



NBS TECHNICAL NOTE **835**

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

**Tabulation of  
Published Data on  
Electron Devices  
of the U.S.S.R.  
Through December 1973**

QC  
100  
U5753  
no. 835  
1974  
c. 2

## NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards<sup>1</sup> was established by an act of Congress March 3, 1901. The Bureau's overall goal is to strengthen and advance the Nation's science and technology and facilitate their effective application for public benefit. To this end, the Bureau conducts research and provides: (1) a basis for the Nation's physical measurement system, (2) scientific and technological services for industry and government, (3) a technical basis for equity in trade, and (4) technical services to promote public safety. The Bureau consists of the Institute for Basic Standards, the Institute for Materials Research, the Institute for Applied Technology, the Institute for Computer Sciences and Technology, and the Office for Information Programs.

**THE INSTITUTE FOR BASIC STANDARDS** provides the central basis within the United States of a complete and consistent system of physical measurement; coordinates that system with measurement systems of other nations; and furnishes essential services leading to accurate and uniform physical measurements throughout the Nation's scientific community, industry, and commerce. The Institute consists of a Center for Radiation Research, an Office of Measurement Services and the following divisions:

Applied Mathematics — Electricity — Mechanics — Heat — Optical Physics — Nuclear Sciences<sup>2</sup> — Applied Radiation<sup>2</sup> — Quantum Electronics<sup>3</sup> — Electromagnetics<sup>3</sup> — Time and Frequency<sup>3</sup> — Laboratory Astrophysics<sup>3</sup> — Cryogenics<sup>3</sup>.

**THE INSTITUTE FOR MATERIALS RESEARCH** conducts materials research leading to improved methods of measurement, standards, and data on the properties of well-characterized materials needed by industry, commerce, educational institutions, and Government; provides advisory and research services to other Government agencies; and develops, produces, and distributes standard reference materials. The Institute consists of the Office of Standard Reference Materials and the following divisions:

Analytical Chemistry — Polymers — Metallurgy — Inorganic Materials — Reactor Radiation — Physical Chemistry.

**THE INSTITUTE FOR APPLIED TECHNOLOGY** provides technical services to promote the use of available technology and to facilitate technological innovation in industry and Government; cooperates with public and private organizations leading to the development of technological standards (including mandatory safety standards), codes and methods of test; and provides technical advice and services to Government agencies upon request. The Institute consists of a Center for Building Technology and the following divisions and offices:

Engineering and Product Standards — Weights and Measures — Invention and Innovation — Product Evaluation Technology — Electronic Technology — Technical Analysis — Measurement Engineering — Structures, Materials, and Life Safety<sup>4</sup> — Building Environment<sup>4</sup> — Technical Evaluation and Application<sup>4</sup> — Fire Technology.

**THE INSTITUTE FOR COMPUTER SCIENCES AND TECHNOLOGY** conducts research and provides technical services designed to aid Government agencies in improving cost effectiveness in the conduct of their programs through the selection, acquisition, and effective utilization of automatic data processing equipment; and serves as the principal focus within the executive branch for the development of Federal standards for automatic data processing equipment, techniques, and computer languages. The Institute consists of the following divisions:

Computer Services — Systems and Software — Computer Systems Engineering — Information Technology.

**THE OFFICE FOR INFORMATION PROGRAMS** promotes optimum dissemination and accessibility of scientific information generated within NBS and other agencies of the Federal Government; promotes the development of the National Standard Reference Data System and a system of information analysis centers dealing with the broader aspects of the National Measurement System; provides appropriate services to ensure that the NBS staff has optimum accessibility to the scientific information of the world. The Office consists of the following organizational units:

Office of Standard Reference Data — Office of Information Activities — Office of Technical Publications — Library — Office of International Relations.

<sup>1</sup> Headquarters and Laboratories at Gaithersburg, Maryland, unless otherwise noted; mailing address Washington, D.C. 20234.

<sup>2</sup> Part of the Center for Radiation Research.

<sup>3</sup> Located at Boulder, Colorado 80302.

<sup>4</sup> Part of the Center for Building Technology.

DEC 1974

acc.

100

753

835

74

2

# Tabulation of Published Data on Electron Devices of the U.S.S.R. Through December 1973

---

Charles P. Marsden

Electronic Technology Division  
Institute for Applied Technology

U.S. National Bureau of Standards  
Washington, D.C. 20234

t. Technical note no 835

(Supersedes Technical Note 715)



---

U.S. DEPARTMENT OF COMMERCE, Frederick B. Dent, *Secretary*  
NATIONAL BUREAU OF STANDARDS, Richard W. Roberts, *Director*

Issued November 1974

Library of Congress Catalog Card Number: 74-600094

**National Bureau of Standards Technical Note 835**

Nat. Bur. Stand. (U.S.), Tech. Note 835, 133 pages (Nov. 1974)

CODEN: NBTNAE

U.S. GOVERNMENT PRINTING OFFICE  
WASHINGTON: 1974

---

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402  
(Order by SD Catalog No. C13.46:835). Price \$1.95

## Preface

### Comments on Tabulations of Electron Devices of the U.S.S.R.

This revision is actually the eighth revision in the series of Tabulations of Electron Devices of the U.S.S.R. published over the past 11 years. These publications document the growth of the U.S.S.R. electron device industry in that a concerted attempt has been made to include all published data on their devices, but we have no knowledge of the time lag between pilot or serial production and data publication.

The growth of published device data is detailed in table 1 which shows the increase in the number of device types in the various groups. Generally this increase, in the receiving tube area, has been in sub-miniature types and more germanium transistor devices are still being produced than silicon devices. Germanium transistor devices have always outnumbered silicon devices by a large factor as is evidenced in the bottom listing of table 1.

There is no U.S.S.R. equivalent of the complete data sheet, with characteristic curves, as published by the European, Japanese, and U. S. device manufacturers; and while Soviet national (GOST) device specifications are quite complete, they appear to be delayed in publication. Furthermore, the published data is not consistent in different publications. For this reason, considerable effort has been expended intercomparing Soviet data in the available publications and selecting the most probably correct data values for this tabulation.

The sources for this publication are books published by the institutes, export brochures, and data contained in magazines and journals.

#### *Diodes and Transistors*

New prefix letters for transistors were introduced about 5 years ago. The letters "G" and "K" designate germanium and silicon, respectively. These are followed by the letters "D" or "T" for diodes or transistors. This type of letter prefix has replaced the "1T" and "2T" designations initiated more than 5 years ago, although a few have been retained in this tabulation as no equivalent "G" or "K" types have replaced them.

The prefix letter "M" was used for the first time about 5 years ago and is now quite common preceding the "P number" to indicate that the transistor enclosure is a cold weld between the copper cap and the alloy header.

#### *Integrated Circuits*

Group X-A on integrated circuits has been increased by adding a number of new types and updating a few. It will be noted that the "Series Number" has been deleted from the Group Headings to provide more space for the device type number. However, the series number consists of the first three digits of the type number, e.g., Type 1LR313 is in Series 131.

All type numbers in which the first digit is a "1" are integrated circuits on a monolithic silicon chip. Similarly, all type numbers in which the first digit is a "2" are hybrid circuits usually mounted on a ceramic substrate. Both of these groups contain digital and linear circuit series.

The letter "K" prefixed to the device type number has been introduced to indicate that the integrated circuit can be used only in a restricted temperature range (i.e.,  $-10$  to  $+70$  °C).

The Series number groups a number of device types into a common family of circuits, but not exclusively according to circuit complication and end-use.

Several devices are marked "Duplicate of - - -" in the data tables because there was no differentiation in the data given.

## *New Groups*

Note that a new group, X-B (Metal-Oxide-Silicon transistors, or MOS transistors), has been included and that two-terminal n-p-n-p devices are separated from three terminal n-p-n-p devices in new group XII-B, Silicon Controlled Rectifiers.

Several new groups have been added in this revision. Among the vacuum tube groups, Group IV-A on Mechanotrons, two anode diodes, shows seven new devices which operate on the old principle that an external mechanical motion imposed on the device changes the position of the cathode with respect to the two anodes causing changes in the plate currents. As the number of Vidicons has increased, the new Group VIII-A was initiated to give more detailed data on these devices.

Two new groups which were first noted during this revision, were introduced for solid state devices. Group XI-E on Light emitting diodes (LED) lists nine devices and Group XI-F on Hall transducers has eleven devices.

In previous editions, the asterisk following the type number indicated "obsolete type." Determination of obsolescence was usually subjective, based on old or nonstandardized type numbers or limited data. For this and the last revision, an **ASTERISK FOLLOWING THE TYPE NUMBER** indicates that the device is "CURRENT"; that is, that the device in question has been used in electronic equipment or circuits noted in the past 2 years or has been first noted in that time. Also, the **LOZENGE (◻)** has been introduced in this revision to indicate **OBSOLESCENCE** noted in the source material. Devices whose status are unknown, have no symbol.

## CONTENTS

	<i>Page</i>
Preface .....	iii
1. Introduction .....	1
2. Description of the tabulation .....	1
3. Organization of the tabulation .....	1
4. Terminology used in the tabulation .....	2
5. Groups:	
I. Numerical .....	5
II. Receiving tubes .....	34
III. Power tubes .....	43
IV. Rectifier tubes .....	47
IV-A. Mechanotrons, two anode diodes .....	48
V. Voltage regulator tubes .....	49
VI. Current regulator tubes .....	50
VII. Thyratrons .....	51
VIII. Cathode ray tubes .....	53
VIII-A. Vidicons .....	56
IX. Microwave tubes .....	57
X. Transistors .....	59
X-A. Integrated circuits .....	68
X-B. MOS transistors .....	81
XI. Diodes—Rectifiers .....	82
XI-A. Diodes—Switching .....	87
XI-B. Diodes—Tunnel .....	87
XI-C. Diodes—Switch control .....	88
XI-D. Diodes—Varactors .....	88
XI-E. Light emitting diodes .....	89
XI-F. Hall transducers .....	89
XI-G. Diodes—Miscellaneous diodes .....	90
XII. Diodes—Power rectifiers .....	91
XII-A. Silicon controlled diodes—High power .....	92
XII-B. Silicon controlled diodes—Low power .....	93
XII-C. Silicon controlled rectifiers .....	94
XIII. Diodes—Regulators .....	95
XIV. Diodes—Mixers and detectors .....	98
XV. Diodes—Photoconductive devices .....	99
XVI. Photo and photomultiplier tubes .....	100
XVIII. Thermocouples .....	102
XIX. Thermistors .....	103
XX. Strobotrons .....	104
XXI. Counters .....	105
XXII. Discharge diodes .....	107
XXIII. Decatrons .....	107
XXIII-A. Character and numerical indicators .....	108
XXIV. Light amplifiers .....	108
XXV. Tube base connections .....	109





TABLE I. *Number of devices in the various tabulations of U.S.S. devices*

	NBS 6637 1/60	NBS 7481 4/62	TN186 6/63	TN265 10/65	TN441 10/67	TN526 12/69	TN715 6/72	TN835 6/74
I Numerical listing .....	642	1,362	1,631	2,360	2,373	3,020	3,200	3,930
II Receiving tubes .....	262	316	328	383	443	461	482	492
III Power tubes .....	89	147	176	176	179	188	187	203
IV Rectifying tubes .....		53	68	80	80	86	89	93
IV-A Mechanotrons, two anode diodes .....								7
V Voltage regulator tubes .....		23	30	33	38	38	36	41
VI Current regulator tubes .....		8	9	9	9	9	9	9
VII Thyratrons .....	26	42	69	54	60	79	77	81
VIII Cathode ray tubes .....	59	87	100	109	115	157	154	141
VIII-A Vidicons .....								31
IX Microwave tubes .....	13	17	20	27	101	101	106	115
X Transistors .....	77	125	160	265	296	438	418	521
X-A Integrated circuits .....						317	317	723
X-B MOS transistors .....							11	16
XI Rectifier diodes .....	84	108	108	200	200	238	246	266
XI-A Switching diodes .....				16	16	16	16	16
XI-B Tunnel diodes .....				8	26	26	30	30
XI-C Control rectifiers .....				10	10	10	10	10
XI-D Varactors .....				6	7	7	20	27
XI-E Light emitting diodes .....								9
XI-F Hall transducers .....								11
XI-C Miscellaneous .....						26	30	40
XII Power rectifiers .....			29	29	29	29	29	25
XII-A Silicon controlled devices—High power .....				40	56	68	40	45
XII-B Silicon controlled devices—Low power .....								7
XII-C Silicon controlled rectifiers .....							26	50
XIII Regulator diodes .....		8	8	41	89	103	107	128
XIV Mixer and Detector Diodes .....		37	37	33	44	50	50	52
XV Photoconductive diodes .....		4	23	29	29	45	50	50
XVI Photodiodes and multipliers .....		25	63	73	72	93	102	111
XVII Flash tubes .....			12					
XVIII Thermocouples .....		15	15	15	15	15	15	15
XIX Thermistors .....	31	19	23	23	35	58	58	58
XX Strobotrons .....		12	23	23	23	23	23	23
XXI Counter tubes .....		41	41	68	68	81	82	100
XXII Discharge diodes .....			20	25	25	31	31	31
XXIII Decatrons .....			4	4	8	9	7	11
XXIII-A Numerical indicators .....							8	14
XXIV Light amplifiers .....			2	2	2	2	2	2
XXV Tube base connections .....		164	162	173	212	225	235	239
Total Devices .....	641	1,087	1,368	1,781	2,075	2,804	2,868	3,843
Transistors germanium .....	73	119	140	224	248	329	312	350
Transistors silicon .....	4	6	20	41	48	102	106	171



# TABULATION OF PUBLISHED DATA ON ELECTRON DEVICES OF THE U.S.S.R. THROUGH DECEMBER 1974

Charles P. Marsden

This tabulation includes data on U.S.S.R. electron devices as collected from publications, mostly handbooks, published by the various ministries and institutes of the U.S.S.R. Information is given on all active devices ranging from receiving to microwave devices, semiconductor devices, and miscellaneous devices such as photographic flash tubes and thermistors.

Key words: Electron devices; electron tubes; semiconductors; U.S.S.R.

## 1. Introduction

The increased circulation of published literature and the importation of equipment from the U.S.S.R. has created a need for factual information about Russian electron devices. To satisfy this need, the National Bureau of Standards has prepared the present publication in a format that has been reproduced directly from punched cards.

This publication is the eighth revision and is an expansion of Technical Note 715 published in June 1972.

The sources of the data are the various publications produced in the U.S.S.R. and include books published by the various ministries and technical magazines. To ensure that the device values selected for use in this tabulation are the probably correct values, considerable effort has been taken to intercompare data from available publications. Because data for any one device may be derived from a number of intercompared sources, no references are given.

## 2. Description of the Tabulation

Within each group the type numbers are arranged in alphanumerical order; the first numerical part of the type number is used as the prime sorting means. Alphabetical prefixes are secondary sorting means and alphabetical postfixes are tertiary means. In the listing, those types without alphabetical prefix follow those with prefix. For example, in the numerical listing, these type numbers will be found in the following order:

VI-0.1/40	SG2S
VT1	TO-2
1A2P	2A1

Alphabetical sorting is performed according to the English alphabet rather than the Russian which was transliterated according to the recommended practice of the Library of Congress as shown below:

А	A	О	O
Б	B	П	P
В	V	Р	R
Г	G	С	S
Д	D	Т	T
Е	Ye	У	U
Ж	Zh	Ф	F
И	I	Х	Kh
К	K	Ц	Ts
Л	L	Ш	Sh
М	M	Э	E
Н	N	Я	Ja

## 3. Organization of the Tabulation

Data in the 39 groups of the tabulation are presented with columnar headings appropriate to each group.

Group I is a numerical listing of all type numbers in the complete tabulation and also includes discontinued and obsolete type numbers. All these types are defined by a three-letter code to indicate the kind and type of device. Furthermore, under the heading "Group No.," Roman numerals are used to show the group number under which the data for a type will be found.

The last column contains the GOST (U.S.S.R. State National Standard) Specification Number (followed by the year of publication of the specification). These specifications include the information in, and follow the format of, the U.S. military specifications.

Group I also constitutes an interchangeability list and known similar types are so identified. The following symbol code indicates the geographic area of manufacture and identifies obsolete or inactive devices.

- \$ Domestic (U.S.A.) manufacture
- = European manufacture
- + Russian manufacture
- \* Current
- Obsolete

These symbol explanations apply only to Group I. Because the card punch limits the number of available symbols, the asterisk is used in tabulations for other groups with different meanings as noted in the columnar headings.

Titles of Groups II–XXIV describe the particular class of device listed under each group. Individual type numbers are arranged in alpha-numerical order as described on page 1 under the heading: "2. Description of the Tabulation."

Under each columnar heading, the device characteristic is expressed in the most commonly used units. For example, under the heading of Maximum Plate Current ( $I_p$ ), the unit in the heading is mA (milliamperes). However, where the data are in amperes, the value will be tabulated with the number followed by the letter "A," e.g., 15A. All such letters used to indicate a unit change are included in the list of alphabetic symbols under "4.4 Code" on page 2.

A blank in any column indicates that no value was given in the available data.

Group XXV, "Tube Base Connections," lists the base connections for the particular "Base No." of the previous groups by a system compatible with punched-card coding.

Instead of the usual base diagram or line drawing, the number of each base pin is given in the column whose heading is the appropriate electrode symbol. This system was developed because many of the Soviet types have base connections which do not conform to the standard base designations of the Electronic Industries Association. In those instances where an electrode is connected to more than one base pin, only the lowest numbered pin is shown in the tabulation.

Outline drawings are shown for semiconductor diodes, transistors, and integrated circuits.

## 4. Terminology Used in the Tabulation

### 4.1 Column Headings

Headings used in the various formats are either the standard symbols as defined by the Institute of Electrical and Electronics Engineers or words descriptive of the given device characteristic. Headings are not further defined due either to the difficulties of translation or lack of definite information.

### 4.2 Bulb Size

This column heading, which is used in the Receiving, Power, Rectifier, and Current Regulator groups, uses a special code to describe the bulb shape and size. The numerical part of the code indicates the diameter of the glass bulb or metal anode (power tubes) in eighths of an inch according to the Standard RS-209-A of the Electronic Industries Association. The alphabetical part of the code is explained as follows:

#### *Prefix*

- A — Air-cooled anode
- B — Bell-shape
- C — Ceramic construction
- G — Globe-shaped bulb
- F — Flat top of Soviet design
- M — Metal tube
- P — Spiral
- R — Ring-shaped
- S — ST design, i.e., the domed conical shaped glass bulb
- T — Cylindrical Shape
- U — U-shape flash tube
- V — Vapor-cooled anode
- W — Water-cooled anode

#### *Postfix*

- B — Button glass stem
- F — Flat press glass stem

For example, a "T3F" would be a cylindrical bulb with a flat press having a diameter of  $\frac{3}{8}$  inch.

### 4.3 Special Symbols

Receiving tubes (Group II) have postfix letters with the following meaning:

- "V" — Ruggedized tubes with 500-hour life
- "K" — Vibration tested
- "Yc" — 3,000- to 10,000-hour long-life tubes
- "I" — Intended for pulse use

Rectifier Diodes (Group XI) with postfix letter "P" are available in reverse polarity.

### 4.4 Code

Due to the limitations of available columns in the punched card, one- to four-letter codes have been de-

veloped and used in the tabulation. These have been so chosen as to be readily understood. The following table lists code meanings alphabetically by code.

A	Change of unit to amperes
AAB	Alpha and beta radiation
ACO	Acorn tube
ADR	And/or logic
A	{ Audio frequency
	{ Forced air cooling
AGC	Automatic gain control
AHE	Argon-helium gas-filled
AHN	Argon-helium-neon gas-filled
AKN	Argon-krypton gas-filled
AL	Aluminum cathode; countertube
ALP	Alpha radiation
AMK	Aluminum-magnesium alloy with potassium surface
AMP	Amplifier
AN	Natural air cooling
AND	And logic
ANR	And/nor logic
AR	Argon gas-filled
ARC	Arc rectifier-mercury pool
BA	Barium (metal) cathode
BAG	Beta and gamma radiation
BAL	Ballast or current regulator
BAO	Barium oxide cathode
BEA	Beam pentode
BET	Beta radiation
BIS	Bismuth sulphide
BL	Blue luminescence
BRG	Bit register
BWD	Backward diode
BWT	Backward wave tube
C	{ Circular dynode arrangement
	{ Common collector operation
	{ Cold cathode
	{ Continuous wave operation
CAM	Copper-aluminum-magnesium
CDS	Cadmium sulphide
CDSE	Cadmium selenide
CH	Charactron
CMP	Cascade amplifier
CN	Converter
CO	Coax connector
COM	{ Commutator tube or operation
	{ Temperature compensation
CON	{ Control switch
	{ Temperature control
COU	{ Counter operation
	{ Counter tube
CP	Cap, external, in tabulation of bases
CSB	Cesium antimony photo surface
CU	Copper cathode; counter tube
CYL	Cylindrical shape; thermistors
DBA	Double anode beam pentode
DCD	Digital current driver
DEC	Decatron
DET	Detector operation
DIN	Digital indicator
DIO	{ Diode
	{ With diode, e.g., triode-diode
DMP	Differential amplifier
DSC	Disc shape
DT	Dark trace CR tube
DTL	Diode-transistor logic
DUO	Douhle, e.g., douhle diode with separate cathodes
DWD	{ Douhle diode (single cathode)
	{ With douhle-diode, e.g., triode-double-diode

E	Common emitter operation
EL	Electrometer tube
ELM	Electromagnetic focus or deflection
ELS	Electrostatic focus or deflection
EMF	Emitter follower
END	End-view indicator
EXP	Expander
F	Filamentary type cathode
FE	Iron cathode; counter tube
FL	Filter circuit
FLP	Flip-flop
G	Giga ( $10^9$ )
GAE	Gallium arsenide, epitaxial
GAM	Gamma radiation
GAN	Germanium alloy, npn
GAP	Germanium alloy, pnp
GAS	Gallium arsenide
GDN	Germanium diffused junction, npn
GDP	Germanium diffused junction, pnp
GE	Germanium
GEA	Germanium alloy junction
GEB	Germanium, gold-bonded
GEM	Germanium mesa structure
GEP	Germanium point-contact
GFP	Germanium, epitaxial diffused, pnp
GPE	Gallium phosphide, epitaxial
GPN	Germanium, planar, npn
GPP	Germanium point-contact, pnp
GR	{ Green luminescence
	{ Graphite cathode; counter tube
GS	Gas-filled
GSP	Germanium surface-barrier, pnp
GTB	Gated beam pentode
H	Heater type cathode
h	Hecto ( $10^2$ )
HAD	Half-adder
HE	Helium gas-filled
HEX	Hexode
HG	Mercury vapor-filled
HK	Hydrogen-krypton gas-filled
HPT	Heptode
HY	Hydrogen gas-filled
IC	Iconoscope
ID	Indicator tube
IGN	Ignitron tube
IM	Image orthicon
IMD	Image dissector
INV	Inverter
k	Kilo ( $10^3$ )
K	Potassium
KLA	Klystron amplifier
KLO	Klystron oscillator
KX	Krypton-xenon gas-filled
L	{ Linear dynode arrangement
	{ Liters per minute—cooling rate
LAM	Light amplifier
LD	Lead cathode
LED	Light emitting diode
LFA	Low frequency amplifier
LIM	Limiter
LIT	Lighthouse
LO	Long persistence screen
M	{ Mega ( $10^6$ )
	{ Meters per second—cooling rate
m	Milli ( $10^{-3}$ )
MAG	Magnetron
MCR	Metal-ceramic tube
MD	Medium persistence screen
MEA	Temperature measurement

MEM	Memory cell, MOS	SDN	Silicon diffused junction, npn
MG	Magnesium cathode	SEN	Silicon planar epitaxial-npn
MIX	Mixer	SFN	Silicon junction FET, n-channel
MJF	MOS junction FET transistor	SFP	Silicon junction FET, p-channel
MMP	MOS amplifier	SH	Short persistence screen
MND	MOS-Nand logic	SHR	Shift register
MNR	MOS-Nor logic	SI	Silicon
MO	Molybdenum cathode	SIA	Silicon alloy junction
MOD	Modulator	SID	Silicon diffused junction
MOR	MOS-Or logic	SIDE	Side-view indicator
MOS	Metal-oxide semiconductor	SIM	Silicon mesa
MUL	Multiplier	SIN	Single e.g., single triode
MVB	Multivibrator	SIP	Silicon, point contact
MX	Mixer	SI4	Silicon, 4-layer rectifier
N	n-type construction, semiconductor	SJP	Silicon isolated-gate FET, p-channel
n	Nano ( $10^{-9}$ )	SM	Secondary emission pentode
NA	Neon-argon gas-filled	SN	Tin cathode; counter tube
NDR	Nand/nor logic	SO	Storage oscilloscope
NE	Neon gas-filled	SPN	Silicon planar npn
NEH	Neon-helium gas-filled	SQ	Self-quenching type of counter
NEU	Neutron	SS	Stainless steel cathode
NI	Nickel cathode	ST	Storage tube
NK	Neon-krypton gas-filled	SWI	Switching diode or mode
NND	Nand logic	T	Thoriated tungsten cathode
NO		TET	Tetrode
NOI	} Noise generator	THM	Thermocouple tube
NOR	Nor logic	TMS	Thermistor
NSP	Nuclear spectrometry	TRD	With triple diode
NUV	Nuvistor	TRI	{ Triode
OD	Double beam oscilloscope tube		{ With triode e.g., pentode-triode
OG	Orange-green luminescence	TTL	Transistor transistor logic
ONR	Or/nor logic	TUN	Tunnel diode
OPA	Operational amplifier	TV	{ Television tube
OR	Or logic		{ Television circuits
ORD	Or/and logic	TWN	Twin with same cathode e.g., twin triode
OS	Oscilloscope tube	TWT	Traveling-wave tube
OSC	Oscillator	$\mu$	Micro ( $10^{-6}$ )
P	{ Pulse operation	UF	Ultra high frequency
	{ p-type construction, semiconductor	UV	Ultra violet radiation
PA	Power amplifier	V	Venetian-blind dynode
PB	Purple-blue luminescence	VAR	Varactor
PBS	Lead sulphide	VB	Violet-blue luminescence
PEN	Pencil tube	VC	Vacuum
PHM	Photomultiplier	VI	Vidicon
PHO	Phototube	VID	Video detector
PIN	Pin type diode	VMP	Video amplifier
PM	Permanent magnet	VR	Voltage regulator
PND	{ Pentode		{ Change of units to watts
	{ With pentode e.g., triode-pentode	W	{ Tungsten cathode
POW	Power rectifier		{ Water-cooled
PR	Projection kinescope	WG	Wave guide coupling
PT	Phototelegraph reproduction	WH	White luminescence
PTG	Pentagrid	WNB	W92%, Ni5%, Ba3% cathode
R	Rectangular-diagonal dimension	XE	Xenon gas-filled
RA	Radar	YG	Yellow-green luminescence
RD	Red luminescence	YO	Yellow-orange luminescence
RDL	Resistor—diode logic	IDA	Single diode array
REG	Regulator (voltage)	2DA	Double diode array
RF	Radio frequency	3C	Three color screen for television
RTL	Resistor-transistor Logic	3DA	Triple diode array
S1-S7	Spectral sensitivity of photo surface	4DA	Four diode array
S	Max. dimension of cathode ray tube face	50	Oscilloscope tube, 5 beam
SAN	Silicon alloy, npn	8DA	Eight diode array
SAP	Silicon alloy, pnp	*	
SCC	Scintillation counters	#	{ Meaning of symbols indicated in column heading
SCD	Silicon carbide, diffused	<	Less than (before digits)
SCG	Space-charge grid (with)	*	Current type
SCH	Schmitt trigger	□	Obsolete type
SCR	Silicon controlled-rectifier		

Group I—NUMERICAL

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
FS-AG	PHC		XV			GRI-02/15	DIO	SIN	IV		
FS-A0	PHC		XV			GR-1-0.3/8.5	DIO	SIN	IV		
FS-AV	PHC		XV			GR-1-25/15	DWD	SIN	IV		
FS-D0	PHC		XV			GS-1B	TRI	SIN	III		
FS-KG	PHC		XV			GUZH-1	PND	SIN		G411+	
FS-K0	PHC		XV			I-1-25/0.8		IV		5550\$	
FS-KV	PHC		XV			I-1-50/20		IV			
TOS-M		TMS	CON	XIX		I-1-70/0.8	TRI	IGN	IV	5551A\$	
DKHG-05	* GE		XI-F			I-1-100/1.5	TRI	IGN	IV		
DKHG-05M	* GE		XI-F			I-1-140/0.8	TRI	IGN	IV	5552A\$	
DKHG-05S	* GE		XI-F			I-1-350/0.8	TRI	IGN	IV	7673\$	
0.24B12-18	BAL	SIN	VI		7162-70	IN-1	* DEC		XXIIIA		
0.3B17-35	BAL	SIN	VI		7162-70	KF-1	TET	TWN		GU-29+, 829B\$	
0.3B65-135	BAL	SIN	VI		7162-70	KMT-1	* TMS		XIX		106B8-63
0.425B55-12	BAL	SIN	VI		7162-70	KZH1	PND	SIN		G411*	
0.6P2B	* PND	SIN	II	CK505AX		LD1	TRI	SIN		12S3S+	
0.6S7A	* TRI	SIN	II			LG-1	DWD	SIN		12KH3S+	
0.6ZH6B	PND	SIN	II			L11	IC		VIII-A		
0.85B55-12	BAL	SIN	VI		7162-70	MMT-1	* TMS		XIX		10688-63
GR-0.8/1.6	DWD	SIN		GRI-0.25/1.5+		MS1	TRI	SIN		GM-60+	
GRI-0.25/1.5	DWD	SIN	IV			OG-1	DEC		XXIII		
TG-0.3/0.3	TRI	THY		TG1-0.1/0.3+, 884\$		PIA			X		
TG-0.5/1.3	TET	THY		TG1-0.1/1.3+, 2050\$		PIB			X		
VG0251500	DIO	SIN		GRI-0.25/1.5+		P1D			X		
AGI1-75/1.3*	THY		VII			P1G			X		
AS-1	COU		XXI			P1I			X		
D1A	REC		XI			P1V			X		
D1B	REC		XI			P1YE			X		
D1D	REC		XI			P1ZH			X		
D1G	REC		XI			R-1			XXII		
D1V	REC		XI			RB-1			XXII		
D1YE	REC		XI			S1A			X		
D1ZH	REC		XI			S1B			X		
DG-S1	MIX		XIV			S1D			X		
DG-TS1	REC		XI	D2G+		S1G			X		
DKHG-1	* GE		XI-F			S1V			X		
DK-I1M	* MIX		XIV			S1YE			X		
DK-S1M	* MIX		XIV			SBS-1	COU		XXI		
DK-V1	* DET		XIV			SFK-1	COU	UV	XXI		
DL-S1	MIX					SG1B	DIO	SIN		0A2\$	
F-1	* PHO		XVI			SG1P	DIO	SIN	V	0A2\$	132B2-67
FD-1	PHC		XV			SG1P-EV	* REG		V		
FDK-1	PHC		XV			SG1P-V	REG			SG1P+	
FEU-1	* PHM		XVI			SG1P-YE	REG			SG1P+	
FEU-1B	PHM		XVI			SI-1BG	COU		XXI		
FEU-1B1V	PHM		XVI			SI-1G	COU			STS-1+	
FEU-1B2V	PHM		XVI			SK1-5.6/1000	REG		XIII		
FEU-1S	PHM		XVI			SK1-6.B/1000	REG		XIII		
FEU-1V	PHM		XVI			SK1-8.2/1000	REG		XIII		
FS-A1	* PHC		XV			SK1-10/500	REG		XIII		
FS-D1	PHC		XV			SK1-12/500	REG		XIII		
FS-K1	PHC		XV			SK1-15/500	REG		XIII		
FSA-G1			XV			SK1-1B/500	REG		XIII		
FSD-G1			XV			SK1-22/150	REG		XIII		
FSK-G1			XV			SK1-24/150	REG		XIII		
FSK-P1			XV			SK1-28/150	REG		XIII		
FT-1	PHC		XV			SK1-30/150	REG		XIII		
FTG-1	PHC		XV			SK1-36/150	REG		XIII		
GE-1	TET	SIN	III	GKE-100*		SK1-43/150	REG		XIII		
GG-1-0.3/B	DIO	SIN	IV			SK1-51/150	REG		XIII		
GG1-0.5/5	DIO	SIN	IV	VG1.5/5000+	13705-68	SK1-62/50	REG		XIII		
GG-1-0.5/20	DIO	SIN	IV			SK1-75/50	REG		XIII		
GG-1-1/22	DIO	SIN	IV			SK1-95/50	REG		XIII		
GG-1-2/5	DIO	SIN	IV			SK1-110/50	REG		XIII		
GG-1-2/16	DIO	SIN	IV			SK1-120/50	REG		XIII		
GG-1.5/15	DIO	SIN		GG1-0.5/5+		SK1-150/50	REG		XIII		
GK1A	TRI	SIN	III			SK1-180/50	REG		XIII		
GMLA	TRI	SIN	III		14609-69	SK1-220/25	REG		XIII		
GMLP	TRI	SIN	111			SK1-270/25	REG		XIII		
GMI-1B	TRI	SIN	III			SK1-300/25	REG		XIII		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
SRM-1	*	COU	XXI			V1-06/30	DIO	SIN	IV		
ST1-17		TMS	MEA	XIX		V1-1/2.5	DIO	SIN	IV		
ST1-18				XIX		V1-1/30	DIO	SIN	IV		
ST1-19		TMS	MEA	XIX		V1-1/40	DIO	SIN	IV		
ST-1-21		TMS		XIX		V1-2/40	DIO	SIN	IV		
ST-1-30		TMS		XIX		V1-3/16	DIO	SIN	IV		
STS-1		COU		XXI		V1-3/70	DIO	SIN	IV		
T-1B		TRI	THY		TG-1B+	V1-4/40	DIO	SIN	IV		
TG1B		TRI	THY	VII		V1-15/55	DIO	SIN	IV		
TG1B-V		TRI	THY		TG1B+	VD1	DIO	SIN		V1-1/40+	
TG1P				VII		VDI-1D	DIO	SIN		VI-1-100/50+	
TG1-.02/0.5	TET	THY	VII			VG1/8500	DIO	SIN	IV		
TG1-0.1/0.3	TRI	THY	VII	884\$		VG1.5/5000	DIO	SIN		GG2-0.5/5+	
TG1-0.1/1.3	TET	THY	VII	2050\$	7843-55	VI-1-5/20	DIO	SIN	IV		
TG1-0.5/12	TRI	THY	VII			VI-1-5/30	DIO	SIN	IV		
TG1-1.0/0.8	TET	THY	VII			VI-1-18/32	DIO	SIN	IV		
TG1-1.5/2	TRI	THY	VII			VI-1-27/35	DIO	SIN	IV		
TG1-1.6/1.3	TRI	THY	VII			VI-1-30/25	DIO	SIN	IV		
TG1-2/8				VII		VI-1-70/32	DIO	SIN	IV		
TG1-2.5/4	TRI	THY	VII	TG8/3, TG1-2.5/3*+	7952-68	VI-1-100/50	DIO	SIN	IV		
TG1-2.5/10				VII		VO-1	DIO	SIN	IV		
TG1-3.2/1.3	TRI	THY	VII			VSTS-1	PHO			F-3+	
TG1-5/3	TRI	THY	VII		7953-56	VT-1	TRI	THY		TG-2.5/5+	
TG1-6.4/1.3	TRI	THY	VII			1A1P	PTG	SIN	II	1R5\$, DK91, DK192	7708-66
TG1-12.5/1.3	TRI	THY	VII			1A2P *	PTG	SIN	II	DK96=, 1R5\$	9836-66
TGI-1B	TRI	THY	VII			1A501A			XI-G		
TGI-1-3/1	TET	THY	VII			1A501G			XI-G		
TGI-1-5/1.1	TRI	THY	VII			1A501I			XI-G		
TGI-1-10/1	TRI	THY	VII			1A504A			XI-G		
TGI-1-35/3	TRI	THY	VII	3C45\$		1A504B			XI-G		
TGI-1-50/5	TRI	THY	VII			1B1P	PND	DIO	II	1S5\$, DAF91=, DAF191	8006-56
TGI-1-90/8	TRI	THY	VII		MTI-4*+	1B2P *	PND	DIO	II	DAF96=, 1S5\$	9837-66
TGI-1-130/8	TRI	THY	VII			1B5-9	BAL	SIN	VI		7162-70
TGI-1-130/10	TRI	THY	VII			1B10-17	BAL	SIN	VI		7162-70
TGI-1-260/12				VII		1DA191			XA		
TGI-1-325/16	TRI	THY	VII		MTI-5+, TGI-325/16+	1E1P *	TET	SIN	II		
TGI-1-400/3.5	TRI	THY	VII			1E3P	TRI	SIN	II	EM-4+	
TGI-1-400/16	TRI	THY	VII			1F2B	PND	TRI	II		
TGI-1-500/16				VII		1GF191			XA		
TGI-1-500/20				VII		1GF192	MVB		XA		
TGI-1-700/25	TRI	THY	VII			1GF193	MVB		XA		
TGI-1-1000/25				VII		1I2P	PND	TRI	II		
TGI1-2000/35				VII		1I-302A	TUN	GAS	XI-B		
TGI1-2500/35				VII		1I-302B	TUN	GAS	XI-B		
TKI-1		TMS	MEA	XIX		1I-302G	TUN	GAS	XI-B		
TKH1	TRI	THY	VII	313C		1I-302V	TUN	GAS	XI-B		
TKH1B	TRI	THY	VII			1IE201			XA		
TKHI-1G	PND			VII		1IL101A-B*			X-A		
TM-1	TRI	SIN			6S5D+, 2C40\$	1IL131A			XA		
TNI-1.5	DEC					1IL131B			XA		
						1IL131V			XA		
T0-1	PND	SIN		10ZH12S+		1IL132A	*	DUPLIC	X-A		
TR1-2.5/3			V11			1IL132B	*	DUPLIC	X-A		
TR1-5/2	TRI	THY	VII		VT-3	1IL132V	*	DUPLIC	X-A	7954-69	
TR1-6/3			V11			1IL141A			XA		
TR1-6/15	TRI	THY	VII			1IL141B			XA	7955-68	
TR1-15/3			V11			1IL371	*	HAD	X-A		
TR1-15/15	TRI	THY	VII			1IL373	*	HAD	X-A		
TR1-15/20			V11			K1IR071	*	MNR	X-A		
TR1-40/15	TRI	THY	VII		7956-69	1IR141A			XA		
TR1-85/15	TRI	THY	VII			1IR141B			XA		
TR1-130/15	TRI	THY	VII			1IR201		MOS	XA		
TSG-1	PHO		XVI			1IR202		MOS	XA		
TSH-1		TMS	MEA	XIX		K1IR441	*	SHR	X-A		
TST-1A		TMS	REG	XIX		K1IR442	*	SHR	X-A		
TSV-1		PHO		XVI		1IR451		MOS	XA		
TVB-1		THM		XVIII		1JAM351	*	MEM	X-A		
V1-00313	DIO	SIN	IV	V13/30+.3B26		1JAM352	*	MEM	X-A		
V1-02/20	DIO	SIN	IV			1JAM881	*	MEM	X-A		
V1-03/13	DIO	SIN	IV			1K1P	PND	SIN	II	1T4\$, DF91=	7707-55
V1-05/70	DIO	SIN	IV			1K2P *	PND	SIN	II	DF96=, 1T4\$	9946-66



Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
1K12B	PND	SIN	II			1LB136B	*	DUPLIC	X-A		
1KP191			XA			1LB136V	*	DUPLIC	X-A		
1KT011A			XA			1LB137A	*	DUPLIC	X-A		
1KT011B			XA			1LB137B	*	DUPLIC	X-A		
1KT011G			XA			1LB137V	*	DUPLIC	X-A		
1KT011V			XA			1LB138A	*	DUPLIC	X-A		
1KT241A.B*			X-A			1LB138B	*	DUPLIC	X-A		
1KT461	*	DCD	X-A			1LB138V	*	DUPLIC	X-A		
1KT462ABV*		DCD	X-A			1LB139A	*	DUPLIC	X-A		
1KT463ABV*		DCD	X-A			1LB139B	*	DUPLIC	X-A		
1KT464ABV*		DCD	X-A			1LB139V	*	DUPLIC	X-A		
1KT465ABV*		DCD	X-A			1LB1310A	*	DUPLIC	X-A		
1KT466ABV*		DCD	X-A			1LB1310B	*	DUPLIC	X-A		
1KT467ABV*		DCD	X-A			1LB1310V	*	DUPLIC	X-A		
1KT491			XA			1LB141A		NOR	XA		
1KT491A	*	SWI	X-A			1LB141B		NOR	XA		
1KT491B	*	SWI	X-A			1LB142A		NOR	XA		
1KT491V	*	SWI	X-A			1LB142B		NOR	XA		
1LB041		NND	XA			1LB143A		NOR	XA		
1LB042		NND	XA			1LB143B		NOR	XA		
1LB043		NND	XA			1LB144A		NOR	XA		
1LB044		NND	XA			1LB144B		NOR	XA		
1LB061		NDR	XA			1LB145A		NOR	XA		
1LB062		NDR	XA			1LB145B		NOR	XA		
1LB063		NDR	XA			1LB146A		NOR	XA		
1LB064		NDR	XA			1LB146B		NOR	XA		
1LB065		NDR	XA			1LB151	*	OR	X-A		
1LB066		NDR	XA			1LB152	*	OR	X-A		
1LB067		NDR	XA			1LB153	*	OR	X-A		
1LB068		NDR	XA			1LB154	*	NOR	X-A		
1LB069		NDR	XA			1LB211A		NDR	XA		
1LB0610		NDR	X-A			1LB211B		NDR	XA		
1LB091A		NDR	XA			1LB211G		NDR	XA		
1LB091B		NDR	XA			1LB211V		NDR	XA		
1LB091G		NDR	XA			1LB212A		NDR	XA		
1LB091V		NDR	XA			1LB212B		NDR	XA		
1LB092A		NDR	XA			1LB251		MND	XA		
1LB092B		NDR	XA			1LB301	*	NDR	X-A		
1LB101	*	NDR	X-A			1LB302	*	NDR	X-A		
1LB102A-B*		NDR	X-A			1LB303	*	NDR	X-A		
1LB103A-B*		NDR	X-A			1LB304	*	NDR	X-A		
1LB104A-B*		NDR	X-A			1LB306	*	NDR	X-A		
1LB105A-G*		NDR	X-A			1LB307	*	NDR	X-A		
1LB106A-G*		NDR	X-A			1LB308	*	NDR	X-A		
1LB107A-G*		NDR	X-A			1LB309	*	NDR	X-A		
1LB108A-G*		NDR	X-A			1LB3010	*	NDR	X-A		
1LB109A-B*		NDR	X-A			1LB311	*	NDR	X-A		
1LB1011A-B*		NDR	X-A			1LB312	*	NDR	X-A		
1LB1012A-B*		NDR	X-A			1LB313	*	NDR	X-A		
1LB1013A-B*		NDR	X-A			1LB314	*	NDR	X-A		
1LB1014A-G*		NDR	X-A			1LB316	*	NDR	X-A		
1LB111		NOR	XA			1LB317	*	NDR	X-A		
1LB112		NOR	XA			1LB318	*	NDR	X-A		
1LB113		NOR	XA			1LB319	*	NDR	X-A		
1LB131A		NOR	XA			1LB3110	*	NDR	X-A		
1LB131B		NOR	XA			1LB331	*	NND	X-A		
1LB131V		NOR	XA			1LB331A		NND	XA		
1LB132A		NOR	XA			1LB331B		NND	XA		
1LB132B		NOR	XA			1LB332	*	NND	X-A		
1LB132V		NOR	XA			1LB332A		NND	XA		
1LB133A		NOR	XA			1LB332B		NND	XA		
1LB133B		NOR	XA			1LB333	*	NND	X-A		
1LB133V		NOR	XA			1LB334	*	NND	X-A		
1LB134A		NOR	XA			1LB336	*	NND	X-A		
1LB134B		NOR	XA			1LB337	*	NND	X-A		
1LB134V		NOR	XA			1LB338	*	NND	X-A		
1LB135A		NOR	XA			1LB339	*	NND	X-A		
1LB135B		NOR	XA			1LB3310	*	NND	X-A		
1LB135V		NOR	XA			1LB3311	*	NND	X-A		
1LB136A	*	DUPLIC	X-A			1LB3312	*	NND	X-A		

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
1LB3313	* NND		X-A			1LL201	MOR		XA		
1LB3315	* NND		X-A			1LN101A-B*	INV		X-A		
1LB3316	* NND		X-A			1LN102A-G*	INV		X-A		
1LB341	NOR		XA			1LN103A-B*	INV		X-A		
1LB341A	* NND		X-A			1LP061	OR		XA		
1LB341B	* NND		X-A			1LP062.A	OR		XA		
1LB342	NOR		XA			1LP063	OR		XA		
1LB342A	* NND		X-A			1LP064	OR		XA		
1LB342B	* NND		X-A			1LP065.A	OR		XA		
1LB361	* NND		X-A			1LP066.A	OR		XA		
1LB362	* NND		X-A			1LP067	OR		XA		
1LB363	* NND		X-A			1LP068	OR		XA		
1LB364	* NND		X-A			1LP091			XA		
1LB366	* NND		X-A			1LP131A	* HAD		X-A		
1LB367	* NND		X-A			1LP131B	* HAD		X-A		
1LB368	* NND		X-A			1LP131V	* HAD		X-A		
1LB369	* NND		X-A			1LP141	OR		XA		
1LB371	* NOR		X-A			1LP141A	* NDR		X-A		
1LB372	ONR		XA			1LP141B	* NDR		X-A		
1LB375	* NOR		X-A			1LP142	OR		XA		
1LB376	* NOR		X-A			1LP142A	* NOR		X-A		
1LB378	* NOR		X-A			1LP142B	* NOR		X-A		
1LB379	* NOR		X-A			1LP143A	* NOR		X-A		
1LB3710	* NOR		X-A			1LP143B	* NOR		X-A		
1LB3716	* NOR		X-A			1LP144A	* ONR		X-A		
1LB3717	* NOR		X-A			1LP144B	* ONR		X-A		
1LB3718	* NOR		X-A			1LP145A	* OR		X-A		
1LB3719	* NOR		X-A			1LP145B	* OR		X-A		
1LB381	ONR		XA			1LP151	* NOR		X-A		
1LB391	ONR		XA			1LP201	MOS		XA		
1LB392	ONR		XA			1LP211			XA		
1LB471	MNR		XA			1LP251	MOS		XA		
1LB472	MNR		XA			1LP281	* OR		X-A		
1LB551	* NDR		X-A			1LP301	* OR		X-A		
1LB552	* NDR		X-A			1LP311	* OR		X-A		
1LB553	* NDR		X-A			1LP331	* OR		X-A		
1LB554	* NDR		X-A			1LP333	* OR		X-A		
1LB556	* NDR		X-A			1LP371	* OR		X-A		
1LB557	* NDR		X-A			1LP372	* OR		X-A		
1LB558	* NDR		X-A			1LP391			XA		
1LB561A	* NND		X-A			1LP421	MOS		XA		
1LB561B	* NND		X-A			1LP471	MOS		XA		
1LB561V	* NND		X-A			1LP551	* OR		X-A		
1LB562	* NND		X-A			1LP553	* OR		X-A		
1LB563A	* NND		X-A			1LP561	* AND		X-A		
1LB563B	* NND		X-A			1LR061.A	ADR		XA		
1LB563V	* NND		X-A			1LR062.A	ADR		XA		
1LB564A	* ORD		X-A			1LR063	ADR		XA		
1LB564B	* ORD		X-A			1LR064	ADR		XA		
1LB564V	* ORD		X-A			K1LR071	* MNR		X-A		
1LB581	* NND		X-A			1LR271	ADR		XA		
1LB582	* NND		X-A			1LR281A	* OR		X-A		
1LB583	* NND		X-A			1LR281B	* OR		X-A		
1LB584	* NND		X-A			1LR301	* OR		X-A		
1LB586	* NND		X-A			1LR303	* OR		X-A		
1LB587	* NND		X-A			1LR304	* OR		X-A		
1LB588	* NND		X-A			1LR305	* OR		X-A		
1LB589	* NND		X-A			1LR306	* OR		X-A		
K1LB721	* ONR		X-A			1LR307	* OR		X-A		
K1LB722	* ONR		X-A			1LR311	* ANR		X-A		
K1LB781	* ONR		X-A			1LR313	* ANR		X-A		
K1LB782	* ONR		X-A			1LR314	* ANR		X-A		
1LI041	AND		XA			1LR315	* ANR		X-A		
1LI042	AND		XA			1LR316	* ANR		X-A		
1LI043	AND		XA			1LR317	* ANR		X-A		
1LI044	AND		XA			1LR331	* AOR		X-A		
1LI045	AND		XA			1LR331A	ADR		XA		
1LI091	* AND		X-A			1LR331B	ADR		XA		
K1LI721	* AND		X-A			1LR333	* AOR		X-A		
K1LI781	* AND		X-A			1LR334	* ANR		X-A		

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
1LR335	* AOR		X-A			1S38A	* TRI	SIN	II		
1LR336	* AOR		X-A			1SV191	AMP		XA		
1LR338	* ANR		X-A			1T303A			X		
1LR341	ADR		XA			1T303B			X		
1LR341A	* AOR		X-A			1T303D			X		
1LR341B	* AOR		X-A			1T303G			X		
1LR342	ADR		XA			1T303V			X		
1LR342A	* AOR		X-A			1T303YE			X		
1LR342B	* AOR		X-A			1T308A				GT308A+	
1LR361	* AOR		X-A			1T308B				GT308B+	
1LR363	* ANR		X-A			1T308V				GT308V+	
1LR364	* ANR		X-A			1T403A				GT403A+	
1LR365	* AOR		X-A			1T403B				GT403B+	
1LR366	* ANR		X-A			1T403D				GT403D+	
1LR367	* ANR		X-A			1T403G				GT403G+	
1LR421	MOS		XA			1T403I				GT403I+	
1LR551	* AOR		X-A			1T403V				GT403V+	
1LR553	* AOR		X-A			1T403YE				GT403YE+	
1LR581	* ANR		X-A			1T403ZH				GT403ZH+	
1LR583	* ANR		X-A			1TK101A-B*	FLP		X-A		
1LR584	* ANR		X-A			1TK102A-D*	FLP		X-A		
1LR585	* ANR		X-A			1TK191A.B			XA		
1LR586	* ANR		X-A			1TK251	MOS		XA		
1LR587	* ANR		X-A			1TK471	MOS		XA		
K1LR721	* ANR		X-A			1TR061.A	ADR		XA		
K1LR781	* ANR		X-A			1TR062.A	ADR		XA		
1LS131A	* NOR		X-A			1TR063	ADR		XA		
1LS131B	* NOR		X-A			1TR064	ADR		XA		
1LS131V	* NOR		X-A			1TR131A	NOR		XA		
1LS132A	* DUPLIC		X-A			1TR131B	NOR		XA		
1LS132B	* DUPLIC		X-A			1TR131V	NOR		XA		
1LS132V	* DUPLIC		X-A			1TR132A	* DUPLIC		X-A		
1LS151	* OR		X-A			1TR132B	* DUPLIC		X-A		
1LS271	ADR		XA			1TR132V	* DUPLIC		X-A		
1LS281A	* OR		X-A			1TR141A	NOR		XA		
1LS281B	* OR		X-A			1TR141B	NOR		XA		
1MA191			XA			1TR151	* OR		X-A		
1N1	TRI	TWN		1N3S=		1TR371	* FLP		X-A		
1N1	*		XXIIIA			1TR373	* FLP		X-A		
1N3S	TRI	TWN	II	1N1+. 1G6-GT\$		1TR421	MOS		XA		
1ND041			XA			K1TR721	* FLP		X-A		
1ND042			XA			K1TR781	* FLP		X-A		
1ND043			XA			1TS1	DIO	SIN		1TS1S+. 1VD1+	
1ND044			XA			1TS1S	* DIO	SIN	II	1TS1+. 1VD1+. 1Z1\$	
K1NT291A	* AMP		X-A			1TS7S	* DIO	SIN	II	DY30=, 1B3/8016\$	8359-66
K1NT291B	* AMP		X-A			1TS11P	DIO	SIN	II		
K1NT291D	* AMP		X-A			1TS20B	DIO	SIN	II		
K1NT291G	* AMP		X-A			1TS21P	* DIO	SIN	II	1S2\$.DY86=.DY87=	13849-68
K1NT291I	* AMP		X-A			K1TSH181A	* FLP		X-A		
K1NT291V	* AMP		X-A			K1TSH181B	* FLP		X-A		
K1NT291YE	* AMP		X-A			K1TSH181D	* FLP		X-A		
K1NT291ZH	* AMP		X-A			K1TSH181G	* FLP		X-A		
K1NT591A	* DMP		X-A			K1TSH181V	* FLP		X-A		
K1NT591E	* AMP		X-A			1TSH191	SCH		XA		
K1NT591D	* AMP		X-A			K1UB181A	* VMP		X-A		
K1NT591G	* AMP		X-A			K1UB181B	* VMP		X-A		
K1NT591I	* AMP		X-A			K1UB181G	* VMP		X-A		
K1NT591V	* AMP		X-A			K1UB181V	* VMP		X-A		
K1NT591YE	* AMP		X-A			1UB191	AMP		XA		
K1NT591ZH	* AMP		X-A			1UE201	MMP		XA		
K1NT661A	* SWI		X-A			1UI461	AMP		XA		
1P2E	* PND	SIN	II	CK507AX		1UI461A.B*	AMP		X-A		
1P3E	* PND	SIN	II			1UI462	AMP		XA		
1P4E	* PND	SIN	II			1UI462A.B*	AMP		X-A		
1P5E	* PND	SIN	II			1UI463A.B*	AMP		X-A		
1P22E	* PND	SIN	II			1UI464A.B*	AMP		X-A		
1P24E	* PND	SIN	II			K1US181A	* AMP		X-A		
1P32E	* PND	SIN	II			K1US181B	* AMP		X-A		
1PP1A			XA			K1US181D	* AMP		X-A		
1S12P	TPI	SIN	II	DC96=		K1US181G	* AMP		X-A		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
K1US181V	* AMP	X-A				D2YE	REC	XI		DG-TS4*+	14341-69
K1US182A	* CMP	X-A				D2ZH	REC	XI		DG-TS5*+	14341-69
K1US182B	* CMP	X-A				DG-S2	MIX	XIV			
K1US182V	* CMP	X-A				DG-TS2	REC	XI		D2D+	
1US191	AMP	XA				DI-2-10	DIO SIN			2D1S+	
1US192	AMP	XA				DKHG-2	* GE	XI-F			
1US221A	AMP	XA				DKHG-2M	* GE	XI-F			
1US221B	AMP	XA				DKHG-2S	* GE	XI-F			
1US221D	* AMP	X-A				DK-I2M	* MIX	XIV			
1US221G	* AMP	X-A				DK-S2M	* MIX	XIV			
1US221V	AMP	XA				DK-V2	* DET	XIV			
1US222A	AMP	XA				DL-S2	MIX				
1US222B	AMP	XA				DSH2-10	DIO SIN			2D2S+	
1US222V	AMP	XA				F-2	* PHO	XVI			
1US231A	* LFA	X-A				FD-2	PHC	XV			
1US231B	* LFA	X-A				FEU-2	* PHM	XVI			
1US231V	* LFA	X-A				FEU-2B	PHM	XVI			
1US481	AMP	XA				FEU-2B1V	PHM	XVI			
K1US671	* MMP	X-A				FEU-2M	PHM	XVI			
K1US731A.B	* LFA	X-A				FEU-2V	PHM	XVI			
K1US731V	* LFA	X-A				FS-2A	PHC	XV			
1US732A.B	* LFA	X-A				FS-B2	PHC	XV			
1US732V	* LFA	X-A				FS-K2	PHC	XV			
1US771	* AMP	X-A				FSA-G2		XV			
K1UT181A	* DMP	X-A				FSK-G2		XV			
K1UT181B	* DMP	X-A				GE-2	TET SIN	III		GKE-150=	
K1UT181V	* DMP	X-A				GMI-2B	TET SIN	III			
1UT191	AMP	XA				GS-2B	TRI SIN	III			
1UT221A	AMP	XA				GU-2	BEA SIN	II			
1UT221B	AMP	XA				GUZH-2	BEA SIN			G807+, 807\$	
1UT221G	AMP	XA				GZH2	PND SIN			G413+	
1UT221V	AMP	XA				I-2-50/1.5	TRI IGN	IV			
1UT321	AMP	XA				I2-70/0.8	* TRI IGN	IV			15480-70
1UT321A	* OPA	X-A				I2-140/0.8	* TRI IGN	IV			15481-70
1UT321B	* OPA	X-A				I2-200/1.5	* TET IGN	IV			15482-70
1UT322A.B	* OPA	X-A				I2-350/0.8	* TRI IGN	IV			15482-70
1UT401	AMP	XA				IN-2	*	XXIII-A			
1UT401A	* OPA	X-A				KF-2	BEA TWN			GU-32+, 832-A\$	
1UT401B	* OPA	X-A				KS-2	TRI SIN			GU-4+	
1UT402A.B	* OPA	X-A				KZH-2	BEA SIN			G-807+, 807\$	
1UT771	* AMP	X-A				MTI-2	TRI THY			TGI-200+	
1UYE191	AMP	XA				OG-2	DEC			XXIII	
1V3/8016	DIO SIN			1TS7S+, 1B3/8016\$		P2A		X			
1VD1	DIO SIN			1TS1, 1TS1S+		P2B		X		OC821=	
1VD2	DIO SIN			1TS7S+, 1B3/8016\$		PT-2	TRI THY			TG-213*	
1YE4A	TRI SIN	II				R-2				XXII	
1ZH1ZH	PND SIN	II				R-2M				XXII	
1ZH2	PND SIN			1ZH2M+		RB-2				XXII	
1ZH2M	PND SIN	II		1ZH2*		S2A		X			
1ZH17B	* PND SIN	II				S2B		X			
1ZH18B	* PND SIN	II				S2G		X			
1ZH24B	* PND SIN	II				S2V		X			
1ZH26A	PND SIN	II				SF2-1		XV			
1ZH29B	* PND SIN	II				SF-2-2		XV			
1ZH30B	PND SIN	II				SF-2-4		XV			
1ZH36B	* PND SIN	II				SF-2-5	* CDS	XV			
1ZH37B	* PND SIN	II				SF-2-8	* CDS	XV			
1ZH42A	* PND SIN	II				SF-2-9		XV			
AS-2	COU	XXI				SF-2-12		XV			
D2A	REC	XI		DG-TS9*+		SF-2-16	* CDS	XV			
D2B	REC	XI		DG-TS10*+	14341-69	SG2P	DIO SIN	V		OB2\$	13283-67
D2D	REC	XI		DG-TS2*+	14341-69	SG2S	DIO SIN	V		OA3\$	
D2G	REC	XI		DG-TS1*+	14341-69	SI-2B	COU	XXI			
D2I	* REC	XI			14341-69	SI-2BG	COU	XXI			
D2K	REC	XI		DG-TS6*+		SK2-5.6/2000	REG	XIII			
D2M	REC	XI		DG-TS7*+		SK2-6.8/2000	REG	XIII			
D2N	REC	XI		DG-TS15*+		SK2-8.2/2000	REG	XIII			
D2P	REC	XI		DG-TS16*+		SK2-10/1000	REG	XIII			
D2R	REC	XI				SK2-12/1000	REG	XIII			
D2V	REC	XI		DG-TS8+	14341-69	SK2-15/1000	REG	XIII			

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
SK2-19/700	REG		XIII			2GF201	MVB		XA		
SK2-22/300	REG		XIII			2GS191	OSC		XA		
SK2-24/300	REG		XIII			2GS192	OSC		XA		
SK2-28/300	REG		XIII			2GS193	OSC		XA		
SK2-30/300	REG		XIII			K2GS371	* REG		X-A		
SK2-36/300	REG		XIII			2ID231			XA		
SK2-43/300	REG		XIII			2IL071			XA		
SK2-51/200	REG		XIII			2IL072			XA		
SK2-62/200	REG		XIII			2IL073			XA		
SK2-75/100	REG		XIII			2IL231			XA		
SK2-91/100	REG		XIII			2IL401B	* HAD		X-A		
SK2-110/100	REG		XIII			2IL401V	* HAD		X-A		
SK2-120/100	REG		XIII			2IR111			XA		
SK2-150/100	REG		XIII			2IR112			XA		
SK2-180/100	REG		XIII			2IR161	*		X-A		
SK2-220/50	REG		XIII			2IR162	*		X-A		
SK2-270/50	REG		XIII			2IR401A	* BRG		X-A		
SK2-300/50	REG		XIII			2IR401B	* BRG		X-A		
ST-2-26			XIX			2IR402A	* BRG		X-A		
ST2S	BAL	TWN	VI		7162-70	2IR402B	* BRG		X-A		
STS-2	COU		XXI			2IR403A	* BRG		X-A		
STSV-2A	PHO			F-2+		2IR403B	* BRG		X-A		
TG2-01/01	TRI	THY	VII	1050\$		2IS401A	* HAD		X-A		
TG2-0.5/12	TRI	THY	VII			2IS401B	* HAD		X-A		
TG-2.5/5	TRI	THY	VII	VT-1		2IYE111			XA		
TGI-2.5/3	TRI	THY		TG1-2.5/4**		2IYE112			XA		
TGI-2.5/10	TET					2IYE161	* COU		X-A		
TGI-2-260/12	TRI	THY	VII			2IYE162	* COU		X-A		
TGI-2-32516	TRI	THY	VII			2IYE231			XA		
TGI-2-400/16*	THY	TRI	VII			2IYE401A	* COU		X-A		
TGI-2-40035	TRI	THY	VII			2IYE401B	* COU		X-A		
TKH-2	TRI	THY	VII			2J55	MAG		IX		
TKI-2	TMS	MEA	XIX			2K1	PND		II	2K1M+	
TO-2	PND	SIN		10P12S+		2K1M	PND	SIN	II	2K1*, SB241*	
TP-2/0.5	REG		XIX			2K2	PND	SIN		2K2M*	
TP-2/2	REG		XIX			2K2M	PND	SIN	II	1E5G\$, 2K2*, S0241*	
TSH-2	TMS	MEA	XIX			2KD281	SWI		XA		
TV-2	THM		XVIII			2KD282	SWI		XA		
TVB-2	THM		XVIII			2KD351	* COM		X-A		
VD2	DIO	SIN		V1-2/40+		2KH1	DWD	SIN		2KH1L+	
VI-2-27/35	DIO	SIN	IV			2KH1L	* DWD	SIN	II	2KH1*	
VI-2-70/32	DIO	SIN	IV			2KH2	DIO	SIN		2VDBA+, 2TS2S+, 2X2\$	
VI-2-100/50	DIO	SIN	IV			K2KT241	* COM		X-A		
2A1	PTG	SIN	II	S0242*+ 2A1M		2KT281	SWI		XA		
2A1M	PTG	SIN		S0242*+		2LB011	NND		XA		
2A3	TRI	SIN		2S4S+, 2A3\$		2LB012	NOR		XA		
2A201A			XIV			2LB013	NOR		XA		
2A202A			XIV			2LB014	NND		XA		
2D1L	DWD	SIN	II			2LB015	NND		XA		
2D1S	DIO	SIN	II	DI-2-10+		2LB016	NOR		XA		
2D2S	* DIO	SIN	II	DSH2-10+	17099-71	2LB017	NOR		XA		
2D3B	* DIO	SIN	II			2LB041	NDR		XA		
2D3S	DIO	SIN	II			2LB042	NND		XA		
2D7S	* DIO	SIN	II			2LB051	NCR		XA		
2D9S	DIO	SIN	II			2LB052	NOR		XA		
2D21	TET	THY		TG3-0.1/1.3+, 2D21\$		2LB053	NOR		XA		
2D503A	SI			KD503A+		2LB071	NOR		XA		
2D503B	SI			KD503A+		2LB072	NOR		XA		
2DA181	DET		XA			2LE073	NOR		XA		
2DA351	* AMP		X-A			2LB074	NOR		XA		
2DS191	LIM		XA			2LB075	NOR		XA		
K2DS241	* DET		X-A			2LB076	NOR		XA		
2DS351	* DET		X-A			2LB111	NND		XA		
2E1	TET	SIN	II			2LB112	NND		XA		
2E2	TET	SIN	II	UB155+		2LB113	NND		XA		
2E2P	* TET	TWN	II			2LB114	NND		XA		
2F2M	TRI	SIN				2LB115	NND		XA		
2FP201	FIL		XA			2LB116	NND		XA		
2GF181	MVB		XA			2LB117	NND		XA		
2GF182	MVB		XA			2LB118	NND		XA		

Group I-- NUMERICAL-- Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
2LB119	NND		XA			2LP401	* EXP		X-A		
2LB1110	NOR		XA			2LR171	ANR		XA		
2LB1111	NOR		XA			2LR221	ANR		XA		
2LB1112	NOR		XA			2LS011	ADR		XA		
2LB161	* NOR		X-A			2LS021	ADR		XA		
2LB162	* NOR		X-A			2LS022	ADR		XA		
2LB163	* NOR		X-A			2LS023	ADR		XA		
2LB164	* NOR		X-A			2LS024	ADR		XA		
2LB165	* NOR		X-A			2LS025	ADR		XA		
2LB166	* NOR		X-A			2LS026	ADR		XA		
2LB167	* NOR		X-A			2LS027	ADR		XA		
2LB168	* NOR		X-A			2LS02B	ADR		XA		
2LB169	* NOR		X-A			2LS151	ADR		XA		
2LB1610	* NOR		X-A			2LS152	ADR		XA		
2LB1611	* NOR		X-A			2LS211			XA		
2LB1612	* NOR		X-A			2MP351	* MOD		X-A		
2LB171	NND		XA			2MS191			XA		
2LB171B	* NND		X-A			2MS192			XA		
2LB172	NND		XA			2N1	TRI DUO	II		1J6GT\$, 2N1M*, SB243, S0243	
2LB172B	* NND		X-A			2N1M	TRI DUO			2N1+, SB243+, S0243+	
2LB173	NND		XA			2NDO21			XA		
2LB173A	* NND		X-A			2NDO22			XA		
2LB174A	* NOR		X-A			2NE281			XA		
2LB174B	* NOR		X-A			2NK041			XA		
2LB1B1			XA			2NK051			XA		
2LB211			XA			2NK281			XA		
2LB231	ORD		XA			2NS191A			XA		
2LB232B	* NOR		X-A			2NS191B			XA		
2LB401A	* NND		X-A			2NT011			XA		
2LB401B	* NND		X-A			2NT012			XA		
2LB401V	* NND		X-A			2NT013			XA		
2LB402	* NND		X-A			2NT171			XA		
2LB403A	* NND		X-A			2NT172			XA		
2LB403B	* NND		X-A			2NT173			XA		
2LB403V	* NND		X-A			2NT191			XA		
2LB404A	* NND		X-A			2P1	BEA SIN	II		SB244+, S0244+	
2LB404B	* NND		X-A			2P1M	BEA SIN			2P1P+, SB244	
2LB404V	* NND		X-A			2P1P	BEA SIN	II		DL94=, 2P1M, 3S4\$	8005-66
2LB405	* NND		X-A			2P2	BEA SIN	II		3S4\$	
2LB406A	* NND		X-A			2P2P	* BEA SIN	II		DL92=, 3S4\$	9947-66
2LB406B	* NND		X-A			2P3	BEA SIN	II		SB25B+, S025B+, 2P2M+	
2LB406V	* NND		X-A			2P5B	* PND SIN	II			
2LI041			XA			2P9	BEA SIN			2P9M+, 2P9S	
2LL231			XA			2P9M	BEA SIN	II		2P9+, 2P9S, 6AK7	
2LN021	*		X-A			2P9S	BEA SIN			2P9M+, 2P9	
2LN022	*		X-A			2P19B	PND SIN	II			
2LN051	NND		XA			2P21S	BEA SIN				
2LN052	NND		XA			2P29	PND SIN			2P29L+	
2LN111	NND		XA			2P29L	* PND SIN	II			
2LN112	NND		XA			2P29P	PND SIN	II			
2LN113	NND		XA			2PD2B1	* CN		X-A		
2LN114	NND		XA			2PD2B2	* CN		X-A		
2LN115	NND		XA			2PM351	* AMP		X-A		
2LN116	NND		XA			2PN151	*		X-A		
2LN151	NND		XA			2PN152	*		X-A		
2LN161	* NOR		X-A			2PN381	* AGC		X-A		
2LN162	* NOR		X-A			K2PP241	* REG		X-A		
2LN163	* NOR		X-A			2PP351	* AGC		X-A		
2LN164	* NOR		X-A			2PS351	* CN		X-A		
2LN165	* NOR		X-A			2S1	TRI SIN	II		UB152+	
2LN166	* NOR		X-A			2S2	TRI SIN	II		UB240+	
2LN181	INV		XA			2S3	TRI SIN			2S4S+, 2A3\$	
2LN1B2	INV		XA			2S3A	* TRI SIN	II			
2LN183	INV		XA			2S3M	TRI SIN			2S2+	
2LN211	NOR		XA			2S4S	* TRI SIN	II		2A3\$	
2LP021	* DIO		X-A			2S14B	* TRI SIN	II			
2LP022	* DIO		X-A			2S22	TRI SIN			6S8S+, 2C22\$	
2LP171	EXP		XA			2S49D	* TRI SIN	II			
2LP172	EXP		XA			2S-156A	REG SI	XIII			
2LP173	EXP		XA			2S-168A	REG SI	XIII			

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
2S920AhPk	REG	SI	XIII			K2US241	* AMP		X-A		
2S930AhPk	REG	SI	XIII			K2US242	* AMP		X-A		
2S950AhPk	REG	SI	XIII			K2US243	* AMP		X-A		
2S980AhPk	REG	SI	XIII			K2US244	* LFA		X-A		
2SV381	* AMP		X-A			K2US245	* LFA		X-A		
2T301				KT301+		K2US246	* AMP		X-A		
2T301A				KT301A+		K2US247	* LFA		X-A		
2T301B				KT301B+		K2US248	* LFA		X-A		
2T301D				KT301D+		K2US249	* LFA		X-A		
2T301G				KT301G+		2US281	AMP		XA		
2T301V				KT301V+		2US282	AMP		XA		
2T301YE				KT301YE+		2US283	AMP		XA		
2T301ZH				KT301ZH+		2US284	AMP		XA		
2TK041			XA			2US285	AMP		XA		
2TK171A			XA			2US351	* AMP		X-A		
2TK171B	* FLP		X-A			2US352	* AMP		X-A		
2TK181			XA			2US353	* AGC		X-A		
2TM-20	TRI	TWN	III			2US354	* LFA		X-A		
2TM-100	TRI	TWN	III			2US355	* LFA		X-A		
2TRO71			XA			2US356	* AMP		X-A		
2TRO72			XA			2US357	* AGC		X-A		
2TRO73			XA			K2US371	* LFA		X-A		
2TR111	NOR		XA			K2US372	* LFA		X-A		
2TR112	NOR		XA			K2US373	* AMP		X-A		
2TR113	NOR		XA			2US381	* CON		X-A		
2TR114	NOR		XA			2US382	* AMP		X-A		
2TR115	NOR		XA			2UYE181	AMP		XA		
2TR116	NOR		XA			2V6	DIO ARC	IV			
2TR161	* FLP		X-A			2V12	DIO ARC	IV			
2TR162	* FLP		X-A			2V20	DIO ARC	IV			
2TR163	* FLP		X-A			2VD8	DIO SIN	II			
2TR164	* FLP		X-A			2VN12	DIO ARC	IV			
2TR165	* FLP		X-A			2VN20	DIO ARC	IV			
2TR166	* FLP		X-A			2ZH1M	PND SIN	II		SB245+	
2TR171A			XA			2ZH2B	PND SIN				
2TR171B	*		X-A			2ZH2M	PND SIN	II			
2TR172			XA			2ZH4	PND SIN	II		S0257+	
2TR211	FLP		XA			2ZH15B*	PND SIN	II			
2TR231			XA			2ZH27	PND SIN			2ZH27L+	
2TS2S	* DIO	SIN	II	2X2\$	8527-65	2ZH27L*	PND SIN	II		2ZH27+	
2TS051	* FLP		X-A			2ZH27P*	PND SIN	II			
K2TS241	* FLP		X-A			2ZH28L	PND SIN	II			
2U-101A	SCR			KU101A+		K2ZHA241	* MIX		X-A		
2U-101B	SCR			KU101B+		K2ZHA242	* MIX		X-A		
2U-101D	SCR					K2ZHA243	* AGC		X-A		
2U-101G	SCR			KU101G+		K2ZHA244	* AMP		X-A		
2U-101V	SCR					K2ZHA371	* CN		X-A		
2U-101YESCR				KU101YE+		K2ZHA372	* DET		X-A		
K2UB241	* AMP		X-A			K2ZHA373	* AMP		X-A		
2UE181	* EMF		X-A			D3A	DET	XIV			
2UE182	* EMF		X-A			D3B	DET	XIV			
2UI021	AMP		XA			DG-S3	MIX	XIV			
2UI071	AMP		XA			DG-TS3	REC	XI			
2UI111	AMP		XA			DK-S3	MIX	XIV			
2UI151	AMP		XA			DK-V3	* DET	XIV			
2UI181	AMP		XA			DL-S3	MIX				
2UI182	AMP		XA			EM-3	TET SIN	II			
2UI183	AMP		XA			F-3	* PHO	XVI			
2UN021	*		X-A			FD-3	PHC	XV			
2UN022	*		X-A			FEU-3B	PHM	XVI			
2UP161	* AMP		X-A			FEU-3M	PHM	XVI			
K2UP241	* MIX		X-A			FEU-R3	PHM	XVI			
2US181	AMP		XA			FS-3A	PHC	XV			
2US191A	AMP		XA			FS-K3	PHC	XV			
2US191B	AMP		XA			GI-3	TRI SIN	III		2C26A\$	
2US192	AMP		XA			GI-3/100	TRI SIN			GI-3+	
2US193	AMP		XA			GK3A	TRI SIN	III			
2US194	AMP		XA			GM3P	TRI SIN	111			
2US201	AMP		XA			GMI-3	TET SIN	III			
2US202			XA								

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
GS-3B	TET	SIN	III			3TS16S	DIO	II		3A3\$, 3B2\$	
GU-3	BEA	SIN	III			3TS18P*	DIO	SIN	II		10372-67
GUZH-3	BEA	SIN		G1625+, 1625\$		3TS22S*	DIO	SIN	II	GY501=	
KF-3	BEA	SIN		GU-13+, 813\$		3V30	DIO	ARC	IV		
KZH-3	BEA	SIN		G-1625+, 1625\$		3VN30	DIO	ARC	IV		
LI3	IC		VIII-A			3VN60	DIO	ARC	IV		
LIM-3	LAM		XXIV			3VN100	DIO	ARC	IV		
MD3	*		XI			3VP1	OS			8L029+, 3BP1A\$	
MS3	TRI	SIN		GM57+, UB180=, M457+		3ZH1BV*	PND	SIN	II		
OG-3	* DEC		XXIII			3ZH2BV*	PND	SIN	II		
P3A			X			DG-S4	MIX	XIV			
P3B			X			DG-TS4	REC	XI		D2YE*+	
P3V			X			DK-S4	MIX	XIV			
PIM-3	IC		VIII			DK-V4	* DET	XIV			
PT-3	TRI	THY		TG-235*+		DL-S4	MIX				
R-3			XXII			EM-4	* TRI	SIN	II	1E3P+	
RB-3			XXII		15630-70	F-4	* PHO	XVI			
S3A			X			FEU-4	* PHM	XVI			
S3B			X			FS-A4	PHC	XV			
S3D			X			FS-K4	PHC	XV			
S3G			X			GI-4A	TRI	SIN	III		
S3V			X			GKV-4	TRI	SIN		GU-4+	
S3YE			X			GMI-4B	TET	SIN	III		
SBT-3	COU		XXI			GS-4	TRI	SIN	III		
SF3-1			XV			GS-4	COU	XXI			
SF-3-5	* CDS		XV			GS-4B	TRI	SIN		G431A+	
SF-3-8	* CDS		XV			GS4D	TRI	SIN	III		
SG3P	REG		V			GU4	TRI	SIN	III		
SG3S	DIO	SIN	V	OC3\$		GU4A	TRI	SIN	III		
SI-3B	COU			MST-18+		IN-4	*		XXIII-A		
SI-3BG	COU		XXI			KMT-4	* TMS	XIX		10688-63	
SNM-3	COU		XXI			KS-4	TRI	SIN		GU-150+	
ST3P	DIO	SIN	VI			LIM-4	LAM	XXIV			
ST3-17	TMS	MEA	XIX			LN-4	* ST	V111			
ST3-18			XIX			LP-4	* COM	VII			
ST3-19	TMS	MEA	XIX			MMT-4	* TMS	XIX		10688-63	
ST-3-21			XIX			MS-4	COU	XXI			
ST-3-22			XIX			MSTR-4	COU	XXI			
ST3-23	TMS	COM	XIX			MTI-4	TRI	THY		TGI-1-90/8+	
ST-3-24			XIX			OG-4	DEC	XXIII			
ST3-25	TMS	MEA	XIX			P4				2N68\$	
ST-3-26			XIX			P4AE	*	X			
STS-3	COU		XXI			P4BE	*	X			
STSV-3	* PHO		XVI			P4DE	*	X			
TG3-0.1/1.3	TET	THY	VII	2D21\$	13875-68	P4GE	*	X			
TG3-2.5/10	TRI	THY	VII			P4L		X			
TKH3B	TET	THY	VII			P4VE	*	X			
TKI-3	TMS	MEA	XIX			PIM-4	IC	VIII			
TO-3	PND	SIN		7ZH12S+		R-4		XXII			
TSG-3	* PHO		XVI			S4A		X			
TSV-3	PHO		XVI			S4B		X			
TVB-3	THM		XVIII			S4G		X			
VDI-3D	DIO	SIN		VI-1-30/25+		S4V		X			
VT-3	TRI	THY		TR1-5/2*+		SBS-4	COU	XXI			
3A4S	PND	SIN	II			SF-4-1	PHC	XV			
3B4S	BEA	SIN	II			SG4S	DIO	SIN	V	OD3\$	
3D6A-V*	DIO	SIN	II			SI-4BG	COU	XXI			
3E29	BEA	TWN		GI-30+, 3E29\$		SI-4G	COU			VS-9T+	
3I-301A	TUN			AI301A		ST-4-15	TMS	XIX			
3I-301B	TUN			AI301B		STSV-4	* PHO	XVI			
3I-301C	TUN			AI301C		TGI-4	TRI	THY		TGI-1-130/10+	
3I-301V	TUN			AI301V		TKH-4B	TET	THY	VII		
3J21	MAG		IX			TO-4	PND	SIN		7P12S+	
3LK1B	* TV		V111			TSG-4	* PHO	XVI			
3L01-I*			VIII			TSV-4	PHO	XVI			
3S1	TRI	SIN	II	TO-141+		TV-4	THM	XVIII			
3S2	TRI	SIN	II	TO-142+		TVB-4	THM	XVIII			
3S6B-V*	TRI	SIN	II			VDI-4D	DIO	SIN		VI-1-70/32+	
3S7B-V*	TRI	SIN	II			VS-4	COU	XXI			
3S9	TRI	SIN	II			4D2	DIO	SIN		4TS6S+	



Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
4D5S		DIO	SIN II			SNM-5	COU	XXI			
4D17P		DIO	SIN II			SNMU-5	* COU	XXI			
4E1		TET	SIN II			STS-5	COU	XXI			
4E2		TET	SIN II			TGSR	* TET THY	VII			
4E3		TET	SIN II			TKH-5A	TRI THY	VII			
4FGS		BEA	SIN II			TKH-5B	TRI THY	VII			
4J26-30		MAG	IX			TV-5	THM	XVIII			
4J45		MAG	IX			TVB-5	THM	XVIII			
4J50		MAG	IX			UV-5	TWT	IX			
4N1		TRI	DUO II	SB259+ . S0259+		VG-5	POW	XII			
4P1		PND	SIN II			5L01B	OS		5L03B+ . 2AP1\$		
4P1L	*	PND	SIN II			5L03B1*	OS	VIII	2AP1\$	17797-72	
4P2		PND	SIN			5SR1	OS		5CP1A\$		
4P6L		PND	SIN			5SR7	OS		5CP7A\$		
4P10S		PND	SIN II			5TS3S	* DWD SIN II		5U4C\$	8360-66	
4S1		TRI	SIN II	UB107+		5TS4	DIO DUO		5TS4S+ . 5Z4G\$		
4S2		TRI	SIN II	UB110+		5TS4M	* DIO DUO II		5Z4\$		
4S3		TRI	SIN II			5TS4S	* DIO DUO II		5Z4\$	8079-67	
4S3S		TRI	SIN II			5TSBS	□ DWD SIN II			8361-66	
4S4		TRI	SIN II			5TS9S	□ DWD SIN II		1502+	8362-66	
4S5		TRI	SIN II	S0-1B5+		5TS9SE	DWD SIN				
4TS1M		DIO	SIN	4TS6S+		5TS12P*	DIO SIN II				
4TS6S	□	DIO	SIN II			5VKH1	DWD SIN		5Z4G\$		
4TS14S	□	DIO	SIN II			5VKH2	DWD SIN II		5U4C\$		
4VD1		DIO	SIN II			5VKH3	DWD SIN II		5Y3G\$		
4VKH1		DIO	TWN II	V0-188**		D6	REC	XIII			
4VKH2		DIO	SIN II	V0-18B**		DC-TS6	REC	XI	D2K+		
4ZH1L	*	PND	SIN II			DK-V6	DET	XIV			
4ZH1P		PND	SIN II			EM-6	* TET DBA	11			
4ZH4		PND	SIN	S0124+		F-6	PHO	XVI			
4ZH5		TET	SIN II	4ZH5S+		FS-A6	PHC	XV			
4ZH5S		PND	SIN II			FS-D6	PHC	XV			
DG-TS5		REC	XI	D2ZH**		FS-K6	PHC	XV			
DK-S5		MIX	XIV			GI-6B	TRI SIN III		LD6		
DK-V5M	*	DET	XIV			GK6A	TRI SIN				
EM-5	*	TET DBA	11			GMI-6	BEA TWN III				
F-5	*	PHO	XVI			GS6	TRI SIN III				
FEU-5	*	PHM	XV1			GS-6	COU	XXI			
FEU-R5		PHM	XVI			GSH-6	NOI	IX			
FS-K5		PHC	XV			IN-6	* IND	XXIII-A		17821-72	
G-5		TRI	SIN	M39+		LD-6	TRI SIN		GI-6B+		
G-5A		TRI	SIN	GU5A+		LI6	IC	VIII-A			
G-5RA		TRI	SIN	GU-5B+		LP-6	* COM	V11			
GI-5B		TRI	SIN III			MMT-6	TMS	XIX			
GK5A		TRI	SIN III			MS-6	COU	XXI			
GMI-5		TET	SIN III			P6A		X			
GP-5	*	TRI	SIN II			P6B		X	OC821=		
GS-5B		TRI	SIN	G433A+		P6D		X	OC812=		
GSH-5		NOI	IX			P6G		X			
GU5A		TRI	SIN III		12402-66	P6V		X	OC814=		
GU5B		TRI	SIN III		12403-66	R6		XXII			
GUO-5		TRI	SIN	G120+		SG6S		II			
LN5	*	ST	VIII			SGS-6	COU	XXI			
LP-5	*	COM	VII			STS-6	COU	XXI			
MMT-5		TMS	MEA XIX			STSV-6	PHO	XVI	F-4+		
MTI-5		TRI THY		TGI-1-32516+		TKH-6G	HEX	VII			
OG-5		DEC	XXIII			TP-6/2	REG	XIX			
P5A		X				TSV-6	PHO	XVI	F-5+		
P5B		X		2N107\$		TVB-6	THM	XVIII			
P5D		X		CK727\$		UV-6	TWT	IX			
P5G		X		2N65\$		VS-6	COU	XXI			
P5V		X				6A1B	PTG SIN		6SA7\$		
P5YE		X				6A2P	* PTG SIN II		6BE6\$ . EK90=	8354-66	
R-5	*	XXII			15632-70	6A3P	□ GTB SIN II		6BN6\$		
RB-5	*	XXII			15631-70	6A4P	* PTG DBA II				
RB-5A		XXII				6A5B	PTG SIN		6L7\$		
SBS-5		COU	XXI			6A6A	DIO				
SG5B		DIO	SIN V			6A7	* PTG SIN II		6SA7\$	8086-67	
SG5B-V		REG		SG5B+		6AB	□ PTG SIN II		6AB\$ . 6A8\$	8367-67	
SGS-5		COU	XXI			6A8B	PTG SIN		6A8\$		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
6A8M		PTG SIN		6A8S+		6K9S		PND SIN II		6K7G\$, 6SK7\$	
6A10S		PTG SIN II		6SA7\$	8087-56	6K11B-K		PND SIN II		6K1B+	
6A15B		PTG SIN		6SA7\$		6K12		PND SIN		6EH7\$	
6AG7		BEA SIN		6P9+, 6AG7\$		6K13P	*	PND SIN II		6EH7\$, EF183=	
6AZH5		PND SIN		6AG5\$ EF96=		6KI4B		PND SIN II			
6B1P	*	PND DIO II				6K14B-V		PND SIN II			
6B2P	*	PND DIO II		L100+		6K15B	*	PND SIN II			
6B4		TRI SIN		6A3\$		6K16B	*	PND SIN II			
6B8	*	PND DWD 11				6K17B		PND SIN		6SK7\$	
6B8M		PND DWD		6B8S+, 6B8G\$		6K19B		PND SIN		9003\$	
6B8S		PND DWD II		6B8G\$, 6B8M*	8369-57	6K19P		PND SIN		6K1P+, 9003\$	
6BKH1		DIO DUO		6KH5S+		6KH1ZH		DIO SIN		6D4ZH+, 9004\$	
6DIA		DIO SIN		6D6A*, 5704\$		6KH2P	*	DIO TWN II		EAA91=, 6AL5\$	8348-66
6D1ZH		DIO SIN		6D4ZH*, 9004\$		6KH4P		DWD SIN		6TS4P+	
6D3D	□	DIO SIN II		559\$		6KH5		DWD SIN		6VKH1+, 6X5GT\$	
6D4ZH	□	DIO SIN II		9004\$		6KH5S		DWD SIN		6VKH1+, 6X5GT\$	
6D6A	*	DIO SIN II		5704\$, *6DIA+		6KH6		DIO TWN		6KH6B+, 6H6\$	
6D8D	□	DIO SIN II				6KH6B		DIO TWN II		6H6-G\$	
6D10D	□	DIO II				6KH6M		DIO TWN		6KH6S+, 6H6G\$	
6DI3D	*	DIO SIN II				6KH6S	*	DIO TWN II		6H6-G\$	8080-67
6D14P	*	DIO SIN II				6KH7B	*	DIO TWN II			
6DI5D		DIO SIN II				6L1P	*	HPT SIN II			
6D16D		DIO SIN II				6L7	□	PTG SIN II		6L7\$	
6D20P	*	DIO SIN II		EY88=, 6AL3\$	13848-68	6LK1A		ELM VIII			
6D22S		DIO SIN 11				6LK1B	*	ELM VIII			
6E5P	*	TET SIN II				6LK3B	*	TV VIII			
6E6P	*	TET SIN II				6L01I	*	ELS VIII			
6E6P-YE	*	BEA SIN II		E7119+	14206-69	6MKH1B	*	DIO TWN IV-A			
6E7P	*	TET SIN II				6MKH1S	*	DIO TWN IV-A			
6E12N	*	TET SIN II		7587\$		6MKH2B	*	DIO TWN IV-A			
6E13N	*	TET SIN II				6MKH3S	*	DIO TWN IV-A			
6E14N	*	TET SIN II				6MKH4S	*	DIO TWN IV-A			
6F1P	*	PND TRI II		EF80=, 6U8\$, 6BL8\$	12399-66	6MKH5S	*	DIO TWN IV-A			
6F3P	*	TRI PND II		6BM8\$	13394-72	6MUKH6P	*	DIO TWN IV-A			
6F4P	*	PND TRI II		6DX8\$	14608-69	6N1P	*	TRI TWN II		6BK7\$	8355-66
6F5		TRI SIN		6S4B+, 6F5\$		6N2P	*	TRI TWN II		ECC83=, 6AX7\$	8356-66
6F5B		TRI SIN		6S4B+, 6F5\$		6N3P	*	TRI TWN II		ECH42=, 2C51\$	8357-66
6F5M		TRI SIN II		6F5GT\$, 6S4+	8372-57	6N4P		TRI TWN II		12AY7\$	
6F5P	*	TRI PND II		6GV8\$	17224-71	6N5P	□	TRI TWN II			13892-68
6F5S		TRI SIN II				6N5S	*	TRI TWN II		6AS7G\$	
6F6		PND SIN		6P6B+, 6F6\$		6N6		DIO TWN		6KH6B+, 6H6\$	
6F6MI		PND SIN II				6N6P	*	TRI TWN II			16754-71
6F6S		PND SIN II		6F6-GT\$	8082-67	6N7		TRI TWN II		6N7\$, 6N7S+	
6F7		PND TRI II				6N7S	*	TRI TWN II		6N7-GT\$	8374-66
6F9P	*	PND TRI II				6N8		TRI TWN		6N8S+, 6SN7GT\$	
6F12P		PND TRI 11			17346-71	6N8M		TRI TWN		6N8S+, 6SN7GT\$	
6G1	□	TRI DWD II		6SR7\$		6N8S	*	TRI TWN II		6SN7-GT\$	
6G2	*	TRI DWD II		6SQ7\$	8370-65	6N9		TRI TWN		6N9S+, 6SL7GT\$	
6G2P-K		TRI DWD II				6N9M		TRI TWN		6N9S+, 6SL7GT\$	
6G2S		TRI DWD		6SQ7G\$		6N9S	*	TRI TWN II		6SL7GT\$	
6G3P		TRD TRI II				6N10		TRI TWN		6N10S+, 6SC7GT\$	
6G3S		TRI DWD		6AK5\$		6N10M		TRI TWN		6N10S+, 6SC7GT\$	
6G7	*	TRI DWD II		6Q7=	8371-65	6N10S		TRI TWN II		6SC7GT\$	
6I1P	*	PTG TRI II		ECH81=, 6AJ8\$	9948-66	6N11		TRI TWN		6N5S+, 6AS7G\$	
6I3P		PTG TRI II				6N12S	*	TRI TWN II		6DN7\$, 5687\$	
6I4P		PTG TRI		6V9\$, ECH200=		6N13S	*	TRI TWN II		6080\$, 6AS7\$	8378-66
6II4P		PTG TRI II		ECH81=, 6I1P+		6NI4P	*	TRI TWN II		ECC84=, 6CW7\$	10880-66
6K1B	*	PND SIN II		5702\$		6N15		TRI TWN II		6J6\$, 6N15P+	
6K1L		PND SIN II				6N15P	*	TRI TWN II		6J6\$, ECC91=	
6K1P		PND SIN II		9003\$		6N16B	*	TRI TWN II			
6K1ZH		PND SIN II		956\$		6N17B	*	TRI TWN II			
6K2P		PND SIN		6K4P+		6N18B	*	TRI TWN II			
6K3	*	PND SIN II		6SK7\$	8084-67	6N19P	*	TTR DWD II			
6K4	*	PND SIN II		6SG7\$	8083-67	6N21B	*	TRI TWN II			
6K4P	*	PND SIN II		EF93=, 6BA6\$	8352-66	6N23P	*	TRI TWN II		ECC88=, 6DJ8\$	15078-69
6K6A	*	PND SIN II				6N24P	*	TRI DUO II		ECC89=, 6FC7\$	15531-70
6K7		PND SIN II		6K7S*, 6K7G\$, 6K9S+	8363-66	6N25G	*	TET TWN II			
6K7S		PND SIN		6K9S+, 6K7G\$ 6K7		6N26P	*	TRI TWN II			
6K8B		PND SIN II				6N27P	*	TRI TWN II		ECC86=, 6GMB\$	
6K8P		PND SIN II		6ES6\$		6N28B		TRI TWN II			

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
6N28B-V	TRI	TWN	II			6S11D	TRI	SIN	II		
6P1P *	BEA	SIN	II	EL90=. 6AQ5\$	8358-66	6S13D *	TRI	SIN	II		
6P2	BEA	SIN		6P6S+. 6V6GT\$		6S15P *	TRI	SIN	II		
6P2P	PND	SIN	II			6S16D *	TRI	SIN	II		
6P3	BEA	SIN		6P3S+. 6L6G\$		6S17K *	TRI	SIN	II		
6P3B	BEA	SIN		6P3S+. 6L6G\$		6S18S *	TRI	SIN	II		
6P3S *	BEA	SIN	II	6L6G\$	8376-66	6S19P *	TRI	SIN	II		12841-67
6P3S-YE	BEA	SIN		6P3S.E7121+		6S20S *	TRI	SIN	II	6BD4\$	
6P4	PND	SIN	II	6G6G\$		6S21D *	TRI	SIN	II		
6P6	BEA	SIN		6P6S+. 6V6GT\$		6S25B	TRI	SIN	II		
6P6B	PND	SIN	II	6F6\$		6S26B *	TRI	SIN	II	6S6B+	
6P6P	BEA	SIN				6S27B *	TRI	SIN	II	6S7B+	
6P6S *	BEA	SIN	II	6V6-GT\$	8375-66	6S28B-V*	TRI	SIN	II		
6P7	BEA	SIN		6P7S*+. 6BG6GA\$		6S29B-V*	TRI	SIN	II		
6P7S *	BEA	SIN	II	6P7*+. 6BG6GA\$		6S30B	TRI	SIN	II		
6P8P	TRI	SIN		6S1P+. 9002\$		6S31B *	TRI	SIN	II		
6P8S	PND	SIN	II	6G6G\$		6S32B *	TRI	SIN	II		
6P9 *	BEA	SIN	II	6AG7\$	8377-66	6S33B *	TRI	SIN	II		
6P9E	BEA	SIN	II	6AK7\$		6S33S *	TRI	SIN	II		
6P13S *	BEA	SIN	II			6S34A-V*	TRI	SIN	II		
6P14P *	BEA	SIN	II	EL84=. 6BQ5\$	10066-66	6S35A-V*	TRI	SIN	II		
6P15P *	BEA	SIN	II	EL83=. 6CK6\$	10879-66	6S36K *	TRI	SIN	II		
6P17S	BEA	SIN	II	6DY5\$		6S37B *	TRI	SIN	II		
6P18P *	BEA	SIN	II	6BQ6\$. EL82		6S39S	TRI	SIN	II		
6P20S *	BEA	SIN	II	6CB5\$. 6CD6\$		6S40P *	TRI	SIN	II		
6P21S *	BEA	SIN	II			6S41S *	TRI	SIN	II		
6P23P *	BEA	SIN	III			6S44D *	TRI	SIN	II		
6P23S *	BEA	SIN	II			6S45K	TRI	SIN	II		
6P25B *	PND	SIN	II			6S45P-YE	TRI	SIN	II		
6P27S *	BEA	SIN	II	6CA7\$		6S46G *	TRI	SIN	II		
6P30B *	PND	SIN	II			6S47S *	TRI	SIN	II		
6P31S *	BEA	SIN	II	EL36=. 6CM5		6S48D	TRI	SIN	II		
6P33P *	PND	SIN	II	6CW5\$. EL86		6S50D *	TRI	SIN	II		
6P34S *	PND	SIN	II			6S51N *	TRI	SIN	II	7586\$	
6P35GV*	PND	SIN	II			6S52N *	TRI	SIN	II	7895\$. 6CW4\$	
6P36S *	BEA	SIN	II	6GB5\$	13883-68	6S53N *	TRI	SIN	II	8058\$	
6P37N *	PND	SIN	II			6S56P *	TRI	SIN	II		
6P38P *	PND	SIN	II			6S58P *	TRI	SIN	II		
6P39S *	PND	SIN	II	E55L=. 8233\$		6S59P *	TRI	SIN	II		
6P41S *	BEA	SIN	II		17618-72	6S62N *	TRI	SIN	II		17484-72
6P42S *	BEA	SIN	II			6SK7	PND	TRI	II		
6R1B	TRI	DWD		6G1+. 6SR7\$		6TS4P *	DWD	SIN	II	6X4\$	8347-66
6R2P	BEA	DUO	II			6TS4S	DIO	SIN	II		
6R3S	BEA	DUO	II			6TS5S *	DWD	SIN	II	6X5GT\$	8528-66
6R7	TRI	DWD		6G7+. 6Q7\$		6TS10P*	DIO	SIN	II	6B3\$	
6R7B	TRI	DWD		6G7+. 6Q7\$		6TS13P*	DIO	SIN	II		
6R17B	TRI	DWD		6G2+. 6SQ7\$		6TS15S	DIO	TWN	II		
6S1B	TRI	SIN		6S6B+. 5703\$		6TS17S	DIO	SIN	II	6BL4\$. 6X5\$. 6AU4\$	
6S1P	TRI	SIN	II	9002\$		6TS19P*	DIO	SIN	II		
6S1ZH	TRI	SIN	II	4671\$. 955\$		6V1P *	PND	SIN	II		
6S2	TRI	SIN		6J5-GT\$		6V2P *	PND	SIN	II		
6S2B *	TRI	SIN	II	6S7B+. 5744\$		6V3S	PND	SIN	II		
6S2P *	TRI	SIN	II	6J4\$	8353-67	6VKH1	DWD	SIN	II		
6S2S *	TRI	SIN	II	6J5-GT\$	8081-67	6YE1P *	TRI	SIN	II	EM80=. 6BR5\$	10881-66
6S3B *	TRI	SIN	II	6K4A\$		6YE2P	TRI	SIN	II		
6S3P *	TRI	SIN	II			6YE3P	TRI	SIN	II	EM84=. 6FG6\$	
6S4	TRI	SIN		6F5\$		6YE5	TRI	SIN		6YE5S+	
6S4B	TRI	SIN	II	6F5\$		6YE5S *	TRI	SIN	II	6E5\$	8379-66
6S4P *	TRI	SIN	II	6B4\$		6ZH1B *	PND	SIN	II	5702\$	
6S4S	TRI	SIN	II	6B4-G\$	8373-66	6ZH1L	PND	SIN	II		
6S5	TRI	SIN	II	6S5S+. 6C5GT\$. 6J5GT\$		6ZH1P *	PND	SIN	II	6AK5\$. EF95=	8349-66
6S5B	TRI	SIN		6C5-GT\$		6ZH1P-E	PND	SIN		6ZH1P.E7112+. 5654\$	
6S5D *	TRI	SIN	II	TM1*+. 2C40\$		6ZH1ZH*	PND	SIN	II	954\$	
6S5S *	TRI	SIN	II	6C5-GT\$. 6J5GT. 6S5\$	8368-57	6ZH2B *	PND	SIN	II	5784\$. 5639\$	
6S6B *	TRI	SIN	II	5703\$		6ZH2M	PND	SIN	II	1851\$	
6S7B *	TRI	SIN	II	5744\$		6ZH2P *	PND	SIN	II	6ZH2P-E. E7113+. 6AS6\$11317-65	
6S8P *	TRI	SIN		6S1P+. 9002\$		6ZH2P-E	PND	SIN		6ZH2P.E7113+. 5725\$	
6S8S	TRI	SIN	II	2C22\$		6ZH3 *	PND	SIN	II	6SH7\$	8085-67
6S9D *	TRI	SIN	II			6ZH3M	PND	SIN	II	6AB7/1853\$	
6S10D	TRI	SIN	II			6ZH3P *	PND	SIN	II	6AG5\$. EF96=	8350-66

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
6ZH4	*	PND SIN II		6AC7\$, 6AB7\$	B364-66	GS-7A	TRI	SIN III			
6ZH4B		PND SIN		6AC7\$		GS-7B	TRI	SIN III			
6ZH4E		PND SIN II		6AB7\$, 6AC7\$		IN-7	*		XXIII-A		
6ZH4P	*	PND SIN II		6AU6\$, EF94=	1239B-66	IN-7A	*		XXIII-A		
6ZH5		TRI SIN		6J5\$		IN-7B	*		XXIII-A		
6ZH5A		PND SIN II				K-7	*	SI 1	XI-F		
6ZH5B	*	PND SIN II				K-7M	*	SI	XI-F		
6ZH5P	*	BEA SIN II		6AH6\$	8351-72	K-7S	*	SI	XI-F		
6ZH6M		PND SIN		6J7\$		KS-7		TRI SIN		G-811+, 811-A\$	
6ZH6P		PND SIN		6J7\$		LD-7		TRI SIN		GI-7B+	
6ZH6S	*	PND SIN II		Z62=		LI7	*	IC	VIII-A		
6ZH7	*	PND SIN II		6J7	8365-66	LK7M	*		VIII		
6ZH7B		PND SIN		6W7G\$		LN-7	*	ST	VIII		
6ZH8	*	PND SIN II		6SJ7\$	B366-67	LP-7		COM	VII		
6ZH8S		PND SIN II				MS-7		COU	XXI		
6ZH9B		PND SIN II				P7			X		
6ZH9C	*	PND SIN II				R-7			XXII		
6ZH9P	*	PND SIN II		E180F=, 66BB\$	11702-66	SAT-7		COU	XXI		
6ZH9P-E		PND SIN		6ZH9P, E7114+	17636-72	SBM-7		COU	XXI		
6ZH10B	*	PND SIN II				SBT-7		COU	XXI		
6ZH10P	*	PND SIN II			12842-67	SG7S		DIO SIN V			
6ZH11B		PND SIN		6SH7\$		SNM-7		COU	XXI		
6ZH11P	*	PND SIN II		6BQ5\$		TKH-7G			VII		
6ZH11P-E		PND SIN		6ZH11P+, E7115+		TVB-7		THM	XVIII		
6ZH12B		PND SIN		6SG7\$		UV-7		TWT	IX		
6ZH13		PND SIN		6ZH13L+		7L01M	*	OS	VIII		
6ZH13L	*	PND SIN II		6ZH13		7L055I	*	OS	VIII	3MP1\$	
6ZH20P	*	BEA DIO II				7P12S	□	PND SIN II		329A	
6ZH21P	*	BEA DIO II				7ZH12S	*	PND SIN II		328A\$	
6ZH22P	*	DIO BEA II				D8		REG	XIII		
6ZH23P	*	PND II				DG-TS8		REC	XI	D2V+	
6ZH31BK	*	PND SIN II		EF95=		DK-V8		VID SI	XIV		
6ZH32B	*	PND SIN II				EM-8		*	PND SIN II		
6ZH32P	*	PND SIN II		EF96=, 6267\$	14072-68	F-8	*	PHO	XVI		
6ZH33AV	*	PND SIN II				FS-K8		PHC	XV		
6ZH35BV	*	PND SIN II				GI-B		PND SIN III			
6ZH3BP	*	PND SIN II		EF184=, 6EJ7\$	14207-69	GS-B		COU	XXI		
6ZH39C	-V	PND SIN II				GS-BB		TET SIN III			
6ZH40P		PND SIN II		6ET6\$		GUB		TRI SIN III			7711-55
6ZH43P		PND SIN II				IN-8	*		XXIII-A		
6ZH44P		PND SCG II				IN-8-2	*		XXIII-A		
6ZH45BV		PND SIN II				KMT-8	*	TMS	XIX		10688-63
6ZH49P		PND SIN II				LN-8	*	ST	VIII		
6ZH50P	*	PND SIN II				MMT-8	*	TMS	XIX		10688-63
6ZH51P	*	PND SIN II				MS-8		COU	XXI		
6ZH52P	*	PND SIN II			17344-71	P8			X		
6ZH53P	*	PND SIN II			17345-71	P8A				P8+	
D7		REG	XIII			R-B			XXII		
D7A	*	REC	XI	DG-TS21**		SAT-B		COU	XXI		
D7B	*	REC	XI	DG-TS22**		SBM-8		COU	XXI		
D7D	*	REC	XI	DG-TS25**		SBT-8		COU	XXI		
D7G	*	REC	XI	DG-TS24**		SG8S		DIO SIN V			
D7V	*	REC	XI	DG-TS23**		SNM-8		COU	XXI		
D7YE	*	REC	XI	DG-TS26		STS-8		COU	XXI		
D7ZH	*	REC	XI	DG-TS27**		T8D		TMS	XIX		
DG-TS7		REC	XI	D2M+		TBE		TMS	XIX		
DK-S7		MIX	XIV			T8M		TMS	XIX		
DK-S7M	*	MIX	XIV			T8R		TMS	XIX		
DK-V7M	*	DET	XIV			T8S1		TMS	XIX		
EM-7	*	TRI SIN II				T8S1M		TMS	XIX		
F-7	*	PHO	XVI			TBS2		TMS	XIX		
FS-K7		PHC	XV			TBS2M		TMS	XIX		
FSK-7A		PHC	XV			TBS3		TMS	XIX		
FSK-7B		PHC	XV			TBS3M		TMS	XIX		
FSK-G7		PHC	XV			TG8/3		TRI THY		TG1-2.5/4+	
GI-7B		TRI SIN III		LD7		TKH-BG		HEX	VII		
GMI-7		TET SIN III				TVB-8		THM	XVIII		
GS-7		COU	XXI			VS-B		COU	XXI		
GS-7		TRI SIN		GK-3000+		8LK2B	*	TV	VIII		
						BLM3V	*	OS	VIII		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
8L02B	OS			8L029+ 3BP1A\$		SI-10BG	COU		XXI		
8L03I	* OS		V111			SI10N	* COU		XXI		
8L04I	* OS		V111			SNM-10	* COU		XXI		
8L029I*	OS		VIII	3BP1\$	17798-72	TCH-10	* TRI		XII-B		
8L029M				8L029I+		T0-10	PND	SIN		10P12S	
8L030I*	OS		VIII	3DP1\$		TS-10	* TRI		XII-B		
8L030M				8L030I+		VG-10	POW		XII		
8L039V*	OS		VIII	3JP7\$		VG-10-30	POW		XII		
D9A	REC		XI			VG-10-45	POW		XII		
D9B	* REC		XI		14342-69	VG-10-55	POW		XII		
D9D	* REC		XI		14342-69	VG-10-80	POW		XII		
D9G	* REC		XI		14342-69	VG-10-110	POW		XII		
D9I	* REC		XI		14342-69	VG-10-150	POW		XII		
D9K	* REC		XI		14342-69	VKU-10-0.25	SCR	SI4	XII-A		
D9L	* REC		XI		14342-69	VKU-10-0.5	SCR	SI4	XII-A		
D9M	GEP		XI			VKU-10-0.75	SCR	SI4	XII-A		
D9V	* REC		XI		14342-69	VKU-10-1.0	SCR	SI4	XII-A		
D9YE	* REC		XI		14342-69	VKU-10-1.5	SCR	SI4	XII-A		
D9ZH	* REC		XI		14342-69	VKU-10-2.0	SCR	SI4	XII-A		
DG-TS9	REC		XI	D2A+		VKU-10-2.5	SCR	SI4	XII-A		
EM-9	* TET	TWN	II			VKU-10-3.0	SCR	SI4	XII-A		
F-9	* PHO		XV1			10LK2B	* PR		VIII		
G-9	TRI	SIN		GU65+		10LK3B	* TV		V111		
GK9P	TRI	SIN	III			10L02I	* OD		V111		
GS-9	COU		XXI			10L043I*	OD		VIII		
GS9B	TRI	SIN	III			10P12S	* PND	SIN	II	312A	
LD-9	TRI	SIN		GS-9B+		10ZH1L	* PND	SIN	II	10ZH3L+	
LN9	* ST		VIII			10ZH3L	* PND	SIN	II	10ZH1L+	
MMT-9	* TMS		XIX		106B8-63	10ZH3P			SIN		
MS-9	COU		XXI			10ZH12S*	PND	SIN	II	310A\$	
P9			X	2N35\$		D11	* REC		XI		
P9A			X			DK-V11	VID	SI	XIV		
R-9			XXII			FEU-11	* PHM		XVI		
SBT-9	COU		XXI			GI-11B	TRI	SIN	III	LD-11	
SG9S	DIO	SIN	V			GK11A	* TET	SIN	III		
SI-9A	* COU		XXI			GS-11	COU		XXI		
SI-9BG	COU		XXI			GSH-11	NOI		IX		
SNM-9	COU		XXI			GU11A	TRI	SIN	III		
T9	TMS		XIX			GU11B	TRI	SIN	III		
TKH-9G			VII			IN-11	*		XXIII-A		
TVB-9	THM		XVIII			KMT-11	TMS		XIX		
VS-9	COU		XXI			LD11	TRI	SIN		GI-11B+	
VS-9T	COU		XXI			MS-11	COU		XXI		
D10	* REC		XI			P11	X			2N94\$	
D10A	* REC		XI			P11A	GAP		X		
D10B	* REC		XI			R-11			XXII		
DGTS10	REC		XI	D2B+		SI-11BG	COU		XXI		
F-10	* PHO		XV1			SI-11N	* COU		XXI		
G10	TRI	SIN	III			SNM-11	* COU		XXI		
G-10A	TRI	SIN		GU-10A+		TKH-11G	TET		VII		
G-10RA	TRI	SIN		GU-10B+		VS-11	COU		XXI		
GK10P	TRI	SIN	III			11LK1B	*		VIII		
GK0-10	TRI	SIN		GK-2000+		11LM2G	* DT		V111		
GS-10	COU		XXI			11LM3G	* DT		V111		
GSH-10	NOI		IX			11L01I	* OS		VIII		
GT-10	TRI	SIN		G46+		D12	* REC		XI		
GU10A	TRI	SIN	III		12B43-67	D12A	* REC		XI		
GU10B	TRI	SIN	III			DGTS12	REC		XI		
ISK10			XX			FEU-12	PHM		XVI		
ISP10			XX			FEU-12A	* PHM		XVI		
IST10			XX			GI-12B	TRI	SIN	III	LD-12	
KMT-10	TMS		XIX			GS-12	COU		XXI		
MO-10	TRI	SIN	III			GU12A	TRI	SIN	III	880\$	
P10	X			2N35\$		IN-12A	*		XXIII-A		
P10A	GAP		X			IN-12B	*		XXIII-A		
P10B	GAP		X			K-12	KLO		IX		
R-10			XXII			KIU12	X		KLA	IX	
SBT-10	COU		XXI			KMT-12	TMS		XIX		
SG10S	REG		V			LD12	TRI	SIN		GI-12B\$	
						MI-12	MAG		IX		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
MMT-12	TMS		XIX			13LM6V	* RA		V111		
MS-12	COU		XXI			13LM7V	* RA		V111		
OS12/500	*PND	SIN		G837=		13LM31M*	OS		VIII	5FP7\$	
P12		X		2N112\$		13LM31V	OS			13LM31M+	
P12A	GAP	X				13LM56I*	OS		VIII	5FP1\$	
R-12			XXII			13LM57	* OS		VIII	5FP7\$	
SI-12BG	COU		XXI			13LM57D	OS			13LM57+	
SNM-12	* COU		XXI			13LM58K*	OS		VIII		
TKH-12G			VII			13LN2	* ST		V111		
12B1M	PND	DWD	II			13LN6	* OD		VIII		
1282M	PND	DWD	II			13L01B			VIII		
12G1	TRI	DWD	II	12SR7\$		13L02B			VIII	5CP1-A*\$	
12G2	□ TRI	DWD	II	12SQ7\$		13L03I	* OS		VIII		
12K1M	PND	SIN	II			13L041	OS		VIII		
12K3	PND	SIN	II	12SK7\$		13L05P			VIII	5CP7-A\$	
12K4	* PND	SIN	II			13L06I			VIII	5FP7-A\$	
12K12B	PND	SIN		12SC7\$		13L07V	* OD		V111		
12K17B	PND	SIN		12SK7\$		13L09I	* OS		V111		
12KH3S	□ DWD	SIN	II	LG1		13L036	OS			5FP7\$, L0736+.13L036V+	
12LN1	* SO		VIII			13L036V*	OS		VIII		
12M1M	PND	TRI	II			13L037A*	OS		VIII	5CP7\$	
12N1	TRI	TWN		12N11S+, 12AH7GT\$		13L037I	OS			5CP1\$, L0737+	
12N4P	TRI	TWN	II	12AY7\$		13L037M	OS				
12N10	TRI	TWN		12N10S+, 12SC7GT\$		13L048V*	OD		VIII	L0748+	
12N10M	TRI	TWN		12N10S+, 12SC7GT\$		13L048I	OD			5SP1\$	
12N10S	TRI	DUO	II	12SC7\$		13L048M	OD				
12N11S	TRI	TWN	II	12AH7GT\$		13L054A*	OS		VIII	L0754	
12P4S	PND	SIN	II	12A6\$		13L054M	OS				
12P14S	BEA	SIN	II			13L054V	OS				
12P17L	* PND	SIN	II			13L0101M*			VIII		
12R1B	TRI	DWD		12G1+, 12SR7\$		13L0102M*			VIII		
12R178	TRI	DWD		12G2+, 12SQ7\$		13L0104A*TV			VIII		
12S2	TRI	SIN	II			13P1	BEA SIN			13P1M+, 13P1S+	
12S3S	* TRI	SIN	II	LD1+		13P1M	BEA SIN			13P1+, 13P1S+	
12S42S	* TRI	SIN	II			13P1S	□ BEA SIN II			13P1+, 13P1M+	
12ZH1	PND	SIN		12ZH1L+		13ZH41S*	PND SIN II				
12ZH1L	* PND	SIN	II	12ZH1		D14	* REC		XI		
12ZH1M	PND	SIN	II			D14A	* REC		XI		
12ZH3L	* PND	SIN	II			DGTS14	REC		XI		
12ZH8	□ PND	SIN	II	12SJ7\$		FEU-14	PHM		XVI		
12ZH8B	PND	SIN		12SJ7\$		FEU-14A	* PHM		XVI		
12ZH17B	PND	SIN		12SJ7\$		GI-14B	TRI SIN	III		LD-14	
D13	* REC		XI			IN-14	*		XXIII-A		
DGTS13	REC		XI			K-14	* SI		XI-F		
FEU-13	* PHM		XVI			KMT-14	TMS		XIX		
G-13	TRI	SIN	III			LI14	IM		VIII-A		
GI-13	TRI	SIN	III			MI-14	MAG		IX		
GI-13B	TRI	SIN	III			MP14B	*		X		
GM13	TET	SIN	III			MS-14	COU		XXI		
GU13	BEA	SIN	III	813\$		P14			X	2N65\$	
LI13	IM		VIII-A			P14A			X		
MMT-13	* TMS		XIX		10688-63	SG14P	REG AH		V		
MS-13	COU		XXI			SNM-14	* COU		XXI		
P13		X		2N43\$		TV-14	THM		XVIII		
P13A		X		2N34\$		UV-14	TWT		IX		
P13B		X				VS-14	COU		XXI		
SG13P	DIO	SIN	V	0A2\$		D15	REC		XI		
SI-13G	COU		XXI			DGTS15	REC		XI	D2N+	
SNM-13	* COU		XXI			FEU-15	* PHM		XVI		
TKH-13			VII			FEU-15A	* PHM		XVI		
UV-13	TWT		IX			FEU-15B	* PHM		XVI		
V13/30	DIO	SIN		V0-1		G-15A	TRI SIN			GU-11A+	
VS-13	COU		XXI			G-15RA	TRI SIN			GU-16B+	
13LK1B	* TV		VIII	5FP4\$		GDO-15	TRI SIN			G-61+	
13LK2B	* TV		VIII			GS-158	TET SIN	III			
13LK38	* TV		V111			GU15	BEA SIN	III			
13LK6B	* TV		V111			IFK15-1			XX		
13LK7B	* TV		V111			IN-15A	*		XXIII-A		
13LK8A	* PT		V111			IN-15B	*		XXIII-A		
13LM4V	* OS		VIII			ISSH15			XX		

Group 1—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
K-15	KLO		IX			18LK4B	TV		VIII		
KIU15	KLA		IX			18LK5B	* TV		VIII		
LI15	* IM		VIII-A			18LK7B	TV		VIII		
MI-15	MAG		IX			18LK9A	* PT		VIII		
P15	X			2N43\$. 0C604=		18LK11B*	TV		VIII		
P15A	GAP		X			18LK12B*	TV		VIII		
SG15P	DIO	SIN	V			18LK13L*	TV		VIII		
SG15P1	DIO	SIN	V	SG15P+		18LK14T*	ELS		VIII		
SG15P2	* REG		V		14783-68	18LK15	TV		VIII		
SNM-15	* COU		XXI			18LK17L*	ELM	ELM	VIII		
TG-15/3	TRI	THY		TG1-5/3+		18LM3S	* RA		VIII		
TR-15/2	TRI	THY		TR-1-5/2+		18LM3S	OS		VIII	78P7A\$, 18LM35V+	
TV-15	THM		XVIII			18LM35V*	OS		VIII	78P7\$	
VG15/5000	DIO	SIN		GG1-0.5/5+		18L01A			VIII		
15A6S	PND	SIN	II			18L01P			VIII	78P7A\$	
D16	REC		XI			18L040B	TV		VIII	7JP4\$, LK740+	
D16A	REC		XI			18L047A*	OD		VIII		
DGTS16	REC		XI	D2P+		18L047V	OD		VIII	18L047A+	
FEU-16	* PHM		XVI			D19	GEP		XI		
FEU-16A	* PHM		XVI			D19A	GEP		XI		
GI-16B	TET	SIN	III			D198	GEP		XI		
GU16B	TRI	SIN	III			FEU-19A	* PHM		XVI		
LG-16	DIO	SIN		2D2S+		FEU-19M	* PHM		XVI		
MI-16	MAG		IX			GI-19B	TRI	SIN	III		
MS-16	COU		XXI			GU-19	BEA	TWN	III		
P16	* X			2N55\$. 0C604=		P19	X				
P16A	X					SG19S	DIO	SIN	V		
P16B	X					SI-19BG	* COU		XXI		
SG16P	DIO	SIN	V	0C2\$		SI-19G	COU		XXI		
SNM-16	* COU		XXI			19LK4B	TV		VIII		
TV-16	THM		XVIII			D20	* GEP		XI		
VS-16	COU		XXI			FEU-20	* PHM		XVI		
16F3P	* PND	TRI	II			GK20	TRI	SIN	III		
16LK1B			VIII			I-20/1.5	TRI	IGN	IV		
16LM1G	* RA		VIII			I-20/1500	DIO	IGN	IV		
16L02I	* OD		VIII			IFK20			XX		
16L03I	* OS		VIII			M-20/35	TRI	SIN		GM-1A+	
D17	REC		XI			M020	TRI	SIN	III		
DGTS17	REC		XI			MP20	*		X		
FEU-17	PHM		XVI			MP20A	*		X		14073-6B
FEU-17A	* PHM		XVI			MP20B	*		X		14073-6B
G-17B	TRI	SIN	III			MP20V	*		X		
GI-17	TRI	SIN	III	G480*		SG20G	DIO	SIN	V		
GS17B	* TET	SIN	III			SI-20G	COU		XXI		
GU-17	BEA	TWN	III	6360\$		SNM-20	* COU		XXI		
KMT-17	* TMS		XIX			QV20-P18	TET	SIN		GMI-83=	
LI17	* IM		VIII-A			T-20BFL	COU		XXI		
MST-17	COU		XXI			TD-20	* TRI		XII-B		
P17	X					TKP-20	TMS	POW	XIX		
P17A	X					TR-20/15	TRI	THY		TR-1-6/15+	
P17B	X					V20/20	DIO	SIN		V1-0.02/20+	
SG17S	DIO	SIN	V			VKU-20-0.25	SCR	SI4	XII-A		
SNM-17	* COU		XXI			VKU-20-0.5	SCR	SI4	XII-A		
D18	* GEP		XI			VKU-20-0.75	SCR	SI4	XII-A		
FEU-18	PHM		XVI			VKU-20-1.0	SCR	SI4	XII-A		
FEU-18A	* PHM		XVI			VKU-20-1.5	SCR	SI4	XII-A		
GI-18B	TRI	SIN	III			VKU-20-2.0	SCR	SI4	XII-A		
GS-18	TRI	SIN		GK-2000+		VKU-20-2.5	SCR	SI4	XII-A		
GU-18	BEA	TWN	III			VKU-20-3.0	SCR	SI4	XII-A		
LI18	* VID		VIII-A			20LM1YE*			VIII		
MST-18	COU		XXI			D21			XI		
P18	X					DGTS21	REC		XI	D7A+	
P18A	X					GI-21B	TRI	SIN	III		
P18B	X					GU21B	TRI	SIN	III		
R-18			XXII			P21			X		
SG18S	DIO	SIN	V			P21A			X		
SNM-18	* COU		XXI			P21B			X		
18LK1B	TV		VIII			P21D	*		X		14073-6B
18LK2B	TV		VIII	7QP4\$		P21G	*		X		14073-6B
18LK3V			VIII			P21V	*		X		14073-6B

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
P21YE	*		X		14073-6B	P27	*		X		
R-21			XX11			P27A	*		X		
SG21B	* REG	V				FEU-28	* PHM	XVI			
SI-21G	COU	XXI				GSH-28	NOI	IX			
STI-21	* TMS	XIX				GU2BA	TET SIN	III			
DGTS22	REC	XI	D7B+			GU28B	TET SIN	III			
FEU-22	PHM	XVI				M2B	TRI SIN	III			
GI-22	TRI SIN	III				P28	*	X			
GU22A	TRI SIN	III			10030-71	FEU-29	* PHM	XVI			
LI22	* IM	VIII-A				G29	TRI SIN	III			
P22			X			GSH-29	NOI	IX			
SI-22G	COU	XXI				GU29	* BEA TWN	III	B29-B\$		9B39-6B
22L01A	* OS	V111				K-29	KLO	IX			
DGTS23	REC	XI	D7V+			P29	*	X			
FEU-23	PHM	XVI				P29A	*	X			
GS23B	* TET SIN	III				FEU-30	* PHM	XVI			
GU23A	TRI SIN	III			10031-68	GD0-30	TRI SIN		GS-3B+		
GU-23B	TRI SIN	III				GI-30	BEA TWN	III	3E29\$		
LI23	* VID	VIII-A				GMI-30	TRI SIN	III	6C21\$		
P23			X			GS-30	COU	XXI			
P23A						GU30A	TRI SIN	III			
23LK1B	TV	VIII	9CP4\$			K-30	KLO	IX			
23LK2B	TV	VIII				M-30/450	TRI SIN		GMI-30+		
23LK5B	* TV	V111				P30	*	X			
23LK6I	* PT	V111				SNM-30	* COU	XXI			
23LK7B	* TV	VIII				T-30BFL	COU	XXI			
23LK8B	* TV	VIII				VG-30	POW	XII			
23LK9B	* TV	VIII				30LK1B	TV	VIII	31LK1B+		
23LK13B*	TV	VIII				30P1	BEA SIN		30P1S+		
23LK41I*	TV	V111				30P1M	BEA SIN		30P1S+		
23LM3S	* RA	V111				30P1S	* BEA SIN	II	30P1M		
23LM34	OS		9GP7\$ .23LM34V+			30TS1M	DIO SIN	II	30VKH1+, 30TS6S+		
23LM34V*	OS	VIII				30TS6S	DIO TWN	II	30VKH1+, 30TS14*		807B-67
23L01P	OS		9GP7\$			30VD1	DIO SIN	II	30TS1M+		
23L051A*	OS	VIII				30VKH1	DIO SIN	II	30TS6S+		
DGTS24	REC	XI	D7G+			FEU-31	* PHM	XVI			
FEU-24	* PHM	XVI				GU31	TET SIN	III			
GI-24A	TRI SIN	III				K-31	KLO	IX			
GU24A		III				P31		X			
R-24		XX11				P31A		X			
DGTS25	REC	XI	D7D+			SNM-31	* COU	XXI			
EVU-25/1.0	IGN HG	1V				31LK1B	TV	VIII			
FEU-25	* PHM	XVI				31LK2B	* TV	VIII	12LP4\$		
GI-25	TRI SIN	III				31LM32	OS		12DP7A\$.31LM32V+		
GU25B	TRI SIN	III				31LM32V*	OS	VIII			
ISK25		XX				31L01P		VIII	12DP7\$		
MP25	*	X			14830-69	31L033	OS		12GP7\$.31L033V+		
MP25A	*	X			14830-69	31L033V*	OS	VIII			
MP25B	*	X			14830-69	FEU-32	* PHM	XVI			
T-25BFL	COU	XXI				G32	TRI SIN	III			
TCH-25	* TRI	XII-B				GU32	BEA TWN	III	832\$		9B3B-6B
TD-25	* TRI	XII-B				K-32	KLO	IX			
VKDU25	* SCR SI4	XII-A				P32		X			
25LM1V	* RA	V111				SNM-32	* COU	XXI			
25P1	BEA SIN	II	25L6\$			FEU-33	* PHM	XVI			
25P1S	BEA SIN	II	25L6\$			GU33B	TET SIN	III			16095-70
DGTS26	REC	XI	D7E+			K-33	KLO	IX			
FEU-26	* PHM	XVI				FEU-34	PHM	XVI			16096-70
GU26A	TRI SIN	III				GU34B	TET SIN	III			
GU26B	TRI SIN	III				K-34	KLO	IX			
K-26	KLO	IX				FEU-35	* PHM	XVI			
MP26	*	X			14830-69	GU-35B	TET SIN	III			
MP26A	*	X			14830-69	K-35	KLO	IX			
MP26B	*	X			14830-69	MP35	*	X			14831-69
26L02A	* PT	VIII				35LK1B	* ELS ELM	VIII			
DGTS27	REC	XI	D7ZH+			35LK2B	* TV	VIII			BB15-58
FEU-27	* PHM	XVI				35LK4B	* TV	V111			
GU27A	TET SIN	III			14626-69	35LK6B	* TV	VIII			
GU27B	TET SIN	III	827-R\$			FEU-36	* PHM	XVI			
						G36	TRI SIN	III			



Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
GK36	TRI	SIN		GK-20+		I-50/1.5	TRI	IGN	IV		
GU-36B	TET	SIN	III			I-50/1500	DIO	IGN	IV		
MP36A	*	X			14831-69	IFK50			XX		
FEU-37	* PHM	XVI				LS50	PND	SIN		GU50=	
GU-37B	* TRI	SIN	III			M50	TRI	SIN	III		
MP37	*	X			14831-69	T-50BFL	COU		XXI		
MP37A	*	X			14831-69	TCH-50	* TRI		XII-B		
MP37B	*	X			14831-69	TKP-50A	TMS	POW	XIX		
P37A				MP37A+		TKP-50B	TMS	POW	XIX		
P37B				MP27B+		VG-50	POW		XII		
FEU-38	* PHM	XVI				VK-50	POW		XII		
MP38	*	X			14831-69	VKDU50	* SCR	SI4	XII-A		
MP38A	*	X			14831-69	VKU-50-0.25	SCR	SI4	XII-A		
FEU-39	* PHM	XVI				VKU-50-0.5	SCR	SI4	XII-A		
FEU-39A	* PHM	XVI				VKU-50-0.75	SCR	SI4	XII-A		
GU-39A	TET	SIN	III		10746-67	VKU-50-1.0	SCR	SI4	XII-A		
GU-39B	TET	SIN	III		11260-65	VKU-50-1.5	SCR	SI4	XII-A		
GU39P	TET	SIN	III			VKU-50-2.0	SCR	SI4	XII-A		
M39	TRI	SIN	III			VKU-50-2.5	SCR	SI4	XII-A		
MP39	*	X			14948-69	VKU-50-3.0	SCR	SI4	XII-A		
MP39B	*	X			14948-69	50LKIB	* TV		VIII		
FEU-40	NSP	XVI				FEU-51	* PHM		XVI		
GU-40B	TET	SIN	III		16802-71	GMSIA	TRI	SIN	III		
MP40	*	X			14948-69	MI-51	MAG		IX		
MP40A	*	X			14948-69	SB-51	PND	SIN	II		
P40B		X				STSV51	* PHO		XVI		
T-40BFL	COU	XXI				51LS1	* CH		VIII		
TD-40	* TRI	XII-B				FEU-52	* PHM		XVI		
V40/100	DIO	SIN		VI-0.1/40+		MI-52	MAG		IX		
40LK1B	* TV	VIII		16AP4\$							
40LK4TS	* TV	VIII				FEU-53	* PHM		XVI		
K-41	KLO	IX				M53	TRI	SIN	III		
MP41	*	X			14948-69	MI-53	MAG		IX		
MP41A	*	X			14948-69						
FEU-42	NSP	XVI				53LK2B	* TV		VIII		
K-42	KLO	IX				53LK3B	TV		VIII		
MP42	*	X			14947-69	53LK4TS	* TV		VIII		
MP42A	*	X			14947-69	53LK5B	TV		VIII		
MP42B	*	X			14947-69	53LK6B	TV		VIII		
42LM2YE	*	VIII				FEU-54	* PHM		XVI		
FEU-43	NSP	XVI				G-54	TRI	SIN		GS-6+	
GU43B	TET	SIN	III			MI-54	MAG		IX		
43LK2B	* TV	VIII				R-54			XXII		
43LK3B	* TV	VIII				FEU-55	* PHM		XVI		
43LK6B	TV	VIII				FEU-56	* PHM		XVI		
43LK7B	TV	VIII				G-56	TRI	SIN		G29+	
43LK8B	* TV	VIII				GM57	TRI	SIN	III	MS50*+, M457+, UB180=	
43LK9B	* TV	VIII				M57	TRI	SIN	III		
43LK11B	* TV	VIII				S0-57	PND	SIN	II		
FEU-44	NSP	XVI				FEU-58	* PHM		XVI		
FEU-45	NSP	XVI				G-58	TRI	SIN		GK-3000+	
45LM1B	* V	VIII				FEU-59	* PHM		XVI		
45LM2U	* RA	VIII				59LKIB	TV		VIII		
45LM3N	* RA	VIII				59LK2B	ELS		VIII		14855-69
FEU-46	NSP	XVI				FEU-60	PHM		XVI		
G46	TRI	SIN	III			GM60	TRI	SIN	III	M600*+	
FEU-47	NSP	XVI				GS-60	COU		XXI		
G47	TRI	SIN	III			T-60BFL	COU		XXI		
SB-47	PND	SIN	II			G61	TRI	SIN	III		
47LK1B	TV	VIII				GU61B	* TET	SIN	III		
47LK2B	* ELS	VIII			14854-69	GU61P	TET	SIN	III		
FEU-48	NSP	XVI				6ILKIB	* ELM	ELM	VIII		
GU48	* TRI	SIN	III	B33A\$		FEU-62	* PHM		XVI		
K-48	KLO	IX				G62	TRI	SIN	III		
FEU-49	* PHM	XVI				GU62P	TRI	SIN	III		
G-49	TRI	SIN		GS-4+		M62	MAG		IX		
EVU-50/1.0	IGN	HG	IV			FEU-63	* PHM		XVI		
FEU-50	* PHM	XVI				TD-63	* TRI		XII-B		
GD-50	TRI	SIN		G-46+		FEU-64	* PHM		XVI		
GU50	* PND	SIN	III	LS50=	12407-66						

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
G-64	TRI	SIN		GS-3B+		I-100/1.0	*	TRI	IGN	IV	
FEU-65	* PHM	XVI				I-100/5.0	*	TRI	IGN	IV	
G65	TRI	SIN	III			I-100/1000	DIO	IGN	IV		
GU65A	* TRI	SIN	III			I-100/5000	DIO	IGN	IV		
65LK1B			VIII			ISSH100-1			XX		
GU66P	TRI	SIN	111			ISSH100-3			XX		
FEU-67	* PHM	XVI				L100	PND	DIO		6B2P*	
FEU-68	* PHM	XVI				TCH100	* TRI		XII-B		
G6B	TRI	SIN	III			TD-100	* TRI		XII-B		
GU6BA	* TRI	SIN	III			VG-100	POW		XII		
FEU-69	* PHM	XVI				VK-100	POW		XII		
GI-70B	TRI	SIN	III	LD-70		VKDU100	* SCR	SI4	XII-A		
FEU-70	*	XVI				VKU100-0.25	SCR	SI4	XII-A		
GM-70	TRI	SIN	III			VKU100-0.5	SCR	SI4	XII-A		
GM70B	TRI	SIN	III			VKU100-0.75	SCR	SI4	XII-A		
GU70B	* TRI	SIN	III			VKU100-1.0	SCR	SI4	XII-A		
ISP70			XX			VKU100-1.5	SCR	SI4	XII-A		
LD70	TRI	SIN		GI-70B+		VKU100-2.0	SCR	SI4	XII-A		
V70/1000	DIO	SIN		V1-0.3/70+		VKU100-2.5	SCR	SI4	XII-A		
GK71	PND	SIN	III	G471+. 471A*		VKU100-3.0	SCR	SI4	XII-A		
GU71B	* PND	SIN	III			VKUV-100-0.25	SCR	SI4	XII-A		
GU72	PND	SIN	III			VKUV-100-0.5	SCR	SI4	XII-A		
GU73B	* TET	SIN	III			VKUV-100-0.75	SCR	SI4	XII-A		
FEU-74	* PHM	XVI				VKUV-100-1.0	SCR	SI4	XII-A		
GU74B	* TET	SIN	III			VKUV-100-1.5	SCR	SI4	XII-A		
M74	TRI	SIN	III			VKUV-100-2.0	SCR	SI4	XII-A		
FEU-75	* PHM	XVI				VKUV-100-2.5	SCR	SI4	XII-A		
GU75A	* TET	SIN	III			VKUV-100-3.0	SCR	SI4	XII-A		
75S5-30	DIO	SIN		SG2S+, 0A3\$		A101	DEC		XX111		
GI-76B	TRI	SIN	III			AI-101A	* TUN		XI-B		
FEU-77	* PHM	XVI				AI-101B	* TUN		XI-B		
FEU-80	* PHM	XVI				AI-101D	* TUN		XI-B		
GUBO	PND	SIN	III	0S450=, P800*	12404-66	AI-101G	* TUN		XI-B		
MBO	TRI	SIN	III			AI-101I	* TUN		XI-B		
T-80BFL	COU		XXI			AI-101V	* TUN		XI-B		
TD-80	* TRI	XII-B				AI-101YE	* TUN		XI-B		
FEU-81	*	XVI				AI-101ZH	* TUN		XI-B		
GU81	PND	SIN	III			D101	* REC		XI		
M81	* MAG	IX				D101A	* REC		XI		
FEU-82	*	XVI				KL101A	* LED	SCD	XI-E		
GMI-B3	TET	SIN	III	QV20-P18=.5D21\$		KL101B	* LED	SCD	XI-E		
FEU-B5	* PHM	XVI				KL101V	* LED	SCD	XI-E		
GBB	TRI	SIN	III			KP101	*		X		
VO-BB	DIO	TWN		4VKH1+		KP101C	*		X		
GMI-B9	TET	SIN	III	G-4B9**		KP101YE	*		X		
GUB9A	TRI	SIN	III	889A\$		KU101A	* SCR	TRI	XII-B		
GU89B	TRI	SIN	III	889R-A\$		KU101B	* SCR	TRI	XII-B		
M89	TRI	SIN	III			KU101G	* SCR	TRI	XII-B		
GMI-90	TET	SIN	III	G-490**		KU101YE	* SCR	TRI	XII-B		
GS90B	TRI	SIN	III	LD-90		KV101A	* VAR	SID	XI-D		
LD-90	TRI	SIN		GS-90B+		LI101	* IC		VIII-A		
MTKH90	TRI	THY	VII			P101			X		
RB-90			XXII			P101A			X		
TGI-90/B	TRI	THY		TGI-1-90/B+		P101B			X		
G91	TRI	SIN	III			A102	* DEC		XXIII		
G-92	TRI	SIN		GK-2000+		AL102A	* LED	GPE	XI-E		
K-92A	KLO	IX				AL102B	* LED	GPE	XI-E		
K-92B	KLO	IX				AL102V	* LED	GPE	XI-E		
K-92C	KLO	IX				D102	* REC		XI		
K-92V	KLO	IX				D102A	* REC		XI		
FEU-93	* PHM	XVI				KD102A	*		XI		
MI-95	MAG	IX				KD102B	* REC	SID	XI		
FEU-97	* PHM	XVI				KN102A	* SIA		XII-B		
L-99	PTG	SIN		6A2P+, 6BE6\$		KN102B	* SIA		XII-B		
EVU-100/1	IGN	HG	1V			KN102V	* SIA		XII-B		
G-100	TRI	SIN		G-29+		KN102G	* SIA		XII-B		
G-100A	TRI	SIN		CK-3A+		KN102D	* SIA		XII-B		
GD-100	TRI	SIN		G-47+		KN102ZH	* SIA		XII-B		
GKE100	TET	SIN	III	GE-1=		KN102I	* SIA		XII-B		
GM100	TRI	SIN	III			KP102I	* MJF		X-B		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
KP102K	*	MJF	X-B			GT109A	*		X		15142-69
KP102L	*	MJF	X-B			GT109B	*		X		15142-69
KP102YE	*	MJF	X-B			GT109D	*		X		15142-69
KP102ZH	*	MJF	X-B			GT109G	*		X		15142-69
KV102A	*	VAR SI	XI-D			GT109I	*		X		15142-69
KV102B	*	VAR SI	XI-D			GT109V	*		X		15142-69
KV102D	*	VAR SI	XI-D			GT109YE	*		X		15142-69
KV102G	*	VAR SI	XI-D			GT109ZH	*		X		15142-69
KV102V	*	VAR SI	XI-D			P109			X		
P102			X			S-109	TET SIN			GKE-300+	
A103	*	DEC	XXIII			P110			X		
AL103A	*	LED GAE	XI-E			SI10N	*	COU	XXI		
AL103B	*	LED GAE	XI-E			UB110	TRI SIN			4S2+	
D103	*	REC	XI			MP111	*		X		14949-69
D103A	*	REC	XI			MP111A	*		X		14949-69
KD103A	*		XI			MP111B	*		X		14949-69
KD103B	*		XI			VU-111D	DIO SIN	IV			
KP103I	*	MJF	X-B			MP112	*		X		14949-69
KP103K	*	MJF	X-B			SB-112	PND SIN	II		4E1+	
KP103L	*	MJF	X-B			MP113	*		X		14949-69
KP103M	*	MJF	X-B			MP113A	*		X		14949-69
KP103YE	*	MJF	X-B			MP114	*		X		14874-69
KP103ZH	*	MJF	X-B			GT115A	*		X		
KV103A	*	VAR SID	XI-D			GT115B	*		X		
KV103B	*	VAR SID	XI-D			GT115D	*		X		
P103			X			GT115G	*		X		
P103A			X			GT115V	*		X		
S-103		TET SIN		GKE-1000+		MP115	*		X		14B74-69
D104	*	REC	XI			MP116	*		X		14B74-69
D104A	*	REC	XI			SO-11B	TRI SIN			4S5+	
KL104A	*	DIN SCD	XI-E			G120	TRI SIN	III			
KV104A	*	VAR SI	XI-D			IFK120			XX		
KV104B	*	VAR SI	XI-D			MI-120	MAG	IX			
KV104D	*	VAR SI	XI-D			TR-120/15	TRI THY			TR-1-40/15+	
KV104G	*	VAR SI	XI-D			SO-122	PND SIN			4P1+	
KV104V	*	VAR SI	XI-D			SO-124	PND SIN	II		4ZH5+	
KV104YE	*	VAR SI	XI-D			TCH125	* TRI	XII-B			
L-104		PND SIN		6K4P+. 6BA6\$		TD-125	* TRI	XII-B			
P104			X			VO-125	DIO SIN	IV			
D105	*	REC	XI			SK-127			XXII		
D105A	*	REC	XI			VG-129	DIO SIN	IV			
KD105A			XI			UB-132	TRI SIN	II		4S3+	
KD105B			XI			KS133A	* REG SI	X111			
KD105G	*	REC SID	XI			P135			X		
KD105V			XI			MI-137	MAG	IX			
KV105A	*	VAR SI	XI-D			KS139A	* REG SI	X111			
KV105B	*	VAR SI	XI-D			TO-141	TRI SIN	II		3S1+	
P105			X			TO-142	TRI SIN	II		3S2+, 3S9+	
105S5-30		DIO SIN		SG3S+, 0C3\$		KS147A	* REG SI	X111			
A106	*	DEC	XXIII			SB-147	TET SIN			4E2+	
D106	*	REC	XI			SO-14B	PND SIN	II		4E3+	
D106A	*	REC	XI			GI-150	TRI SIN	III			
KV106A	*	VAR SID	XI-D			GKE150	TET SIN	III		GE-2=	
KV106B	*	VAR SID	XI-D			GU150	TRI SIN	III			7712-55
P106			X			I-150/1.0	* TRI	IGN	IV		
S-106		TET SIN		GKE-150+		M150	TRI SIN	III			
A107	*	DEC	XXIII			VKDU150	* SCR	SI4	XII-A		
D107		REC SIP	XI			150S5-30	DIO SIN			SG4S+, 0D3\$	
D107A		REC SIP	XI			SB-152	TRI SIN	II			
P107			X			UB-152	TRI SIN	II		2S1+	
UB107		TRI SIN		4S1+		UB-153	TRI SIN	II			
D108		REC SIP	XI			SB-154	PND SIN	II		2E1+	
GT108A	*		X		15141-69	SB-155	BEA SIN			2P2+	
GT108B	*		X		15141-69	UB-155	BEA SIN	II		2E2+	
GT108C	*		X		15141-69	KS156A	* REG SI	X111			
GT108V	*		X		15141-69	TD-160	* TRI	XII-B			
KD108G	*		X			VG-161	DIO SIN	IV			
P108			X			KS162A	* REG	SIA	XIII		
P108A			X			VG-163	*		IV		
D109		REC SIP	XI			KS16BA	* REG	SI	X111		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
KS168V	*	REG SIA	XIII			KD202G	*	REC	XI		
KS170A	*	REG SIA	XIII			KD202I	*	REC	XI		
KS175A	*	REG SIA	XIII			KD202K	*	REC	XI		
VG-176		DIO SIN	IV			KD202L	*	REC	XI		
UB-178		TRI SIN	II			KD202M	*	REC	XI		
KS182A	*	REG SIA	XIII			KS202N	*	REC	XI		
SO-182		PND SIN	II			KD202R	*	REC	XI		
UB-182		TRI SIN	II			KD202S	*	REC	XI		
SO-185		TRI SIN		4S5+		KD202V	*	REC	XI		
U0186		TRI SIN	II	4S4+		KD202YE	*	REC	XI		
US-186		TRI SIN		4S4+		KD202ZH	*	REC	XI		
VO-188		DWD SIN	IV	4VKH1*		KU-202A	*	SCR TRI	XII-B		
SB-190		PND SIN	II			KU-202B	*	SCR TRI	XII-B		
KS191A	*	REG SIA	XIII			KU-202D	*	SCR TRI	XII-B		
191P		TET SIN	II			KU-202G	*	SCR TRI	XII-B		
KS194A		REG	XIII			KU-202I	*	SCR TRI	XII-B		
KS194B		REG	XIII			KU-202K	*	SCR TRI	XII-B		
KS194G		REG	XIII			KU-202L	*	SCR TRI	XII-B		
KS194V		REG	XIII			KU-202M	*	SCR TRI	XII-B		
KS196B	*	REG SIA	XIII			KU-202N	*	SCR TRI	XII-B		
KS196G	*	REG SIA	XIII			KU-202V	*	SCR TRI	XII-B		
KS196V	*	REG SIA	XIII			KU-202YE	*	SCR TRI	XII-B		
VO-196		DIO SIN	IV			KU-202ZH	*	SCR TRI	XII-B		
VO-197		DWD SIN	IV			LI202	*	IM	VIII-A		
GD-200		TRI SIN		GS-4+		P202E	*		X	2N68\$	
I-200/1.5		TRI IGN	IV			SG202B		DIO SIN	V		
IFP200			XX			VO-202		DWD SIN	IV		
IVS200/2			IGN	IV		D203	*	REC	XI		
TD-200	*	TRI	XII-B			KD203A	*	REC SID	XI		
TGI-200		TRI THY	VII	MT		KD203B	*	REC SID	XI		
VG200		POW	XII			KD203D	*	REC SID	XI		
VK-200		POW	XII			KD203G	*	REC SID	XI		
VKDUV-200	*	SCR	SI4 XII-A			KD203V	*	REC SID	XI		
VKV200		POW	XII			LI203	*	IM	VIII-A		
AI-201A	*	TUN	XI-B			P203E	*		X	2N68\$	
AI-201B	*	TUN	XI-B			SG203K		DIO SIN	V		
AI-201D	*	TUN	XI-B			D204	*	REC	XI		
AI-201G	*	TUN	XI-B			KU204A	*	TRI	XII-B		
AI-201I	*	TUN	XI-B			KU204B	*	TRI	XII-B		
AI-201K	*	TUN	XI-B			KU204V	*	TRI	XII-B		
AI-201L	*	TUN	XI-B			SG204K	*	REG	V		
AI-201V	*	TUN	XI-B			UV-204		TWT	IX		
AI-201YE	*	TUN	XI-B			D205	*	REC	XI		
AI-201ZH	*	TUN	XI-B			KD205A	*	REC SIA	XI		
D201A		REC	XI			KD205B	*	REC SIA	XI		
D201B		REC	XI			KD205D	*	REC SIA	XI		
D201D		REC	XI			KD205G	*	REC SIA	XI		
D201G		REC	XI			KD205V	*	REC SIA	XI		
D201TS		REC	XI			KD205YE	*	REC SIA	XI		
D201V		REC	XI			SG205B	*	REG	V		
D201YE		REC	XI			UV-205		TWT	IX		
D201ZH		REC	XI			D206	*	REC	XI		
KU-201A	*	SCR	XII-B			D207	*	REC	XI		
KU-201B	*	SCR	XII-B			LI207	*	IM	VIII-A		
KU-201D	*	SCR	XII-B			P207			X		
KU-201G	*	SCR	XII-B			P207A			X		
KU-201I	*	SCR	XII-B			D208	*	REC	XI		
KU-201K	*	SCR	XII-B			P208			X		
KU-201L	*	SCR	XII-B			P208A			X		
KU-201V	*	SCR	XII-B			D209	*	REC	XI		
KU-201YE	*	SCR	XII-B			P209		GAP	X		
KU-201ZH	*	SCR	XII-B			P209A		GAP	X		
LI201	*	IM	VIII-A			D210	*	REC	XI		
P201E	*		X			KS210B	*	REG SIA	XIII		
P201AE	*		X			P210		GAP	X		
SG201S		DIO SIN	V	OB3\$		P210A	*	GAP	X		
D202	*	REC	XI			P210B	*	GAP	X		14875-69
KD202A	*		XI			P210V	*	GAP	X		14875-69
KD202B	*	REC	XI			D211	*	REC	XI		
KD202D	*	REC	XI			KS211B		REG SI	XIII		

Group 1— NUMERICAL— Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
KS211D	REG	SI	XIII			D227-ZH	SWI	SI4	XI-A		
KS211G	REG	SI	XIII			SG227	DIO	SIN	V		
KS211V	REG	SI	XIII			D228-A	SWI	SI4	XI-A		
P211			X			D228-B	SWI	SI4	XI-A		
LI212	* IM		VIII-A			D228-D	SWI	SI4	XI-A		
P212			X			D228-G	SWI	SI4	XI-A		
P212A			X			D228-I	SWI	SI4	XI-A		
TG212M	TRI	THY	VII			D228-V	SWI	SI4	XI-A		
KS213B	* REG	SIA	XIII			D228YE	SWI	SI4	XI-A		
P213	*		X			D228-ZH	SWI	SI4	XI-A		
P213A	*		X			D229A	SIA		XI		
P213B	*		X			D229B	SIA		XI		
TG-213	TRI	THY	VII	PT-2**		D229D			XI		
D214	REC	SIA	XI			D229E			XI		
D214A	REC	SIA	XI			D229G			XI		
D214B	REC		XI			D229V			XI		
P214	*		X			D230A	SIA		XI		
P214A	*		X			D230B	SIA		XI		
P214B	*		X			VO-230	DIO	SIN	IV		
P214G	*		X			D231hPk	REC	SIA	XI		
P214V	*		X			D231AhPk	REC	SIA	XI		
D215	REC	SIA	XI			D231BkPk	REC	SIA			
D215A	REC	SIA	XI			D232hPk	REC	SIA	XI		
D215B	REC	SIA	XI			D232AhPk	REC	SIA	XI		
P215	*		X			D232BhPk	REC	SIA	XI		
P216	*		X			D233hPk	SIA		XI		
P216A	*		X			D233A	REC	SIA	XI		
P216B	*		X			D233BhPk	REC	SIA	XI		
P216D	*		X			D234BhPk	REC	SIA	XI		
P216G	*		X			D235A	CON	SI	XI-C		
P216V	*		X			D235B	CON	SI	XI-C		
D217	* REC	SIA	XI			D235G	CON	SI	XI-C		
MD217	* REC	SID	XI			D235V	CON	SI	XI-C		
P217	*		X			TG-235	TRI	THY	VII	PT-3**	
P217A	*		X			VG-236	*		IV		
P217B	*		X			VG-237	* DIO	SIN	IV		
P217G	*		X			D238A	CON	SI	XI-C		
P217V	*		X			D238B	CON	SI	XI-C		
D218	* REC	SIA	XI			D238D	CON	SI	XI-C		
D219A	* REC	SIA	XI			D238G	CON	SI	XI-C		
D219S	*		XI			D238V	CON	SI	XI-C		
D220	* REC	SIA	XI			D238YE	CON	SI	XI-C		
D220A	* REC	SIA	XI			VO-239	DIO	SIN	IV		
D220B	* REC	SIA	XI			UB-240	TRI	SIN	II	2S2+	
D220S	* REC	SIA	XI			SB241	PND	SIN		2K1*, 2K1M+, S0241*	
SK-220			XXII			S0241	PND	SIN		2K1*, 2K1M+, S0241*	
D221	REC	SIA	XI			D242	* REC		XI		14758-69
D222	REC	SIA	XI			D242A	* REC		XI		14758-69
D223	* REC	SIA	XI		14343-69	D242B	* REC		XI		14758-69
D223A	* REC	SIA	XI		14343-69	SB-242	PTG	SIN		2A1+	
D223B	* REC	SIA	XI		14343-69	S0-242	PTG	SIN	II	SB242, 2A1, 2A1M	
D224	REC	SIA	XI			D243	* REC		XI		14758-69
D224A	REC	SIA	XI			D243A	* REC		XI		14758-69
D224B	REC	SIA	XI			D243B	* REC		XI		14758-69
D225	REC	SIA	XI			SB243	TRI	DUO		2N1*, 2N1M*, S0243*	
D226	REC	SIA	XI			S0-243	TRI	TWN	II	2N1+	
D226A	REC	SIA	XI			D244	* REC		XI		
D226B	*		XI			D244A	* REC		XI		
D226D	* SIA		XI			D244B	* REC		XI		
D226G	* SIA		XI			SB244	BEA	SIN		2P1+, S0244+	
D226V	* SIA		XI			S0-244	PND	SIN	II	2P1+	
D226YE	SIA		XI			D245	* REC		XI		14758-69
SG226	DIO	SIN	V			D245A	* REC		XI		14758-69
D227-A	SWI	SI4	XI-A			D245B	* REC		XI		14758-69
D227-B	SWI	SI4	XI-A			SB245	PND	SIN		2ZH1M+	
D227-D	SWI	SI4	XI-A			D246	* REC		XI		14758-69
D227-G	SWI	SI4	XI-A			D246A	* REC		XI		14758-69
D227-I	SWI	SI4	XI-A			D246B	* REC		XI		14758-69
D227-V	SWI	SI4	XI-A			D247	* REC		XI		14758-69
D227YE	SWI	SI4	XI-A			D247B	* REC		XI		14758-69

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
L0247	* OD		VIII			P307A				X	
D248B	* REC		XI		1475B-69	P307B				X	
LO-24B	OS		VIII			P307G				X	
LO-249	OS		VIII			P307V				X	
GK0-250	TRI	SIN		GK-1A+		SG307K	*			V	
TD-250	* TRI		XII-B			GT30BA	*			X	
VG-252	DIO	SIN	IV			GT30BB	*			X	
G256	TRI	SIN	III			GT30BV	*			X	
S0257	PND	SIN	II	2ZH4+		K-30B		KLO		IX	
SB25B	BEA	SIN		2P3+, 2P2M+, S025B+		KU30B		KLA		IX	
S0-25B	PND	SIN	II	2P3+		P30B				X	
SB259	TRI	DUO		4N1+		SG308K	*			V	
S0259	TRI	DUO		4N1+		GT309A	*			X	
RB-280			XXII			GT309B	*			X	
G-300	TRI	SIN		G68		GT309D	*			X	
GI-300	TRI	SIN		GI-18B+		GT309G	*			X	
GK-300	TRI	SIN		GU-8+		GT309V	*			X	
GKE300	TET	SIN	III			GT309YE	*			X	
IFB300			XX			KU309		KLA		IX	
TKP-300	TMS	POW	XIX			P309				X	
AI-301A	* TUN	GE	XI-B		15606-70	SG309K	*			V	
AI-301B	* TUN	GE	XI-B		15606-70	D310	*	GEA		XI	
AI-301G	* TUN	GE	XI-B		15606-70	GT310A	*			X	
AI-301V	* TUN	GE	XI-B		15606-70	GT310B	*			X	
KP301B	*		X-B			GT310D	*			X	
KT301	*		X			GT310G	*			X	
KT301A	*		X			GT310V	*			X	
KT301B	*		X			GT310YE	*			X	
KT301D	*		X			KU310A		KLA		IX	
KT301G	*		X			KU310B		KLA		IX	
KT301V	*		X			D311	*	REC		XI	
KT301YE	*		X			D311A	*	REC		XI	
KT301ZH	*		X			D311B	*	REC		XI	
SG301S-1	* DIO	SIN	V		9103-59	GT311A	*			X	
D302	* REC		XI			GT311B	*			X	
D302A	*		XI			GT311D				X	
P302	*		X			GT311G				X	
SG302S-1	* DIO	SIN	V		9103-59	GT311I				X	
D303	* REC		XI			GT311V				X	
D303A	*		XI			GT311YE				X	
P303	*		X			GT311ZH				X	
P303A	*		X			SG311S	*	REG		V	
SG303S-1	* DIO	SIN	V		9103-59	D312	*	REC		XI	
D304	* REC		XI			D312A	*	REC		XI	
GI304A	* TUN	GE	XI-B			D312B	*	REC		XI	
GI304B	* TUN	GE	XI-B			KT312A	*			X	
KU304	KLA		IX			KT312B	*			X	
KU304A	KLA		IX			KT312G	*			X	
P304	*		X			KT312V	*			X	
SG304S	* DIO	SIN	V			GT313A	*			X	
D305	* REC		XI			GT313B	*			X	
GI305A	* TUN	GE	XI-B			P314A				X	
GI305B	* TUN	GE	XI-B			P314B				X	
GT305A	*		X			P314S				X	
GT305B	*		X			KT315A	*			X	
GT305V	*		X			KT315B	*			X	
SG305K	* REG		V			KT315C	*			X	
KT306A	*		X			KT315V	*			X	
KT306B	*		X			KT315A	*			X	
KT306D	*		X			KT315B	*			X	
KT306G	*		X			KT316A	*			X	
KT306V	*		X			KT316B	*			X	
P306	*		X			KT316D	*			X	
P306A	*		X			KT316G	*			X	
SG306K	* REG		V			KT316V	*			X	
KT307A	*		X			KT318A	*			X	
KT307B	*		X			KT318B	*			X	
KT307G	*		X			KT318D	*			X	
KT307V	*		X			KT318G	*			X	
P307			X			KT318V	*			X	

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
KT318YE	*		X			GT346A	*		X		
KT319A			X			GT346B	*		X		
KT319B			X			GT346V	*		X		
KT319V			X			KT349A	*		X		
GT320A	*		X			KT349B	*		X		
GT320B	*		X			KT349V	*		X		
GT320V	*		X			KT350A	*		X		
T-320V	*	TRI	XII-B			R-350			XXII		15633-70
TD-320A	*	TRI	XII-B			RB-350			XXII		
TD-320B	*	TRI	XII-B			K-351		KLO	IX		
GT321A	*		X			KT351A	*		X		
GT321B	*		X			KT351B	*		X		
GT321D	*		X			KT352A	*		X		
GT321G	*		X			KT352B	*		X		
GT321V	*		X			K-352		KLO	IX		
GT321YE	*		X			V0-360		DIO SIN	IV		
GT322A	*		X			GD-400		TRI SIN		GS-6+	
GT322B	*		X			M400		TRI SIN	III		
GT322D	*		X			TG-400/15		TRI THY		TRI-130/15+	
GT322G	*		X			TGI400/3.5		TRI THY		TGI-2-400/3.5+	
GT322V	*		X			D401		MIX	XIV		
GT322YE	*		X			GI401A	*		XI-G		
P322			X			GI401B	*		XI-G		
GT323A	*		X			KD401A	*	REC	XI		
GT323B	*		X			KD401B	*	REC	XI		
GT323V	*		X			KTS401A	*	REC	XI		
KT324A	*		X			KTS401B	*	REC	XI		14914-69
KT324B	*		X			KTS401V	*	REC	XI		14914-69
KT324D	*		X			LI401			VIII-A		
KT324G	*		X			M401		TRI SIN	III		
KT324V	*		X			P401	*		X	2N112\$	
KT324YE	*		X			AI402B	*	BWD GAS	XI-G		
KT325A			X			AI402G	*	BWD GAS	XI-G		
KT325B			X			AI402I	*	BWD GAS	XI-G		
KT325D			X			AI402YE	*	BWD GAS	XI-G		
KT325G			X			D402		MIX SI	XIV		
KT325V			X			GD402A	*	REC	XI		
TGI-325/16		TRI THY		MTI5+. TGI-1-325/16+		GD402B	*	REC	XI		
KT326A			X			GT402					
KT326B			X			GT402A	*		X		
GT328			X			GT402B	*		X		
GT328A	*		X			GT402G	*		X		
GT328B	*		X			GT402V	*		X		
GT328V	*		X			P402	*		X	SB-100\$.	
GT329A			X			D403A		MIX	XIV		
GT329B			X			D403B		MIX	XIV		
GT329V			X			D403V		MIX	XIV		
GT330A			X			GD403A	*	REC	XI		
GT330B			X			GD403B	*	REC	XI		
KT337A	*		X			GD403V	*	REC	XI		
KT337B	*		X			GT403A	*		X		
KT337V	*		X			GT403B	*		X		
GT338A	*		X			GT403D	*		X		
GT338B	*		X			GT403G	*		X		
GT338V	*		X			GT403I	*		X		
KT339A	*		X			GT403IU	*		X		
KT339B	*		X			GT403V	*		X		
KT339D	*		X			GT403YE	*		X		
KT339G	*		X			GT403ZH	*		X		
KT339V	*		X			P403	*		X	0C614=	
KT342A	*		X			P403A	*		X	0C614=	
KT342B	*		X			403A	*	BWD GEA	XI-G		
KT342D	*		X			D404		MIX SI	XIV		
KT342G	*		X			GT404A	*		X		
KT342V	*		X			GT404B	*		X		
KT342YE	*		X			GT404G	*		X		
KT343A	*		X			GT404V	*		X		
KT343B	*		X			P404			X		
KT343G	*		X			P404A			X		
KT343V	*		X			D405		DET	XIV		

Group I—NUMERICAL—Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
D405A	DET		XIV			LI425	* VID		VIII-A		
D405AP	DET		XIV			LI428	* VID		VIII-A		
D405B	DET		XIV	1N23D\$		G430		TRI	SIN	III	
D405BP	DET		XIV			RB-430				XXII	
GD405A	* REC	GEA	XI			G431		TRI	SIN	III	G431A+
P405			X			G431A		TRI	SIN	III	G431
P405A			X			G-431R		TRI	SIN		GS-4D+
D406		MIX	SI	XIV		G433		TRI	SIN	III	G433A+
GD406A	* REC	GEA	XI			G433A		TRI	SIN	III	G433
P406			X	GT-60=.2N113\$		KS433A	* REG	SIA		XIII	
LI407	* VID		VIII-A			M435		TRI	SIN	III	
P407			X	2N114\$		UV-438		TWT		IX	
D408		MIX	SI	XIV		KS439A	* REG	SIA		XIII	
LI408	* VID		VIII-A			UV-440		TWT		IX	
P408			X			G441		TRI	SIN	III	
D409A	* MIX	SI	XIV			KS447A	* REG	SIA		XIII	
D409AP	* MIX	SI	XIV			G-450		TRI	SIN	III	
LI409	* VID		VIII-A			OS450		PND	SIN		GUBO, P800+*
P409			X			R-450				XXII	
T-409		DIO	IGM	IV		M-451		TRI	SIN		GM-51A+
G410		TRI	SIN	III		G-452		TRI	SIN	III	G-431A+
LI410	* VID		VIII-A			G-454		TRI	SIN	III	GS-3B+
P410	* X					KS456A	* REG	SIA		XIII	
P410A	* X					M457		TRI	SIN	II	MS3*+, UB180=, GM57+
T-410		DIO	IGM	IV		KS468A	* REG	SIA		XIII	
G410R		KLO				M-470		TRI	SIN		GM-70+
G411		PND	SIN	III	KZH1*+	G471		PND	SIN		GK71+
P411	* X			AF114=		G472		TRI	SIN	III	
P411A	* X			AF114=		G480		TRI	SIN		GI-17*+
T-411		DIO	IGM	IV		KS482A	* REG	SIA		XIII	
G412		PND	SIN	III		G-483		TET	SIN		GMI-83+
LI412	* VID		VIII-A			G484		TRI	SIN	III	
G413		PND	SIN	III	GZH2*+	G-489		TET	SIN		GMI-89+
G414		PND	SIN	III		G-490		TET	SIN		GMI-90*+
P414			X			IFK500				XX	
P414A			X			IFP500				XX	
P414B			X			ISSH500				XX	
LI415	* VID		VIII-A			VG500		POW		XII	
P415			X			D501	* X			XIV	
P415A			X			P501				X	
P415B			X			P501A				X	
P416	* X				14876-72	P502				X	
P416A	* X				14876-72	P502A				X	
P416B	* X				14876-72	P502B				X	
P416V			X			P502V				X	
G417		TRI	SIN	III		KD503A	* REC	SPN	XI		
P417	* X					KD503B	* REC	SPN	XI		
P417A	* X					KD503V	* REC	SPN	XI		
G418		PND	SIN	III		P503				X	
LI418	* VID		VIII-A			P503A				X	
P418			X			KD504A	* REC	SIA	XI		
P418A			X			P504				X	
P418B			X			P504A				X	
P418G			X			P505				X	
P418M			X			P505A				X	
P418V			X			GD507A	* REC		XI		
LI420	* VID		VIII-A			KD509A	* REC	SEN	XI		
P420			X			KD510A	* REC	SEN	XI		
LI421	* VID		VIII-A			KD512A	* SI		XI		
P421			X			KD513A	* SI		XI		
UV-421		TWT		IX		KD514A	* REC	SEN	XI		
G422		PND	SIN	III		KS515A	* REG	SIA	XIII		
P422	* X					KS518A	* REG	SIA	XIII		
P422A			X			KS522A	* REG	SIA	XIII		
UV-422		TWT		IX		KS527A	* REG	SIA	XIII		
P423	* X					M-532		MAG		IX	
P423A			X			M571		MAG		IX	
G424		PND	SIN	III		MI-588		MAG		IX	
LI424	* VID		VIII-A			MI-589A		MAG		IX	
G425		PND	SIN	III		MI-589B		MAG		IX	



Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
MI-5B9V	MAG	IX				OV-622	BWT	IX			
M600	TRI	SIN		GM60+		KS630A	* REG	SI	X111		17126-71
KT601		X				KS650A	* REG	SI	X111		17126-71
KT601A	*	X				KS680A	* REG	SI	X111		17126-71
LI601	* IM	VIII-A				700AD	MAG	IX			
P601		X				GT701A	*	X			16947-71
P601A		X				P701	*	X			
P601AI	*	X				P701A	*	X			
P601B		X				P701B	*	X			
P601BI	*	X				P702	*	X			
P601I	*	X				P702A	*	X			
D602A	VID	XIV				GT703A	*	X			
D602B	VID	XIV				GT703B	*	X			
D602V	DET	XIV				706AU	MAG	IX			
KA602A	* VAR	SEN XI-D				707A/B	KLO	IX			
KA602B	* VAR	SEN XI-D				L0-709A	OS	VIII			
KT602A	*	X				714AU	MAG	IX			
KT602B	*	X				LK-715	TV			18LK15+	
KT602G	*	X				720AYE	MAG	IX			
KT602V	*	X				723A/B	KLO	IX			
P602		X				725A	MAG	IX			
P602A		X				LK-726	TV			18LK3B+	
P602AI	*	X				726	KLO	IX			
P602I	*	X				L0-729	OS			8L029+, 3BP1A\$	
D603	* VID	XIV				L0-730	OS			8L030+	
KT603A	*	X				L0-731	OS			13LM31+	
KT603B	*	X				L0-732	OS			31LM32+	
KT603D	*	X				L0-733	OS			31L033+	
KT603G	*	X				L0-734	OS			23LM34+	
KT603V	*	X				L0-735	OS			18LM35+	
KT603YE	*	X				L0-736	OS			13L036+	
D604	* VID	SI XIV				L0-737	OS			13L037+	
KT604A		X				L0-738	OS			5L038+, 2AP1\$	
KT604B		X				L0-739	OS			8L039+	
LI604-K	* IMD	VIII-A				LK-740	TV			18L040B+, 7JP4\$	
P604	GAP	X				K-743	KLO	IX			
P604A	GAP	X				L0-743	OD			10L043+	
P604B	GAP	X				K-744	KLO	IX			
D605	MIX	SI XIV				K-745	KLO	IX			
KT605A		X				K-746	KLO	IX			
KT605B		X				K-747	KLO	IX			
P605	* GDP	X				L0-747	OD			18L047+	
P605A	* GDP	X				L0-748	OD			13L048+	
KT606A	*	X				L0-749	OS			13L049+	
KT606B	*	X				GK750	* TRI	SIN III			7709-55
P606	* GDP	X				L0751	OS			23L051+	
P606A	* GDP	X				L0-754	OS			13L054+	
D607	*	XIV				K-765	KLO	IX			
D607A	*	XIV				K-766	KLO	IX			
P607	*	X			14883-69	K-767	KLO	IX			
P607A	*	X			14883-69	K-768	KLO	IX			
D608	*	XIV				K-769	KLO	IX			
KT608A	* SEN	X				K-770	KLO	IX			
KT608B	* SEN	X				K-771	KLO	IX			
P608	*	X			14883-69	M800	TRI	SIN III			
P608A	*	X			14883-69	PB00	PND	SIN		GU80+, OS450=	
P608B		X				TI-800	* TRI	XII-B			
D609		XIV				K-801	KLO	IX			
P609	*	X			14883-69	KT801A	*	X			
P609A	*	X			14883-69	KT801B	*	X			
P609B		X				K-802	KLO	IX			
KT611A	*	X				KT802A	*	X			
KT611B	*	X				K-B03	KLO	IX			
KT611G	*	X				KT803A	*	X			
KT611V	*	X				GT804A	*	X			
OV-612	BWT	IX				GT804B		X			
OV-613	BWT	IX				GT804V		X			
OV-614	BWT	IX				K-804	KLO	IX			
KS620A	* REG	SI X111			17126-71	K-B05	KLO	IX			
OV-621	BWT	IX				KT805A	*	X			

Group I - NUMERICAL - Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
KT805B	*		X			KD903A	*		XI-G		
GT806A	*		X			KD903B	*		XI-G		
GT806B	*		X			KT903A	*		X		
GT806V	*		X			KT903B	*		X		
K-806		KLO	IX			KD904A	*		XI-G		
G807		BEA SIN	III	807\$	8380-65	KD904B	*		XI-G		
K-807		KLO	IX			KD904D	*		XI-G		
KT807A	*		X			KD904G	*		XI-G		
KT807B	*		X			KD904V	*		XI-G		
D808	*	REG	XIII			KD904YE	*		XI-G		
KT808A	*		X			KT904A	*		X		
D809	*	REG	XIII		15953-70	KT904B	*		X		
D810	*	REG	XIII			KT905A	*		X		
D811	*	REG	XIII	811-A\$		KT905B	*		X		
G811		TRI SIN	III			KD906	*		XI-G		
D813	*	REG	XIII			KD907	*		XI-G		
G-813		BEA SIN		GU-13+, 813\$		KD907A	*	1DA SEN	XI-G		
D814-A	*	REG SI	XIII		14913-69	KD907B	*	2DA SEN	XI-G		
D814-B	*	REG SI	XIII		14913-69	KD907C	*	4DA SEN	XI-G		
D814-D	*	REG SI	XIII		14913-69	KD907V	*	3DA SEN	XI-G		
D814-G	*	REG SI	XIII		14913-69	KT907A	*		X		
D814-V	*	REG SI	XIII		14913-69	KT907B	*		X		
D815A.P	*	REG SI	XIII		17126-71	KD908A	*	8DA SEN	XI-G		
D815B.P	*	REG SI	XIII		17126-71	KT908A	*		X		
D815D.P	*	REG SI	XIII		17126-71	KT908B	*		X		
D815G.P	*	REG SI	XIII		17126-71	KD909	*		XI-G		
D815I	*	REG SI	XIII		17126-71	KT909	*		X		
D815V.P	*	REG SI	XIII		17126-71	KD910A	*	1DA SPN	XI-G		
D815YE.P	*	REG SI	XIII		17126-71	KD910B	*	2DA SPN	XI-G		
D815ZH.P	*	REG SI	XIII		17126-71	KD910V	*	3DA SPN	XI-G		
D816A.P	*	REG SI	XIII		17126-71	KD911A	*	3 SPNEN	XI-G		
D816B.P	*	REG SI	XIII		17126-71	KT911	*		X		
D816D.P	*	REG SI	XIII		17126-71	KT913A	*		X		
D816G.P	*	REG SI	XIII		17126-71	KT913B	*		X		
D816V.P	*	REG SI	XIII		17126-71	KT913V	*		X		
D817A.P	*	REG SI	XIII		17126-71	KT916A	*		X		
D817B.P	*	REG SI	XIII		17126-71	GD1000		TRI SIN		G-29+	
D817G.P	*	REG SI	XIII		17126-71	GKE1000		TET SIN	III		
D817V.P	*	REG SI	XIII		17126-71	M-1000		TRI SIN		GM-100+	
D818A	*	REG SI	XIII			VKV1000		POW	XII		
D818B	*	REG SI	XIII			D1001	REC		XI		
D818D	*	REG SI	XIII			D1001A	REC		XI		
D818G	*	REG SI	XIII			UV1001	*	TWT	IX		
D818V	*	REG SI	XIII			D1002	REC		XI		
D818YE	*	REG SI	XIII			D1002A	REC		XI		
G-827		TET SIN		GU-27B+, 827R\$		UV1002	*	TWT	IX		
G-829		TET TWN		GU-29+, 829-B\$		D1003A	REC		XI		
G-832		BEA TWN		GU-32+, 832A\$		UV1003	*	TWT	IX		
G837		PND SIN	III	OS12/500=, 837\$		D1004	*	SIA	XI		14912-69
G-880		TRI TWN		GU-12A+, 880\$		UV1004	*	TWT	IX		
TG-884		TRI THY		TG1-0.1/0.3+, 884*		D1005A	*	SIA	XI		14912-69
G889		TRI SIN	III	889-A\$		D1005B	*	SIA	XI		14912-69
G891		TRI SIN	III	891\$		UV1005	*	TWT	IX		
D901A	*	VAR SI	XI-D		16359-70	D1006	*	SIA	XI		14912-69
D901B	*	VAR SI	XI-D		16359-70	D1006A	*	REC SIA	XI		
D901D	*	VAR SI	XI-D		16359-70	UV1006	*	TWT	IX		
D901G	*	VAR SI	XI-D		16359-70	D1007	*	SIA	XI		14912-69
D901V	*	VAR SI	XI-D		16359-70	D1007A	*	REC SIA	XI		
D901YE	*	VAR SI	XI-D		16359-70	UV1007	*	TWT	IX		
KD901A	*	1DA SI	XI-G			D1008	*	SIA	XI		14912-69
KD901B	*	2DA SI	XI-G			D1008A	*	REC SIA	XI		
KD901G	*	4DA SI	XI-G			UV1008	*	TWT	IX		
KD901V	*	3DA SI	XI-G			D1009	*	SIA	XI		
KP901A	*	SFN	X-B			D1009A	*	SIA	XI		
D902	*	VAR SI	XI-D			UV1009	*	TWT	IX		
KD902D	*		XI-G			D1010	*	SIA	XI		
KD902I	*		XI-G			D1010A	*	SIA	XI		
KD902YE	*		XI-G			UV1010	*	TWT	IX		
KD902ZH	*		XI-G			D1011A	*	SIA	XI		
KT902A			X			UV1011	*	TWT	IX		

Group I— NUMERICAL— Continued

Type No.	Kind	Type	Group No.	Similar types	COST spec. No.	Type No.	Kind	Type	Group No.	Similar types	COST spec. No.
151012	*	TWT	IX			D1602V	REC	XI			
T.1050		TRI	THY	TG2-0.1/0 1+		G1625	BEA	SIN	III	1625\$	
IFF1500			XX			GK2000	TRI	SIN	III		
1502		DIO	SIN	IV	5TS9S	IFK2000			XX		
1504		TRI	SIN	II		TG2050	TET	THY		TG1-0.1/1.3+. 2050\$	
1506		BEA	TWN	II		GK3000	TRI	SIN	III		7710-55
1509		BEA	TWN	II		M-3000	TRI	SIN		GMI-1B+	
1511		PND	SIN	II		PI-3000	PND	SIN		GI-8*+	
1512		PND	SIN	II	6AG7\$	GI-3100	TRI	SIN	III		
1514		PND	SIN	II		IFP4000			XX		
1515		BEA	SIN	II	6K	4378D			XXII		
1536		DIO	TWN	II		4671	TRI	SIN		6S1ZH+	
1538		BEA	SIN	II		G-5000	TRI	TWN		GS	
1539		TRI	SIN	II		IFP15000			XX		
1540		BEA	SIN	II		IFK20000			XX		
1550		DWD	SIN	II		G40011	TRI	SIN	III		
1587	*	THY	VII			IFK80000	*		XX		
T11600	*	TRI	XII-B								
D1602A		REC	XI								
D1602B		REC	XI								

## Group II—RECEIVING TUBES

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>f</sub> V	I <sub>f</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.	
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>c2</sub> V	E <sub>c1</sub> V	I <sub>b</sub> mA	I <sub>c2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF
06P28	*	PND SIN	T3F	AF	F	0.6	30	35	350μ	<0.1	30	30	0	90μ	<0.1	.1	1M					5CL
06S57A	*	TRI SIN			F	0.6	38				12		<2	<1	<0.2	10	55k	0.7	1.7			T29
06ZH6B		PND SIN	T3F	AF	F	0.6	20	35	350μ	8M	30	30	0	150μ	0.1	.1	900k	5.0	3.0			5CL
1A1P	*	PTG SIN	T6	CN	F	1.2	60	100		0.3	90	45	15	<1	1.7	.8	500k	7.0	7.0			7AT
1A2P	*	PTG SIN	T6	CN	F	1.2	30	90	3	0.3	60	45	8	<1	1.1	.8		5.1	6.3			7AT
181P		PND DIO	T6		F	1.2	60	100	4	0.2	67	67	0	2	0.3	.6	1M	2.2	2.4			6AU
182P	*	PND DIO	T6		F	1.2	30	90	2	0.1	60	45	0	900μ	0.2	.5	1M	1.8	2.1			6AU
1E1P	*	TET SIN	T5	EL	F	1.0	46				6	4	3	100μ	0.4	<.1	1	3.5				TE2
1E3P		TRI SIN			F	1.3	24				8		3	300μ	<.1	2		3.5				
1F28		TRI PND			F	1.2	60				45		0	1	0.4			2.5	1.5			
1F28		PND TRI			F	1.2	60				45	45	0	<1	0.2	0.3	600k	4.0	3.5			
1I2P		TRI HEX			F	1.2	60	90	2	0.2	60		0	1		1.0	25	25k	0.7	3.0		PT1
1I2P		HEX TRI			F	1.2	60	90	2	0.2	60	45	0	1	0.3	.2	650k	3.5	4.7			PT1
1K1P		PND SIN	T6		F	1.2	60	100		0.6	90	67	0	3	1.2	.9	1M	3.5	7.5			6AR
1K2P	*	PND SIN	T6	RF	F	1.2	30	90	3	0.3	60	45	0	1	0.3	.7	1M	3.0	4.9			6AR
1K128	*	PND SIN	T3B		F	1.2	60	120	5	0.6	60	40	0	2	0.7	1.0	30k	3.7	2.8			
1N3S	□	TRI DUO	T10	RF	F	1.2	120	150		1.0	120		5	<3		1.8	11	14k				7A8
1P2B	*	PND SIN	T3F	AF	F	1.3	50	50			45	45	2	1	0.5	.4	50k	3.0	6.0			5CL
1P3B	*	PND SIN	T3F	AF	F	1.3	28	50			45	45	2	1	0.3	.3	50k	3.0	6.0			5CL
1P48	*	PND SIN	T3F	AF	F	1.3	20	50	<2	<0.1	45	45	2	1	0.4	.4	350k	3.0	6.0			5CL
1P5B	*	PND SIN	T3B		F	1.2	120	150	18	1.7	90	90	<5	12	1.0	1.9	60k	3.9	2.6	100		
1P22B	*	PND SIN	T38		F	1.2	115	180	17	2.0	90	90	<5	13	1.0	2.8	60k	6.9	4.7	100		
1P24B	*	PND SIN	T38		F	1.2	250	300	25	2.5	150	125	14	17	3.0	2.8	50k	7.1	4.0	60		
1P328	*	PND SIN	T3B		F	1.2	215	200	30	3.0	150	150	14	12	1.5	2.3		6.3	5.8	60		
1S12P		TRI SIN			F	1.2	30	90	<3	0.2	60		1	1		.9	16	19k	0.8	0.7	300	TS1
1S38A	*	TRI SIN	T2		F	0.9	85				70		0	2		0.9	24	0.9	1.2			
1TS1S	*	DIO SIN	T10		F	0.7	185	15k		0.5	50		6					2.0				8HC
1TS7S	*	DIO SIN	T10		F	1.3	200	30k	2		100		4					1.3		3hk		8HC
1TS11P	*	DIO SIN	T6		F	1.2	200	20k	2				300μ					1.0				DS3
1TS20B		DIO SIN	T3B		F	1.0	250	10k	300μ				135μ					0.8				
1TS21P	*	DIO SIN	T7		H	1.4	690	25k	40		100		600μ					3.0		20k		DS5
1YE4A		TRI SIN	T28		F	1.2	25	200	1	0.2	150		<1	900μ				1.3	1.0			T10
1ZH1ZH		PND SIN	ACO		F	1.2	50	145			135	68	3	<2	0.4	.6	800k	1.8	2.5			
1ZH2M		PND SIN			F	1.2	30				70	70	0	1	0.6	<.5						
1ZH17B	*	PND SIN	T3B	RF	F	1.2	60	90	5	0.5	60	40	0	2	0.3	1.5	80k	3.2	2.4			P42
1ZH18B	*	PND SIN	T3B	RF	F	1.2	24	90	<3	0.3	60	45	0	1	0.3	1.1	60k	3.2	2.4			P43
1ZH24B	*	PND SIN	T38	RF	F	1.2	13	120	<2	0.1	60	45	0	1	0.1	0.9	40k	3.6	2.4			P42
1ZH26A		PND SIN			F	1.4	130				135	70	<1	4	0.5	1.2						
1ZH29B	*	PND SIN	T3B		F	1.2	60	150	8	1.2	60	45	0	5	0.5	2.5	35k	5.0	3.0			
1ZH30B		PND SIN	T3B		F	1.2	15	200	1		12	12	0	1		.8	600	8.5	3.5			
1ZH368	*	PND SIN	T3B		F	1.3	75	200			150	45	1	3	0.4	1.5			2.2	3.0		
1ZH37B	*	PND SIN	T3B		F	1.2	60	100	<5		45	45	0	2	0.4	1.0	30k	2.2	2.6			
1ZH42A	*	PND SIN	T2B		F	1.2	15	20	1		6	6	0	<1	0.2	0.5	100k	10.0	3.5			
GU-2		8EA SIN	S18		H	6.3	900	750	120	30	0	250	250			10.0						60
2A1		PTG SIN		CN	H	2.0	160	160		0.7	120	70	4	2		0.4	150k	9.6	11.4			8A
2D1L		DWD SIN	F10		H	2.2	130				50		2									DW3
2D1S	□	DIO SIN	T7		H	2.3	400	450	<1	<0.1	5		<1									3G
2D2S	*	DIO SIN	F27	NO	T	1.5	1500	200	40	5.0	125											3G
2D38	*	DIO SIN	T3F	NO	W	2.2	110	150	5		150								2.4			
2D3S		DIO SIN	T3F		H	2.2	110				150											
2D7S	*	DIO SIN	PEN	NO	W	1.4	212	350		6.0	300		3									
2D9S	□	DIO SIN	T10		W	3.7	550	500	1													
2E1		TET SIN			F	2.0	110	160		1.0	100	40	0	1	0.5	.9	1M	9.0	9.0			TE5
2E2		TET SIN			F	1.8	320			1.5	160	80	2	7	4.0	1.8	300k	8.3	9.0			TE6
2E2P	*	TET DUO	T8	EL	F	2.0	55				6	3	4	45		22	1	4.0				TE3
2K1		PND			F	2.0	120	120			120	70	1	<4	1.2	1.6	750k					
2K1M		PND SIN			F	2.0	120				150	70	1	3	1.1	1.4	1M					5Y
2K2M		PND SIN	T9		F	2.0	60	160		0.5	120	70	<1	2	0.5	.9	1M	5.4	8.1			5Y
2KHLL	*	DWD SIN	F10		H	2.2	130				50		2						2.2			DW3
2N1		TRI DUO			F	2.0	240	160		1.5	120		0	3		2.1	32		2.8	5.7		7A8

Group II—RECEIVING TUBES—Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>t</sub> V	I <sub>t</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>g2</sub> V	E <sub>g1</sub> V	I <sub>b</sub> mA	I <sub>g2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF		
2P1		BEA SIN			F	2.0	185		0.2	120	120	2	4	0.7	1.8		150k			6X	
2P1P *		BEA SIN	T6	AF	F	1.2	120	100	15	1.1	90	90	<2	10	2.2	1.7	100k	5.5	4.0	7BA	
2P2		BEA SIN			F	2.0	220		0.3	120	100	4	10	1.8	2.2	90k					
2P2P *		BEA SIN	T6	AF	F	1.2	60	90	7	0.4	60	60	4	3	0.8	1.1	120k	3.7	3.8	7BA	
2P3		BEA SIN			F	2.0	230		0.5	160	120	6	10	1.7	2.0	80k			6X		
2P5B *		PND SIN	T3B		F	2.4	90	180	25	2.3	90	90	4	12	1.2	3.3		7.1	4.7	100	
2P9M		BEA SIN	T10		F	2.0	1000	300		8.0	250	150	5	35	1.5	2.5	40k	8.5	8.5	6X	
2P19B *		PND SIN	T3B		F	2.2	70	200	15	1.0	120	90	5	8	3.5	1.7		4.5	7.0	PS6	
2P29L *		PND SIN	F10		F	2.2	120	200	20	2.0	160	120	6	10	2.0	2.0	50k	4.3	5.5	PS3	
2P29P *		PND SIN	T5		F	2.2	110	200	5	1.0	120	45	0	<2	0.4	1.2	100k	4.9	2.0	120	
2S1		TRI SIN			F	2.0	110	120		2.0	80		0	<6		1.5	14	9k	3.6	3.0	
2S2		TRI SIN	T8		F	2.0	120	160		0.6	120			1	1.3	22	17k	2.8	2.7	5S	
2S3A *		TRI SIN			F	2.4	120	70		1.8	65		2	10	2.7	<8	28h	1.6	3.1	T30	
2S4S *		TRI SIN		PA	F	2.5	2500	360		15.0	300		62	40	4.0	4	800k	7.5	5.5	4D	
2S14B *		TRI SIN	T3F		F	2.2	60	250	5	0.7	90		3	<4	1.8	15	8400	2.8	2.1	300	
2S49D *		TRI SIN	LIT		H	2.4	480	300	50	4.0	250		1	15	6.0	62	500M	3.3	0.1		
2TS2S *		DIO SIN	S12		H	2.5	1750	12k	65		4k			7						4AC	
2VD8		DIO SIN				2.5	1750	12k	100												
2ZH1M		PND SIN			F	2.0	320			0.5	160	80	2	7	1.5	1.8				PS8	
2ZH2M		PND SIN	T9		F	2.0	60	160		0.5	120	70	<1	2	0.5	.9	1M	5.4	8.1	5Y	
2ZH4		PND SIN			F	2.0	275			1.2	200	100	7	14	2.4	1.8	110k			PS8	
2ZH14B *		PND SIN	T3B		F	2.2	30	90	5	0.5	90	45	0	2	0.8	1.2		4.5	6.0	PS6	
2ZH15B *		PND SIN	T3B		F	2.2	14	200	5	1.0	60	45	0	1	0.7	0.7		4.0	5.0	P4S	
2ZH27L *		PND SIN	F10		F	2.2	57	200	5	1.0	120	45	0	2	0.5	1.2	700k	5.3	4.9	PS3	
2ZH27P *		PND SIN	T5		F	2.2	57	200	5	1.0	120	45	0	1	0.5	1.0	<2M	4.5	2.0	PS4	
2ZH28L		PND SIN			F	2.2	28			1.0	120	45	0	2	0.5	1.2	<2M	5.4	4.8	PS3	
EM-3		TET SIN	T16		F	3.0	120			6	4	3	70μ	0.4	0.1	1		5.0			
3A4S		PND SIN			F	3.2	100			150	90	0	13	2.2	1.9					P7S	
3B4S		BEA SIN	T5		F	3.2	150			180	150	20	30	2.5	2.4					P8S	
3D6A-V *		DIO SIN			H	3.2	32	450	10	0.2	165			35				3.8		D15	
3S1		TRI SIN			F	2.5	1A			220		4	8	2.2	22	10k					
3S2		TRI SIN			F	2.5	1A			220		10	15	2.4	11	4k					
3S6B-V *		TRI SIN			H	3.2	480			1.4	120		9	5.3	26	5k	3.4	3.4		T31	
3S7B-V *		TRI SIN			H	3.2	440			1.4	250		<5	4.2	70	17k	3.3	3.4		T31	
3S9		TRI SIN			F	2.5	1000			6.0	220		10	17	2.4	11		5.0	2.5	4F	
3TS16S □		DIO SIN	T10		H	3.2	220	35k	80		120		1				1.5		12k	4AC	
3TS18P *		DIO SIN	T6		H	3.2	210	25k	15		100		8				1.5			DS3	
3TS22S *		DIO SIN	T10	TV	H	3.1	400	36k	80		30k		2					2.5		D7	
3ZH1BV *		PND SIN			H	3.2	400			1.2	120	120	<8	<.4	4.8			4.8	4.3		
3ZH2BV *		PND SIN			H	3.2	400			0.9	120	120	<6	<.6	3.8			4.9	4.1	PS5	
EM4 *		TRI SIN	T6	EL	F	1.3	24	10	500μ		8		3	300μ	<.1	2		3.5			
4D5S □		DIO SIN	T4		H	4.0	210			0.4	10			30						D12	
4D17P		DIO SIN			F	4.0	1750	200	16	1.0	60		7							D10	
4E1		TET SIN			F	4.0	75	200		2.0	160	80	0	3	.8	350		8.0	6.3	TE5	
4E2		TET SIN			F	4.0	150	200		2.0	160	80	0	<8	1.8	400		10.5	8.0	TE5	
4E3		TET SIN			H	4.0	1000	250		160	60	1	8	1.5	3.0	200k	6.5	4.5			
4F6S		BEA SIN		PA	H	4.0	1100			10.0	250		16	34	6.0	2.5	200	80k			
4N1		TRI DUO			F	4.0	2A			6.0	120		0	30	3.2						
4P1		PND SIN				4.0	1A			240	140	11	22	6.0	2.1						
4P1L *		PND SIN	T10		F	4.2	330	250	50	7.5	150	150	3	60	7.0	6.5	30k	8.5	9.4	100	
4P10S		PND SIN				4.0	1750			315	210	7	63	1.4	8.5						
4S1		TRI SIN			F	4.0	70			120		0	8	1.3	11	8k					
4S2		TRI SIN			F	4.0	70			160		0	4	1.3	25	18k					
4S3		TRI SIN			F	4.0	155	200		3.0	160		6	15	2.1	9		3.8	2.4		
4S3S		TRI SIN	F9		H	4.4	330	300	30	5.0	100		4	27	3.0	12	4200	1.5	0.6	1k	
4S4		TRI SIN			F	4.0	1A			15.0	250		37	57	3.2	4	1k				
4S5		TRI SIN			H	4.0	1A			240		3	6	1.7	32	20k					
4TS6S □		DIO SIN	S10		W	4.0	1750			1.0	50		7							DS4	
4TS14S □		DIO SIN	T11		W	4.0	1750	60	20	1.2	60		7							DS4	
4VD1		DIO SIN			F	4.0	700			350		50									

Group II - RECEIVING TUBES - Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>f</sub> V	I <sub>f</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.		
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>c2</sub> V	E <sub>c1</sub> V	I <sub>b</sub> mA	I <sub>c2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF	
4VKH1		DIO	TWN		F	4.0	2300	1k	560														
4VKH2		DIO	SIN			4.0	2000	<2k	1200														
4ZH1L *		PND	SIN	F10	H	4.2	225	250	11	2.0	150	75	0	7	0.9	1.5	1M	3.7	4.0	200	PS1		
4ZH1P		PND	SIN	F10	H	4.2	225	250	11	2.0	150	75	0	7									
4ZH5		TET	SIN		H	4.0	1000	250			120	40	1	<3	1.7	1.3	770k	14.0	4.5				
4ZH5S		PND	SIN		RF	H	4.0	1000			160	60		5	3.5	2.0				11.0	4.5		
EM-5 *		TET	DBA	T7	EL	H	3.1	115	5			5	3	85μ	<0.1	1				1.6			T2E
GP-5 *		TRI	SIN	T15	TV	H	6.3	210	30k	2			7	<2	0.6					1.5	4.0		T4S
5TS3S *		DWD	SIN	S16	F	5.0	3000	17h	750			75		225									DW1
5TS4M *		DIO	DUO	T11	H	5.0	2000	15h	415			400		133									DW4
5TS4S *		DIO	DUO	T10	H	5.0	2000	13h	375			500		300									DW4
5TS8S □		DWD	SIN	T17	H	5.0	5000	17h	1200	30.0	500			300									DW2
5TS9S □		DWD	SIN	F13	H	5.0	3000	17h	600	12.0	500			180									DW2
5TS12P*		DWD	SIN	T7	H	5.0	870	5k	350	5.0	2k			50									DS1
5VKH2		DWD	SIN			5.0	2000	14h	375														
5VKH3		DWD	SIN			5.0	3000	15h	675														
EM-6 *		TET	DBA	T6	EL	H	4.5	75	5			5	3	70μ	<0.1	1				1.8			T2E
SG6S		REG	TRI	T12		6.3	825	25k	300μ		20k	150	100μ										DB
6A2P *		PTG	SIN	T5	CN	H	6.3	300	330	14	1.1	250	100	<2	3	1.0	.3	100k	3.1	9.2			7CH
6A3P □		GTB	SIN	T6	CN	H	6.3	300	150	20	1.2	75	75	4	5	7.0	1.2			4.7	4.0		7DF
6A4P *		PTG	DBA	T7	CN	H	6.3	440	250	20	2.0	200	100		34	26.0	16.0			10.5	2.8		P35
6A7 *		PTG	SIN	M8	CN	H	6.3	300	300	15	1.1	250	100	0	4	8.5	.4	500k	9.5	12.0			8R
6A8 □		PTG	SIN	M11	CN	H	6.3	300	300	15	1.0	250	250	0	4	2.7	.5	360k	4.0	9.0			8A
6A10S		PTG	SIN	M11	CN	H	6.3	300	330	15	1.1	250	100	0	4	9.0	.4	1M	9.0	10.0			8R
6B1P *		DIO	PND	T7	H	6.3	400	200			0.8	150		15						6.2	4.0		PS5
6B1P *		PND	DIO	T7	H	6.3	400	550	20	4.5	250	250	2	26	2.7	29.0				9.0	4.0		PS5
6B2P *		PND	DIO	T7	RF	H	6.3	300			2.1	250	100	1	6	1.6	2.7	700k	4.2	4.1			PS5
6B8 *		PND	DWD	M10	H	6.3	300	275			250	125	3	10	2.4	1.6		750k	5.7	7.5			8E
6B8S		PND	DWD	S12	RF	H	6.3	300	275		2.5	250	125	3	10	2.4	1.3	600k	4.0	9.0			8E
6D3D □		DIO	SIN	LIT	H	6.3	770	200	150			7		27									3G DS2
6D4ZH □		DIO	SIN	ACO	H	6.3	150	365	30		165			5						1.9			4G
6D6A *		DIO	SIN	T2F	H	6.3	150	450	70	0.2	165			8						3.0			700
6D8D □		DIO	SIN	PEN	H	6.3	450	450		<0.1	150			<4									5G
6D10D □		DIO	SIN	PEN	H	6.3	750	100	30	0.5	100			8						3.5			
6D13D *		DIO	SIN	PEN	H	6.3	210	450		1.0	150			150μ						0.8			48h
6D14P *		DIO	SIN	T22	H	6.3	1100	56h	600	4.5	20			175						10.0			9CB
6D15D		DIO	SIN	LIT	H	6.3	330	200	750	0.5										1.2			
6D16D		DIO	SIN	LIT	H	6.3	240	450	2000	1.0	100			14						2.0			3G DS9
6D20P *		DIO	SIN	T7	H	6.3	1800	6k	600	5.0				250						9.0			9BD
6D22S *		DIO	SIN	T10	TV	H	6.3	1900	6k	1000	8.0			300							12.0		D9
6E5P *		TET	SIN	T6	H	6.3	600	150	70	8.3	150	150	2	45	14.0	30.5		8k	15.0	2.6			TE1
6E6P *		TET	SIN	T7	RF	H	6.3	600			8.4	150	150	1	44	10.0	30.5		15k	15.0	5.8		9EQ
6E6P-YE		TET	SIN	T7	H	6.3	600	150	70	8.3	150	150	2	44	10.0	29.5		15k	15.0	2.7			
6E7P *		TET	SIN	T7	CN	H	6.3	750	5k	10	10.0	5k	25	2	2	0.1	1.6	2k		5.6	1.1		TE9
6E12N *		TET	SIN	NUV	H	6.3	130	250	20	2.2	125	50	1	10	3.6	10.0				7.1	1.6		TE8
6E13N *		TET	SIN		H	6.3	140			2.0	27	27		7	3.6	8.5				7.0	1.9		T3E
6E14N *		TET	SIN		H	6.3	140			2.2	27	27		7	3.6	10.0		100k	7.0	1.5			T3E
6F1P *		TRI	PND	T7	H	6.3	430	250	14	1.5	100		2	13		5.0	20		4k	2.5	0.3		9AE
6F1P *		PND	TRI	T7	H	6.3	430	250	14	2.5	170	170	2	10	4.0	6.2		400k	5.5	3.4			9AE
6F3P *		TRI	PND	T7	H	6.3	850	600	15	1.0	170		1	2	2.0	2.5	75		28k	2.2	0.4		PT5
6F3P *		PND	TRI	T7	H	6.3	850	275	60	8.0	170	170	11	41	14.0	7.0		15k	9.3	8.5			PT5
6F4P *		PND	TRI	T6	H	6.3	720	250	40	4.0	170	170	2	18	7.0	11.0		100k	9.5	4.0			PT4
6F4P *		TRI	PND	T6	H	6.3	720	250	12	1.0	200		2	3		4.0	65		16k	4.0	0.6		PT4
6F5M		TRI	SIN	T10	H	6.3	300	350		4.0	250		2	1		2.0	100						5M
6F5P *		TRI	PND	T7	H	6.3	900	250	15	0.5	100		1	5		7.0	70		10k	3.5	0.3		PT6
6F5P *		PND	TRI	T7	H	6.3	900	300		9.0	185	185	12	41	2.7	7.5		23k	11.7	8.8			PT6
6F5S		TRI	SIN	T5	H	6.3	325			1.3	250		2	<2		2.0							
6F6M1		PND	SIN	T11	H	6.3	700				250	250	<17	46		2.9							7S
6F6S		PND	SIN	S14	PA	H	6.3	700	375		11.0	250	250	16	34	6.5	2.5			7.5	11.0		7S
6F7		TRI	PND	M11	H	6.3	300	110		0.5	100		3	3		.5	70						PT2



Group II—RECEIVING TUBES—Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>r</sub> V	I <sub>r</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>c2</sub> V	E <sub>g1</sub> V	I <sub>b</sub> mA	I <sub>c2</sub> mA	Sm mmho	μ	R <sub>p</sub> Ω	In pF		
6N18B *	TRI	TWN	T3B		H	6.3	330	200	14	0.9	100		2	6		5.0	25	325k	2.6	1.5	TD1
6N19P *	TET	TWN	T7		H	6.3	650	250	50	2.0	150		14		13.5		25k	3.8	1.2		
6N21B *	TRI	TWN	T3B		H	6.3	395	250		1.0	200		<4		3.8	82		2.8	0.6	T21	
6N23P *	TRI	TWN	T7		H	6.3	300	300	20	1.8	200		15		12.7	32		3.6	2.1	9AJ	
6N24P *	TRI	TWN	T7		H	6.3	300	300	20	1.8	90		9	15	12.5	33		3.9	3.2	9DD	
6N25G *	TET	TWN	T4B		H	6.3	350	200	30	1.2	75		1	<10	1.5	18		1.1	0.7	T20	
6N26P *	TRI	TWN	T6		H	6.3	600	250	30	2.6	150		<2	14	9.5	48	5k	4.0	2.2	8CJ	
6N27P *	TRI	TWN	T6		H	6.3	330	30	20	0.6	13		<3	<3	4.9	15		3.0	2.0	9AJ	
6N28B	TRI	TWN		RF	H	6.3	200			0.9	50		1	7	6.8	25		3.0	2.3	T19	
6N28B-V	TRI	TWN	T3B		H	6.3	245	150	10	0.9	50		1	7	6.7	24		2.6	1.8	T19	
6P1P *	BEA	SIN	T7		H	6.3	500	250	70	12.0	250	250	12	44	7.0	4.9		50k	7.8	5.7	PS9
6P2P	PND	SIN			H	6.3	450				120	120	5	35	12.0	8.0					6CC
6P3S *	BEA	SIN	T12		F	6.3	900	400	90	20.0	250	250	14	72	8.0	8.0		22k	11.0	8.2	7S
6P4	PND	SIN			H	6.3	300				180	180	9	15		2.3			5.5	7.0	
6P6B	PND	SIN			H	6.3	700	375			250	250	16	34	6.5	1.5			6.0	12.0	7S
6P6S *	BEA	SIN	T9	PA	H	6.3	450	350	100	13.2	250	250	12	46	7.5	4.1		52k	9.5	9.5	7S
6P7S *	BEA	SIN	S16		H	6.3	900	6k	100	20.0	250	250	14	72	8.0	5.9		32k	11.5	6.0	PS7
6P8S	PND	SIN	T11		H	6.3	300				180	180	9	15		2.4					7S
6P9 *	BEA	SIN	M10	PA	H	6.3	650	330		9.0	300	150	3	30	6.5	11.7		80k	9.3	5.8	8Y
6P9E	BEA	SIN	M10	PA	H	6.3	560	330		9.0	300	150	3	25	5.8	11.2		100k			8Y
6P13S *	BEA	SIN	T10		H	6.3	1300	450	130	14.0	200	200	19	60	8.0	9.5		25k	18.5	6.5	5BT
6P14P *	BEA	SIN	T6	AF	H	6.3	760	300	66	12.0	250	250	6	48	7.0	11.3		20k	11.0	7.0	9CV
6P15P *	BEA	SIN	T6	TV	H	6.3	760	330	90	12.0	300	150	2	30	4.5	14.7		100k	14.0	7.0	P1S
6P17S	BEA	SIN			H	6.3	900	500		20.0	250	250	14	72	8.0	5.9		32k	11.5	6.0	
6P18P *	BEA	SIN	T6	AF	H	6.3	760	25h	75	12.0	170	170	6	53	8.0	11.0		23k	11.5	6.0	9CV
6P20S *	BEA	SIN	S16		H	6.3	2500	450	200	27.0	175	175	30	90	6.0	8.5		7k	24.0	10.0	5BT
6P21S *	BEA	SIN	T12		F	6.3	750	600	100	18.0	600	200	16	36	5.0	4.0		20k	8.2	6.5	80 P14
6P23P *	BEA	SIN	T6	RF	H	6.3	750			11.0	300	200	16	40	5.0	4.5			7.5	4.5	P44
6P23S *	BEA	SIN	T6	F	6.3	750	350	100	11.0	300	200	16	40	5.0	4.5		44k	7.5	4.5	180 P38	
6P25B *	PND	SIN	T3B		H	6.3	450	170	50	4.1	110	110	8	30	5.0	4.5			7.5	8.5	P30
6P27S *	BEA	SIN	T12		H	6.3	1500	800	150	27.5	250	265	13	100	15.0	10.0		15k	15.0	11.0	7S
6P30B *	PND	SIN	T3B		H	6.3	465	250	60	5.5	120	120		35	2.0	4.5			12.0	4.2	P22
6P31S *	BEA	SIN	T11	TV	H	6.3	1300	600	200	10.0	100	100	9	80	8.5	12.5		4k	18.0	8.5	PS7
6P33P *	PND	SIN	T6		H	6.3	900	250	100	12.0	170	170	12	70	6.5	10.0		25k	12.0	7.0	9CV
6P34S *	PND	SIN	T11		H	6.3	2000	250	150	18.0	180	180	14	70	8.5	13.0			21.0	11.0	P23
6P35GV *	PND	SIN			H	6.3	450			5.2	80	80	5	50	10.0	10.5			11.5	6.0	P41
6P36S *	BEA	SIN	T13	TV	H	6.3	2000	250	250	17.0	100	100	7	120		20.0		4500	36.0	21.0	P21
6P37N *	PND	SIN	NUV		H	6.3	1210	200	400	15.0	100	100	9	100	22.5	18.0			20.0	2.3	
6P38P *	PND	SIN			H	6.3	450			10.5	150	150		50	8.0	65.0		30k	21.5	3.9	P33
6P39S *	PND	SIN			H	6.3	600			10.0	125	125	0	50	6.0	45.0		18k	18.0	4.0	P16
6P41S *	BEA	SIN			H	6.3	1100			14.0	170	170		66	2.7	8.4		12k	23.0	10.5	P40
6P42S *	BEA	SIN	T15	TV	H	6.3	2100	7k	700	24.0	150	150		20					13.5	38.0	P21
6R2P	BEA	DUO			H	6.3	600			6.5	200	200	16	20	2.0	2.5			4.5	2.0	PD7
6R3S	BEA	DUO			H	6.3	2000			20.0	350	250	30	45		4.5			10.0	4.0	PD8
6S1P	TRI	SIN	T6	RF	H	6.3	150	275	20	1.8	250		7	6		2.2	26	11k	1.4	1.1	7BS
6S1ZH	TRI	SIN	AC0		H	6.3	150	275		1.8	250		7	6		2.2	26	11k	1.0	0.6	600 T3S
6S2B *	TRI	SIN	T3B		H	6.3	250	250	40	2.5	150		11		11.0	50			6.5	4.4	T12
6S2P	TRI	SIN	T6		H	6.3	400	165		2.5	150		1	14		11.5	48	4200	5.3	4.2	7BQ
6S2S *	TRI	SIN	T9		H	6.3	300	330	20	2.7	250		8	9		2.5	20	8000	3.0	4.5	6Q
6S3B *	TRI	SIN	T3F		H	6.3	150	300	12	2.5	270		8			2.2	14	6400	2.5	3.9	
6S3P *	TRI	SIN	T6		H	6.3	300	160	35	3.0	150		1	16		20.0	50	2600	6.5	1.5	TS4
6S4B	TRI	SIN	M9		H	6.3	300			0.4	250		1			1.5	100	66k	2.0	12.0	5M
6S4P *	TRI	SIN	T6		H	6.3	300	160	35	3.0	150		1	16		20.0	50	2600	11.5	3.7	TS4
6S4S	TRI	SIN	S16	PA	F	6.3	1000	360		15.0	250		45	60		5.4	4	840			5S
6S5	TRI	SIN	M11		H	6.3	300			1.2	250		8	8		2.2	20		3.0	11.0	6Q
6S5D *	TRI	SIN	LIT		H	6.3	770	300	25	6.5	250		3	15		5.0	42	9k	2.3	0.5	3G 6BY
6S5S *	TRI	SIN	T10		H	6.3	300	350		2.7	250		6	8		2.2	20	9k	3.8	12.0	6Q
6S6B *	TRI	SIN	T3F		H	6.3	200	250	14	1.4	120		2	9		5.0	25	5k	3.3	3.5	500
6S7B *	TRI	SIN	T3F		H	6.3	200	300	7	1.4	250		2	<5		4.0	65	16k	3.3	3.4	
6S8S	TRI	SIN	T10		H	6.3	300	500	500	3.6	300		10	11		3.0	20	6700	2.2	0.6	TS5



Group II — RECEIVING TUBES — Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>t</sub> V	I <sub>t</sub> mA	Maximum			Typical						Capacity		f <sub>max</sub> MHz	Base No.
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>e2</sub> V	E <sub>e1</sub> V	I <sub>b</sub> mA	I <sub>e2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω		
6S9D *	TRI	SIN	LIT	H	H	6.3	570	300	25	5.5	250	1	15	10.0	100	10k	2.9	<0.1	900	6BY
6S10D	TRI	SIN	LIT	H	H	6.3	920	5k	8500	9.0									36	6BY
6S11D	TRI	SIN	PEN	H	H	6.0	176	120	30	3.6	110	2	20	6.5	17	2500	2.5	0.1	18h	
6S13D *	TRI	SIN	MCR	H	H	6.3	770	350	35	9.0	300	4	21	5.2	32	6200	2.7	<0.1	36h	
6S15P *	TRI	SIN	T6	H	H	6.3	440	160	52	7.5	150		40	45.0	52		10.5	1.5		T2S
6S16D	TRI	SIN	PEN	H	H	6.3	192	170	35	3.6	135	4	12	6.0	17	2800	2.5	0.1	18h	
6S17K *	TRI	SIN	MCR	H	H	6.3	295	200	11	2.0	175	1	10	12.0	125	10k	3.5	<0.1		
6S18S *	TRI	SIN	T20	H	H	6.3	6600	450	500	60.0	120	20	550	40.0	2	60				TS6
6S19P *	TRI	SIN	T7	H	H	6.3	1000	350	110	11.0	100	7	95	7.5	4	500	6.5	2.5		TS7
6S20S *	TRI	SIN	T13	H	H	6.3	200	25k	<2	25.0	25k	8	1	.2	2k	10M	2.5	0.7		TS8
6S21D *	TRI	SIN	PEN	H	H	6.3	176	200		3.6	110	2	20	6.5	16	2500	2.5	0.7	18h	
6S25B	TRI	SIN	T3B	H	H	6.3	220	250	15	1.4	120		8	5.0	29	220k	3.3	3.5		
6S26B *	TRI	SIN	T3B	H	H	6.3	200	250	15	1.4	120	2	9	5.0	25	220k	3.3	3.5		
6S27B *	TRI	SIN	T3B	H	H	6.3	200	300	7	1.4	250		<5	4.0	65	16k	3.3	3.4		
6S28B-V	TRI	SIN	T4B	H	H	6.3	310	150	35	2.4	120		16	19.0	40	2500	5.8	2.2		T25
6S29B-V	TRI	SIN	T4B	H	H	6.3	310	150	35	2.4	120		16	19.0	40	2500	9.5	3.9		T26
6S30B	TRI	SIN	T3B	H	H	6.3	425	200	60	5.0	50		40	21.0	17	800k	7.0	1.5		
6S31B *	TRI	SIN	T3B	H	H	6.3	220	100	60	2.5	50	0	40	18.0	17		4.1	1.5		T13
6S32B *	TRI	SIN	T3B	H	H	6.3	165	250	10	1.5	200		4	3.5	100		2.8	0.7		T14
6S33B *	TRI	SIN	T20	H	H	6.3	6600	600	600	60.0	120		550	40.0		80	30.0	9.0		T16
6S33S *	TET	TWN	T20	H	H	6.3	5600		.60	0.0	120		550	45.0	14	80	30.0	10.5		T16
6S34A-V	TRI	SIN	T2B	H	H	6.3	127	200	15	1.1	100	1	8	4.6	25		2.0	2.3	480	T28
6S35A-V	TRI	SIN	T2B	H	H	6.3	127	300	7	0.9	200	1	3	4.0	70	17k	2.0	2.4		T28
6S36K *	TRI	SIN	C5	H	H	6.3	320	300	10	3.0	250	<1	6	8.0	145	18k	3.5	0.2	9k	
6S37B *	TRI	SIN	T3B	H	H	6.3	440	120	2000	4.5	80	<2	40	16.5	13	800k	6.0	4.7		T27
6S39S	TRI	SIN	T20	VR	H	6.3	200	30k	<3	75.0	30k	45	<3	.2	500		3.5	1.2		T11
6S40P *	TRI	SIN	T7	H	H	6.3	170	20k	500μ	6.0	20k	14	300μ	0.2	1k		2.5	0.5		T15
6S41S *	TRI	SIN	T13	H	H	6.3	2700	450	300	25.0	90		250	21.0			11.0	5.0		T16
6S44D *	TRI	SIN	PEN	H	H	6.3	330	300	80	8.0	250		26	6.0	25		4.0	0.1	36	
6S45K	TRI	SIN		H	H	6.3	310				18h		500	13.0			2.8	10.1		
6S45P-Y	TRI	SIN	T7	H	H	6.3	440	150	52	7.8	150		40	45.0	52		11.5	1.9		T2S
6S46G *	TRI	SIN	T4B	H	H	6.3	500	250	100	4.5	42	1	60	20.0	7		6.0	1.7		T2S
6S47S *	TRI	SIN	T17	H	H	6.3	6200	600	3000	33.0	90		400	45.0			37.0	7.0		TS6
6S48D	TRI	SIN	PEN	H	H	6.3	95	150	10	3.0	50	0	5	3.5	40		3.0	<0.1		
6S50D *	TRI	SIN	PEN	H	H	6.3	365	15h	3000	8.0	250	4	22	6.0	32		4.0	0.1		
6S51N *	TRI	SIN	NUV	H	H	6.3	130	110	15	1.0	75		10	11.2	32		4.7	2.2	800	
6S52N *	TRI	SIN	NUV	H	H	6.3	130	125	15	1.0	110		8	10.0	64		4.7	2.4	800	
6S53N *	TRI	SIN	NUV	H	H	6.3	130	130	15	1.2	120	1	11	13.0	75		4.8	0.1	800	
6S56P *	TRI	SIN		H	H	6.3	1000			11.0	110	7	<1	8.5	13	350	6.0	5.0		TS7
6S58P *	TRI	SIN		H	H	6.3	300			5.7	150		27	36.0	64	17h	7.5	1.2		T26
6S59P *	TRI	SIN		H	H	6.3	300			5.7	150		27	36.0	62	17h	12.3	2.5		TS4
6S62N *	TRI	SIN	NUV	H	H	6.3	130	250	15	1.2	120		<1	1.7	90	53k	2.7	2.4		T32
6SK7	TRI	PND		H	H	6.3	300				100	3	3	.5	8		2.5	3.0		
6SK7	PND	TRI		H	H	6.3	300				250	100	3	1.1			3.2	12.5		
6TS4P *	DWD	SIN	T6	H	H	6.3	600	1k	300	3.0	350		75							DW6
6TS4S	DIO	SIN		H	H	6.3	600	1k	300				75							
6TS5S *	DWD	SIN	T10	H	H	6.3	600	11h	300		400		75							DW7
6TS10P*	DIO	SIN	T7	H	H	6.3	1050	45h	450		1k		120				5.0			9BD
6TS13P*	DIO	SIN	T7	H	H	6.3	950	16h	900	8.0	650		120							DS1
6TS15S	DIO	TWN	T13	H	H	6.3	1430	1k	375		350		62							8AN
6TS17S□	DIO	SIN	T10	H	H	6.3	1800	4k	1200	8.0			200				11.0			DS8
6TS19P*	DIO	SIN	T7	H	H	6.3	1100	45h	450		700		120				8.0			9BD
6V1P *	PND	SIN	T6	SM	H	6.3	400	500		4.5	250	250	2	26	2.7	29.0		9.0	4.6	PS5
6V2P *	PND	SIN	T7	SM	H	6.3	1800	600	1500	3.0	600	300	25		h2.2		26.0	15.0		PD9
6V3S	PND	SIN	T7	SM	H	6.3	900	700	1500	5.0	700	400	25	1200	8h	h2.0		15.0	14.0	P34
6VKH1	DWD	SIN		H	H	6.3	600	1k	200				70							DW7
6YE1P *	TRI	SIN	T7	ID	H	6.3	300	250		0.2	100	2	2	0.5	24					ID1
6YE2P *	TRI	SIN	T7	ID	H	6.3	580	250		0.4	150	4	<2	1.4			3.0	7.0		ID3
6YE3P *	TRI	SIN	T6	ID	H	6.3	230	300	3	0.5	230	0	<1							ID2
6YE5S *	TRI	SIN	T11	ID	H	6.3	300	250			250	4	5	1.2	24					8B

Group II—RECEIVING TUBES—Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>r</sub> V	I <sub>r</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.		
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>g2</sub> V	E <sub>g1</sub> V	I <sub>b</sub> mA	I <sub>g2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF	
6ZH1B *	PND	SIN	T3F		H	6.3	200	150	14	1.2	120	120	<8	3.5	4.8		200k	4.8	3.8				
6ZH1L	PND	SIN	F10		H	6.3	150			2.0	150	75	2	2	0.2	1.5	1M	4.0	4.2	200	PS1		
6ZH1P *	PND	SIN	T6	UF	H	6.3	170	200	20	1.8	120	120	2	7	3.0	5.2	300k	4.3	2.4	120	7BD		
6ZH1ZH*	PND	SIN	ACO		H	6.3	150	250		0.5	250	100	3	2	0.7	1.6	1M	3.5	3.0				
6ZH2B *	PND	SIN	T3F	RF	H	6.3	200	150	14	0.9	120	120	2	<6	6.0	3.2	500k	4.9	4.1				
6ZH2M	PND	SIN	T6	RF	H	2.0	60			0.5	120	70	<1	2	0.5	.9		5.4	8.1				
6ZH2P *	PND	SIN	T6	RF	H	6.3	170	200	20	1.0	120	120	1	6	5.0	3.9	100k	4.5	2.4		7CM		
6ZH3 *	PND	SIN	M8	RF	H	6.3	300	330		3.3	250	150	1	11	4.0	4.9	900k	8.5	7.0		88K		
6ZH3M	PND	SIN			H	6.3	450	300		3.0	300	200		10	2.5	5.0	700k	11.0	5.0		8N		
6ZH3P *	PND	SIN	T6	UF	H	6.3	325	330	20	2.5	250	150	<2	7	2.0	5.0	800k	6.5	1.5		7BD		
6ZH4 *	PND	SIN	M10		H	6.3	450	330		3.3	300	150	<2	10	2.2	9.0	900k	8.5	4.8		8N		
6ZH4E	PND	SIN	M10		H	6.3	450	330		2.5	300	150	0	9	2.2	8.5					8N		
6ZH4P *	PND	SIN	T6		H	6.3	300	300	20	3.5	250	150	1	11	4.3	5.7	200k	6.3	6.3		7BK		
6ZH5A	PND	SIN			H	6.3	450			250	100		10	2.5	9.0						7BK		
6ZH5B *	PND	SIN	T3F		H	6.3	250	150	28	2.6	120	120	2	15	6.0	10.0	100k	6.0	4.0				
6ZH5P *	BEA	SIN	T6		H	6.3	450	300	20	3.6	300	150	2	10	2.0	9.0	350k	8.5	2.2		7BK		
6ZH6S *	PND	SIN	M10		H	6.3	500			2.5	250	100	2	10	2.5	7.5	2M	9.5	6.2		7R		
6ZH7 *	PND	SIN	M10	RF	H	6.3	300	330		0.8	250	100	3	2	0.6	1.2	1M	7.0	12.0		7R		
6ZH8 *	PND	SIN	S11	RF	H	6.3	300	330		2.8	250	100	3	3	0.8	1.6	2M	6.0	7.0		8N		
6ZH8S	PND	SIN			H	6.3	300			100	100	3	3	0.9	1.6						8Y		
6ZH9B	PND	SIN	T4F		H	6.3	310	150	26	2.4	120	120		15	5.5	17.0		7.5	3.3				
6ZH9G *	PND	SIN	T4B		H	6.3	310	150	35	2.4	120	120		15	5.5	17.0		7.5	3.4				
6ZH9P *	PND	SIN	T6		H	6.3	300	250	35	3.0	150	150	1	15	5.0	17.5	100k	8.5	3.3		9EQ		
6ZH10B*	PND	SIN	T3F		H	6.3	250	150	28	2.2	120	120	1	<11	6.0	5.0	100k	6.5	4.5				
6ZH10P*	PND	SIN	T6		H	6.3	300	250	35	3.0	200	100	1	6	5.5	9.5	100k	8.9	3.9		9EQ		
6ZH11P*	PND	SIN	T6		H	6.3	440	150	40	4.9	150	150	<2	25	5.0	28.0	30k	14.0	3.5		9EQ		
6ZH13L	PND	SIN	M12		H	6.3	400			250	250	2	10	1.4	7.5						P18		
6ZH20P*	PND	SCG	T7		H	6.3	450	250		4.0	150	150	1	16	6.0	16.5	100k	8.5	2.5	245	P31		
6ZH21P*	PND	SCG	T7		H	6.3	350	200		2.5	150	150	1	15	5.0	15.0	60k	5.9	1.9	400	P32		
6ZH22P*	PND	SCG	T7		H	6.3	500	200		5.5	150	150	1	30	7.5	23.0	60k	9.3	2.4	440	P32		
6ZH23P*	PND	DBA	T7		H	6.3	440	150	40	2.4	150	150	2	14	6.0	15.0	36k	14.0	3.5		PD3		
6ZH318K	PND	SIN	T3F		H	6.3	200	150	14	1.3	120	120	<8	3.5	5.0			4.8	3.8				
6ZH32B*	PND	SIN	T38		H	6.3	165	250	10	1.2	120	120		6	1.4	6.0		5.4	2.3		P24		
6ZH32P*	PND	SIN	T6		H	6.3	200	300	6	1.0	250	140	2	3	1.0	0.8	3M	4.0	5.5		P17		
6ZH33AV	PND	SIN	T2B		H	6.3	127	150	15	1.3	120	100		8	4.0	4.5	120k	3.6	3.3		P28		
6ZH35BV	PND	SIN	T3F		H	6.3	127	150	15	0.9	120	110	2	6	6.5	3.1		4.6	3.5		PS5		
6ZH38P*	PND	SIN	T6		H	6.3	180	300	20	3.0	150	100	1	12	1.0	10.6	280k	5.8	3.1		78K		
6ZH39GV	PND	SIN	T4B		H	6.3	440	200	60	3.3	100	100		25	10.0	28.0		13.5	3.5				
6ZH40P	PND	SIN	T6		H	6.3	300	30	15	0.5	25	25	3	8	3.3	3.8		6	7	4.1	7CM		
6ZH43P*	PND	DBA	T6		H	6.3	475	150	46	3.1	150	150	16	<15	6.5	14.5	36k	13.5	3.0		PD3		
6ZH44P*	PND	SCG	T6		H	6.3	550	165	120	4.5	150	150		25	11.0	25.0		8.6	3.6		P25		
6ZH45BV	PND	SIN	T3B		H	6.3	125	150	10	0.5	50	50	1	<6	1.5	5.4		6.1	2.1		P26		
6ZH46BV	PND	SIN	T3B		H	6.3	125	150	10	0.5	50	50	1	<6	1.8	4.5		6.1	2.1		P36		
6ZH49P*	PND	SIN	T6		H	6.3	300	150	22	2.8	150	150		14	2.4	16.7	100k	8.2	2.7		P33		
6ZH50P*	PND	SIN			H	6.3	300			5.3	150	150		25	4.0	35.0		13H	12.0	2.8		P33	
6ZH51P*	PND	SIN			H	6.3	300			200	200		<9	3.5	15.5			11	5	3.3		P20	
6ZH52P*	PND	SIN	T7		H	6.3	330	350	60	10.0	150	150	1	40	8.0	55		13.5	1.8		9EQ		
6ZH53P*	PND	SIN	T6		H	6.3	160	300	22	3.5	150	150	1	13	2.2	20		6.6	1.7		7BD		
EM7 *	TRI	SIN	T3B	EL	F	1.0	18	8		7			2	200μ	<0.1	<2		1.6	1.9				
7P12S □	PND	SIN	S12	AF	H	7.3	850	200	60	8.0	135	135	15	31	7.0	2.8		7	7	9.5		5F	
7ZH12S*	PND	SIN	S12		H	7.3	425	250		1.9	250	135	3	5	1.1	1.8	500k	6	1	15.0		6F	
EM-8	PND	SIN	T3B	EL	H	6.3	100	20		15	15		<3	2	1.3	0.8	30	4	5	3		P39	
EM-9	* TET	TWN	T4B	EL	H	6.3	100			7			2	250μ		0.1							
10P12S *	PND	SIN	S12		H	10.0	640	200	60	8.0	135	135	15	31	7.0	2.9	20M	7.7	9.7		5F		
10ZH1L *	PND	SIN	F10		H	10.0	93	250	11	2.0	150	75	2	<3	0.5	1.6	1M	3.4	3	6	200	PS1	
10ZH3L *	PND	SIN	F10		H	10.0	93	250	11	2.0	150	75	2	<3	0.5	1.6	1300	4.0	4	2	200	PS1	
10ZH12S*	PND	SIN	S12		H	10.0	320	250		1.9	250	135	3	6	1.0	1.8	500M	6.1	15.0		6F		
12B1M	PND	DWD			H	12.5	220			25	25		1	1	0.4	1.9	7500					PD5	
12B2M	PND	DWD			H	12.5	150			25	25		1	1	0.3	.8	150k					PD6	
12G1	TRI	DWD			H	12.6	150	275		2.7	250		9	9		1.9	16	8500	3	6	2	8	8Q

Group II—RECEIVING TUBES—Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>f</sub> V	I <sub>f</sub> mA	Maximum			Typical					Capacity		f <sub>max</sub> MHz	Base No.			
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>g2</sub> V	E <sub>g1</sub> V	I <sub>b</sub> mA	I <sub>g2</sub> mA	S <sub>m</sub> mmho	μ			R <sub>p</sub> Ω	In pF	Out pF
12G2	□	TRI DWD			H	12.6	150	330	0.9	250		2	1	1.1	100	90k	3.2	3.0	8Q			
12K1M		PND SIN			H	12.5	225			25	25	<2	2	0.5	1.4	200k			7R			
12K3		PND SIN			H	12.6	150	330	4.4	250	100	1	9	2.5	2.0	800k	6.0	7.0	8N			
12K4	*	PND SIN	T10	RF	H	12.6	150		3.3	250	125	1	12	4.4	4.7		8.5	7.0	8BK			
12KH3S	□	DWD SIN	F10		H	12.6	73	250	20	0.1	10		10				0.5		1G DW8			
12M1M		PND TRI			H	12.5	225			25	25	1	1	0.3	1.9	7500			PT3			
12N4P		TRI TWN			H	12.6	150		1.5	250		4	3	1.8	40	22k	1.6	1.6	9AJ			
12N10S		TRI DUO	T11		H	12.6	150	275	1.1	250		2	2	1.3	70	54k	1.5	0.2	8S			
12N11S		TRI TWN			H	12.6	150		1.8	180		6	7	1.9	16	8500	3.2	2.6	8BE			
12P4S		PND SIN	T11		H	12.6	160		250	250	12	38		3.8					7S			
12P14S		BEA SIN			H	12.6	150		7.5	250	250	12	30		3.0				7S			
12P17L	*	PND SIN	F11		H	12.6	325	250	60	7.5	150	150	20	35	5.0	7.0	10.0	8.5	120	P3S		
12S2		TRI SIN			H	12.6	150			250		8	9		2.0	20	3.4	3.6	8T3			
12S3S	*	TRI SIN			H	12.6	100	300	5.0	100		4	27		3.0	12	4100	1.5	0.6	11h TS3		
12S42S	*	TRI SIN	T30		H	12.6	4900		H1.2	120		16	1000		60.0	<4	65	40.0	15.0	T17		
12ZH1L	*	PND SIN	F10		H	12.6	75	250	11	2.0	150	75	2	2	0.5	1.6	1M	4.0	4.2	200	PS1	
12ZH1M		PND SIN			H	12.5	225			25	25	<2	2	0.5	1.4	200k				7R		
12ZH3L	*	PND SIN	F10		H	12.6	75	250	11	2.0	150	75	2	2	0.5	1.6	1300	4.0	4.2		PS1	
12ZH8	□	PND SIN	M10		H	12.6	150	330	2.8	250	100	3	3	0.8	1.6	2M	6.0	7.0		8N		
13P1S	□	BEA SIN		PA	H	13.0	765	110		6.0	110	80	2	52		7.5	15.5	10.5				
13ZH41S	*	PND SIN	T9		H	13.3	290			80	80	2	2	0.5	4.1		11.0	3.0		P27		
15A6S		PND SIN			H	15.0	300			180	135		48		2.5	30k						
16F3P	*	PND TRI			H	16.0	300	25h	60	8.0	275									PT5		
16F3P	*	TRI PND			H	16.0	300	600	15	1.0	250									PT5		
25P1		BEA SIN			H	25.0	300			10.0	110	110		80		8.5						
25P1S		BEA SIN			H	25.0	300			10.0	110	110		80		8.5						
30P1S	*	BEA SIN	T11	PA	H	30.0	300	110		7.0	110	110	7	70	12.0	10.0	9k	19.0	11.0		7S	
30TS1M		DIO SIN			H	30.0	300	300	500			250	90			2500					5AA	
30TS6S	□	DIO TWN	S13		H	30.0	300	500	500		150		60				16.0				8AN	
30VD1		DIO SIN				25.0	300	500	500												4BQ	
30VKH1		DIO TWN			H	30.0	300	500	500		150		60								8AN	
SB-47		PND SIN			H	4.0	150			160	120	1	5	0.7	1.6	250k						
SB-51		PND SIN			H	4.0	80			240	80	1	3	0.6	1.0	600k						
SO-57		PND SIN			H	4.0	1A			240	100	1	3	0.8	3.0	500k						
SB-112		PND SIN			H	4.0	80			160	80	1	2	0.6	6	500k						
SO-124		PND SIN			H	4.0	1A			160	60	2	5	3.5	2.0							
UB-132		TRI SIN			F	4.0	150		3.0	160		6	15	2.1	9	4k						
TO-141		TRI SIN	S17		F	2.6	1000			220		3	14	2.6							4F	
TO-142		TRI SIN	S17		F	2.6	1000			220		7	23	2.5							4F	
SO-148		PND SIN			H	4.0	1A			240	80	2	7	1.0	1.6	200k						
SB-152		TRI SIN			F	2.0	120			100		<2	<5	1.5	14	10k						
UB-152		TRI SIN			F	2.0	120			120		4	6	3.0	14	5k						
UB-153		TRI SIN			F	2.0	200			100		6	8	2.5	10	4k						
SB-154		PND SIN			F	2.0	90			160	60	1	3	0.4	1.2	290k						
UB-155		BEA SIN			F	2.0	230		0.2	100	60	2	6	1.5	2.1	100k						
UB-178		TRI SIN			F	2.0	120			100		<1	2	1.1	33	30k						
SO-182		PND SIN			H	4.0	1100			240	100	1	7	2.0	2.5	800k						
UB-182		TRI SIN			F	4.0	150		3.0	240		6	12	2.4	9	4k						
U0186		TRI SIN	S16		F	4.0	1000		15.0	250		37	57	3.2	4	1k					4F	
SB-190		PND SIN			F	2.0	100			160	120	1	1	0.4	1.2	420k						5Y
191P		TET SIN	T6	EL	H	1.0	46			6	3	4	100		50.0							TE2
UB-240		TRI SIN			F	2.0	120			0.6	120		3		1.5	22	14k	2.8	2.8		5S	
SO-242		PTG SIN	S9	CN	H	2.0	160	300	14	1.0	120	70	0	3	.2	.1		7.0	8.6		7Z	
SO-243		TRI TWN			F	2.0	240			1.5	120		3		2.1	32	16k	2.8	3.4		7AB	
SO-244		PND SIN			F	2.0	185			1.5	120		4		1.8	270	150k	55.0	7.0		6X	
SO-257		PND SIN	S10		F	2.0	300			200	100	7	18		1.3							P19
SO-258		PND SIN			F	1.8	320			1.3	160	120	6	2	2.0	160	80k	5.4	7.5		6X	
M-457		TRI SIN			F	4.0	2100			50.0	1k		72	70	7.0	8	1k					
1504		TRI SIN	LIT		H	6.3	770	300	25	6.5	250		25		4.7	42	9k	2.3	0.5	36		
1506		BEA TWN	T19		H	12.6	1120	500		15.0	400		110									7BP

Group II—RECEIVING TUBES—Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>r</sub> V	I <sub>r</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.	
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>c2</sub> V	E <sub>kt</sub> V	I <sub>b</sub> mA	I <sub>c2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF
1509	BEA	TWN	T19		H	12.6	800	500	15.0	500			72									7BP
1511	PND	SIN	M10		H	6.3	450	330	3.3	300	150	0	10	2.2	9.0		900 k					8N
1512	PND	SIN	M10		H	6.3	650	330	9.0	300	150	3	30	5.7	11.7		80 k					8Y
1514	PND	SIN	M10		H	6.3	300	330	2.8	250	100	3	3	0.8	1.7		2M					8Y
1515	BEA	SIN	M10		H	6.3	450	350	13.2	250	250	12	45	7.5	4.3		52 k	9.5	9.5			
1536	DIO	TWN	T9		H	6.3	300	450	90	0.5	150			10								6BT
1538	BEA	SIN	T6		H	6.3	350	330	2.5	250	150		7	2.0	5.0		500 k	6.5	2.4			6CC
1539	TRI		T9		H	6.3	600	300	2.5	250			7		4.2	33	7900	3.3	1.7			9AJ
1540	BEA	SIN	T13		H	6.3	900	400	27.5	250	250	14	72	8.0	6.0			11.0	6.7			
1550	DWD	SIN			H	6.3	600	1 k	300		350			37								DW6

**Group III—POWER TUBES**

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>r</sub> V	I <sub>r</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.		
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>e2</sub> V	E <sub>κ1</sub> V	I <sub>b</sub> mA	I <sub>e2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF	
GE-1	TET	SIN			F	11.0	2A			80.0	15h	250			100		2.5			15.5	10.0	20	
GK1A	TRI	SIN W46			W	31.5	580A	10k	30A	2h	k	8k			8A		80.0	45		2h	1h	22	
GM1A	TRI	SIN W22			T	10.5	195A	6k	100A	30.	k	3k			8A		20.0	5					
GM1P	TRI	SIN V																					
GMI-1B	TRI	SIN				9.0	26A			h3.2	22k					5.0							
GS-1B	TRI	SIN A			H	12.6	3200	2k		1.k	2k		1	250		30.0						1G	
GE-2	TET	SIN			F	11.0	6300			1.h	3k	500			130		2.0		17.0	11.0	20		
	TET	SIN A70			H	25.0	7500	32k	90A	h9.0					140							TE7	
GS-2B	TRI	SIN W22			H	12.6	3200	2k		1.k	2k		1	250		30.0						1G	
2TM-20	TRI	TWN				20.0	450	750		20.0						4.0	30						
2TM-100	TRI	TWN				20.0	2200	1k		70.0						2.5	28						
GI-3	TRI	SIN T11			H	6.3	1100	25h	15A	10.0	400		15	16		2.2	16		2.6	1.1	300	4BB	
GK3A	TRI	SIN W43			W	17.0	430A	12k	50A	1h.	k	5k			6A		35.0	40	1h	65.0	25		
GM3P	TRI	SIN V																					
GMI-3	TET	SIN T32			H	26.0	4750	28k	4500	80.0													
GS-3B	TET	SIN A30			H	1H	865	2k		2.k	2k	500				40.0						1G	
GU-3	BEA	SIN S18			H	12.6	450	750	120	30.0	250	250				10.0						60	
GI-4A	TRI	SIN W			T	10.0	215A	35k	220A	20.k	3k			4A		38.0						150	
GMI-4B	TET	SIN A			H	6.3	14A	18k	15A	1.h													
GS-4	TRI	SIN C8			H	6.3	610	250		15.0	200		1	30		18.0	60					600	
GS4D	TRI	SIN				22.0	105A			10.k	15k					12.0	50						
GU4	TRI	SIN				7.0	1800		107	35.0	700			55		1.4	12					85	
GU4A	TRI	SIN W25			T	8.3	145A	6k	30A	20.k	3k			4A		30.0	50		40.0	35.0	100		
GI-5B	TRI	SIN	PA		T	6.3	425	27k	250A	5.k	1k			1A		25.0						200	
GK5A	TRI	SIN W44			T	17.0	580A	10k	300A	k2.5						14.0	40		2h	40.0	25		
GMI-5	TET	SIN			H	26.0	1750	20k	12A														
GU5A	TRI	SIN W14			T	12.6	23A	5k	7A	3.k	3k			600		15.0	80		19.0	16.0	110		
GU5B	TRI	SIN A14			T	12.6	23A	5k	7A	2.k	3k			600		15.0	80		19.0	16.0	110		
GI-6B	TRI	SIN C11			H	12.6	2100	9k	20A	h3.5	1k			150		22.0			11.4	4.8	<2G		
GMI-6	BEA	TWN T16			H	6.3	2200	4k	8A	15.0													
GS6	TRI	SIN				17.0	8500			5.h	3k					3.5	95						
GI-7B	TRI	SIN C11			H	12.6	2100	9k	20A	h3.5	1k			150		22.0			11.4	4.8	2G		
GMI-7	TET	SIN T40			H	26.0	6300	22k	52A	h1.2													
GS-7A	TRI	SIN W22			H	12.6	3100	<3k		2.k	2k		1	400		30.5						1G	
GS-7B	TRI	SIN A22			H	12.6	3100	<3k		h1.5	2k		1	400		30.0						1G	
GI-8	PND	SIN T35			T	12.6	10A	8k	4A	h2.0	1k	600			200		5.5		30.0	25.0		P11	
GS-8B	TET	SIN C12			H	6.3	2000			60.0	1k	250			210		16.0		8.0	5.0	2k		
GUB	TRI	SIN				5.0	6500				3k					5.5			3.0	2.0			
GK9P	TRI	SIN V								30.k													
GS9B	TRI	SIN C11			H	12.6	1100	1k	4A	3.h	1k			120		19.5			8.4	31.5	2G		
G10	TRI	SIN				4.1	900			20.0	400			25		.6	19	35k					
GK10P	TRI	SIN V								2h.k													2
GU10A	TRI	SIN W21			T	7.0	75A	8k	15A	10.k	2k			3A		20.0	50		40.0	34.0	25		
GU10B	TRI	SIN A21			T	7.0	75A	6k	15A	7.k	2k			2500		20.0	50		40.0	34.0	25		
MO-10	TRI	SIN				16.5	52A		10A	10.k	10k					7.0	18						
GI-11B	TRI	SIN C8			H	12.6	815	2k	1A	8.0	400			15		10.0			11.0	2.6	3G		
GK11A	TET	SIN			F	22.0	340A	15k														30	
GU11A	TRI	SIN W27			W	12.7	240A	10k	20A	20.k	5k			3A		20.0	55		55.0	45.0	25		
GU11B	TRI	SIN C8			H	12.6	815	2k	1A	80.0	400			15		10.0			11.0	2.6	<3G		
GI-12B	TRI	SIN C8			H	12.6	815	2k	1A	80.0	400			15		10.0			11.0	2.6	3G		
GU12A	TRI	SIN W25			W	12.6	315A	10k	30A	20.k	4k			3A		23.0	20		35.0	24.0	50		
G-13	TRI	SIN T11			H	6.3	1100	2k		1.0				16		2.2	16		2.6	1.1		4BB	
GI-13	TRI	SIN C9			H	12.6	650	800	<4A	80.0												3G	
GI-13B	TRI	SIN C8			H	12.6	650	800		80.0												3G	
GMI3	TET	SIN T34			H	26.0	4750	28k	45A	80.0	28k												
GU13	BEA	SIN T20			T	10.0	5A	2k		1.h	2k	400	35	70		4.0			16.2	14.0	30	P13	
GI-14B	TRI	SIN				12.6	3400	21k		5.h	2k			250		35.0						1G	
GS-15B	TET	SIN C12			H	6.3	2300			h1.6	13h	300		240		16.0			7.0	2.0	3G		
GU15	BEA	SIN F12			F	4.4	680	400	85	15.0	220	200	14	50	7.5	4.7			10.5	12.5	60	P5S	
GI-16B	TET	SIN A60			W	8.3	115A	8k		h8.0													

Group III—POWER TUBES—Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>r</sub> V	I <sub>r</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>g2</sub> V	E <sub>g1</sub> V	I <sub>b</sub> mA	I <sub>g2</sub> mA	Sm mmho	μ	R <sub>p</sub> Ω	In pF		
GU16B	TRI	SIN	A23		W	13.5	200A	8k	15A	10.k	5k		1500		25.0	47	55.0	42.0	25		
G-17B	TRI	SIN	C11		H	12.6	2A	9k		3.0	1k		150		22.0		11.3	4.8			
GI-17B	TRI	SIN	A16		H	6.3	750	8k		1.h	2k		10A		45.0	15	11.0	8.0	500		
GS17B	* TET	SIN			H	3.4	160A	55h											16		
GU-17	BEA	TWN	T7		H	6.3	800	400	100	6.0	300	200	16	20	6.0	2.8	6.5	2.7	250	PD7	
GI-18B	TRI	SIN	A50		T	12.5	190A	16k	150A	6.k	10k		1A		25.0	45	75.0	50.0	<1		
GU-18	TET	TWN	T13		H	6.3	1200	600	130	20.0	250	200		35	6.0	1.5	7.0	2.6	600	PD8	
GI-19B	TRI	SIN	W33		H	7.3	20A	14k	100A	1.k	1k		500		20.0		50.0	12.0	150		
GU-19	BEA	TWN	T16		H	6.3	2000	750	280	40.0	350	250	17	40	8.0	4.5	10.0	3.5	500	PD8	
GK20	TRI	SIN				5.6	850		200	20.0	750				1.7	53					
M020	TRI	SIN				22.0	61A		10A	20.k	10k				7.0	13					
GI-21B	TRI	SIN	C8		H	12.6	900	800	<4A	h1.1	600		75		26.0				3G		
GU21B	TRI	SIN	A30		T	8.3	150A	9k	30A	10.k	9k		3700		30.0	48	55.0	45.0	26		
GI-22	TRI	SIN	C8		H	6.3	640		<2A	10.0	200		30		18.0				6G		
GU22A	TRI	SIN	W25		T	8.3	150A	10k	30A	20.k	10k		2730		27.0	48	55.0	45.0	26		
GS23B	* TET	SIN			H	6.3	5700	25h											1G		
GU23A	TRI	SIN	W44		T	12.0	210A	11k	60A	60.k	5k		7900		49.5	49	h1.0	65.0	26		
GU-23B	TRI	SIN	A		W	12.0	210A	11k		50.k					42.0	55			26		
GI-24A	TRI	SIN	W30		W	6.3	425A	27k	250A	25.k	4k		150A		40.0				200		
GU24A						3.3	<2kA	6k		25.k									273		
GI-25	TRI	SIN	C8		H	6.3	1145	<2k		12.0	250				24.0				5G		
GU25B	TRI	SIN	W30		T	8.3	150A	12k		12.k					30.0	48			26		
GU26A	TRI	SIN	W		H	30.0	17A	6k		10.k					20.0				330		
GU26B	TRI	SIN			T	12.0	210A	12k	60A	50.k											
GU27A	TET	SIN	W13		T	7.5	25A	4k	5A	2.k	2k	1k	300		6.0	16	25.0	17.0	110		
GU27B	TET	SIN	A24		T	7.5	25A	3k	5A	8.h	3k	1k	300		6.0	16	21.0	13.0	110		
GU-28A	TET	SIN	W20		T	6.3	98A	10k	98A	8.k	3k	850			16.0	9			24		
GU28B	TET	SIN	A		T	6.3	98A	10k		10.k	3k	2k			16.0				30		
M28	TRI	SIN				11.0	6400			h1.5	1k				2.4	11	<5k				
G29	TRI	SIN				16.0	10A		1200	4.h	10k		1200		3.2	250					
GU29	* BEA	TWN	T16		H	6.3	2250	750	250	40.0	600	200	70	150	30.0	8.0	15.0	7.0	200	7BP	
GI-30	BEA	TWN	T16		H	6.3	2250	5k	9A	15.0	250		58		8.0		15.0	7.0	7BP		
GMI-30	TRI	SIN	G44		T	8.2	17A	27k	15A	3.h	2k		100		5.8		9.5	2.0			
GU30A	TRI	SIN	W		T	10.5	220A	7k	50A	60.k					38.0	28			100		
GU31	TET	SIN				6.3						450	200								
G32	TRI	SIN				3.2	3500			15.0	800		60		.8	18	22k	2.4			
GU32	BEA	TWN	T14		H	6.3	1600	750		15.0	250	130	10	30	5.5	3.5	7.8	3.8	200		
GU33B	TET	SIN			H	6.3	5A	1k		h1.5	15h	400			20.0				500		
GU34B	TET	SIN	T20		H	12.6	4A	4k		5.h	2k	600			28.0				250		
GU-35B	* TET	SIN	A32		W	6.3	65A	5k		k3.5	5k	800			24.0	20			250		
G36	TRI	SIN				5.6	860			20.0	600		200		1.8	60	35k				
GU-36B	* TET	SIN	A		W	8.3	100A	6k		14.k	6k	1k			80.0				250		
GU-37B	TRI	SIN	A		W	3.4	110A	3k		k3.5					25.0	35			330		
GU-39A	TET	SIN	W		W	6.3	98A	10k		8.k		2k			22.0				100		
GU-39B	TET	SIN	A		W	6.3	98A	10k		6.k		2k			22.0				100		
GU39P	TET	SIN	V							15.k									30		
M39	TRI	SIN				11.0	3500			30.0	1k		200		1.4	10	7k				
GU-40B	* TET	SIN	A30		T	6.3	33A	45h		2.k	2k	900			18.0				250		
GU43B	TET	SIN			H	12.6	6600	33h	3200	1.k	1k	350	25	1000		45	85	14	100		
G46	TRI	SIN				11.0	4100		250	80.0	1k				2.0	55			250		
G47	TRI	SIN				11.5	3800		215	h1.5	3k				1.4	70					
GU48	* TRI	SIN			F	10.0	10A	25h	130						35		13.0	11.0	75		
GU50	* PND	SIN	F12		H	12.6	655	1k	230	40.0	1k	300	80	120	10.0	5.0	14.0	9.2	120	P9S	
M50	TRI	SIN				11.0	6300		270	50.0	1k				1.4	10					
GM51A	TRI	SIN	W19		W	22.0	102A	12k	10A	15.k	5k		2A	10.0	.7				12		
M53	TRI	SIN				11.0	6300			h1.5	3k		375		1.4	11	7k				
GM57	TRI	SIN				4.0	2100				750				5.0	9	8.5	3.5			
M57	TRI	SIN				16.0	10A			4.h	10k		1200		2.9	52	18k				
GM60	TRI	SIN	T32		W	17.0	8A	10k	550	6.h	1k		100	2.2	1.6						
G61	TRI	SIN				16.5	52A		11A	10.k						47					

Group III – POWER TUBES – Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>f</sub> V	I <sub>f</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.	
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>c2</sub> V	E <sub>c1</sub> V	I <sub>b</sub> mA	I <sub>c2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF
GU61B	*	TET SIN			F	8.3	133	10 k													70	
GU61P		TET SIN	V						30 k												70	
G62		TRI SIN				16.5	51A		10 k			10A		7.0	47	7 k						
GU62P		TRI SIN	V						60 k												85	
G65		TRI SIN				5.2	1300		12.0			60		1.0	60	60 k						
GU65A	*	TRI SIN			F	26.0	670A	12 k													22	
GU66P	*	TRI SIN	V						1 h k												30	
G68		TRI SIN				17.0	18A		1 k 10 k			2A		5.0	180	36 k						
GU68A	*	TRI SIN			F	20.0	315A	12 k													30	
GI-70B		TRI SIN	C11		H	12.6	2100	9 k 20A	1 k			150		22.0			11.4	4.9		36		
GM-70		TRI SIN	T21		T	20.0	3A	1 k 800	1 h 600			200		6.0	7		8.0	12.0				
GM-70B		TRI SIN	T21		T	20.0	3A	1 k 800	1 h 600			200		6.0	7		8.0	12.0		IF		
GU70B	*	TET SIN			H	6.0	3100	2 k													250	
GK71		PND SIN	T21		T	20.0	3A	1 k	h1 2 600	400		200	62.0	4.2			18.0	17.0		20	P12	
GU71B	*	PND SIN			H	12.6	6100	1 k													75	
GU72	*	PND SIN	T25		T	20.0	3A	1 k	900 h1 5	750 400		150		4.2			18.0	17.0		40	P14	
GU73B	*	TET SIN			H	26.0	4850	300													250	
GU74B	*	TET SIN			H	12.6	3600	1 k													60	
M74		TRI SIN							450					.1	63							
GU75A	*	TET SIN			F	6.3	135A	6 k													75	
GI-76B		TRI SIN	C			12.6	2100	9 k	1 k			150		22.0			11.3			36		
GU80		PND SIN	T30		T	12.6	10A	3 k	4 h 2 k	600 140	200		5.5			28.5	22.5		50	P6S		
M80		TRI SIN				11.0	3500		260 80.0	1 k			1.4	10								
GU81		PND SIN	T38		F	12.6	10A	3 k	h4 5	2 k 600			5.5							50		
GMI-83		TET SIN	T20		H	25.0	2000	20 k	15A 65.0	15 k 1 k						50.0	5.0					
G88		TRI SIN				6.0	4A		600			120		.9	15	17 k					TS5	
GMI-89		TET SIN	T32		H	25.0	4000	25 k	20A 1 h	25 k 1 k				22.0		60.0	12.0					
GU89A		TRI SIN	W24		W	11.0	124A	8 k	9A 5 k	1 k		3A		10.0	20	23.3	17.5		100			
GU89B		TRI SIN	A24		W	11.0	124A	8 k	9A 5 k	1 k		3A		10.0	20	23.3	17.5		100			
M89		TRI SIN				11.0	6300		h4 5	1 k				5.0	9	1800						
GMI-90		TET SIN	T46		H	25.0	7800	33 k	40A 1 h	33 k				4.0		1 h	16.0					
GS90B		TRI SIN	C12		H	12.6	1100	2 k	4500 15.0	1 k		175		19.5					36			
G91		TRI SIN				11.0	6200		600			400		.9	10	5 k				P10		
GKE100		TET SIN	T20		H	11.0	2A	<2 k	500 1 h	15 k 250	2	500	6.5	2.8	225		15.5			20	TE4	
GM100		TRI SIN	T60		W	17.0	18A	5 k	1600 1 k	1 k		600		6.5	18					IF		
G120		TRI SIN				16.5	52A		11A 5 k	4 k		700			14							
GI-150		TRI SIN	C8		H	12.6	815	800	<5A 20.0	400		15		10.0						46		
GKE150		TET SIN			H	11.0	6300		420 1 h	3 k 500				2.0	350						TE4	
GU150		TRI SIN				11.0	10A		710 h1 5	2 k				2.2	17					85		
M150		TRI SIN				11.0	6300		420 h1.5	3 k				1.4	11							
G256		TRI SIN							30.0	450											500	
GKE300		TET SIN			H	17.0	10A		750 4 h	3 k 500				3.9	400							
M400		TRI SIN				17.0	18A		2300 4 h	1 k				6.0	10							
M401		TRI SIN				16.0	10A		1200 4 h	10 k				2.9	52							
G410		TRI SIN				10.0	450		10.0	400				4.0	23		2.9	2.7				
G411		PND SIN				10.0	600	400	20.0	400	200	55	112	5.0	5.5		11.0	7.0				
G412		PND SIN				20.0	220	750	20.0	750	250	40	57	11.0	3.0		6.5	6.0			P10	
G413		PND SIN				20.0	500	750	40.0	750	250	55	90	15.0	4.5		11.0	10.5			P10	
G414		PND SIN				20.0	1400	1 k	1 h	1 k	250	50	65	10.0	6.0		21.0	19.0			P15	
G417		TRI SIN				5.0	1150		20.0	400				1.0	19		1.9	1.0			TS9	
G418		PND SIN			F	5.0	900	400	20.0	400	225	50	85	20.0	4.0		12.5	10.0				
G422		PND SIN				20.0	3250	1 k	1 h	750	300	60	180	40.0	3.0		15.5	15.5				
G424		PND SIN				20.0	4600	1 k	2 h	1 k	400	140	300	80.0	5.0		27.0	33.0				
G425		PND SIN				20.0	22A	4 k	h7 5	4 k	1 k	100	350	70.0	4.0		21.0	18.0				
G430		TRI SIN				22.0	51A	12 k	10 k						45							
G431		TRI SIN	W16		W	22.0	102A	15 k	20 k	5 k		3A		12.0	50		25.0	1.5	25			
G431A		TRI SIN	W		W	22.0	102A	15 k	12A	20 k	5 k	3A		12.0	50		25.0	1.5	25			
G433		TRI SIN	T46		W	33.0	210A	15 k	60 k	6 k		5A		32.0	45		80.0	67.0		20		
G433A		TRI SIN				33.0	210A	15 k	50A	60 k	6 k	5A		32.0	45		80.0	6.0		20		
M435		TRI SIN				20.0	24A		1 k	5 k				6.0	9							

Group III - POWER TUBES - Continued

Type No.	Kind	Type	Bulb	Use	Cathode	E <sub>f</sub> V	I <sub>f</sub> mA	Maximum			Typical							Capacity		f <sub>max</sub> MHz	Base No.					
								E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>p</sub> W	E <sub>b</sub> V	E <sub>g2</sub> V	E <sub>g1</sub> V	I <sub>b</sub> mA	I <sub>c2</sub> mA	S <sub>m</sub> mmho	μ	R <sub>p</sub> Ω	In pF			Out pF				
G441	TRI	SIN				11.0	51A			2.5	7k															
G-450	TRI	SIN	W38	W		16.0	51A	10k		10.k	5k			4A		7.0	44								20	
G-452	TRI	SIN	W40	W		22.0	102A	15k		20.k	5k			4A		12.5	40								25	
G-454	TRI	SIN	W38	W		22.5	71A	10k		20.k	5k			4A		10.0	45								20	
G472	TRI	SIN				2.5	14A			1.h	k	18k				2.5	140									
G484	TRI	SIN	A30	W		22.0	60A	9k		5.k	3k			A			9							23.0	320	
GK750	TRI	SIN				5.0	10A			2.5	3k					6.6	37						5.8	2.9	40	
M800	TRI	SIN				17.0	8A		800	8.h	10k					2.2	16									
G807	BEA	SIN	S16	H		6.3	900	750	120	30.0	600	275	90	100	6.5	6.0							12.0	7.0	60	5AW
G811	TRI	SIN				6.3	400			50.0	1k						160						5.6	5.5	100	T1S
G837	PND	SIN				12.6	700		200		500	200	85		30.0	3.4							16.0	10.0		
G889	TRI	SIN				11.0	125A			5.k	7k						21						23.3	3.0	100	
G891	TRI	SIN				11.0	60A			3.5	8k						8									
GKE1000	TET	SIN				17.0	18A			7.5	4k	500				3.0	150						22.0	0.2		
G1625	BEA	SIN				12.6	450			25.0	600					6.0							11.0	7.0		
GK2000	TRI	SIN				16.0	51A		1A	10.k	8k					7.0										
GK3000	TRI	SIN				17.0	18A		1600	1.k	10k					5.2	200									
GI-3100	TRI	SIN				6.3	1100			10.0	2k					2.2	16						2.6	1.1	300	
GI-3100	TRI	SIN				6.3	1100			10.0	2k					2.2	16						2.6	1.1	300	



Group IV - RECTIFIER TUBES

Type No.	Kind	Type	Bulb	Gas	Cathode	E <sub>r</sub> V	I <sub>r</sub> mA	Maximum		Typical	
								E <sub>b</sub> V	I <sub>b</sub> mA	E <sub>b</sub> V	I <sub>b</sub> mA
EVU-25/1.0	IGN		T1H	HG	C			12h	400A		
EVU-50/1.0 *	TRI	IGN	W33	HG	C			12h	900A		50A
EVU-100/1.0	IGN		T2H	HG	C			12h	2kA		
GG-1-0.3/8	DIO	SIN	T14	AR	H	6.3	4A	8k	1A	30	<1
GG1-0.5/5*	DIO	SIN	S21	KX	F	2.5	8500	5k	1500		500
GG-1-0.5/20*	DIO	SIN	T21	AR	H	6.3	5A	20k	3500	30	500
GG-1-1/22*	DIO	SIN	T30	AR	H	6.3	14A	22k	3500	30	1000
GG-1-2/5 *	DIO	SIN	T22	XE	H	6.3	6500	9k	6500	16	2000
GG-1-2/16*	DIO	SIN	T30	XE	H	6.3	16A	16k	7A	30	2000
GRI-02/15	DIO	SIN	S16	HG	F	5.0	3300	<2k	800		235
GR-1-0.3/8.5	DIO	SIN	S21	AR	F	6.3	4A	8k	1A	30	<1
GR-1-25/15	DWD	SIN		GS	F	5.0	3A	<2k	800	500	125
GRI-0.25/1.5	DWD	SIN	S17		F	5.0	3300	16h	800		235
I/1/25/0.8*TRI	IGN	W19	HG		C			800	30A		10A
I-1-50/20*TET	IGN	W47	HG		C			20k			50A
I-1-70/0.8*TRI	IGN	W25	HG		C			800			70A
I-1-100/1.5	TRI	IGN	W52	HG	C			15h	3hA		1hA
I-1-140/0.8*TRI	IGN	W34	HG		C			800			140A
I-1-350/0.8*TRI	IGN	W47	HG		C			800			350A
I-2-50/1.5*TRI	IGN	W34	HG		C			15h	150A		50A
I2-70/0.8 *	TRI	IGN	W78	HG	C			800	10hA	220	70A
I2-140/0.8 *	TRI	IGN	W1h	HG	C			800	16hA	220	140A
I2-200/1.5 *	TET	IGN	W1h	HG	C			15h	10kA		200A
I2-350/0.8 *	TRI	IGN	W1h	HG	C			800	32hA	220	350A
I-20/1.5 *	TRI	IGN	W25	HG	C			15h	60A		20A
I-20/1500	DIO	IGN	W19	HG	C			15h	1kA		20A
I-50/1.5 *	TRI	IGN	W35	HG	C			15h	1hA		50A
I-50/1500	DIO	IGN	W26	HG	C			15h	2kA		50A
I-100/1.0 *	TRI	IGN	W50	HG	C			1k	6hA		1hA
I-100/5.0 *	TRI	IGN	W70	HG	C			5k	3hA		1hA
I-100/1000	DIO	IGN	W33	HG	C			1k	2kA		100A
I-100/5000	DIO	IGN	W33	HG	C			5k	300A		100A
I-150/1.0 *	TRI	IGN	W52	HG	C			1k	1hA		2hA
I-200/1.5	TRI	IGN	W65	HG	C			15h	6hA		2hA
IVS200/2		IGN	W	HG	C			<3k	450A	16	150
T-409	DIO	IGN	G14	HG	C			3k	200A		
T-410	DIO	IGN	G17	HG	C			14k	20A		
T-411	DIO	IGN	G17	HG	C			19k	100A		
V1-00313	DIO	SIN	T10		F	2.5	4600	13k	3000		30
V1-02/20	DIO	SIN	T13	VC	F	2.5	3200	20k	100		20
V1-03/13	DIO	SIN	T9	VC	F	2.5	4650	13k	3A		30
V1-05/70	DIO	SIN	T32	VC	F	5.0	32A	70k	8A		50
V1-06/30	DIO	SIN						30k			60
V1-1/2.5	DIO	SIN	W12	VC	F	15.0	12A	25h	1000		
V1-1/30	DIO	SIN	T18	VC	F	5.0	5A	30k	600		100
V1-1/40	DIO	SIN	T17	VC	F	5.0	6A	40k	750		100
V1-2/40	DIO	SIN						40k			200
V1-3/16	DIO	SIN	A27	VC	H	6.3	10A	16k	1500		300
V1-3/70	DIO	SIN						70k			300
V1-4/40	DIO	SIN	G70	VC		7.5	48A	44k	2A		450
V1-15/55	DIO	SIN	T31	VC	F	6.3	7500	55k	700		180
VG1/8500	DIO	SIN		GS	F	2.5	5500	8k	1A	6k	300
VG-129	DIO	SIN	S20	HG	F	2.5	9A	7k	1500		500
VG-161	DIO	SIN		HG	F	2.5	6A	<3k	1A	<2k	300
VG-163	*DIO	SIN	G70	HG	F	5.0	32A	15k	50A		16A

Group IV – RECTIFIER TUBES – Continued

Type No.	Kind	Type	Bulb	Gas	Cathode	E <sub>f</sub> V	I <sub>f</sub> mA	Maximum		Typical	
								E <sub>b</sub> V	I <sub>b</sub> mA	E <sub>b</sub> V	I <sub>b</sub> mA
VG-176		DIO SIN	G16		M	2.5	11A	150	9A	20	
VG-236	*	DIO SIN	G38	HG	F	2.5	20A	7k	4A		1300
VG-237	*	DIO SIN	G55		F	5.0	22A	10k	10A		3500
VG-252		DIO SIN				2.5		300	30A	15	
VI-1-5/20		DIO SIN	T16	VC	H	6.3	29A	20k	5000		
VI-1-5/30		DIO SIN	A16	VC	W	6.3	95A	30k	2000		
VI-1-18/32		DIO SIN	A23	VC	H	17.0	3700	40k	20A		500
VI-1-27/35		DIO SIN	A40	VC	H	9.0	145A	35k	70A		
VI-1-30/25		DIO SIN				10.0	6A	25k	30A		30
VI-1-70/32		DIO SIN						32k	70A		
VI-1-10050		DIO SIN						50k	100A		
VI-2-27/35		DIO SIN	W20	VC	H	9.0	145A	35k	70A		
VI-2-70/32		DIO SIN	A21	VC	H	12.6	5300	32k	70A		70
VI-2-100/50		DIO SIN	A30	VC	H	12.6	36A	50k	100A		
VO-1		DIO SIN			H	4.0	3200			850	40
VO-125		DIO SIN			F	4.0	700			250	60
VO-188		DWD SIN			F	4.0	2A			500	155
VO-196		DIO SIN			H	4.0	3A			750	250
VO-197		DWD SIN			F	4.0	5A			250	300
VO-202		DWD SIN			F	4.0	700			250	60
VO-230		DIO SIN			F	4.0	700			350	50
VO-239		DIO SIN			F	4.0	2A			850	180
VO-360		DIO SIN			F	4.0	1A			500	100
VU-111D		DIO SIN	S		F	4.0	1500	12k	400	160	80
2V6		DIO ARC		HG	C			400	6A		
2V12		DIO ARC		HG	C			1k	1A		
2V20		DIO ARC		HG	C			750	20A		
2VN12		DIO ARC		HG	C			450	12A		
2VN20		DIO ARC		HG	C			750	20A		
3V30		DIO ARC		HG	C			750	30A		
3VN30		DIO ARC		HG	C			750	30A		
3VN60		DIO ARC		HG	C			400	60A		
3VN100		DIO ARC		HG	C			600	100A		
1502		DIO SIN	F13		H	5.0	3000	<2k	1200	500	400

Group IV-A – TWO ANODE DIODE MECHANOTRONS

Type No.	Kind	Type	Displacement		Force		Angle		Non-linearity %	
			Range μm	Sens. μA/μm	Range g	Sens. μA/g	Range deg.	Sens. mA/°		
6MKH1B	*	DIO	TWN	140	20	5m	2k			4
6MKH1S	*	DIO	TWN	100	30	10	200			1
6MKH2B	*	DIO	TWN	100	40	2	500			4
6MKH3S	*	DIO	TWN	100	100	15	1k			1
6MKH4S	*	DIO	TWN	500	10	30	100			1
6MKH5S	*	DIO	TWN	1k	3	30	40			1
6MUKH6P								5	1	1

## Group V—VOLTAGE REGULATOR TUBES

Type No.	Kind	Gas			Cath Mat'l	Voltages			Max $\Delta V$ over		Current		Dimen	
		Kind	Pres mm			Ian V	Max V	Min V	$\Delta I$ V	Life V	Max mA	Min mA	Dia mm	Lth mm
SG1P	* REG	AHE				175	155	143	3.5	5	30	5	22	65
SG1P-EV*	REG					175	155	143	2.5	4	30	5	22	65
SG2P	REG	AKN				150		104			30	5	22	65
SG2S	* REG	NA	30			105	81	70	6	6.5	40	5	34	98
SG3P	REG	AHE				170		144			40	5	22	65
SG3S	* REG	AHN	30			127	112	105	3.5	4	40	5	34	98
SG4S	* REG	AHE	30	NI		180	162	145	4	4.5	30	5	34	98
SG5B	* REG	AHE				170	155	142	4	7.5	10	5	10	36
SG7S	REG					480		390			0.1	0.003		
SG8S	REG					970		880			0.1	0.003	10	
SG9S	REG					13h		12h			0.1	0.01	10	
SG10S	REG	NK				150		86			15	4	32	40
SG13P	* REG	AHN	55	NI		175	155	143	3.5	5	30	5	19	65
SG14P	REG	AHN				125		115			40	20	22	75
SG15P	REG	AHN	54	MO		150		104			30	5	19	55
SG15P1	REG					160		103			30	5	19	60
SG15P2	* REG					160	110	102	3	0.2	30	5	19	65
SG16P	* REG	AHE	40	MO		150	86	80	3	0.2	30	5	19	65
SG17S	REG	NEH				1350		850			60	10	38	189
SG18S	REG	NEH				1500		950			60	10	38	189
SG19S	REG	NEH				1650		1050			60	10	38	189
SG20G	* REG					135	91	85	2.5	0.2	15	4	12	45
SG21B	* REG					160	109	101	2.5	0.2	15	4	11	40
SG201S	* REG	NK	50	MO		150	92	86	2.5	0.2	1.5	4	33	64
SG202B	* REG	NA	35	MO		135	86	81	4.5	0.2	5	1.5	10	40
SG203K	* REG					135	86	79	2	0.1	10	1	10	23
SG204K	* REG					220	168	160	4	0.3	15	1	10	30
SG205B	* REG					135	84	81	0.5	0.3	11	9	11	40
SG226	* REG	NE				95		70			40	8	50	130
SG227	* REG	NE				95		70			60	10	65	135
SG301S-1	* REG	HY				430	400	380	14	16			10	36
SG302S-1	* REG	HY				970	920	880	30	32			12	67
SG303S-1	* REG	HY				1320	1280	1220	30	32			12	67
SG304S	* REG	HY				4200	3800	240	240				22	128
SG305K	* REG					105h	95h	11h	400		15h	50	20	148
SG306K	* REG					26k	24k	15h	500		15h	50	49	251
SG307K	* REG	HY				143h	157h	10h	375		15h	50	33	181
SG308K	* REG	HY				19k	21k	1k	500		1k	50	33	181
SG309K	* REG	HY				315h	285h	18h	750		15h	50	49	231
SG311S	* REG					430	400				1	0.05		86
TP-2/0.5	REG					1	3				0.2	2.0	33	68
TP-2/2	REG					1	3				0.4	6.0	33	68
TP-6-2	REG					4	8				0.4	6.0	33	68

### Group VI—CURRENT REGULATOR TUBES

Type No.	Kind	Type	Bulb	Volt range		Cur. range		Base No.
				Max V	Min V	Max mA	Min mA	
024B12-18	*	BAL SIN	T10	18	12	264	248	
03B17-35	*	BAL SIN	T14	35	17	325	275	8ES
03B65-135	*	BAL SIN	T14	135	65	325	275	8ES
0425B55-12	*	BAL SIN		12	<6	460	390	8ES
085B55-12	*	BAL SIN	T9	12	<6	920	780	8ES
1B5-9	*	BAL SIN	T14	9	5	1080	960	DS7
1B10-17	*	BAL SIN	T14	17	10	1040	960	DS7
ST2S	*	BAL TWN		17	6	2100	2000	DS6
ST3P		BAL SIN	T6	6	4	880	720	8ES

**Group VII - THYRATRONS**

Type No.	Kind	Bulb			Gas	Cathode				Maximum anode						Avg	Maximum grid					Base No.			
		Shape	Lth mm	Diam mm		Kind	E <sub>r</sub> V	I <sub>r</sub> mA	Warm-up min s	PIV V	E <sub>r</sub> V	Firing V	Tube drop V	Pulse I <sub>b</sub> mA	I <sub>b</sub> mA		Bias V	Input res kΩ	Pulse						
																			Ign V	Time μs	t <sub>r</sub> ns		pps 10 <sup>3</sup>		
AGI-1-75/1.3	* TET	T	50	30	C				1300				75A	20	30	1M	550	5m							
TG1B	* TRI	T	36	10	KX H	6.3	225	10	240	240	30	20	120	20	30	1M	100	30	10						
TG1P	* TRI	T	67	19	HE H	6.3	1200		4k		80	34				35									
TG1-.02/0.5*	TET	T	38	19	XE H	6.3	165	10	500	500	30	16	120	20	100	10M	15						8T1		
TG1-0.5/0.3*	TRI	T	97	35	AR H	6.3	660	30	300	300		20	300	75	80	500	80						20	8T3	
TG1-0.1/1.3*	TET	T	185	33	XE H	6.3	600	10	1300	650	25	11	500	100	100	10M	100	5	60	10				8T2	
TG1-0.5/12*	TRI	T	225	62	AR H	6.3	5A	90	12k		500	27	3A	500	70	100									
TG1-1.0/0.8*	TET	T	130	61	KX H	6.3	300	60	800	420	50	15	6A	1A	15	1M	15							10T	
TG1-1.5/2*	TRI	T	160	68	XE H	6.3	7500		2k			16	5A	15h	15										
TG1-1.6/1.3*	TRI	M	201	66	XE H	5.0	6A	90	1300	1k		20	10A	16h	100	100	100								
TG1-2/8	* TRI	T	180	70	XE H	6.3	7500	120	8k		140	20	#7A	2A											
TG1-2.5/4	* TRI	S	255	85	KX F	5.0	12A	60	4000	3k	140	20	8A	<3A	100	100	100								4T2
TG1-2.5/10	TET	T	285	90	XE H	5.0	15A	180	10k			16	8A	25h	50	5									
TG1-3.2/1.3*	TRI	T	222	66	XE H	5.0	8A	90	1300	1k		20	20A	3A	100	100	100								
TG1-5-3	* TRI	T	350	110	KX F	5.0	21A	40	3k		190	22	15A	5A	20										
TG1-6.4/1.3*	TRI	T	242	66	XE H	5.0	13A	120	1300	1k		20	40A	6A	100	100	100								
TG1-12.5/1.3	* TRI	T	292	90	XE H	5.0	16A	120	13h		1k	20	80A	12A	20										
TGI-1B	* TRI	T	40	10	XE H	3.1	1500		500		30		20A		6	1M									
TGI-1-3/1	* TET	T	67	15	AR H	6.3	1100	90	1000	1k		35	3A	6	40			20	300	5			15	T22	
TGI-1-5/1.1	TRI	T	67	19	HY H	6.3	2000		1100		70		5A	10	100										T23
TGI-1-10/1	* TRI	T	80	32	HY H	6.3	2600	60	1000				10A	50	100	15			6	150	40				
TGI-1-35/3	* TRI	T	135	38	HY H	6.3	2500	180	3k	3k		140	35A	45	100			6	500						
TGI-1-50/5	* TRI	T	160	45	HY H	6.3	3600	180	5k	5k		160	50A	50	150										
TGI-1-90/8	* TRI	T	195	66	HY H	6.3	7000	180	8k	8k			90A	100	200										
TGI-1-130/8	* TRI	T	180	64	HY H	6.3	500	180	3k	8k			1hA	150	170										
TGI-1-130/10	* TRI	T	205	62	HY H	6.3	5A	240	10k	10k		150	1hA	250	170										
TGI-1/260/12	* TRI	T	98	67	HY H	6.3	12A	180	12k				3hA	400				200	50						
TGI-1-325/16	* TRI	T	230	66	HY H	6.3	8500	300	16k	16k		150	3hA	200				200	1						
TGI-1-400/3.5*	TRI	S	280	85	HY H	5.0	18A	180	3500	3k		150	4hA	300		2			20						
TGI-1-400/16	* TRI	T	268	78	HY H	6.3	10A	360	16k	16k		170	4hA	500	200			200	5						
TGI-1/500/16	* TRI	T	138	86	HY H	6.3	17A	300	16k	16k			5hA	500	200			400	10						
TGI-1/500/20	* TRI	T	300	110	H	6.3	19A	300	20k	16k			5hA	51A				400	10						
TGI-1-700/25	* TRI	T	450	135	HY H	6.3	20A	420	20k	20k		200	7hA	1A				700	<1						
TGI1-1000/25	* TRI	T	160	106	HY H	6.3	20A	300	5k	25k		150	1kA	1A				500	50						
TGI1-2000/35	* TRI	T	420	172	HY H	6.3	55A	360	5k	35k			2kA	3A				1k	10						
TGI1-2500/35	* TRI	T	600	215	HY H	6.3	55A	720	5k	35k		250	2kA	25h				1k	10						
TKH-1	* TRI	T	85	34	NA C				150			60	100	30					85						
TKH1B	TRI				C					160		85	30	10		10M		85							
TKHI-1G	PND	T	45	13	AR C				275	205			60A	25A		100									
TR1-2.5/3	* TRI	T	120	66	HG H	5.0	7A	300	3k	3k		15	15A	25h	100										
TR1-5/2	* TRI	T	275	90	HG H	5.0	15A	300	2k	2k	100	15	15A	5A	24										
TR1-6/3	* TRI	T	160	66	HG H	5.0	13A	300	3k			15	40A	6A	100	100									
TR1-6/15	* TRI	T	350	90	HG H	5.0	23A	900	15k	15k		18	20A	6A	100	5									
TR1-15/3	* TRI	T	250	90	HG H	5.0	22A	480	3k			15	90A	15A	100	100									
TR1-15/15	* TRI	T	490	195	HG H	5.0	40A	18h	15k			20	47A	15A	100	5									
TR1-15/20	* TRI	T	440	108	HG H	5.0	20A	900	20k	20k		18	45A	15A	150	5									
TR1-40/15	* TRI	G	700	245	HG H	5.0	68A	18h	15k			20	1hA	40A	100	5									
TR1-85/15	* TRI	T	760	270	HG H	5.0	130A	24h	15k			20	3hA	85A	100	5									
TR1-130/15	TRI	T		220	HG H	5.0	130A		15k				3hA	85A											
TG2-0.1/0.1*	TRI	T	105	40	XE H	6.3	600	10	100	100	18	11	300	100	2	5M									
TG2-0.5/12	* TRI	T	225	62	HY H	6.3	7A	180	12k	12k		70	<4A	500	100										
TG2.5/5	TRI				F	5.0	13A		3k				8A	2A	18										
TGI-2-260/12	TRI	T	285	90	HY H	6.3	12A		12k						400			200							<5
TGI-2-325/16	TRI				HY F	6.3	8500		16k				3hA	200											
TGI-2-400/16	* TRI	T	78	500	H	6.3	12h	300	16k				4hA	500					5						<1
TGI-2-400/35	TRI				HY F	5.0	18A		3500				4hA	300											
TKH-2	* TRI		57	19	HE C				2800	350		80	100	12		8M							1		T24
TG3-0.1/1.3*	TET	T	57	19	XE H	6.3	600	30	1300	650	30	11	500	100	100	10M	100	10	60	10					7EM
TG3-2.5/10	TRI	T	290	90	KX H	5.0	20A		10k			25	8A	<3A	30										
TKH3B	* TET	T	40	10	NA C				190		110		10	<1	85	20M	67	15	1hμ						1

Group VII - THYRATRONS - Continued

Type No.	Kind	Bulb			Cathode				Maximum anode					Avg I <sub>b</sub> mA	Maximum grid					Base No.		
		Shape	Lth mm	Diam mm	Gas	Kind	E <sub>r</sub> V	I <sub>r</sub> mA	Warm- up min s	PIV V	E <sub>p</sub> V	Firing V	Tube drop V		Pulse I <sub>b</sub> mA	Bias V	Input res kΩ	Pulse				
																		Ign V	Time μs		t <sub>r</sub> ns	pps 10 <sup>3</sup>
LP-4	* COM		29	40	H	4.0	270		150				1	70								
TKH4B	* TET	T	40	10	NA	C			225	180	115		70	3	99M	92	10					
LP-5	* COM		29	40	H	4.0	270		100				1	4	40							
TC5R	* TET	T	19	5	F	1.0	65		170		40											
TKH-5A	TRI		25	7	NA	C				270		110	<1	<1								
TKH-5B	* TRI	T	25	7	NE	C			270	225			<2	<1	150							
LP-6	* COM		108	58	H	6.3	1600		275				1	8	350							
TKH-6G	* HEX	T	50	13	NE	C				285	130			1		100	20					
LP-7	* COM		62	35	H	4.0	270		25				<1	13								
TKH-7G	* PND	T	50	13	NE	C			285			140	2	1	20			80		200		
TKH-8G	* PND	T	50	13	NE	C				285	130			1		80	10					
TKH-9G	* HEX	T	50	13	NE	C			285				2	1	40			40		200		
TKH-11G	TET	T	60	13		C				215				10		35	7					
TKH-12G	HPT	T	50	13		C			275					1K	10			50				
TKH-13	PND	T	50	13		C			220					5	1			100		5		
MTKH90	* TRI		37	12	NE	C			200	120	150	50	20	2	45	20M	85					
TGI-200	TRI	S	280	85	KX	F	5.0	15A	60	3500			20	2hA	18	200						
TC212M	TRI	T	105	35	AR	H	4.0	950	30	300	300		27	500	125	7	100					
TG-213	* TRI	S	155	63	F	2.5	9A		500	500	50	25	1A	500	15							
TG-235	* TRI	S	220	81	F	5.0	12A		700	700	70	25	6A	1A	16							
1587	* TET	T	57	19	H	6.3	600	30	1300	650	30	12	500	100	100							

7EM

Group VIII — CATHODE RAY TUBES

Type No.	Meth of		Dimensions			Cathode	Typical						Maximum		Screen		Defl angle deg	Base No.		
	Focus	Defl	Diam cm	Lth cm	Use		Heater		E <sub>Proc</sub> V	E <sub>A1</sub> kV	E <sub>A2</sub> kV	E <sub>A3</sub> kV	E <sub>A4</sub> kV	E <sub>C1</sub> V	I <sub>k</sub> $\mu$ A	Defl sens mm/V			Col	Pers
							E V	I mA												
LK7M	*	ELS			H	12.6	600			1.4				50	150					
LN-4	*	ELS ELS	17	49	ST H	6.3	550			1.5	0.2			100	6					
LN5	*	ELS ELM			ST H	6.3	600			0.6	0.2				15					
LN-7	*	ELM ELM	9	26	ST H	12.6	300			0.6				65						
LN-8	*	ELS ELS	9	36	ST H	6.3	550			0.2	1.5			70						
LN9	*	ELS ELM			ST H	6.3	600			0.6	0.2				15					
L0247	*	ELS ELS	7	19	OD H	4.0	700	160		0.8				27	75	0.20	GR			
L0-248		ELS ELS	11		OS	4.0	700	600		3.0				50			GR	MD		
L0-249		ELS ELS	11		OS	4.0	700	600		3.0				50			GR	MD		
L0-709A		ELS ELS	11		OS	2.5	21h	450		2.0				50			GR	MD		
PIM-3			6		IC					18.0								VB		
PIM-4			13		IC					18.0								VB		
3LK1B	*	ELM ELM	3	19	TV H	6.3	500			2.0				40			WH	MD		
3L01-I	*	ELS ELS	3	12	OS H	6.3	600	50		0.5				60	300	0.18	GR	MD		
5L038I	*	ELS ELS	5	19	OS H	6.3	600	300		1.0				60	1m	0.11	GR	MD		
6LK1A	*	ELM ELM	6	27	PR H	6.3	600			25.0				65	100		BL	MD		
6LK1B	*	ELM ELM	6	27	PR H	6.3	600			25.0				65	100		WH	SH		
6LK3B	*	ELS ELM		11	TV H	1.3	300	350		0.3	6.0			12			WH			
6L01I	*	ELS ELS	5	14	OS H	6.3	600	135		1.2				60	300	0.15	GR	MD		
7L01M	*	ELS ELS	7	19	RA H	6.3	600	167		1.4	2.8			76		0.13	PB	SH		
7L055I	*	ELS ELS	7	19	OS H	6.3	600	180		1.1	2.0			76	500	0.12	GR	MD		
8LK2B	*	ELM ELM	8	26	TV H	6.3	500			3.0				45	60		WH	MD		
8LM3V	*	ELS ELM	8	21	RA H	6.3	600	300		0.4	4.0			50			WH	LO		
8L03I	*	ELS ELS	8	30	OS H	6.3	600	300		0.8	2.3			85		1.0	GR	MD		
8L04I	*	ELS ELS	8	35	OS H	6.3	300			0.7	3.7			75	300	1.5	GR	MD		
8L029I	*	ELS ELS	8	26	OS H	6.3	600	350		1.5				45	1000	0.17	GR	MD		
8L030I	*	ELS ELS	8	27	OS H	6.3	600	400		1.5				45	1000	0.17	GR	MD		
8L039V	*	ELS ELS	8	27	OS H	6.3	600	400		2.0	4.0			60	1500	0.17	YO	LO		
9L01I	*	ELS ELS	9	35	OD H	6.3	600	300		1.0	1.0	1.0	2.8	60	1500	0.45	GR	MD		
10LK2B		ELM ELM	8	32	PR H	1.5	25h			20.0				120	200		WH	MD		
10LK3B	*	ELM ELM	10	30	PR H	6.3	500			25.0				50	200		WH	MD		
10L02I	*	ELS ELS	10	36	OD H	6.3	350			2.0	4.0			120		0.25	GR	MD		
10L043I	*	ELS ELS	10	41	OD H	6.3	600	550		2.0				60		0.20	GR	MD		
11LM2G	*	ELM ELM	11	29	DT H	6.3	600			20.0				80						
11LM3G	*	ELM ELM	11	36	DT H	6.3	600			20.0				95						
11L01I	*	ELS ELS	8	41	OS H	6.3	300	250		<0.1	<0.1	8.0		25		1.8	GR	MD		
12LN1	*	ELS ELM			OS H	6.3				<0.1	1.2	6.5								
13LK1B	*	ELM ELM	14	37	TV H	6.3	550			6.0				76	100		WH	MD		
13LK2B	*	ELM ELM	13	31	TV H	6.3	500			4.0				55	50		WH	MD		
13LK3B	*	ELM ELM	13	31	TV H	6.3	500			10.0				90	40		WH	MD		
13LK6B	*	ELM ELM	13	38	PR H	6.3	880			1.2	45.0			150	550		WH	MD		
13LK7B		ELM ELM	13	39	TV H	6.3	880			1.2	45.0			150	550		WH	MD		
13LK8A	*	ELS ELM	13	43	PT H	6.3	600	500		14.0				60			BL	SH		
13LM4V	*	ELM ELM	13	29	OS H	6.3	600			0.4	12.0			50	350		YO	LO		
13LM6V	*	ELS ELM	13	21	RA H	6.3	600	425			14.0			50			YO	LO		
13LM7V	*	ELM ELM	13	27	RA H	6.3	600			0.2	12.0			70			YO	LO		
13LM31M	*	ELM ELM	13	28	OS H	6.3	600	250		4.0				45	350		YO	LO		
13LM56I	*	ELM ELM	13	29	RA H	6.3	600			0.2	4.0			50	350		GR	MD		
13LM57		ELM ELM	11	28	OS H	6.3	600	250			6.0			71			GR	LO		
13LM58K		ELS ELM	13	29	OS H	6.3	600			0.7	4.0			50			RD	LO		
13LN2	*	ELS ELS	13	45	ST H	6.3	550			0.2	3.0									
13LN6	*				OD															
13L01B		ELS ELS	13			2.5	2A	425		2.0				40			GR	MD		
13L02B		ELS ELS	13			6.3	600	500		1.8	3.0			50			GR	MD		
13L03I	*	ELS ELS	14	43	OS H	6.3	600	410		1.5	3.0			50	1000	0.45	GR	MD		
13L04I		ELS ELS	14	43	OS H	6.3	600	425		1.5	1.5	5.0	8.0	50		0.25	GR	MD		
13L05P		ELS ELS	13			6.3	600	500		1.8	3.0			50			YO	LO		
13L06I	*	ELS ELS	13	34	OS H	6.3	600	400		1.5				45		0.38	GR	MD		
13L07V	*	ELS ELS	14	45	OD H	6.3	600	600		2.0	4.0	8.0		80		0.30	WH	LO		
13L09I	*	ELS ELS	14	45	OS H	6.3	600	300		1.2	4.8			40		1.0	GR	MD		

55

Group VIII—CATHODE RAY TUBES—Continued

Type No.	Meth of		Dimensions			Cathode	Typical								Maximum		Screen		Defl angle deg	Base No.
	Focus	Defl	Diam cm	Lth cm	Use		Heater		E <sub>proc</sub> V	E <sub>A1</sub> kV	E <sub>A2</sub> kV	E <sub>A3</sub> kV	E <sub>A4</sub> kV	E <sub>C1</sub> V	I <sub>k</sub> μA	Defl sens mm/V	Col	Pers		
							E V	I mA												
13L036V	* ELS	ELS	14	43	OS H	6.3	600	525		2.0	4.0		60	1000	0.29	WH	LO			
13L037A	* ELS	ELS	14	43	OS H	6.3	600	400		1.5	3.0		50	1000	0.43	BL	SH			
13L048V	* ELS	ELS	14	41	OD H	6.3	600	550	2.0				60		0.17	BL	LO			
13L054A	* ELS	ELS	14	43	OS H	6.3	600	300	1.5	3.5	6.0	8.0	60	750	0.20	BL	LO			
13L0101M*			13	32	OS H	6.3	550	11h	3.0	6.0			140		0.15	BL	SH			
13L0102M*	ELS	ELS	13	61	OS H	6.3	750	300	4.0	15.0	25.0		300		0.15	BL	MD			
13L0104A*	ELS	ELS	13	54	OS H	6.3	600	700	.4	4.0	8.0	12.0	100		0.13	BL	SH			
16LK1B	* ELS	ELM	R16	19	TV H	1.4	280	450	0.3	9.0			40	60		WH	SH	70		
16LM1G	* ELM	ELM	13	31	RA H	6.3	600		20.0				90					50		
16L02I	* ELS	ELS	13	45	OD H	6.3	600	500		2.0	3.5		70	500	0.28	GR	MD			
16L03I	* ELS	ELS	16	35	OS H	6.3	600	450		1.5			45		0.48	GR	MD			
18LK1B		ELM	ELM	17	35	TV H	2.5	21h		3.5			35			WH				
18LK2B		ELM	ELM	14	42	TV H	6.3	550			15.0		60	100		WH	SH			
18LK3V		ELM	ELM	18			2.5	2A		3.5			60			GR	MD			
18LK4B		ELS	ELM	17	34	TV H	6.3	600			6.0		60	150		WH	SH			
18LK5B	* ELM	ELM	17	35	TV H	6.3	520			4.0			30	100		WH	MD			
18LK7B		ELM	ELM	17	35	TV H	6.3	560			4.0		35	100		WH	SH			
18LK9A	* ELM	ELM	19	48	PT H	6.3	550		25.0				125	250		BL	SH			
18LK11B	* ELM	ELM	17	35	TV H	6.3	550		8.0				75	100		WH	MD			
18LK12B	* ELM	ELM	17	42	TV H	6.3	550		15.0				100	100		WH	MD			
18LK13L	* ELM	ELM	17	42	TV H	6.3	550		25.0				140	200		BL	SH			
18LK14T	* ELM	ELM	17	42	TV H	6.3	550		25.0				140	500		CR	SH	40		
18LK15		ELM	ELM	17	34	TV H	6.3	550		5.0			38	100		WH	MD			
18LK17L	* ELM	ELM	17	40	TV H	6.3	550		25.0				60			BL	SH			
18LM3S	* ELS	ELM	18	29	RA H	6.3	600	425	0.4	14.0			50			YO	LO			
18LM35V	* ELM	ELM	18	35	RA H	6.3	600		0.2	4.0			50	350		WH	LO			
18L01A	* ELS	ELS	18	47	OD H	6.3	600	1k	4.0	8.0			130	0.23	BL	SH				
18L040B		ELS	ELS	18	36	TV H	6.3	600		2.0			120			WH	MD			
18L047A	* ELS	ELS	18	45	OD H	6.3	600	550	2.0	6.0			100	0.19	BL	SH				
19LK4B		ELM	ELM	17		TV H	6.3	600		6.0			60							
20LM1YE	* ELS	ELM	20	46	OD H	6.3	12h		0.3	4.0	8.0		60	60		GR	LO			
22L01A	* ELS	ELS	15	48	50 H	6.3	600	500		2.0	4.0		70	0.23	BL	SH				
23LK1B		ELM	ELM	19	38	TV H	6.3	550		8.0			50			WH	MD			
23LK2B		ELM	ELM	22	47	TV H	6.3	550			10.0		18	100		WH	SH			
23LK5B	* ELM	ELM	23	40	TV H	6.3	550		12.0				80	100		WH	MD			
23LK6I	* ELM	ELM	24	49	PT H	6.3	550		25.0				100	150		GR	MD			
23LK7B	* ELM	ELM	R23	42	TV H	6.3	550		8.0				55	100		WH	MD			
23LK8B	* ELM	ELM	S23	49	TV H	6.3	550		15.0				60	100		WH	MD			
23LK9B	* ELS	ELM	R23	18	TV H	12.0	65	250	9.0				25	150		WH	MD	90		
23LK13B	* ELS	ELM	R23	20	TV H	12.0	65	350	0.1	11.0			60			WH		90		
23LK41I	* ELM	ELM	R23	30	TV H	6.3	550		8.0				65	50		YG	MD			
23LM3S	* ELS	ELM	23	34	RA H	6.3	600	425	0.4	14.0			50			YO	LO			
23LM34V	* ELM	ELM	23	43	OS H	6.3	600		0.2	4.0			50	350		YO	LO			
23L051A	* ELS	ELS	23	57	OS H	6.3	600	55h	6.0	20.0			200	0.03	BL	SH				
25LM1V	* ELM	ELM	R28	35	OS H	6.3	550		10.0				60	60		YO	LO			
26L02A	*		6	24	PT H	6.3	300		3.0	6.0			40							
30LK1B			30	45	TV H	6.3	600		10.0				75							
31LK1B		ELM	ELM	31		TV H	6.3	550		10.0			52	150		WH	MD			
31LK2B	* ELM	ELM	30	48	TV H	6.3	600		10.0				55	150		WH	MD			
31LM32V	* ELM	ELM	31	54	RA H	6.3	600		0.2	4.0			50	350		YO	LO			
31L01P		ELM	ELM	31				250	1.8				50			GR	MD			
31L033V	* ELS	ELS	31	57	OS H	6.3	600		1.1	4.3	5.5		140			YO	LO			
35LK1B		ELS	ELM	32	38	TV H	6.3	600	425	12.0			90	150						
35LK2B	* ELS	ELM	R32	46	TV H	6.3	600	425	0.3	12.0			60	150		WH	SH	70		
35LK4B	* ELS	ELM	R33	44	TV H	6.3	520	250	14.0				60	100		WH	MD	70		
35LK6B	* ELS	ELM	R35	38	TV H	6.3	600	425	0.3	12.0			60	125		WH	MD			
40LK1B	* ELM	ELM	40	49	TV H	6.3	500		12.0				70	150		WH	MD	70		
40LK4TS	* ELS	ELM	R40	40	TV H	6.3	900	4k	0.5	20.0			132			3C	MD			
42LM2YE	* ELS	ELM	42	59	RA H	6.3	12h	4k	4.5	11.5	20.0		60	50		OG	LO			
43LK2B	* ELS	ELM	R37	50	TV H	6.3	600	300	0.3	14.0			60	100		WH	MD	70		



Group VIII—CATHODE RAY TUBES—Continued

Type No.	Meth of		Dimensions		Use	Cathode	Typical							Maximum		Screen		Defl angle deg	Base No.	
	Focus	Defl	Diam cm	Lth cm			Heater		E <sub>roc</sub> V	E <sub>A1</sub> kV	E <sub>A2</sub> kV	E <sub>A3</sub> kV	E <sub>A4</sub> kV	E <sub>C1</sub> V	I <sub>k</sub> μA	Defl sens mm/V	Col			Pers
							E V	I mA												
43LK3B	* ELS	ELM	R43	51	TV	H	6.3	600	300	0.5	14.0		60	150			WH	MD	70	
43LK6B	ELS	ELM	S45	30	TV	H	6.3	600		0.3	0.5	14.0	25				WH	SH	11A	
43LK7B	ELS	ELM	S45	50	TV	H	6.3	600		0.3	0.3	14.0	60	35			WH	SH	68	
43LK8B	* ELS	ELM	S45	50	TV	H	6.3	600		0.3	0.5	14.0	50	100			WH	SH		
43LK9B	* ELS	ELM	R37	33	TV	H	6.3	600	425	0.3	14.0		60	30			WH	MD	110	
43LK11B	* ELS	ELS					6.3	600	400	0.3	14.0		90	250			WH	MD		
45LM1B	* ELM	ELM	45	56	RA	H	6.3	600		0.5	12.0		60	350			YO	LO		
45LM2U	* ELM	ELM	44	51	RA	H	6.3	600		0.5	14.0		60				GR	SH		
45LM3N	* ELM	ELM	44	54	RA	H	6.3	550		14.0			60				YG	LO		
47LK1B	ELS	ELM	S47	31	TV	H	6.3	300	400	0.4	16.0		55	120			WH	SH	110	
47LK2B	* ELS	ELM	R44	30	TV	H	6.3	300	400	0.4	16.0		80	300			WH	MD	110	
50LK1B	* ELS	ELM	R50	32	TV	H	6.3	400	04	16.0			77				WH		110	
51LS1	* ELS	ELS	51	104	CH	H	6.3	600	500	3.5	7.0		90				YG	MD		
53LK2B	* ELS	ELM	R48	61	TV	H	6.3	600	300	0.3	16.0		60	150			WH	MD	70	
53LK3B			S50	58	TV	H	6.3	600	300	0.4	16.0		140							
53LK4TS	* ELS	ELM	R47	65	TV	H	6.3	18h	3k	20.0			70	500			3C	MD		
53LK5B	ELS	ELM	S45	38	TV	H	6.3	600	300	0.5	16.0		25	100			WH	SH	110	
53LK6B	ELS	ELM	S48	385	TV	H	6.3	600	425	0.3	0.5	16.0	90	30			WH	SH	110	
59LK1B	ELS	ELM	S59	37	TV	H	6.3	300	425	0.4	16.0		55				WH	SH	110	
59LK2B	ELS	ELM	S59	36	TV	H	6.3	300	400	0.4	16.0		80	300			WH	MD	110	
61LK1B	* ELS	ELM	R60	36	TV	H	6.3	300	400	0.4	18.0		44	350					110	
65LK1B	ELS	ELM	38	62	TV	H	6.3	300	400	20.0			80	300						

Group VIII-A - VIDICONS

Type No.	Kind	Target area		Spectral response		Resolution lines		Voltages				Current		Target lux	Dimen	
		Hgt mm	Width mm	Min kÅ	Max kÅ	Center Min	Corner Max	Heat- er V	1st An. V	2d An. V	Mod. max V	Heat- er mA	Sig- nal nA		Dia mm	Lth mm
LI1	IC							6.3	400	12h	50	510			40	170
LI3	IC							12.6	650	1k	50	300			10	
LI6	IC							12.6	850	13h	50	300			20	320
LI7	* IC							12.6	850	13h	50	300			130	320
LI13	IM							6.3	400	15h	70	600			80	390
LI14	IM								600	900	35				30	390
LI15	IM								600	900	35	600			30	390
LI17	* IM							6.3	400	15h	95	600			80	390
LI18	* VID							6.3	600		80	450			16	160
LI22	* IM							6.3	11h		120	550			90	300
LI23	* VID	9.5	12.7			550	350	6.3	300	300	125	600	100		28.6	156
LI101	* IC							6.3	800	12h	5	300			150	310
LI201	* IM							6.3	400	15h		600			80	390
LI202	* IM							6.3	400	15h	150	600			80	390
LI203	* IM							6.3	500			600			80	390
LI207	* IM							6.3	400	15h		600			80	390
LI212	* IM							6.3	300	18h		260			40	230
LI401								6.3				450			340	160
LI407	* VID	4.5	6	4.0	7.0	350	250	6.3			150	90	5	15	16	112
LI408	* VID	11	11	5.0	6.4	600	500	6.3	300	300	130	90			28.6	130
LI409	* VID	11.5	11.5	4.0	5.3	550	400	6.3		300	125	90	10μ	5	28.6	130
LI410	* VID	18	18	4.0	5.5	800		6.3	700	400	300	630	160		43	218
LI412	* VID	11.5	11.5	6.5	7.2	550	350	6.3	300	300	60	90	100	1	28.6	130
LI415	* VID	9.5	12.7			600	600	6.3	300	300	125	640	10μ		28.6	161
LI418	* VID	4.5	6	4.0	7.0	350	250	6.3			150	90	5	15	16	112
LI420	* VID	9.5	12.7	4.2	5.7	500	400	6.3				90	100	10	28.6	164
LI421	* VID	9.5	12.7	5.5	6.1			6.3				640	100		28.6	164
LI424	* VID	4.5	6.0		5.8	350	250	6.3	300	300		90	50		16	112
LI425	* VID	11.5	11.5		6.5	550	400	6.3	300	300		90	50		28.6	150
LI428	* VID	9.5	12.7	5.5	6.1	500	400	6.3				90	100		28.9	164
LI601	* IM								16h		370				50	200
LI604-K	* IMD		25			125	100						30μ		55	170

### Group IX—MICROWAVE TUBES

Type No.	Kind	Freq		Duty cyl %	Operation	Cathode		Maximum											Coupling	Dimen		Wt g									
		Min	Max			E <sub>r</sub>	I <sub>r</sub>	E <sub>b</sub>	I <sub>b</sub>	P <sub>o</sub>	Col	E <sub>κ</sub>	Helix	Gain	NF	VSWR	Band width	Mag field		Lth	Diam										
		GHz	GHz	V	mA	V	mA	mW	V	V	V	dB	dB	dB	MHz	gauss	mm	mm													
2J55	MAG		13.3	1	P			12k	12A	53W																					
3J21	MAG		24.5		C			15k	15	60W																					
4J26-30	MAG		1.2	1	P			27k	46A	700W																					
4J45	MAG		2.8	1	P			23k	45	650W																					
4J50	MAG		12.1	1	P			22k	27A	28W																					
GSH-5	NOI	10.0	26.0			6.3				70																					
UV-5	TWT	3.4	4.4			3.0	900	180	1	<1	600	12	500	18	8	1.6									WG	388	17	83			
GSH-6	NOI	25.4	52.0			6.3				60																					
UV-6	TWT	3.4	4.4			4.0	950	500	4	30	1300	30	11h	30		1.6									WG	388	17	95			
UV-7	TWT	3.4	4.4			6.3	850	1400	35	3W	1500	80		26		1.6									WG	397	17	100			
GSH-10	NOI	2.6	8.4			6.3				150																					
GSH-11	NOI	8.4	11.6			6.3				150																					
K-12	KLO	2.5	3.6		C	6.3		250	40	100																		77	30		
KIU12	KLA	2.8			P	9.5		280k		20MW				40					14	800	WG	13h	300	50k							
MI-12	MAG	3.0	3.1		P			15k	18A	1hkW																			18h		
UV-13	TWT	3.4	4.4			2.4		600	350μ	5				20	9													600			
MI-14	MAG	2.9	3.0		P			15k	18A	1hkW																			18h		
UV-14	TWT	3.4	4.4			4.5		1300	5	100				30	25														PM		
K-15	KLO	3.1	5.6		C	6.3		250	50	50																		68	25		
KIU15	KLA	1.8			P	12.0		280k		30MW				35					18	700	WG	15h	400	75k							
MI-15	MAG	2.9	2.9		P			15k	18A	1hkW																			18h		
MI-16	MAG	2.8	2.8		P			15k	18A	1hkW																			18h		
K-26	KLO	0.5	0.7		C	6.3		250	60	100																		140	33		
GSH-28	NOI	64.0	76.0			6.3		100								17															
GSH-29	NOI	52.0	65.0			6.3		100								17															
K-29	KLO	8.8	10.3		C	6.3		320	45	15																			150	58	
K-30	KLO	7.7	9.1		C	6.3		320	50	15																			150	58	
K-31	KLO	7.0	8.1		C	6.3		320	50	20																			141	46	
K-32	KLO	5.6	7.1		C	6.3		320	50	20																			141	56	
K-33	KLO	14.3	16.7		C	6.3		400	45	10																			150	58	
K-34	KLO	12.0	14.4		C	6.3		400	45	10																			150	58	
K-35	KLO	10.0	12.1		C	6.3		350	45	10																			150	58	
K-41	KLO	1.4	2.5		C	6.3		250	60	80																			85	30	
K-42	KLO	0.9	1.5		C	6.3		250	60	80																			85	30	
K-48	KLO	3.4	4.4		C	6.3		180	70	100																			70	25	
MI-51	MAG	9.5	9.5		P			13k	16A	65kW																				48h	
MI-52	MAG	9.4	9.5		P			13k	16A	65kW																				48h	
MI-53	MAG	9.3	9.4		P			13k	16A	65kW																				48h	
MI-54	MAG	9.3	9.3		P			13k	16A	65kW																				48h	
M62	* MAG	2.4	2.4		C			2300	150	150W																			18h	200 140 700	
M81	* MAG	2.3	2.4					5500		5kW						3.1										WG	290	140	62h		
K-92A	KLO	3.4	3.6		C	6.3		850	90	1W	600																		160	140	2k
K-92B	KLO	3.5	3.7		C	6.3		850	90	1W	600																		160	140	2k
K-92G	KLO	4.0	4.3		C	6.3		850	90	1W	600																		160	140	2k
K-92V	KLO	3.7	4.0		C	6.3		850	90	1W	600																		160	140	2k
MI-95	MAG	9.2	9.3		P			13k	16A	65W																				48h	
MI-120	MAG	2.8	2.8		P			5k	7A	10kW																				13h	
MI-137	MAG	1.8	1.8		P			23k	25A	25kW																				16h	
UV-204	TWT	3.4	3.9			13.2		2800	75	20W				20															500		
UV-205	TWT	3.4	4.4			6.3		1400	55	4W				30	30														750		
KU304	KLA	0.8	0.9		C	6.5		16k		10kW				40										6	250	CO	12h	400	60k		
KU304A	KLA	0.8	0.8		C	6.5		15k		10kW				37									10	350	CO	10h	400	65k			
K-308	KLO	3.4	4.0		C	6.3		220	130	500																			73	25	
KU308	KLA	0.8	1.0		C	10.0		10k		4kW				45										8	400	CO	10h	206	35k		
KU309	KLA	0.5	0.6		C	4.0		9k		3kW				40										300	CO	10h	250	50k			
KU310A	KLA	0.5	0.6		C	5.0		15k		15kW				35										8	500	CO	12h	250	85k		
KU310B	KLA	0.6	0.6		C	5.0		15k		15kW				35										8	500	CO	14h	250	85k		
K-351	KLO	2.7	3.3		C	6.3		250	40	80																			80	29	
K-352	KLO	3.2	7.5		C	6.3		250	40	10																			68	25	
UV-421	TWT	0.9	1.2			2.8		200	300μ	5				18	<9														360		

Group IX – MICROWAVE TUBES – Continued

Type No.	Kind	Freq		Duty cyl %	Operation	Cathode		Maximum											Dimen		Wt g	
		Min	Max			E <sub>r</sub> V	I <sub>r</sub> mA	E <sub>b</sub> V	I <sub>b</sub> mA	P <sub>o</sub> mW	Col V	E <sub>c</sub> V	Helix V	Gain dB	NF dB	VSWR	Band width MHz	Mag field gauss	Coupling	Lth		Diam
		GHz	GHz																	mm		mm
UV-422	TWT	0.6	1.0			2.8		450	700μ	5					15	8			420			
UV-438	TWT	3.5	5.3			3.0		560	400μ	5					25	11			600			
UV-440	TWT	1.5	2.4			2.5		400	700μ	10				25	10			500				
M-532	MAG	2.3	3.6		C			5000	200	100W								22h	273	70	25h	
M571	* MAG	2.4	2.4		C			3600	1150	25hW								12h	210	160	15h	
MI-588	* MAG	36.4	37.1		P			15k	12A	28kW											PM	
MI-589A	* MAG	9.4	9.5		P			135h	20A	95kW											PM	
MI-589B	* MAG	9.3	9.4		P			135h	20A	95kW											PM	
MI-589V	* MAG	9.3	9.3		P			135h	20A	95kW											PM	
OV-612	BWT	37.5	53.6		C	5.0		1500	50	200	400			10					200	130	5k	
OV-613	BWT	52.6	81.0		C	5.0		1500	50	80	400			10					200	130	5k	
OV-614	BWT	79.0	h1.2		C	6.3		2500	50	50	400			10					200	130	5k	
OV-621	BWT	h1.8	h2.0		C	6.3		3000	50	15	500			13					240	140	95h	
OV-622	BWT	h1.2	h1.8		C	6.3		4000	50	50	500			13					240	140	95h	
700AD	MAG		0.6	20	P			12k	10A	40W								650				
706AU	MAG		3.1		P			22k	20	200W												
707A/B	KLO	2.4	3.5		C	6.3	250		100	275							20					
714AU	MAG		3.3		1 P			19k	20A	165W								22h				
720AYE	MAG		2.8		<1 P			27k	65A	1kW								29h				
723A/B	KLO	8.5	9.6		C	6.3	300	20	30	300								70				
725A	MAG		9.3		P			12k	10	44W												
726	KLO	2.9	3.2		C	6.3	300	20	170	300								30				
K-743	KLO	33.3	36.6		C			1800	15	10												
K-744	KLO	27.3	33.3		C			1800	15	10												
K-745	KLO	23.0	27.3		C			1500	15	15												
K-746	KLO	20.0	23.0		C			1200	15	15												
K-747	KLO	16.7	20.0		C			1200	15	15												
K-765	KLO	75.0	79.0		C			2400	15	15												
K-766	KLO	70.0	75.0		C			2400	15	15												
K-767	KLO	64.0	70.0		C			2400	15	20												
K-768	KLO	57.6	66.4		C			2400	15	20												
K-769	KLO	52.7	57.6		C			2400	15	20												
K-770	KLO	43.0	52.7		C			2000	15	20												
K-771	KLO	36.2	43.0		C			2000	15	20												
K-801	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
K-802	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
K-803	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
K-804	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
K-805	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
K-806	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
K-807	KLO	2.4	6.1		C	6.3		250	150	100										82	29	
UV1001	* TWT	5.0	10.3			3.0		800	400μ	5				25	10			900	WG			
UV1002	* TWT	5.0	10.3			3.0		800	400μ	5				25	10			900	WG			
UV1003	* TWT	0.9	5.0			2.8		560	700μ	5				25	10			600	WG			
UV1004	* TWT	0.9	5.0			2.8		560	700μ	5				25	10			600	WG			
UV1005	* TWT	0.9	5.0			2.8		560	700μ	5				25	10			600	WG			
UV1006	* TWT	0.9	5.0			2.8		560	700μ	5				25	10			600	WG			
UV1007	* TWT	5.0	10.3			6.3		1200	<6	100				30	30				PM	WG		
UV1008	* TWT	5.0	10.3			6.3		1200	<6	100				30	30				PM	WG		
UV1009	* TWT	0.9	5.0			6.3		1400	18					30	30				PM	WG		
UV1010	* TWT	0.9	5.0			6.3		1400	18					30	30				PM	WG		
UV1011	* TWT	0.9	5.0			6.3		1400	18					30	30				PM	WG		
UV1012	* TWT	0.9	5.0			6.3		1400	18					30	30				PM	WG		

## Group X - TRANSISTORS

Type No.	Kind	Maximum										Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum		Fig No.	
		V <sub>CB0</sub> V	V <sub>EB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> mA	I <sub>E</sub> mA	I <sub>CB0</sub> μA	P <sub>C</sub> mW	K <sub>θ</sub> mW/°C	T <sub>A</sub> °C	V <sub>C</sub> Common V	I mA	h <sub>11</sub> Ω	h <sub>12</sub> 10 <sup>-5</sup>	h <sub>21</sub> μmho	h <sub>22</sub>	α <sub>r</sub> max MHz	dB			dB	C <sub>ob</sub> pF		r <sub>b</sub> Ω r <sub>i</sub> C <sub>e</sub>
P1A	GAP	20			5	5	30	50	10	70	E	10	1		3.3	0.90	0.1	30				1		
P1B	GAP	20			5	5	30	50	10	70	E	10	1		2.0	0.93	0.1	35	33			400	1	
P1D	GAP	20			5	5	15	50	10	70	E	10	1		2.0	0.94	0.1	18	33			600	1	
P1G	GAP	20			5	5	30	50	10	70	E	10	1		2.0	0.96	0.1		37			600	1	
P1I	GAP	20			5	5	20	50	10	70	E	10	1		2.0	0.96	1.6	35		40			1	
P1V	GAP	20			5	5	15	50	10	70	E	10	1		1.0	0.93	0.1	35	37			400	1	
P1YE	GAP	20			5	5	30	50	10	70	E	10	1		2.0	0.95	0.5	35	30	60		1k	1	
P1ZH	GAP	20			5	5	20	50	10	70	E	10	1		3.3	0.95	0.1	35	35	45		1k	1	
1T303A	GDN	12	2	10	15		8	100	3	70	E	5	5			15						10	*1k	13
1T303B	GDN	12	2	10	15		8	100	3	70	E	5	5			30						10	*1k	13
1T303D	GDN	12	2	10	15		8	100	3	70	E	5	5			30						10	*1k	13
1T303G	GDN	12	2	10	15		8	100	3	70	E	5	5			15						10	*1k	13
1T303V	GDN	12	2	10	15		8	100	3	70	E	5	5			60						10	*1k	13
1T303YE	GDN	12	2	10	15		8	100	3	70	E	5	5			60						10	*1k	13
P2A	GAP	100			10	10	200	250	10	60	C	50	5			0.90			17					1
P2B	GAP	50			25	25	200	250	10	60	C	25	10			0.90			17					1
P3A	GAP	50		50	150		500	3W	100	50	C	10	150			2.0	0.1		17					2
P3B	GAP	50		50	250		250	3W	100	50	C	10	150			2.0	0.1		20					2
P3V	GAP	50		50	450		250	3W	100	50	C	10	150			2.0	0.1		25					2
P4AE	* GAP	60		50	5A		500	2W	500	90	C	10	2A		5.0	5.0	0.1		20			150	22	
P4BE	* GAP	70		60	5A		400	3W	500	90	C	10	2A		15	15	0.1		23			150	22	
P4DE	* GAP	60		50	5A		400	3W	500	90	C	10	2A		50	30	0.1		30			150	22	
P4GE	* GAP	60		50	5A		400	3W	500	90	C	10	2A		15	15	0.1		27			150	22	
P4L	GAP	50			2A		500	3W	500	50	C	10	2			20	0.1		30			150	22	
P4VE	* GAP	40		35	5A		400	3W	500	90	C	10	2A		10	10	0.1		23			150	22	
P5A	GAP	10	20	10	10	10	30	25	1	75	E	2	1	36	500	3.3	15	0.3	12			80	4	
P5B	GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	20	0.3	12			80	4	
P5D	GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	20	0.3	7			80	4	
P5G	GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	30	0.3	10			80	4	
P5V	GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	30	0.3	15			80	4	
P5YE	GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	20	0.3	18			80	4	
P6A	GAP	30	30	10	10	10	10	150	2	100	E	5	1	32	500	3.3	10	0.1	30	30	50		10	
P6B	GAP	30	30	10	10	10	5	150	2	100	E	5	1	32	60	2.0	10	0.5	30	34	50		10	
P6D	GAP	30	30	10	10	10	5	150	2	100	E	5	1	32	60	2.0	10	0.5	12	34	50		10	
P6G	GAP	30	30	10	10	10	5	150	2	100	E	5	1	32	60	3.3	30	1.0	30	37	50		10	
P6V	GAP	30	30	10	10	10	5	150	2	100	E	5	1	32	60	2.0	10	0.5	30	34	50		10	
P7	GAP	13		6	45		5	45		50	E	2	1			30								4
P8	GAN	15	15	25	20	10	30	150	5	85	E	5	1	34	500	2.5	10	1.0	15	32	65	150	10	
P9	GAN	20	20	25	20	10	15	150	2	100	E	5	1	32	60	2.0	10	0.5	12	32	60		10	
P9A	GAN	15	15	15	20		15	150	5	85	E	5	1	32	60	2.5	15	1.0	5	32	60	150	10	
P10	* GAN	15	15	15	20	10	15	150	5	85	E	5	1	32	60	2.5	15	1.0	5	32	60	150	10	
P10A	GAN	30	30	30	20		15	150	5	85	E	5	1			2.5	15	1.0				60	150	10
P10B	GAN	30	30	30	20		15	150	5	85	E	5	1			2.5	25	1.0				60	150	10
P11	* GAN	15	15	15	20	10	15	150	5	85	E	5	1	32	60	2.5	25	2.0	5	32	60		10	
P11A	GAN	15	15	15	20		15	150	5	85	E	5	1			2.5	45	2.0				60	150	10
P12	GAP			6	5	5	6	30	2	85	E	6	1			2.0	20	5.0				20	150	17
P12A	GAP	6		6	5	5	6	30	1	70	E	6	1			.2	20	5.0				20	150	17
P13	GAP	15	15	15	20	10	15	150	3	100	E	5	1	500	3.3	12		0.5	33			50		10
P13A	GAP	30			20	10	15	150	2	100	E	5	1	60	2.0	20		0.5	33			50		10
P13B	GAP	15	15	15	20	10	15	150	3	100	E	5	1	60	3.3	20		0.5	12			50		10
P14	* GAP	15	15	15	20	10	15	150	3	100	E	5	1	500	3.3	20		1.0	33			50	150	10
P14A	GAP	30	30	30	20	20	15	150	3	85	E	5	1	32	700	3.3	20	1.0				50	150	10
MP14B	* GAP	30	30	30	20	20	15	150	3	85	E	5	1	32	500	3.3	30	1.0				50	150	10
P15	GAP	15	15	15	20	10	15	150	3	100	E	5	1	500	3.3	30		2.0	33			50	150	10
P15A	* GAP	15	15	15	20		15	150	3	85	E	5	1	32	500	3.3	50	2.0				50	150	10
P16	* GAP	30	15	15	50	50	25	200	5	100						20		1.0				50		10
P16A	GAP	30	15	15	50	50	25	200	5	100						30		1.0				50		10
P16B	* GAP	30	15	15	50	50	25	200	5	100						45		1.0				50		10
P17	GAP	40			400		200	150								9		0.2		20				8
P17A	GAP	40			400		200	150								16		0.2		20				8

Group X—TRANSISTORS—Continued

Type No.	Kind	Maximum										Typical		Maximum			Minimum			Typ NF	Min K <sub>M</sub>	Maximum			Fig No.
		V <sub>CB0</sub>	V <sub>EB0</sub>	V <sub>CE0</sub>	I <sub>C</sub>	I <sub>E</sub>	I <sub>CB0</sub>	P <sub>C</sub>	K <sub>a</sub>	T <sub>A</sub>	Common	V <sub>C</sub>	I	h <sub>11</sub>	h <sub>12</sub>	h <sub>22</sub>	h <sub>21</sub>	f <sub>α</sub>	C <sub>ob</sub>			r <sub>b</sub>	r <sub>Ω</sub>		
		V	V	V	mA	mA	μA	mW	mW/°C	°C		V	mA	Ω	10 <sup>-5</sup>	μmho	MHz	dB						dB	
P17B	GAP	40			400		200	150									32	0.2	20				8		
P18	GAP	70			400		200	150									9	0.2	20				8		
P18A	GAP	70			400		200	150									16	0.2	20				8		
P18B	GAP	70			400		200	150									32	0.2	20				8		
P19	* GAP	20	20	6	30	5	6	30	1	90	E	5	1	33		2.0	20	5.0	5		20	150	3		
MP20	* GAP	50		20	300	1	50	150			C						50	1.0			20		10		
MP20A	* GAP	30		20	300		50	150	3	85	E	5	25				50	2.0					17		
MP20B	* GAP	30		20	300		50	150	3	85	E	5	25				80	1.5					17		
MP20V	* GAP	40		30	300		50	150	3	85	E	5	25				20	1.5					17		
P21	GAP	50			30	1	50	150	3	85	C	5					20	1.0					10		
P21A	GAP	30		20	500	1	50	150	3	85	C	5	25				20	1.0			20		10		
P21B	GAP	30		20	500		50	150	3	85	C	5	25				20	1.0			20		10		
MP21D	* GAP	50		30	300		50	150	3	85	E	5	25				60	1.0					17		
MP21G	* GAP	60		30	300		50	150	3	85	E	5	25				20	1.0					17		
P21V	* GAP	60		35	300		50	150		85	E	5	25				20	1.5					17		
MP21YE	* GAP	70		35	300		50	150	3	85	E	5	25				30	0.7					17		
P22	GAP	40		20	10		25	100		85						3.3	5	1.0			20		10		
P23	GAP	35		30	10		25	100		85						3.3	5	2.0			18		10		
MP25	* GAP	40		40	300	6	75	200	5	75	E	20	<3			3.5	13	0.2		20	50	160	17		
MP25A	* GAP	40		40	400	6	75	200	5	75	E	20	<3			3.5	20	0.2		20	50	160	17		
MP25B	* GAP	40		40	400	6	75	200	5	75	E	20	<3			3.5	30	0.5		20	50	160	17		
MP26	* GAP	70		70	300	6	75	200	5	75	E	35	<2			3.5	13	0.2		20	50	160	17		
MP26A	* GAP	70		70	400	6	75	200	5	75	E	35	<2			3.5	20	0.2		20	50	160	17		
MP26B	* GAP	70		70	400	6	75	200	5	75	E	35	<2			3.5	30	0.5		20	50	160	17		
P27	* GAP	5		5	6		3	30	1	75	E	5	<1			2.0	20	1.0	10		50	*6k	17		
P27A	* GAP	5		5	6		3	30	1	75	E	5	<1			1.0	20	1.0	5		50	*6k	17		
P28	* GAP	5		5	6		3	30	1	75	E	5	<1			1.0	20	5.0	5		50	*6k	17		
P29	* GAP	12	12	10	100		4	30	1	75		<1	20				20	5.0			20		17		
P29A	* GAP	12	12	10	100		4	30	1	75		<1	20				40	5.0			20		17		
P30	* GAP	12	12	10	100		4	30	1	75	E	<1	20				80	10.0			20		17		
P31	GAP			12	100		5	30									25	4.5			50		17		
P31A	GAP			12	100		5	30									45	4.5			60		17		
P32	GAP			12	100		5	30									45	9.0			20		17		
MP35	* GAN	15		15	20		15	150		75	E	5	1			3.3	10	0.5		60	220	17			
MP36A	* GAN	15		15	20		15	150		75	E	5	1			3.3	15	1.0		60	220	17			
MP37	* GAN	15		15	20		15	150		75	E	5	1			3.3	15	1.0		60	220	17			
MP37A	* GAN	30		30	20		15	150	5	75	E	15	1			3.3	15	1.0		60	220	17			
MP37B	* GAN	30		30	20		15	150	5	75	E	15	1			3.3	25	1.0		60	220	17			
MP38	* GAN	15		15	20		15	150		75	E	5	1			3.3	25	2.0		60	220	17			
MP38A	* GAN	15		15	20		15	150	5	75	E	5	1			3.3	45	2.0		60	220	17			
MP39	* GAP	15	5	15	150		15	150	5	85	E	5	1			3.3	12	0.5		60	220	17			
MP39B	* GAP	15	5	15	150		15	150	5	85	E	5	1			3.3	20	0.5	12		60	220	17		
MP40	* GAP	15	5	15	150		15	150	5	85	E	5	1			3.3	20	1.0		60	220	17			
MP40A	* GAP	30	5	30	150		15	150	5	85	E	5	1			3.3	20	1.0		60	220	17			
P40B	GAP			30	20		15	150		85							30	1.0			60		10		
MP41	* GAP	15	5	15	150		15	150	5	85	E	5	1			3.3	30	1.0		60	220	17			
MP41A	* GAP	15	5	15	150		15	150	5	85	E	5	1			3.3	50	1.0		60	220	17			
MP42	* GAP	15		15	150		25	200	5	85	E	1	10				20	1.0					17		
MP42A	* GAP	15		15	150		25	200	5	85	E	1	10				30	1.0					17		
MP42B	* GAP	15		15	150		25	200	5	85	E	1	10				45	1.0					17		
P101	SAN	20		10	20	20	1	150	2	120	E	5	1	100	300	3.3	10	0.2	15	25	150		10		
P101A	SAN	10	10	10	20	20	1	150	2	120	E	5	1	100	300	3.3	10	0.2	18		150		10		
P101B	SAN	20	20	20	20	20	1	150	2	150	E	5	1	100	300	3.3	15	0.2	15		150		10		
P102	SAN	10	10	10	20	20	1	150	2	120	E	5	1	100	300	2.0	18	0.5	15		150		10		
P103	SAN	10	10	10	20	20	1	150	2	120	E	5	1	100	300	3.3	30	1.0	15		150		10		
P103A	GAN			10	20		3	150									30	1.0			100		10		
P104	SAP	60	45	60	10	10	1	150	2	150	E	5	1	140		3.3	9.0	0.1		80	1k		10		
P105	SAP	30	45	30	10	10	1	150	2	150	E	5	1	140		3.3	9.0	0.1		80	1k		10		
P106	SAP	15	45	15	10	10	1	50	2	150	E	5	1	80		2.0	13.5	0.5		80	<2k		10		
GT108A	* GAP	10			50		10	75	1	80	E	5	1			3.3	20	0.5		50	5k		9A		

Group X—TRANSISTORS—Continued

Type No.	Kind	Maximum										Typical		Maximum			Minimum		Typ. NF	Min. K <sub>M</sub>	Maximum		Fig. No.
		V <sub>CB0</sub>	V <sub>EB0</sub>	V <sub>CE0</sub>	I <sub>C</sub>	I <sub>E</sub>	I <sub>CB0</sub>	P <sub>C</sub>	K <sub>a</sub> mW/°C	T <sub>A</sub>	Common	V <sub>C</sub>	I	h <sub>11</sub>	h <sub>12</sub>	h <sub>22</sub>	h <sub>21</sub>	f <sub>T</sub> max MHz			C <sub>ob</sub>	r <sub>b</sub> Ω	
		V	V	V	mA	mA	μA	mW	°C	°C		V	mA	Ω	10 <sup>-3</sup>	μmho			dB	dB	pF	r <sub>b</sub> Ω	
GT108B	* GAP	10			50		10	75	1	80	E	5	1			3.3	35	1.0			50	5k	9A
GT108G	* GAP	10			50		10	75	1	80	E	5	1			3.3	h1.1	1.0			50	5k	9A
GT108V	* GAP	10			50		10	75	1	80	E	5	1			3.3	60	1.0			50	5k	9A
P108	GAN			10	20		<1	150										20	*1.0		50		10
P108A	GAN			10	20		<1	150										13	1.0		50		10
GT109A	* GAP	10		6	20		5	30	<1	80	E	5	1			3.3	20	1.0			30	*5k	29
GT109B	* GAP	10		6	20		5	30	<1	80	E	5	1			3.3	35	1.0			30	*5k	29
GT109D	* GAP	10		6	20		2	30	<1	80	E	5	1			3.3	20	3.0			40	*5k	29
GT109G	* GAP	10		6	20		5	30	<1	80	E	5	1			3.3	h1.1	1.0			30	*5k	29
GT109I	* GAP	10		6	20		5	30	<1	80	E	5	1			3.3	20	1.0			30	*5k	29
GT109V	* GAP	10		6	20		5	30	<1	80	E	5	1			3.3	60	1.0			30	*5k	29
GT109YE	* GAP	10		6	20		2	30	<1	80	E	5	1			3.3	50	5.0			40	*5k	29
GT109ZH	* GAP	10		6	20		1	30	<1	80	E	1	5			3.3	1h				30	*5k	29
P109	GAN			10	20		<1	150											*2.0		50		10
P110	GAN			10	20		<1	150											*3.0		30		10
MP111	* SAN	20	5	20	20		3	150	2	120	E	5	1	30	300	2.0	10	0.5		170		17	
MP111A	* SAN	10	5	10	20		3	150	2	120	E	5	1	30	300	2.0	10	0.5	18	170		17	
MP111B	* SAN	10	5	20	20		3	150	2	120	E	5	1	30	300	2.0	15	0.5		170		17	
MP112	* SAN	10	5	10	20		3	150	2	120	E	5	1	30	300	2.0	15	0.5		170		17	
MP113	* SAN	10	5	10	20		3	150	2	120	E	5	1	30	300	2	15	1.0		170		17	
MP113A	* SAN	10	5	10	20		3	150	2	120	E	5	1	30	300	2.0	35	1.2		170		17	
MP114	* SAP	60	10	60	10		10	150		120	E	5	1	300	60		9	0.1			17		17
GT115A	* GAP	20	20		30		40	50		85	E	5	25				20	1.0					9A
GT115B	* GAP	30	20		30		40	50		85	E	5	25				20	1.0					9A
GT115D	* GAP	20	20		30		40	50		85	E	5	25				1h	1.0					9A
GT115G	* GAP	30	20		30		40	50		85	E	5	25				60	1.0					9A
GT115V	* GAP	20	20		30		40	50		85	E	5	25				60	1.0					9A
MP115	* SAP	30	10	30	10		10	150		120	E	5	1	300	64		9	0.1					17
MP116	* SAP	15	10	15	10		10	150		120	E	5	1	300	114		15	0.5					17
P135	GAP	30			10		10	150		100		5	1		60	2.0	0.92	0.5	12		50		10
P201E	* GAP	45	45	30	15h		400	1W	300	85	E	10	200				20	0.1	25				25
P201AE	* GAP	45	45	30	15h		400	1W	300	85	E	10	200				40	0.2	25				25
P202E	* GAP	70	35	55	2k		400	1W	300	85	E	10	200				20	0.1	30				25
P203E	* GAP	70	45	55	2k		400	1W	300	85	E	10	200				20	0.2	20				25
P207	GAP	45	20	40	25A		16m	4W	70	85							15	0.2					24
P207A	GAP	45	20	40	25A		16m	4W	70	85							15						24
P208	GAP	65	30	60	25A		25m	4W	70	85							15						24
P208A	GAP	65	30	60	25A		25m	4W		85							15						24
P209	GAP	65		45	12A		8m	1500	43	85							15	0.1					4
P209A	GAP	65		45	12A		8m	1500	43	85							15	0.1					4
P210	GAP	45		65	12A		12m	1500	43	85							15	0.1					4
P210A	* GAP	45		65	12A		12m	1500	43	85							15	0.1					4
P210B	* GAP	65	25	40	12A		15m	P45W	1k	70	E	2	5A				10	0.1					23
P210V	* GAP	45	25	40	12A		15m	P45W	1k	70	E	2	5A				10	0.1					23
P211	GAP	50			500		50	750		85							50	1.0					26
P212	GAP	70			500		50	750		85							20	1.0					26
P212A	GAP	70			500		50	750		85							50	1.0					26
P213	* P	45	15	40	5A	1h	150	<12k	250	85	E	10	100				20	<0.2					25
P213A	* GAP	45	10	30	5A		1000	10W	250	85	E	5	200				20	<0.2					25
P213B	* GAP	45	10	30	5A		1000	10W	250	85	E	5	200				40	<0.2					25
P214	* GAP	60	15	55	5A	1h	300	10W	250	85	E	5	200				20	<0.2					25
P214A	* GAP	60	15	55	5A	1h	300	10W	250	85	E	5	200				50	<0.2					25
P214B	* GAP	60	15	55	5A	1h	150	<12k	250	85	E	5	200				20	<0.2					25
P214G	* GAP	60	10	55	5A		15H	10W	250	85	E	5	200				20	<0.2					25
P214V	* GAP	60	10	55	5A		15H	10W	250	85	E	5	200				20	<0.2					25
P215	* GAP	80	15	70	5A	1h	300	10W	250	85	E	5	200				20	<0.2					25
P216	* GAP	40	15	30	75h	1h	500	30W	500	85	E	10	100				18	0.1					25
P216A	* GAP	40	15	40	75h	1h	500	30W	500	85	E	10	100				20	0.1					25
P216B	* GAP	35	15	35	75h		1500	P24W	500	85	E	5	1A				10	0.1					25
P216D	* GAP	50	15	50	75h		2000	P24W	500	85	E	3	2A				15	0.1					25

Group X—TRANSISTORS—Continued

Type No.	Kind	Maximum									Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum		Fig No.		
		V <sub>CB0</sub>	V <sub>EB0</sub>	V <sub>CB0</sub>	I <sub>C</sub>	I <sub>E</sub>	I <sub>CB0</sub>	P <sub>C</sub>	K <sub>θ</sub>	T <sub>A</sub>	Common	V <sub>C</sub>	I	h <sub>11</sub>	h <sub>12</sub>	h <sub>22</sub>	h <sub>21</sub>			f <sub>T</sub> max	C <sub>ob</sub>		r <sub>b</sub>	
		V	V	V	mA	mA	μA	mW	mW/°C	°C		V	mA	Ω	10 <sup>-3</sup>	μmho				MHz			pF	Ω
P216G	* GAP	50	15	50	75h		2500	P24W	500	85	E	3	2A				5	0.1			25			
P216V	* GAP	35	15	35	75h		2000	P24W	500	85	E	3	2A				30	0.1			25			
P217	* GAP	60	15	45	75h	1h	500	P30W	500	85	E	1	4A				15	0.1			25			
P217A	* GAP	60	15	45	75h	1h	500	P30W	500	85	E	5	1A				20	0.1			25			
P217B	* GAP	60	15	45	75h	1h	500	P30W	500	85	E	5	1A				20	0.1			25			
P217G	* GAP	60	15	60	75h		3000	P24W	500	85	E	3	2A				20	0.1			25			
P217V	* GAP	60	15	60	75h		3000	P24W	500	85	E	3	2A				15	0.1			25			
KT301	* SDN	20	3	20	10	10	40	150	1	120	E	10	3			3	20	30		10	9			
KT301A	* SDN	20	3	20	10	10	40	150	1	120	E	10	3			3	40	30		10	9			
KT301B	* SDN	30	3	30	10	10	40	150	1	120	E	10	3			3	10	30		10	9			
KT301D	* SDN	20	3	20	10	10	40	150	1	120	E	10	3			3	20	60		10	9			
KT301G	* SDN	20	3	20	10	10	40	150	1	120	E	10	3			3	10	60		10	9			
KT301V	* SDN	30	3	30	10	10	40	150	1	120	E	10	3			3	20	30		10	9			
KT301YE	* SDN	20	3	20	10	10	40	150	1	120	E	10	3			3	40	60		10	9			
KT301ZH	* SDN	20	3	20	10	10	40	150	1	120	E	10	3			3	80	60		10	9			
P302	* SAP	35	6	35	500	5h	100	1000	100	120	E	10	120				10	0.2			20			
P303	* SAP	60	10	60	500	5h	100	1000	100	120	E	10	120				6	0.1		*20	20			
P303A	* SAP	60	6	60	500	5h	100	1000	100	120	E	10	120				6	0.1		*20	20			
P304	* SAP	80	10	80	500	5h	100	1000	100	120	E	10	60				5	<0.1			20			
GT305A	* GDP	15	<2	15	40		4	75	1	85	E	1	10				25	140		<6	*3h	20		
GT305B	* GDP	15	<2	15	40		4	75	1	85	E	1	10				65	160			20			
GT305V	* GDP	15	<2	15	40		4	75	1	85	E	1	10				40	180			20			
KT306A	* SPN	15	4	10	30	30	<1	150		100	C	1	10	30			20	300		5	*5h	34		
KT306B	* SPN	15	4	10	30	30	<1	150		100	C	1	10	30			40	500		5	*5h	34		
KT306D	SPN	15	4	10	30	30	<1	150		100	C	1	10	30			30	100			*5h	34		
KT306G	* SPN	15	4	10	30	30	<1	150		100	C	1	10	30			40	100		5	*5h	34		
KT306V	* SPN	15	4	10	30	30	<1	150		100	C	1	10	30			20	100		5	*5h	34		
P306	* SAN	60	6	60	400	1h	100	1000	100	120	E	10	100				7	<0.1			20			
P306A	* SAN	80	4	80	400	50	100	1000	100	120	E	10	100				5	<0.1			20			
KT307A	* SPN	10	4	10	20		500	15	<1	85	C	1	10				20	*3h		6	35			
KT307B	* SPN	10	4	10	20		500	15	<1	85	C	1	10				40	*3h		6	35			
KT307C	* SPN	10	4	10	20		500	15	<1	85	C	1	10				80	*3h		6	35			
KT307V	* SPN	10	4	10	20		500	15	<1	85	C	1	10				40	*3h		6	35			
P307	* SDN	80	3	80	30		3	250		70		20	10	70			16	20			38			
P307A	* SDN	80	3	80	30		3	250		70		20	10	70			30	20			38			
P307B	* SDN	80	3	80	15		3	250		70		20	10	70			50	20			38			
P307G	* SDN	80	3	80	15		3	250		70		20	10	70			16	20			38			
P307V	* SDN	60	3	60	30		3	250		70		20	10	70			50	20			38			
GT308A	* GAP	20	3	12	50		2	150	4	85	E	1	10	2			20	90		8	*4h	12		
GT308B	* GAP	20	3	12	50		2	150	4	85	E	1	10	2			50	120		8	*5h	12		
GT308V	* GAP	20	3	12	50		2	150	4	85	E	1	10	2			80	120		8	*5h	12		
P308	* SDN	120	3	120	15		3	250		70		20	10	70			30	20			38			
GT309A	* GDP	15	6	10	10		5	50	1	70	E	5	1	38			5.0	20	120		10	*5h	9	
GT309B	* GDP	15	6	10	10		5	50	1	70	E	5	1	38			5.0	60	120		6	*5h	9	
GT309D	* GDP	15	6	10	10		5	50	1	70	E	5	1	38			5.0	20	40		10	*1k	9	
GT309G	* GDP	15	6	10	10		5	50	1	70	E	5	1	38			5.0	60	80		6	*1k	9	
GT309V	* GDP	15	6	10	10		5	50	1	70	E	5	1	38			5.0	20	80		10	*1k	9	
GT309YE	* GDP	15	6	10	10		5	50	1	70	E	5	1	38			5.0	60	40		10	*1k	9	
P309	* SDN	120	3	120	30		3	250		70		20	10	70			16	20			38			
GT310A	* GDP	12		10	10		5	20	<1	75	E	5	1	38			3.0	20	160		3	*3h	29	
GT310B	* GDP	12		10	10		5	20	<1	75	E	5	1	38			3.0	60	160		3	*3h	29	
GT310D	* GDP	12		10	10		5	20	<1	75	E	5	1	38			3.0	20	80		4	*3h	29	
GT310G	* GDP	12		10	10		5	20	<1	75	E	5	1	38			3.0	60	120		4	*3h	29	
GT310V	* GDP	12		10	10		5	20	<1	75	E	5	1	38			3.0	20	120		4	*5h	29	
GT310YE	* GDP	12		10	10		5	20	<1	75	E	5	1	38			3.0	60	80		4	*5h	29	
GT311A	* GEM	15	2	12	10		3	100		55	E	5	5	30			20	*3h			2	50	12	
GT311B	* GEM	15	2	12	10		3	100		55	E	5	5	30			20	*45. h		7		100	12	
GT311D		12	2	12			5	150			E	3	15				60					2	75	12
GT311G		12	2	12			5	150			E	3	15				30					2	75	12
GT311I	* GDP	12	2	10	50		10	150	3	70							1h	450			<3	*1h	12	



Group X - TRANSISTORS - Continued

Type No.	Kind	Maximum									Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum		Fig No.
		V <sub>CB0</sub> V	V <sub>EB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> mA	I <sub>E</sub> mA	I <sub>CB0</sub> μA	P <sub>C</sub> mW	K <sub>θ</sub> mW/°C	T <sub>A</sub> °C	Common	V <sub>C</sub> V	I mA	h <sub>11</sub> Ω	h <sub>12</sub> 10 <sup>-3</sup>	h <sub>22</sub> μmho	h <sub>21</sub>			f <sub>α</sub> MHz	C <sub>ob</sub> pF	
KT311V		12	2	12			5 150			E	3	15				15			2	75	12	
KT311YE	* GDP	12	2	12	50		10 150	3 70								15	250		<3	*75	12	
KT311ZH	* GDP	12	2	12	50		10 150	3 70								50	300		<3	*1h	12	
Γ-312A	* SPN	15	4	15	30		10 225	<3 115	E	2	20					10	h8.0		5	*5h	34	
Γ-312B	* SPN	30	4	30	30		10 225	<3 115	E	2	20					25	h1.2		5	*5h	34	
KT312G	SPN	15		15	30		225	150									*h1.4				34	
Γ-312V	* SPN	15	4	15	30		10 225	<3 115	E	2	20					50	h1.2		5	*5h	34	
GT313A	* GDP	15		12	10		3 100	85	E	5	5	30				20	300		<3	*75	12	
GT313B	* GDP	15		12	10		3 100	85	E	5	5	30				20	450	7	2	*40	12	
P314A	GAP	10		1			10 100	85								0.94	30		15			
P314B	GAP	10		1			5 100	85								0.94	60		10			
P314S	GAP	10		1			5 100	85								0.94	120		6			
KT315A	* SEN			25	100		1 150	1 120								20	250		7	*3h	30	
KT315B	* SEN			20	100		1 150	1 120								70	250		7	*5h	30	
KT315G	* SEN			35	100		1 150	1 120								70	250		7	*5h	30	
KT315V	* SEN			40	100		1 150	1 120								20	250		7	*5h	30	
ΓB315A	* SEN	30			30		<1 50	125	E	10	1					20	200		5	*5h	35	
ΓB315B	* SEN	30			30		<1 50	125	E	10	1					1h	200		5	*5h	35	
KT316A	* SEN	10	4	10	30	30	<1 150	100								20	*6h		3	*2h	34	
KT316B	* SEN	10	4	10	30	30	<1 150	100								40	*8h		3	*2h	34	
KT316D	* SEN	10	4	10	30	30	<1 150	100								60	*8h		3	*2h	34	
KT316G	* SEN	10	4	10	30	30	<1 150	100								20	*6h		3	*2h	34	
KT316V	* SEN	10	4	10	30	30	<1 150	100								40	*8h		3	*2h	34	
KT318A	* SPN	20	<4		20		<1 30	125	E							30	430		<4		35	
KT318B	* SPN	20	<4		20		<1 30	125	E							50	430		<4		35	
KT318D	* SPN	20	<4		20		<1 30	125	E							50	350		<5		35	
KT318G	* SPN	20	<4		20		<1 30	125	E							30	350		<5		35	
KT318V	* SPN	20	<4		20		<1 30	125	E							70	430		<4		35	
KT318YE	* SPN	20	<4		20		<1 30	125	E							70	350		<5		35	
KT319A	* SPN	5	<4	5	15		1 100	125								15	100		11		35	
KT319B	* SPN	5	<4	5	15		1 100	125								25	100		11		35	
KT319V	* SPN	5	<4	5	15		1 100	125								40	100		11		35	
GT320A	* GDP	20	3	12	150		10 200	4 90	E	1	10					20	80		8	*5h	16	
GT320B	* GDP	20	3	12	150		10 200	4 90	E	1	10					50	120		8	*5h	16	
GT320V	* GDP	20	3	9	150		10 200	4 90	E	1	10					80	160		8	*6h	16	
GT321A	* GDP	60	4	50	200		500 160	4 80	E	3	500					20	60		80	*6h	13	
GT321B	* G P	60	4	50	200		500 160	4 80	E	3	500					40	60		80	*6h	13	
GT321D	* GDP	45	2	30	200		500 160	4 80	E	3	500					40	60		80	*6h	13	
GT321G	* GDP	45	2	30	200		500 160	4 80	E	3	500					20	60		80	*6h	13	
GT321V	* GDP	60	4	40	200		500 160	4 80	E	3	500					80	60		80	*6h	13	
GT321YE	* GDP	45	2	30	200		500 160	4 80	E	3	500					80	60		80	*6h	13	
GT322A	* GAP	15		15	5		4 50	62	E	5	1	34		1	20	80		7	<2	*2h	31	
GT322B	* GAP	15		15	5		4 50	59	E	5	1	34		1	50	80		4	<2	*2h	31	
GT322D	* GAP	15		15	5		4 50	62	E	5	1	34		1	20	50		4	<2	*2h	31	
GT322G	* GAP	15		15	5		4 50	59	E	5	1	34		1	50	50		4	<3	*2h	31	
GT322V	* GAP	15		15	5		4 50	62	E	5	1	34		1	20	80		4	<3	*2h	31	
GT322YE	* GAP	15		15	5		4 50	59	E	5	1	34		1	50	50		4	<2	*2h	31	
P322	GDP	8		15			2 50	85								5.0	0.97	400	4			
GT323A	* GPN	20	2	10	1A		30 500	10 100	C	5	500					20	2h		30	*3h	12	
GT323B	* GPN	20	2	10	1A		30 500	10 100	C	5	500					40	2h		30	*3h	12	
GT323V	* GPN	20	2	10	1A		30 500	10 100	C	5	500					80	3h		30	*3h	12	
KT324A	* SEN	10	4	10	20		<1 15	100								20	800		<3		35	
KT324B	* SEN	10	4	10	20		<1 15	100								40	800		<3		35	
KT324D	* SEN	10	4	10	20		<1 15	100								20	600		<3		35	
KT324G	* SEN	10	4	10	20		<1 15	100								40	600		<3		35	
KT324V	* SEN	10	4	10	20		<1 15	100								80	800		<3		35	
KT324YE	* SEN	10	4	10	20		<1 15	100								60	600		<3		35	
KT325A	* SEN	15	4	10	30	30	<1 225	120	E	5	10					20	*8h		<3	*1h	36	
KT325B	* SEN	15	4	10	30	30	<1 225	120	E	5	10					20	*5h		<3	*1h	36	
KT325D	* SEN	15	4	10	30	30	<1 225	120	E	5	10					60	*8h		<3	*1h	36	

Group X—TRANSISTORS—Continued

Type No.	Kind	Maximum									Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum		Fig No.
		V <sub>CE0</sub> V	V <sub>EB0</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> mA	I <sub>E</sub> mA	I <sub>CB0</sub> μA	P <sub>C</sub> mW	K <sub>θ</sub> mW/°C	T <sub>A</sub> °C	Common	V <sub>C</sub> V	I mA	h <sub>11</sub> Ω	h <sub>12</sub> 10 <sup>-5</sup>	h <sub>22</sub> μmho	h <sub>21</sub>			f <sub>a</sub> *f <sub>r</sub> max MHz	C <sub>ob</sub> pF	
KT325G	* SEN	15	4	10	30	30	<1	225	120	E	5	10				50	*6h			<3	*1h	36
KT325V	* SEN	15	4	10	30	30	<1	225	120	E	5	10				50	*8h			<3	*1h	36
KT326A	* SPN	20	4	15	50		<1	250	120	C	2	10				20	*4h			5	*5h	31
KT326B	* SPN	20	4	15	50		<1	250	120	C	2	10				45	*4h			5	*5h	31
GT328	GEP	15			10			45								10	*2k			<2	*10	13
GT328A	* GFP	15	<1	15	10			50	*55	E	5	3				20	400			<2	*5	31
GT328B	* GFP	15	<1	15	10			50	*55	E	5	3				40	300			<2	*10	31
GT328V	* GFP	15	<1	15	10			50	*55	E	5	3				10	300			<2	*10	31
GT329A	* GPN	10	<1		15			20								15	12h	4		2	*15	37
GT329B	* GPN	10	<1		15			20								15	15h	5		3	*20	37
GT329V	* GPN	10	<1		15			20								15	20h	5		<4	*30	37
GT330A	* GPN	10	<2		20			50	1							30	5h	5		2	*30	37
GT330B	* GPN	10	<2		20			50	1							30	10h	5		3	*50	37
KT337A	* SEN	6	4	6	30			150	150	E	<1	10				30	*5h			6		31
KT337B	* SEN	6	4	6	30			150	150	E	<1	10				50	*6h			6		31
KT337V	* SEN	6	4	6	30			150	150	E	<1	10				70	*6h			6		31
GT338A	* GEM	10		25	1A			100	20											2		12
GT338B	* GEM	15		25	1A			100	20											2		12
GT338V	* GEM	5		10	1A			100	20											2		12
KT339A	* SEN	40	4	24	25			250	120	E	10	7				25	*h4.5			2	*50	31
KT339B	* SEN	20	4	12	25			250	120	E	10	7				25	*h4.5			2	*25	31
KT339D	* SEN	20	4	12	25			250	120	E	10	7				40	*h2.5			2		31
KT339G	* SEN	20	4	12	25			250	120	E	10	7				15	*h4.5			2	*25	31
KT339V	* SEN	40	4	24	25			250	120	E	10	7				15	*h2.5			2	*50	31
KT342A	* SEN			30	50			250	2	150	E	5	1			1h	*3h			8		31
KT342B	* SEN			25	50			250	2	150	E	5	1			2h	*3h			8		31
KT342D	* SEN			60	50			250	2	150	E	5	1			50	*3h			8		31
KT342G	* SEN			15	50			250	2	150	E	5	10			70	*3h			8		31
KT342V	* SEN			20	50			250	2	150	E	5	1			4h	*3h			8		31
KT342YE	* SEN			10	50			250	2	150	E	5	10			h1.4	*3h			8		31
KT343A	* SEN		4	17	50			150	2	150	E	<1	10			30	3h			6		31
KT343B	* SEN		4	17	50			150	2	150	E	<1	10			50	3h			6		31
KT343G	* SEN		4	17	50			150	2	150	E	1	10			20	3h			6		31
KT343V	* SEN		4	9	50			150	2	150	E	<1	10			30	3h			6		31
GT346A	* GEP	20	<1	15	10	11		60	1	90				4		10	700.*	5				
GT346B	* GEP	20	<1	15	10	11		60	1	90			27			10	600.*	6				*3
GT346V	* GEP	20	<1	15	10	11		60	1	90			27			10	780.*	5				
KT349A	* S P	20	4		40			200	150							20				6		12
KT349B	* S P	20	4		40			200	150							40				6		12
KT349V	* S P	20	4		40			200	150							1h				6		12
KT350A	* S P	20	4		600			200	150							15				15		12
KT351A	* S P	20	4		400			200	150							20				15		12
KT351B	* S P	20	4		400			200	150							50				15		12
KT352A	* S P	20	4		200			200	150							25				15		12
KT352B	* S P	20	4		200			200	150							70				15		12
P401	* GDP	10	1	10	20	10		5	100	2	85	E	5	5		5.0	16	30		10	*4k	13
GT402A	* GAP		<1	25	500			25	600	10	85	E	1	3		30	<0.1					32
GT402B	* GAP		<1	25	500			25	600	10	85	E	1	3		60	<0.1					32
GT402G	* GAP		<1	40	500			25	600	10	85	E	1	3		60	<0.1					32
GT402V	* GAP		<1	40	500			25	600	10	85	E	1	3		30	<0.1					32
P402	* GDP	10	1	10	20	10		5	100	2	85	E	5	5		5.0	16	60		10	*1k	13
GT403A	* GAP	45	20	30	12h			50	600	10	85	C	5	100		20	<0.1					28
GT403B	* GAP	45	20	30	12h			50	600	10	85	C	5	100		50	<0.1					28
GT403D	* GAP	60	30	45	12h			50	600	10	85	C	5	100		50	<0.1					28
GT403G	* GAP	60	20	45	12h			50	600	10	85	C	5	100		50	<0.1					28
GT403I	* GAP	80	20	60	12h			50	600	10	85	C	5	450		50	<0.1					28
GT403IU	* GAP	45	<1	30	12h			50	600	10	85	C	5	100		30	<0.1					28
GT403V	* GAP	60	20	45	12h			50	600	10	85	C	5	100		20	<0.1					28
GT403YE	* GAP	60	20	45	12h			50	600	10	85	C	5	450		30	<0.1					28
GT403ZH	* GAP	80	20	60	12h			50	600	10	85	C	5	100		20	<0.1					28

**Group X—TRANSISTORS—Continued**

Type No.	Kind	Maximum										Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum		Fig No.
		V <sub>CB0</sub> V	V <sub>EBO</sub> V	V <sub>CEO</sub> V	I <sub>C</sub> mA	I <sub>E</sub> mA	I <sub>CB0</sub> μA	P <sub>C</sub> mW	K <sub>θ</sub> mW/°C	T <sub>A</sub> °C	Common V <sub>C</sub> V	I mA	h <sub>11</sub> Ω	h <sub>12</sub> 10 <sup>-3</sup>	h <sub>22</sub> μmho	h <sub>21</sub>	f <sub>T</sub> max MHz	C <sub>ob</sub> pF			r <sub>b</sub> Ω	r <sub>c</sub> Ω	
P403	* GDP	10	1	10	20	10	5	100	2	85	E	5	5		5.0	30	*h1.2		10	*5h	13		
P403A	* GDP	10	1	10	20	10	5	100	2	85	E	5	5		5.0	16	*h1.2		10	*5h	13		
GT404A	* GAN	<1	<1	25	500		25	600	10	85	E	1	3			30	<0.1				32		
GT404B	* GAN	<1	<1	25	500		25	600	10	85	E	1	3			60	<0.1				32		
GT404V	* GAN	<1	<1	40	500		25	600	10	85	E	1	3			30	<0.1				32		
GT404G	* GAN	<1	<1	40	500		25	600	10	85	E	1	3			60	<0.1				32		
P404	GSP	5	5	<5	5		5	10	<1	85	E	3	<1		7.0	15	10		25		5		
P404A	GSP	5	5	<5	5		2	10	<1	85	E	3	<1		7.0	15	10		25		5		
P405	GSP	5	5	<5	5		5	10	<1	85	E	3	<1		7.0	20	30		15		5		
P405A	GSP	5	5	<5	5		2	10	<1	85	E	3	<1		7.0	20	30		15		5		
P406	GAP	6	6	6	5	5	6	30	2	85		6	1		2.0	20	10		20	150	17		
P407	GAP	6	6	6	5	5	6	30	2	85		6	1		2.0	20	20		20	150	17		
P408	G P	20	20	6	5	5	6	30	1	90	E	5	1	33	2.0	20	10	5	20	150	3		
P409	G P	20	20	6	5	5	6	30	1	90	E	5	1	33	2.0	20	20	5	20	150	3		
P410	* GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	10	30	*h2.0	5	4	*3h	6		
P410A	* GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	10	10	1h	5	4	*3h	6		
P411	* GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	10	30	*h4.0		4	*2h	6		
P411A	* GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	10	10	*h4.0		4	*2h	6		
P414	GDP	10	1	10	10		5	100	2	75					5.0	25	60		10	*1k	16		
P414A	GDP	10	1	10	10		5	100	2	75					5.0	60	60		10	*1k	16		
P414B	GDP	10	1	10	10		5	100	2	75					5.0	1h	60		10	*1k	16		
P415	GDP	10	1	10	10		5	100	2	75					5.0	25	h1.2		10	*5h	16		
P415A	GDP	10	1	10	10		5	100	2	75					5.0	60	h1.2		10	*5h	16		
P415B	GDP	10	1	10	10		5	100	2	75					5.0	1h	h1.2		10	*5h	16		
P416	* GDP	3	20	25	50		3	100	2	85	E	5	5		5.0	20	40		8	*5h	13		
P416A	* GDP	3	20	25			3	100	2	85	E	5	5		5.0	60	60		8	*5h	13		
P416B	* GDP	3	20	25			3	100	2	85	E	5	5		5.0	1h	80		8	*5h	13		
P417	* G P	<1	10	10	5		3	50	2	85	E	5	5		24	200			5	*4h	19		
P417A	* G P	<1	10	10	5		3	50	2	85	E	5	5		65	200			5	*4h	19		
P418	P		10		5		3	50	2		C	5	5		24	400							
P418A	P		10		5		3	50	2		C	5	5		65	400							
P418B	P		10		10		3	50	2		C	6	10		24	700							
P418G	GDP	10		8			3	50		85					8	400			200		6		
P418M	GDP	10		8			3	50		85					8	400			200		6		
P418V	P		10		10		3	50	2		C	6	10		65	700							
P420	GDP	40		12	25		10	100							6.0	12	*30		20	*5k	10		
P421	GDP	40		12	25		10	100							5.0	15	*30		15	*3k	10		
P422	* GDP	40		10	10		5	50		70	E	5	5		5.0	30	*60		10	*1k	16		
P422A	GDP	40		12	25		5	100							5.0	15	*60		10	*1k	16		
P423	* GDP	40		10	10		5	50		70	E	5	5		5.0	30	h1.2	10	10	*5h	16		
P423A	GDP	40		12	25		5	100							5.0	15	*h1.2			*5h	16		
P501	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	10	10		10		19		
P501A	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	15	10		10		19		
P502	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	20	30		10		19		
P502A	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	20	30		10		19		
P502B	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	20	30		10		19		
P502V	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	20	30		10		19		
P503	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	30	60		10		19		
P503A	SDN	20	1	20	10	3	50	150	1	150	E	10	3		3.0	30	60		10		19		
P504	SDN	30	2	30	10		2	150	2	120	E	10	5		2.0	10			7		14		
P504A	SDN	30	2	30	10		2	150	2	120	E	10	5		2.0	25			7		14		
P505	SDN	20	2	20	10		2	150	2	120	E	10	5		2.0	40			7	*1k	14		
P505A	SDN	20	2	20	10		2	150	2	120	E	10	5		2.0	20			7	*1k	14		
KT601	SDN	100	2	100	30			500		150						16			15	*6h	11		
KT601A	* SPN	100	2	100	30		500	500		150	E	20	<1		16	*40			15	*6h	11		
P601	* GDP	25	<1	25	15h		200	1W	500		C	10	500		20	20			10	200	*5h	20	
P601A	GDP	30	<1	30	1A		100	1W	500		C	10	500		40	20			10	200	*5h	20	
P601AI	* GDP	30	<1	30	15h		100	500	65	85	E	3	<1		40	30			150	*7h	18		
P601B	GDP	30	<1	25	1A		130	1W	500	85	C	10	500		80	20			10	200	*5h	20	
P601BI	* GDP	30	<1	30	15h		130	500	65	85	E	3	<1		80	30			250	*7h	18		

Group X — TRANSISTORS — Continued

Type No.	Kind	Maximum										Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum			Fig No.	
		V <sub>CE0</sub>	V <sub>EBO</sub>	V <sub>CEO</sub>	I <sub>C</sub>	I <sub>E</sub>	I <sub>CB0</sub>	P <sub>C</sub>	K <sub>θ</sub> mW/°C	T <sub>A</sub>	Common	V <sub>C</sub>	I	h <sub>11</sub>	h <sub>12</sub>	h <sub>22</sub>	h <sub>21</sub>	f <sub>T</sub> max			C <sub>ob</sub>	r <sub>h</sub>	r <sub>Ω</sub>		r <sub>e</sub>
		V	V	V	mA	mA	μA	mW	°C	V		mA	Ω	10 <sup>-5</sup>	μmho	MHz	pF								
P601I	* GDP	25	<1	25	15h		200	500	65	85	E	3	<1				20	*30		150	*7h	18			
KT602A	* SDN	120	5	100	75	80	70	850	20	120	E	10	10				20	150		4	*3h	33			
KT602B	* SDN	120	5	100	75	80	70	850	20	120	E	10	10				50	150		4	*3h	33			
KT602G	\$ SDN	80	5	70	75	80	70	850	20	120	E	10	10				50	150		4	*3h	33			
KT602V	* SDN	80	5	70	75	80	70	850	20	120	E	10	10				15	150		4	*3h	33			
P602	GDP	30	<1	30	1A		100	1W	500	85	C	10	500				40	20	10	200	*5h	20			
P602A	GDP	25	<1	25	1A		130	1W	500	85	C	10	500				80	20	10	200	*5h	20			
P602AI	* GDP	25	<1	25	15h		130	500	65	85	E	3	<1				80	*30		150	*7h	18			
P602I	* GDP	30	<1	30	15h		100	500	65	85	E	3	<1				40	*30		150	*7h	18			
KT603A	* SEN	30	3	30	300		10				C	2	150				10			15	*4h	13			
KT603B	* SEN	30	3	30	300		10				C	2	150				60			15	*4h	13			
KT603D	* SEN	10	3	10	300		1				C	2	150				20			15	*4h	13			
KT603G	* SEN	15	3	15	300		5				C	2	150				60			15	*4h	13			
KT603V	* SEN	15	3	15	300		5				C	2	150				10			15	*4h	13			
KT603YE	* SEN	10	3	10	300		1				C	2	150				60			15	*4h	13			
KT604A	SPN	300	5	250	200		50	800	25	150	E	40	20				10	*80		7		33			
KT604B	SPN	300	5	250	200		50	800	25	150	E	40	20				30	*80		7		33			
P604	GAP	45	15	45	200			400		70							10					15			
P604A	GAP	45	15	45	200			400		70							20					15			
P604B	GAP	45	15	45	200			400		70							40					15			
KT605A	* SEN	300	5	250	200		50	400	25	150	E	40	20				10	*80		7		18			
KT605B	* SEN	300	8	250	200		50	400	25	150	E	40	20				30	*80		7		18			
P605	* GDP	45	1	40	500		2m	500	65	85	E	3	500			20	20	30		130	*5h	18			
P605A	* GDP	45	1	40	500		2m	500	65	85	E	3	500			40	40	30		130	*5h	18			
KT606A	* SEN	60	4	60	400			2500	25	120								35.0		10	*10	42			
KT606B	* SEN	60	4	60	400			2500	25	120								35.0		10	*12	42			
P606	* GDP	35	<1	25	500		2m	500	65	85	E	3	500			20	20	30		130	*5h	18			
P606A	* GDP	35	<1	25	500		2m	500	65	85	E	3	500			40	40	30		130	*5h	18			
P607	* GDP	30	<2	25	300		300	1500	65	85	E	10	100				20	*60		50	*2h	18			
P607A	* GDP	30	<2	25	300		300	1500	65	85	E	10	100				60	*60		50	*2h	18			
KT608A	* SEN	60	4	60	400		10	500	*2h	120	E	5	200				20	20.0		15		13			
KT608B	* SEN	60	4	60	400		10	500	*2h	120	E	5	200				40	20.0		15		13			
P608	* GDP	30	<2	25	300		300	1500	65	85	E	10	100				40	90		50	*2h	18			
P608A	* GDP	30	<2	25	300		300	1500	65	85	E	10	100				80	90		50	*2h	18			
P608B	GDP	50	<2	40	300		300	1500	65	85	E	10	100				40	90		50	*2h	18			
P609	* GDP	30	<2	25	300		300	1500	65	85	E	10	100				40	120		50	*2h	18			
P609A	* GDP	30	<2	25	300		300	1500	65	85	E	10	100				80	120		50	*2h	18			
P609B	GDP	50	<2	40	300		300	1500	65	85	E	10	100				80	120		50	*2h	18			
KT611A	* SEN	200	3	180	100		200	800	65	150	E	40	20				10	6.0		5	*2h	33			
KT611B	* SEN	200	3	180	100		200	800	65	150	E	40	20				30	6.0		5	*2h	33			
KT611G	* SEN	180	3	150	100		200	800	65	150	E	40	20				30	6.0		5	*2h	33			
KT611V	* SEN	180	3	150	100		200	800	65	150	E	40	20				10	6.0		5	*2h	33			
GT701A	* GAP		15	55	12A		5000	50W	400	85	C	20	100				10	<0.1				23			
P701	* SDN	40	2	40	500	7h	100	1000	100	150	E	10	500				10	12.5				20			
P701A	* SDN	60	2	60	500	7h	100	1000	100	150	E	10	200				15	12.5				20			
P701B	* SDN	35	<3	35	500	7h	100	1000	100	150	E	10	200				30	20				20			
P702	* SDN	60	3	80	2A		5000	40W	400	120	C	10	1A				25	4.0				21			
P702A	* SDN	60	3	80	2A		2500	40W	400	120	C	10	1A				10	4.0				21			
GT703A	* GAP		30	35h			100	15W	300	85	C	1	100				30	<0.1				21			
GT703B	* GAP		30	35h			100	15W	300	85	C	1	100				50	<0.1				21			
KT801A	* SDN		<3	80	2A		10m	5W	50	150	E	5	1A				13	*10				33			
KT801B	* SDN		<3	60	2A		10m	5W	50	150	E	5	1A				20	*10				33			
KT802A	* SPN	150	3	130	5A		60m	50W	400	150	C	10	2A				15	*10				21			
KT803A	* SPN		4	60	10A		5m	60W		150							10	*20				21			
GT804A	* GDN			45	10A		10m	15W		65							20	10				18			
GT804B	GDN			55	10A		10m	15W		65							20	10				18			
GT804V	GDN			75	10A		10m	15W		65							20	10				18			
KT805A	* SDN		5	160	5A		60m	30W	300	150	C	10	2A				15	20				21			
KT805B	* SDN		5	135	5A		60m	30W	300	150	C	10	2A				15	20				21			
GT806A	* GAP	75	<2		20A		12m	30W	500	85							10	10				21			

Group X – TRANSISTORS – Continued

Type No.	Kind	Maximum									Typical		Maximum			Minimum		Typ NF	Min K <sub>M</sub>	Maximum		Fig No.
		V <sub>CB0</sub> V	V <sub>EBO</sub> V	V <sub>CE0</sub> V	I <sub>C</sub> mA	I <sub>E</sub> mA	I <sub>CB0</sub> μA	P <sub>C</sub> mW	K <sub>θ</sub> mW/°C	T <sub>A</sub> °C	Common	V <sub>C</sub> V	I mA	h <sub>11</sub> Ω	h <sub>12</sub> 10 <sup>-5</sup>	h <sub>22</sub> μmho	h <sub>21</sub>			f <sub>α</sub> *f <sub>T</sub> max MHz	C <sub>ob</sub> pF	
GT806B	* GAP	100	<2		20A		12m	30W	500	85						10	10				21	
GT806V	* GAP	120	<2		20A		12m	30W	500	85						10	10				21	
KT807A	* SEN		4	100	500		5m	10W	120	120						15	5				43	
KT807B	* SEN		4	100	500		5m	10W	120	120						30	5				43	
KT808A	* SEN		4	120	10A		3m	50W		100						10	7		500		21	
KT902A	SDN	65	5	110	5A		10m	P30W		120						15	*35				21	
KT903A	SPN	60	4	60	3A		10m	30W	300	115						15	*1h		180		21	
KT903B	* SPN	60	4	60	3A		10m	30W	300	115						40	*1h		180		21	
KT904A	* SPN	60	4	60	800		1500	5W	60	120							*3h		12	15n	42	
KT904B	* SPN	60	4	60	800		1500	5W	60	120							*3h		12	20n	42	
GT905A	* G P	75		75	3A			6W	20	85											41	
GT905B	* G P	60		60	3A			6W	20	85											41	
KT907A	* SPN		4	60	1A		3m	<14W	60	120							*3h		20	15n	42	
KT907B	* SPN		4	60	1A		3m	<14W	60	120							*3h		20	25n	42	
KT908A	* SPN		5	100	10A		25m	50W	500							8	*50				21	
KT908B	* SPN		5	60	10A		50m	50W		150						20					21	
KT909	*							1W									61.8					
KT911	*							1W									61.8					
KT913A	* SEN		<4	55	10h			3W	50	150						9	1k.*		6		39	
KT913B	* SEN		<4	55	16h			5W	100	150						9	1k.*		10		39	
KT913V	* SEN		<4	55	22h			10W	100	150						9	1k.*		12		39	
KT916A	* SEN		<4	55	40h			20W	220	160						9	1k.*		20		39	
S1A	GPP	40			10	10		100			E	20	<1			1.0	0.5		19		7	
S1B	GPP	40			6	10		50			E	20	<1			1.2	0.5		22		7	
S1D	GPP	40			6	10		50			E	20	<1			1.2	5.0		22		7	
S1G	GPP	40			6	10		50			E	20	<1			1.2	1.5		22		7	
S1V	GPP	40			10	10		100			E	20	<1			1.2	1.5		19		7	
S1YE	GPP	40			6	10		50			E	20	<1			1.2			15		7	
S2A	GPP	30			10	10		100			E	10	<1			1.2	0.5				7	
S2B	GPP	20			6	10		50			E	10	<1			1.5	1.5				7	
S2G	GPP	20			6	10		50			E	10	<1			1.5					7	
S2V	GPP	20			6	10		50			E	10	<1			1.5	5.0				7	
S3A	GPP	40			10	10		100			E	20	<1			1.0	0.5		19		8	
S3B	GPP	40			6	10		50			E	20	<1			1.2	0.5		22		8	
S3D	GPP	40			6	10		50			E	20	<1			1.2	5.0		22		8	
S3G	GPP	40			6	10		50			E	20	<1			1.2	1.5		22		8	
S3V	GPP	40			10	10		100			E	20	<1			1.2	1.5		19		8	
S3YE	GPP	40			6	10		50			E	20	<1			1.2	10.0		15		8	
S4A	GPP	30			6	10		100			E	10	<1			1.2	0.5				8	
S4B	GPP	20			6	10		50			E	10	<1			1.5	1.5				8	
S4G	GPP	20			6	10		50			E	10	<1			1.5	10.0				8	
S4V	GPP	20			6	10		50			E	10	<1			1.5	5.0				8	

Group X-A - INTEGRATED CIRCUITS

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.			
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out					
1DA191	* AGC	2	RTL	6.3	3.0		1			5	40k							51				
1GF191	* *	3		6.3	3.5	4.5	<3				1hk	1	3					400	51			
1GF192	* MVB	4	2	3.0		1.4	8					39	2					20 $\mu$	51			
1GF193	* MVB	2	2	3.0	5.5	1.4	4				1hk	1	3					5h $\mu$	51			
1IE201		30		12.6	4.0				15							10			51			
1IL101A-B*		6	RTL	3.0		2.4			8									5	450	51		
1IL131A	*	8		4.0	0.2	0.78	18	1h	<4									4	400	51		
1IL131B	*	8		4.0	0.2	0.78	25	2h	8									4	300	51		
1IL131V	*	8		4.0	0.2	0.78	38	3h	<6									4	200	51		
1IL132A	* DUPLICATE OF 1IL131A																					
1IL132B	* DUPLICATE OF 1IL131B																					
1IL132V	* DUPLICATE OF 1IL131V																					
1IL141A	* NOR	10	RTL	4.0	0.20	0.95	78	32	3									4	100	58		
1IL141B	* NOR	10	RTL	4.0	0.25	0.78		46	5									4	800	58		
1IL371	* HAD	2	9	ECL	5.0	1.45	0.95		220									5	8	63		
1IL373	* HAD	2	9	ECL	5.0	1.45	0.95		125									5	8	63		
K1IR071	* MNR	10		15	11.0	3.5														3	51	
1IR141A	* SHR	16		4.0	0.20	0.78		1h	<5									4	12h	58		
1IR141B	* SHR	16		4.0	0.20	0.78		2h	<7									4	15h	58		
1IR201	MOS	31		12.6	4.0				15									10		51		
1IR202	MOS	19		12.6	4.0				12									10		51		
K1IR441	* SHR	138	MOS	12.6	1.5	15.0	<2											10		53		
K1IR442	* SHR	543	MOS	12.6	1.5	15.0	<1											10		53		
1IR451	MOS	12		12.6					40			10	9							51		
1JAM351	* MEM	160	RTL	12.6	2.0	8.0			<2											51		
1JAM352	* MEM	128	RTL	12.6	2.0	8.0			<2											51		
1JAM881	* MEM																			51		
1KP191	* COM	1	RTL	3.0	3.0	0.35	3	70												51		
1KT011A	*	2	RTL	3.5		6.5	10					1	2							54		
1KT011B	*	2	RTL	3.5		6.5	10					1	2							54		
1KT011G	*	2	RTL	3.5		3.5	10					1	2							54		
1KT011V	*	2	RTL	3.5		3.5	10					1	2							54		
1KT241A,B*		2										1	2							54		
1KT461	* DCD	2	5	10.0			80	200												300	53	
1KT462ABV*	DCD	2	4	5.0																60	53	
1KT463ABV*	DCD	2	4	5.0																60	53	
1KT464ABV*	DCD	2	4	5.0																60	53	
1KT465ABV*	DCD	2	4	5.0																60	53	
1KT466ABV*	DCD	2	4	5.0																60	53	
1KT467ABV*	DCD	2	4	5.0																60	53	
1KT491		4	RTL	5.0			2h	100												50	51	
1KT491A	* SWI	4	RTL	3.3	1.6	0.65			100											100	51	
1KT491B	* SWI	4	RTL	5.5	1.6	0.65			100											100	51	
1KT491V	* SWI	4	RTL	15.1	1.6	0.65			100											100	51	
1LB041	NND	3	1	DTL	6.3				18											5	50	51
1LB042	NND	4	1	DTL	6.3	0.5	2.6		18								3	5		50	51	
1LB043	NND	5	1	DTL	6.3	0.5	2.6		18								3	5		50	51	
1LB044	NND	6	1	DTL	6.3	0.5	2.6		18								3	5		50	51	
1LB061,A	* NDR	10	TTL	5.0	0.3	2.3			18									3	10	40	51	
1LB0610	NDR	6	TTL	5.0	0.25	2.3			7									4	10	110	51	
1LB062,A	* NDR	10	TTL	5.0	0.25	2.3			7									3	10	100	51	
1LB063	NDR	10	TTL	5.0	0.3	2.3			18									2	10	40	51	
1LB064	NDR	10	TTL	5.0	0.25	2.3			7									2	10	100	51	

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Supply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out		
1LB065.A	* NDR	6	TTL	5.0	0.3	2.3			18						8	10	45	51	
1LB066.A	* NDR	6	TTL	5.0	0.25	2.3			7						8	10	110	51	
1LB067	NDR	6	TTL	5.0	0.3	2.3			18						6	10	45	51	
1LB068	NDR	6	TTL	5.0	0.25	2.3			7						6	10	110	51	
1LB069	NDR	6	TTL	5.0	0.3	2.3			18						4	10	45	51	
1LB091A	* NND	5	2	DTL	5.0	0.35	0.25			12					6	5	50	51	
1LB091B	* NND	5	2	DTL	5.0	0.35	0.25			12					6	4	50	51	
1LB091C	* NND	5	2	DTL	5.0	0.35	0.25			12					6	3	50	51	
1LB091V	* NND	5	2	DTL	5.0	0.35	0.25			12					6	2	50	51	
1LB092A	* NDR	4	4	DTL	5.0	0.4	2.5			19					6	16	50	51	
1LB092B	* NND	4	4	DTL	5.0	0.4	2.5			19					6	12	50	51	
1LB101	* NDR	6	RTL	3.0		2.4			13							5	450	51	
1LB102A-B*	NDR	3	RTL	3.0		2.4			13							5	450	51	
1LB103A-B*	NDR	4	RTL	3.0		2.4			13							5	450	51	
1LB104A-B*	NDR	5	RTL	3.0		2.4			13							5	450	51	
1LB105A-G*	NDR	7	RTL	3.0		2.4			13							25	450	51	
1LB106A-G*	NDR	1	4	RTL	3.0		2.4		13							25	450	51	
1LB107A-G*	NDR	1	5	RTL	3.0		2.4		13							25	450	51	
1LB108A-G*	NDR	1	6	RTL	3.0		2.4		13							25	450	51	
1LB109A-B*	NDR	7	RTL	3.0		2.4			8							5	450	51	
1LB1011A-B*	NDR	4	RTL	3.0		2.4			8							5	450	51	
1LB1012A-B*	NDR	5	RTL	3.0		2.4			8							5	450	51	
1LB1013A-B*	NDR	2	RTL	3.0		2.4			13							5	450	51	
1LB1014A-G*	NDR	1	3	RTL	3.0		2.4		8							25	450	51	
1LB111	NOR	2	RTL	4.0	0.2	0.95		1h	<1							4	400	62	
1LB112	NOR	2	RTL	4.0	0.2	0.95		2h	<1							4	400	62	
1LB113	NOR	2	RTL	4.0	0.2	0.95		3h	<1							4	100	62	
1LB131A	* NOR	8	RTL	4.0	0.2	0.78		18	<4							4	400	51	
1LB131B	* NOR	8	RTL	4.0	0.2	0.78		25	8							4	300	51	
1LB131V	* NOR	8	RTL	4.0	0.2	0.78		38	<9							4	200	51	
1LB132A	* NOR	8	RTL	4.0	0.2	0.78		18	1							4	400	51	
1LB132B	* NOR	8	RTL	4.0	0.2	0.78		25	4							4	300	51	
1LB132V	* NOR	8	RTL	4.0	0.2	0.78		3h	<3							4	200	51	
1LB133A	* NOR	8	RTL	4.0	0.5	2.2		18	7							50	400	51	
1LB133B	* NOR	8	RTL	4.0	0.5	2.2		25	11							50	300	51	
1LB133V	* NOR	8	RTL	4.0	0.5	2.2		38	17							50	250	51	
1LB134A	* NOR	6	RTL	4.0	0.5	2.2		1h	7							50	400	51	
1LB134B	* NOR	6	RTL	4.0	0.5	2.2		2h	11							50	300	51	
1LB134V	* NOR	6	RTL	4.0	0.5	2.2		3h	17							50	250	51	
1LB135A	* NOR	8	RTL	4.0	0.2	0.95		18	<1							4	400	51	
1LB135B	* NOR	8	RTL	4.0	0.2	0.95		25	2							4	300	51	
1LB135V	* NOR	8	RTL	4.0	0.2	0.95		38	1							4	200	51	
1LB136A	* DUPLICATE OF 1LB131A																		
1LB136B	* DUPLICATE OF 1LB131B																		
1LB136V	* DUPLICATE OF 1LB131V																		
1LB137A	* DUPLICATE OF 1LB132A																		
1LB137B	* DUPLICATE OF 1LB132B																		
1LB137V	* DUPLICATE OF 1LB132V																		
1LB138A	* DUPLICATE OF 1LB133A																		
1LB138B	* DUPLICATE OF 1LB133B																		
1LB138V	* DUPLICATE OF 1LB133V																		
1LB139A	* DUPLICATE OF 1LB134A																		
1LB139B	* DUPLICATE OF 1LB134B																		
1LB139V	* DUPLICATE OF 1LB134V																		
1LB1310A	* DUPLICATE OF 1LB135A																		

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.	
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out μA		Min Hz	Max Hz	No.	Exp		In	Out			
																				In
1LB1310B	*	DUPLICATE OF 1LB135B																		
1LB1310V	*	DUPLICATE OF 1LB135V																		
1LB141A	* NOR	8	RTL		0.2	0.78			1								4	500	58	
1LB141B	* NOR	8	RTL		0.2	0.78			2								4	400	58	
1LB142A	* OR	8	RTL	4.0	0.20	0.95			<3								10	1k	58	
1LB142B	* OR	8	RTL	4.0	0.20	0.95			4								10	800	58	
1LB143A	* NOR	5	RTL	4.0	0.20	0.95		1k	48								50	1k	58	
1LB143B	* NOR	5	RTL	4.0	0.20	0.95		2k	48								50	800	58	
1LB144A	NOR	8	RTL	4.0	0.15	0.95			2								4	500	58	
1LB144B	NOR	8	RTL	4.0	0.15	0.95			2								4	500	58	
1LB145A	NOR	8	RTL	4.0	0.15	0.95			2								10	500	58	
1LB145B	NOR	8	RTL	4.0	0.15	0.95			2								10	500	58	
1LB146A	NOR	10	RTL	4.0	0.15	0.95			2								50	500	58	
1LB146B	NOR	10	RTL	4.0	0.15	0.95			2								50	500	58	
1LB151	* OR	8	RTL																51	
1LB152	* OR	8	RTL																51	
1LB153	* OR	8	RTL		0.35	2.2											10		51	
1LB154	* NOR	6	RTL																51	
1LB211A	NDR	5	2 DTL	5.0	0.35	2.5			12								6	12	35 53	
1LB211B	NDR	5	2 DTL	5.0	0.35	2.5			12								6	10	35 53	
1LB211G	NDR	5	2 DTL	5.0	0.35	2.5			12								6	5	35 53	
1LB211V	NDR	5	2 DTL	5.0	0.35	2.5			12								6	8	35 53	
1LB212A	NDR	4	4 DTL	5.0	0.4	2.5			19								6	20	50 53	
1LB212B	NDR	4	4 DTL	5.0	0.4	2.5			19								6	16	50 53	
1LB251	MND	6	16 DTL	27.0		15			17			10	7				5	10	4k 51	
1LB301	* NDR	2	6 RTL	5.0	0.4	2.4			88								4	10	11 51	
1LB302	* NDR	4	RTL	5.0	0.4	2.4			44								8	10	12 51	
1LB303	* NDR	4	16 RTL	5.0	0.4	2.4			176								2	10	11 51	
1LB304	* NDR	3	12 DTL	5.0	0.4	2.4			132								3	10	11 51	
1LB306	* NDR	10	RTL	5.0					120								4	20	51	
1LB307	* NDR	2	6 RTL	5.0	0.4	2.4			88								4	5	11 51	
1LB308	* NDR	4	RTL	5.0	0.4	2.4			44								8	5	12 51	
1LB309	* NDR	4	16 RTL	5.0	0.4	2.4			176								2	5	11 51	
1LB3010	* NDR	3	12 DTL	5.0	0.4	2.4			132								3	5	<16 51	
1LB311	* NDR	8	RTL	5.0	2.3	2.4											10		61	
1LB312	* NDR	4	RTL	5.0	2.3	2.4											10		61	
1LB313	* NDR	16	RTL	5.0	2.3	2.4											10		61	
1LB314	* NDR	12	RTL	5.0	2.3	2.4											10		61	
1LB316	* NDR	10	RTL	5.0	2.3	2.4											10		61	
1LB317	* NDR	8	RTL	5.0	2.3	2.4											5		61	
1LB318	* NDR	4	RTL	5.0	2.3	2.4											5		61	
1LB319	* NDR	16	RTL	5.0	2.3	2.4											5		61	
1LB3110	* NDR	12	RTL	5.0	2.3	2.4											5		61	
1LB331	* NND	2	8 DTL	5.0	0.35	2.4			25								4	10	30 51	
1LB331A	NND	2	8 TTL	5.0	0.4	2.4			20								4	10	22 51	
1LB331B	NND	2	8 TTL	5.0	0.4	2.4			20								4	10	35 51	
1LB332	* NND	1	4 DTL	5.0	0.35	2.4			25								8	10	37 51	
1LB332A	NND	1	4 TTL	5.0	0.4	2.4			20								8	10	25 51	
1LB332B	NND	1	4 TTL	5.0	0.4	2.4			20								8	10	35 51	
1LB333	* NND	4	16 TTL	5.0	0.35	2.4			25								2	10	30 51	
1LB334	* NND	3	12 TTL	5.0	0.35	2.4			25								3	10	30 51	
1LB336	* NND	10	TTL	5.0	0.35	2.4			41								4	10	42 51	
1LB337	* NND	6	TTL	5.0	0.35				41								4		51	
1LB338	* NND	12	TTL	5.0	0.35				25								2		51	
1LB339	* NND	2	8 TTL	5.0	0.35	2.4			25								4	5	30 51	



Group X-A - INTEGRATED CIRCUITS - Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Supply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp.		In	Out		
1LB3310	* NND	1	4	TTL	5.0	0.35	2.4			25					8	5	37	51	
1LB3311	* NND	4	16	TTL	5.0	0.35	2.4			25					2	5	30	51	
1LB3312	* NND	3	12	TTL	5.0	0.35	2.4			25					3	5	30	51	
1LB3313	* NND		10	TTL	5.0	0.35	2.4			41					4	5	58	51	
1LB3315	* NND		6	TTL	5.0	0.35				41					4			51	
1LB3316	* NND		12	TTL	5.0	0.35				25					2			51	
1LB341	NOR			TTL	5.0					2						10	100	51	
1LB341A	* NND		20	TTL	5.0	0.3	2.3			8						10	100	51	
1LB341B	* NND		20	TTL	5.0	0.3	2.3			8						10	60	51	
1LB342	NOR			TTL	5.0					2						10	100	51	
1LB342A	* NND		15	TTL	5.0	0.3	2.3			6						10	100	51	
1LB342B	* NND		15	TTL	5.0	0.3	2.3			6						10	60	51	
1LB361	* NND	2	8	TTL	5.0	0.4	2.4			8						10	60	51	
1LB362	* NND	1	4	TTL	5.0	0.4	2.4			4						10	85	51	
1LB363	* NND	4	16	TTL	5.0	0.4	2.4			16						10	60	51	
1LB364	* NND	3	12	TTL	5.0	0.4	2.4			12						10	60	51	
1LB366	* NND	2	8	TTL	5.0	0.4	2.4			8						5	60	51	
1LB367	* NND	1	4	TTL	5.0	0.4	2.4			4						5	85	51	
1LB368	* NND	4	16	TTL	5.0	0.4	2.4			16						5	60	51	
1LB369	* NND	3	12	TTL	5.0	0.4	2.4			12						5	60	51	
1LB371	* NOR	2	7	ECL	5.0	1.45	0.95			70						15	6	63	
1LB372	* NOR	2	11	ECL	5.0	1.45	0.95			115						15	6	63	
1LB375	* NOR	2	11	ECL	5.0	1.45	0.95			250						100	7	63	
1LB376	* NOR	2	9	ECL	5.0	1.45	0.95			70						15	6	63	
1LB378	* NOR	2	7	ECL	5.0	1.45	0.95			70						15	6	63	
1LB379	* NOR	2	11	ECL	5.0	1.45	0.95			210						15	6	63	
1LB3710	* NOR	2	11	ECL	5.0	1.45	0.95			115						15	6	63	
1LB3716	* NOR	2	11	ECL	5.0	1.45	0.95			95						100	7	63	
1LB3717	* NOR	2	9	ECL	5.0	1.45	0.95			165						15	6	63	
1LB3718	* NOR	2	9	ECL	5.0	1.45	0.95			70						15	6	63	
1LB3719	* NOR	2	7	ECL	5.0	1.45	0.95			160						15	6	63	
1LB381	ONR		10	TTL	5.0					110						15	3	63	
1LB391	ONR		6	TTL	5.0					40						9	15	10	51
1LB392	ONR		6	RTL	5.0					40						9	15	10	51
1LB471	MNR	6	16	DTL	12.6	2.0	13.9			25						10			51
1LB472	MNR	8	15	DTL	12.6	2.0	14			45		10	6			10	$\mu$		51
1LB551	* NDR	2	8	TTL	5.0	0.45	2.4			25						4	10	37	63
1LB552	* NDR	1	4	TTL	5.0	0.45	2.4			25						8	10	42	63
1LB553	* NDR	4	16	TTL	5.0	0.45	2.4			25						2	10	37	63
1LB554	* NDR	3	12	TTL	5.0	0.45	2.4			25						3	10	37	63
1LB556	* NDR		10	TTL	5.0	0.45	2.4			40						4	30	50	63
1LB557	* NDR		6	TTL	5.0	0.4				40									63
1LB558	* NDR		12	TTL	5.0	0.4				25									63
1LB561A	* NND		3		5.0	0.3	2.5			17						10	6	60	51
1LB561B	* NND		3		5.0	0.3	2.5			17						10	4	60	51
1LB561V	* NND		3		5.0	0.3	2.5			17						10	2	60	51
1LB562	* NND		7		5.0	0.3	2.5			25						10	16	30	51
1LB563A	* NND		12		5.0	0.3	2.5			34						10	6	60	51
1LB563B	* NND		12		5.0	0.3	2.5			34						10	4	60	51
1LB563V	* NND		12		5.0	0.3	2.5			34						10	2	60	51
1LB564A	* ORD		12		5.0	0.3	2.5			34						4	6	60	51
1LB564B	* ORD		12		5.0	0.3	2.5			34						4	4	60	51
1LB564V	* ORD		12		5.0	0.3	2.5			34						4	2	60	51
1LB581	* NND		1	4	TTL	5.0	0.3	2.4		15						10			63
1LB582	* NND		1	4	TTL	5.0	0.3	2.4		15						5			63

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.		
		Diodes	Xistors		Supply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out				
1LB583	* NND	1	4	TTL	5.0	0.3	2.4			15						10		63			
1LB584	* NND	1	4	TTL	5.0	0.3	2.4			15						10		63			
1LB586	* NND	1	4	TTL	5.0	0.3	2.4			15						10		63			
1LB587	* NND	1	4	TTL	5.0	0.3	2.4			15						5		63			
1LB588	* NND	1	4	TTL	5.0	0.3	2.4			15						5		63			
1LB589	* NND	1	4	TTL	5.0	0.3	2.4			15						5		63			
K1LB721	* ONR		22	MOS	27.0	1.0	20.0			80			15	6		15	600	63			
K1LB722	* ONR		17	MOS	27.0	1.0	20.0			45			15	6		15	600	63			
K1LB781	* ONR		22	MOS	27.0	1.0	20.0			80			15	6		15	60	51			
K1LB782	* ONR		17	MOS	27.0	1.0	20.0			45			15	6		15	600	51			
1LI041	AND	3			6.3					6								51			
1LI042	AND	4			6.3					6								51			
1LI043	AND	5			6.3					6								51			
1LI044	AND	8			6.3					6								51			
1LI045	AND	10			6.3					6								51			
1LI091	* AND	8	5	DTL	5.0		2.5									6	12	52	51		
K1LI721	* AND		28	MOS	27.0	1.0	20.0			160			15	6		15	600	63			
K1LI781	* AND		28	MOS	27.0	1.0	20.0			160			15	6		15	600	51			
1LL201	MOR		14	TTL	12.6	4.0	13			8						10	800	51			
1LN101A-B*	INV		1	RTL	3.0		2.4			13						5	450	51			
1LN102A-G*	INV	1	2	RTL	3.0		2.4			13						25	450	51			
1LN103A-B*	INV		2	RTL	3.0		2.4			8						5	450	51			
1LP061,A	* OR		3	TTL	5.0											8	10	6	51		
1LP062,A	* OR		3	TTL	5.0											8	10	10	51		
1LP063	OR		3	TTL	5.0											6		6	51		
1LP064	OR		3	TTL	5.0											6		10	51		
1LP065,A	* OR		4	TTL	5.0											4		6	51		
1LP066,A	* OR		4	TTL	5.0											4		10	51		
1LP067	OR		4	TTL	5.0											3		6	51		
1LP068	OR		4	TTL	5.0											3		10	51		
1LP091	*		6		25					<2									5	51	
1LP131A	* HAD		8	RTL	4.0	0.2	0.78			1h	<4					4	400	51			
1LP131B	* HAD		8	RTL	4.0	0.2	0.78			2h	8					4	300	51			
1LP131V	* HAD		8	RTL	4.0	0.2	0.78			3h	<6					4	200	51			
1LP141	OR		8																500	58	
1LP141A	* NDR		8	RTL		0.2	0.78			1h	<3					4	500	58			
1LP141B	* NDR		8	RTL		0.2	0.78			2h	4					4	500	58			
1LP142	OR		8		4.0	0.15	0.95			2						4	500	58			
1LP142A	* NOR		8	RTL		0.2													58		
1LP142B	* NOR		8	RTL		0.2													58		
1LP143A	* NOR		8	RTL	4.0	0.2	0.78			1						4	1k	58			
1LP143B	* NOR		8	RTL	4.0	0.2	0.78			<2						4	800	58			
1LP144A	* ONR		8	RTL	4.0	0.2	0.78			17	<3					4	1k	58			
1LP144B	* ONR		8	RTL	4.0	0.2	0.78			34	4					4	800	58			
1LP145A	* OR		8	RTL	4.0	0.2													58		
1LP145B	* OR		8	RTL	4.0	0.2													58		
1LP151	* NOR		8	RTL		0.2				5h						4	100	51			
1LP201	MOS		8							12									51		
1LP211		6			25					<2									5	53	
1LP251	MOS	8	8		27					17									6 $\mu$	51	
1LP281	* OR	8		RDL	4.5															51	
1LP301	* OR		4	RTL	5.0															51	
1LP311	* OR		4	RTL	5.0	2.3	2.4										10			61	
1LP331	* OR		4	RTL	5.0											4			5	51	
1LP333	* OR		2	RTL	5.0															5	51

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out		
1LP371	* OR	6	ECL		0.80													63	
1LP372	* OR	6	ECL		0.82													63	
1LP391		6													6			51	
1LP421	MOS	10							2							15		51	
1LP471	MOS	8	18	TTL	12.6	2.0	14		25			10	6			10	1 $\mu$	51	
1LP551	* OR	4			5.0													5 63	
1LP553	* OR	2			5.0													5 63	
1LP561	* AND	8														5		51	
1LR061, A	* ANR	7	TTL	5.0	0.3	2.3			24						4	10	45	51	
1LR062, A	* ANR	7	TTL	5.0	0.25	2.3			10						4	10	110	51	
1LR063	ADR	7	TTL	5.0	0.3	2.3			24						4	10	45	51	
1LR064	ADR	7	TTL	5.0	0.25	2.3			10						4	10	110	51	
K1LR071	* MNR	50		15	11.0	2.0												3 51	
1LR271	ADR	7	1	DTL	3.0				30		12M				4	6	30	51	
1LR281A	* OR	20	5	DTL	3.0	0.5	2.4		6		5M				4	6		51	
1LR281B	* OR	20	5	DTL	3.0	0.5	2.4		6		10M				4	6		51	
1LR301	* OR	2	9	RTL	5.0	0.4	2.4		100						2	10	<14	51	
1LR303	* OR	1	10	RTL	5.0	0.4	2.4		70						3	10	<14	51	
1LR304	* OR	1	5	RTL	5.0	0.4	2.4		50						4	10	<14	51	
1LR305	* OR	2	9	RTL	5.0	0.4	2.4		100						2	5	<14	51	
1LR306	* OR	1	10	RTL	5.0	0.4	2.4		70						3	5	<14	51	
1LR307	* OR	1	5	RTL	5.0	0.4	2.4		50						4	5	<14	51	
1LR311	* ANR	12	RTL	5.0	2.3	2.4									10			61	
1LR313	* ANR	10	RTL	5.0	2.3	2.4									10			61	
1LR314	* ANR	8	RTL	5.0	2.3	2.4									5			61	
1LR315	* ANR	12	RTL	5.0	2.3	2.4										5		61	
1LR316	* ANR	10	RTL	5.0	2.3	2.4										5		61	
1LR317	* ANR	8	RTL	5.0	2.3	2.4										5		61	
1LR331	* ADR	2	12	RTL	5.0	0.35	2.4		35						4	10	35	51	
1LR331A	ADR	2	12	DTL	5.0	0.4	2.4		20							10	28	51	
1LR331B	ADR	2	12	DTL	5.0	0.4	2.4		20						4	10	40	51	
1LR333	* ADR	1	10	RTL	5.0	0.35	2.4		55						10		37	51	
1LR334	* ANR	8	8	DTL	5.0	0.35	2.4		55						10		33	51	
1LR335	* ADR	2	12	RTL	5.0	0.35	2.4		35						4	5	35	51	
1LR336	* ADR	1	10	RTL	5.0	0.35	2.4		55							5		51	
1LR338	* ANR	8	8	DTL	5.0	0.35	2.4		55							5	33	51	
1LR341	ADR			DTL	5.0				2						10	100		51	
1LR341A	* ADR	14	RTL	5.0	0.3	2.3			5						10	100		51	
1LR341B	* ADR	14	RTL	5.0	0.3	2.3			5						10	60		51	
1LR342	ADR			DTL	5.0				2						10	100		51	
1LR342A	* ADR	11	RTL	5.0	0.3	2.3			4						10	100		51	
1LR342B	* ADR	11	RTL	5.0	0.3	2.3			4						10	60		51	
1LR361	* ADR	2	12	DTL	5.0	0.4	2.4		11						10	80		51	
1LR363	* ANR	1	10	DTL	5.0	0.4	2.4		11						10	120		51	
1LR364	* ANR	1	6	DTL	5.0	0.4	2.4		<6						10	80		51	
1LR365	* AOR	2	12	DTL	5.0	0.4	2.4		11							5	80	51	
1LR366	* ANR	1	10	DTL	5.0	0.4	2.4		11							5	120	51	
1LR367	* ANR	1	6	DTL	5.0	0.4	2.4		<6							5	80	51	
1LR421	MOS	15	TTL	12.6	3.0	10			36						15	30	500	51	
1LR551	* ADR	1	6		5.0	0.45	2.4		34						2	10	42	63	
1LR553	* ADR	1	10		5.0	0.45	2.4		50						2	10	42	63	
1LR581	* ANR	1	5		5.0	0.3	2.4		15						10			63	
1LR583	* ANR	1	10		5.0	0.3	2.4		15						10			63	
1LR584	* ANR	1	6		5.0	0.3	2.4		15						10			63	
1LR585	* ANR	1	5		5.0	0.3	2.4		15						5			63	

Group X-A - INTEGRATED CIRCUITS - Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms	Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Supply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz			In	Out		
													No.	Exp				
1LR586	* ANR	1	10		5.0	0.3	2.4			15					5		63	
1LR587	* ANR	1	6		5.0	0.3	2.4			15					5		63	
K1LR721	* ANR	22	MOS	27.0	1.0	20.0				80		15	6		15	600	63	
K1LR781	* ANR	22	MOS	27.0	1.0	20.0				80		15	6		15	600	51	
1LS131A	* NOR		8		4.0		0.78	1h		<4					4	400	51	
1LS131B	* NOR		8		4.0		0.78	2h		8					4	300	51	
1LS131V	* NOR		8		4.0		0.78	3h		<6					4	200	51	
1LS132A	* DUPLICATE OF 1LS131A																	
1LS132B	* DUPLICATE OF 1LS131B																	
1LS132V	* DUPLICATE OF 1LS131V																	
1LS151	* OR		8	RTL													51	
1LS271	ADR	7	2	DTL	3.0					30		12M			4	6	30	51
1LS281A	* OR	20	4	DTL	3.0	0.5	2.4			60		5M			6	6	51	
1LS281B	* OR	20	4	DTL	3.0	0.5	2.4			60		10M			6	6	51	
1MA191A,B	* AGC		4	RTL	6.3	0.5											51	
1ND041			3		4.5	0.85											51	
1ND042			4		4.5	0.85											51	
1ND043			6		4.5	0.85											51	
1ND044			8		4.5	0.85											51	
K1NT291A	* DMP		2					10		15				60			62A	
K1NT291B	* DMP		2					10		15				90			62A	
K1NT291D	* DMP		2					10		15				60			62A	
K1NT291G	* DMP		2					10		15				3h			62A	
K1NT291I	* DMP		2					10		15				3h			62A	
K1NT291V	* DMP		2					10		15				2h			62A	
K1NT291YE	* DMP		2					10		15				90			62A	
K1NT291ZH	* DMP		2					10		15				2h			62A	
K1NT591A	* DMP		2				10.0			50				60			54	
K1NT591B	* AMP		2				10.0			50				1h			54	
K1NT591D	* AMP		2				10.0			50				60			54	
K1NT591G	* AMP		2				10.0			50				3h			54	
K1NT591I	* AMP		2				10.0			50				3h			54	
K1NT591V	* AMP		2				10.0			50				2h			54	
K1NT591ZH	* AMP		2				10.0			50				2h			54	
K1NT591YE	* AMP		2				10.0			50				1h			54	
K1NT661A	* SWI		4		5.0												51	
1PP191	*		4	TTL	10.0			10	10			20	2M	15	2		51	
1SV191	* AMP	2	2	RTL	6.3	6.3	0.25	<3						5hk			51	
1TK101A-B	* FLP	4	3	DTL	3.0		2.4			8					4		51	
1TK102A-D	* FLP	6	5		3.0		2.4			8					20		51	
1TK191A,B	* SWI	3	2	DTL	5.0	4.6	3.5	8							4		51	
1TK251	MOS	6	18	TTL	27.0	2.0	15			17		1	7		5	10	4 $\mu$	51
1TK471	MOS	8	22	TTL	12.6	2.0	14			15			7				51	
1TR061,A	* FLP		8	TTL	5.0	0.3	2.3			36					3	10	40	51
1TR062,A	* FLP		8	TTL	5.0	0.3	2.3			14					3	10	100	51
1TR063	ADR		10	TTL	5.0	0.3	2.3			36					2	10	40	51
1TR064	ADR		10	TTL	5.0	0.3	2.3			14					2	10	100	51
1TR131A	* NOR		8	RTL	4.0	0.2	0.78	18	1h	<4					4	400	51	
1TR131B	* NOR		8	RTL	4.0	0.2	0.78	25	2h	8					4	300	51	
1TR131V	* NOR		8	RTL	4.0	0.2	0.78	38	3h	<6					4	200	51	
1TR132A	* DUPLICATE OF 1TR131A																	
1TR132B	* DUPLICATE OF 1TR131B																	
1TR132V	* DUPLICATE OF 1TR131V																	
1TR141A	* FLP		8	RTL	4.0	0.20	0.78	1h		2					4	1k	58	
1TR141B	* FLP		8	RTL	4.0	0.20	0.78	2h		<4					4	800	58	

Group X-A - INTEGRATED CIRCUITS - Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Supply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min H <sub>z</sub>	Max H <sub>z</sub>	No.	Exp		In	Out		
1TR151	* OR		8	RTL		0.2		5h								4	100	51	
1TR371	* FLP	2	17	ECL	5.0	1.45	0.95		280							100	7	63	
1TR373	* FLP	2	17	ECL	5.0	1.45	0.95		185							100	7	63	
1TR421	MOS		22	TTL	12.6	3.0	10		40									500	51
K1TR721	* FLP	28	MOS	27.0	1.0	29.0			80			15	6			15	600	63	
K1TR781	* FLP	28	MOS	27.0	1.0	20.0			80			15	6			15	600	51	
K1TSH181A	* FLP	4	RTL	3.0		3.0	20 $\mu$											63	
K1TSH181B	* FLP	4	RTL	4.0		4.0	40 $\mu$											63	
K1TSH181D	* FLP	4	RTL	6.3		6.3	20 $\mu$											63	
K1TSH181G	* FLP	4	RTL	6.3		6.3	40 $\mu$											63	
K1TSH181V	* FLP	4	RTL	4.0		4.0	20 $\mu$											63	
1TSH191	* SCH	4	RTL	3.0	1.5	2.0	<4				1hk	8	2					51	
K1UB181A	* AMP	4	RTL	6.3										900				63	
K1UB181B	* AMP	4	RTL	6.3										13h				63	
K1UB181G	* AMP	4	RTL	12.6										20h				63	
K1UB181V	* AMP	4	RTL	12.6										15h				63	
1UB191	* AMP	2		6.3	1.0	3.0	6					1	3	5				500	51
1UE201	MMP	26		12.6	4.0	13			70							10	800	51	
1UI461	AMP	10		10.0					100									57	
1UI461A,B*	AMP	9		5.0					100									100	53
1UI462	AMP	2	4		20.0			3h										200	57
1UI462A,B*	AMP	12		5.0					150									100	53
1UI463A,B*	AMP	12		5.0					150									100	53
1UI464A,B*	AMP	14		5.0					150									100	53
K1US181A	* AMP	2	RTL	6.3										250				63	
K1US181B	* AMP	2	RTL	6.3										400				63	
K1US181D	* AMP	2	RTL	12.6										800				63	
K1US181G	* AMP	2	RTL	12.6										500				63	
K1US181V	* AMP	2	RTL	12.6										350				63	
K1US182A	* AMP	3	RTL	4.0										15				63	
K1US182B	* AMP	3	RTL	6.3										25				63	
K1US182V	* AMP	3	RTL	6.3										40				63	
1US191	* AMP	1		6.3	0.3	0.75	1.				5	1hk	5	3	3			51	
1US192	* AMP	2		6.3	0.5	0.8	<3				5	1hk			10			51	
1US221A	* AMP	2		6.3		3.8					0	7hk			8h			53	
1US221B	* AMP	2		6.3		3.8					0	7hk			1k			53	
1US221D	* AMP	2	RTL	12.6		9.6							15	2	2k			53	
1US221G	* AMP	2	RTL	12.6		9.6							15	2	1k			53	
1US221V	* AMP	2		12.6		9.6					0	7hk			1k			53	
1US222A	* AMP	3		4.0	0.1						0	8M	1	3	40			53	
1US222B	* AMP	3		6.3	0.1						0	8M	1	3	60			53	
1US222V	* AMP	3		6.3	0.05						0	8M	1	3	90			53	
1US231A	* LFA	8	RTL	6.3	0.5		15	100	20	1hk	10	3	5h					51	
1US231B	* LFA	8	RTL	6.3	0.5		15	100	20	1hk	10	3	3h					51	
1US231V	* LFA	8	RTL	6.3	0.5		15	100	20	1hk	10	3	1h					51	
1US481	AMP	5		3.0					50		50M							53	
K1US671	* MMP	3		12.0			5	60			1hk			13h				54	
K1US731A,B*	LFA	15		12.6							20k	10	3	2h				53	
K1US731V	* LFA	15		12.6							20k	10	3	80				53	
1US732A,B*	LFA	8	RTL	12.6							30	20k	1	3	50			53	
1US732V	* LFA	8	RTL	12.6							30	20.	1	3	20			53	
1US771	* AMP	5	6	RTL	12.6		7					40	3	1h				51	
K1UT181A	* AMP	4	RTL	4.0			10 $\mu$							15				63	
K1UT181B	* AMP	4	RTL	6.3			10 $\mu$							22				63	
K1UT181V	* AMP	4	RTL	6.3			20 $\mu$							22				63	

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out		
1UT191	* AMP	2	RTL	6.3	0.3	0.7	2			5	2hk	15	2	4				51	
1UT221A	* AMP	4	RTL	4.0	2.0			10		0	2M	6	3	26				53	
1UT221B	* AMP	4	RTL	4.0	6.3	3.0		10		0	2M	6	3	40				53	
1UT221G	AMP	4		6.3						0	2M			22				53	
1UT221V	* AMP	4	RTL	6.3	3.0		<1			0	2M	3	3	40		15		53	
1UT321	AMP	24		12.6					120	0	2M	15	4					53	
1UT321A	* OPA	1	9 DTL	6.3				6				4	3	4k				63	
1UT321B	* OPA	1	9 DTL	12.6				12				4	3	10k				63	
1UT322A,B	* OPA	1	24 DTL	12.6		10.0	8							1hk				63	
1UT401A	* OPA	1	9 DTL	6.3				6				4	3	4k				53	
1UT401B	* AMP	1	9	12.6				12				4	3	10k				53	
1UT402A,B	* OPA	2	24 DTL	12.6		10.0	8							1hk				53	
1UT771	* AMP	2	5 DTL	6.3				3						<40				1	
1UYE191	* AMP	4		3.0	1.5	0.6	<2			20	5hk	30	3					51	
2DA181	* DET	1	1 DTL	6.3					14		10k						4 $\mu$	57	
2DA351	* AMP	3	3 RTL	6.3					15	5hk	25M	5	2					55	
2DS191	LIM	4		5.0						500	1M							55	
K2DS241	* DET	2	RTL															65	
2DS351	* DET	3	3 RTL	6.3					30	5hk	25M	5	2	30				55	
2FP201	FIL																	55	
2GF181	* MVB	6	2	63.0					86	50	6hk						4 $\mu$	57	
2GF182	* MVB	6	2	6.3	6.0	2.8			76		2hk						300	57	
2GF201	MVB	2		7.5				2										55	
2GS191	OSC	1		5.0				2			70M							55	
2GS192	OSC	1		5.0				2			15M							55	
2GS193	OSC	1		5.0				2			15M							55	
K2GS371	* REG	5	RTL	9.0			30		300									63	
2ID231	*	25		4.0	1.45	0.85			171							4	10	15	64
2IL071		16		3.0	0.35	0.65			18							3	200	60	
2IL072		16		3.0	0.35	0.65			18							4	200	60	
2IL073		16		3.0	0.35	0.65			18							5	200	60	
2IL231	*	30		4.0	1.45	0.85			250							10	35	64	
2IL401B	* HAD			5.0	0.3	2.5			360							4	190	65	
2IL401V	* HAD			5.0	0.3	2.5			360							2	190	65	
2IR111		12	TTL	3.0	0.35	0.8			35							4	400	56	
2IR112		12	TTL	3.0	0.35	0.8			35							6	400	56	
2IR161	*	12	RTL	3.0	0.30	2.3			40						10	6	500	56	
2IR162	*	12	RTL	3.0	0.30	2.3			40						10	6	500	56	
2IR401A	* BRG	20		5.0	0.3	2.5			420							6	250	65	
2IR401B	* BRG	20		5.0	0.3	2.5			420							4	250	65	
2IR402A	* BRG			5.0	0.3	2.5			380							6	105	65	
2IR402B	* BRG			5.0	0.3	2.5			380							4	105	65	
2IR403A	* BRG			5.0	0.3	2.5			430							6	105	65	
2IR403B	* BRG			5.0	0.3	2.5			430							4	105	65	
2IS401A	* HAD			5.0	0.3	2.5			300							6	270	65	
2IS401B	* HAD			5.0	0.3	2.5			300							4	270	65	
2IYE111		15		3.0	0.35	0.8			30							3	300	56	
2IYE112		15		3.0	0.35	0.8			30							5	300	6	
2IYE161	* COU	15	RTL	3.0	0.30	2.3			35							6	500	56	
2IYE162	* COU	15	RTL	3.0	0.30	2.3			35							6	500	56	
2IYE231	*	29		4	0.145	0.85			185							10	50	64	
2IYE401A	* COU			5.0	0.3	2.5			250							6	250	65	
2IYE401B	* COU			5.0	0.3	2.5			250							4	250	65	
2KD281	* COM	8	2 DTL	6.3		1.7			100									20	57
2KD282	* COM	14	RDL	6.3		1.25	<3											20	57

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out		
2KD351	* COM	3	RTL	6.3			<3		20									55	
K2KT241	* COM	6	RTL	12.0			15				6M							65	
2KT281	SWI	8	2 DTL	6.3	0.5	2.5											20	57	
2LB011	* NND	4	RTL	4.0	1.3	0.3			15						6	2	100	58	
2LB012	* NOR	4	RTL	4.0	1.3	0.3			30						6	1	100	58	
2LB013	* NOR	4	RTL	4.0	1.3	0.3			30						6	1	100	58	
2LB014	* NND	6	RTL	4.0	1.3	0.3			25						6	2	100	58	
2LB015	* NND	5	RTL	4.0	1.3	0.3			20						6	2	100	58	
2LB016	* NOR	5	RTL	4.0	1.3	0.3			38						6	1	100	58	
2LB017	* NOR	5	RTL	4.0	1.3	0.3			38						6	1	100	58	
2LB041	* NDR	2	8 TTL	4.0	2.4	0.3			68						10	10	100	61	
2LB042	* NDR	2	6 TTL	4.0	2.4	0.3			56						5	10	150	61	
2LB051	NOR	8	RTL	4.0	0.3	1.4			50							2	250	61	
2LB052	* NOR	4	RTL	4.0	0.3	1.4			25							2	250	61	
2LB053	* NOR	4	RTL	4.0	0.3	1.4			25							3	250	61	
2LB071	NOR	12	RTL	3.0	0.35	0.65			18						6	3	200	60	
2LB072	NOR	12	RTL	3.0	0.35	0.65			18						6	4	200	60	
2LB073	NOR	12	RTL	3.0	0.35	0.65			18						6	5	200	60	
2LB074	NOR	16	RTL	3.0	0.35	0.65			19						6	3	200	60	
2LB075	NOR	16	RTL	3.0	0.35	0.65			19						6	4	200	60	
2LB076	NOR	16	RTL	3.0	0.35	0.65			19						6	5	200	60	
2LB111	NND	16	RTL	3.0	0.35	0.8									10	3	400	56	
2LB112	NND	16	RTL	3.0	0.35	0.8			19						10	4	400	56	
2LB113	NND	16	RTL	3.0	0.35	0.8			19						10	6	400	56	
2LB114	NND	10	RTL	3.0	0.35	0.8			25						10	3	400	56	
2LB115	NND	10	RTL	3.0	0.35	0.8			25						10	4	400	56	
2LB116	NND	10	RTL	3.0	0.35	0.8			25						10	6	400	56	
2LB117	NND	9	RTL	3.0	0.35	0.8			40						10	3	400	56	
2LB118	NND	9	RTL	3.0	0.35	0.8			40						10	4	400	56	
2LB119	NND	9	RTL	3.0	0.35	0.8			40						10	6	400	56	
2LB1110	NOR	8	RTL	3.0	0.35	0.8			35						10	3	250	56	
2LB1111	NOR	8	RTL	3.0	0.35	0.8			35						10	4	250	56	
2LB1112	NOR	8	RTL	3.0	0.35	0.8			35						10	6	250	56	
2LB161	* NOR	16	RTL	3.0	0.30	2.3			65						10	6	500	56	
2LB162	* NOR	16	RTL	3.0	0.30	2.3			65						10	6	500	56	
2LB163	* NOR	16	RTL	3.0	0.30	2.3			65						10	6	500	56	
2LB164	* NOR	10	RTL	3.0	0.30	2.3			35						10	6	350	56	
2LB165	* NOR	10	RTL	3.0	0.30	2.3			35						10	6	350	56	
2LB166	* NOR	10	RTL	3.0	0.30	2.3			35						10	6	350	56	
2LB167	* NOR	9	RTL	3.0	0.34	2.3			50						10	6	500	56	
2LB168	* NOR	9	RTL	3.0	0.34	2.3			50						10	6	500	56	
2LB169	* NOR	9	RTL	3.0	0.34	2.3			50						10	6	500	56	
2LB1610	* NOR	8	RTL	3.0	0.30	2.3			40						10	6	350	56	
2LB1611	* NOR	8	RTL	3.0	0.30	2.3			40						10	6	350	56	
2LB1612	* NOR	8	RTL	3.0	0.30	2.3			40						10	6	350	56	
2LB171A	* NND	10	1 DTL	6.0	0.3	2.6			12						8	4	35	59	
2LB171B	* NND	10	1 DTL	6.0	0.3	2.6			12						6	4	35	59	
2LB172	* NND	10	2 DTL	6.0	0.3	2.6			24						3	4	25	59	
2LB172B	* NND	10	2 DTL	6.0	0.3	2.6			24						6	4	25	59	
2LB173	* NND	8	3 DTL	6.0	0.3	2.6			32						8	8	35	59	
2LB173A	* NND	8	3 DTL	6.0	0.3	2.6			32						8	60	35	59	
2LB174A	* NOR	12	3 DTL	6.0	0.3	2.6			39						2	4	24	59	
2LB174B	* NOR	12	3 DTL	6.0	0.3	2.6			39						2	6	24	59	
2LB181	*	3	1 DTL	6.3	6.0	3.5			49	600	1M						5h $\mu$	57	
2LB211		10	1	4.0					7									15	57

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms No. Exp	Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out μA		Min Hz	Max Hz			In	Out		
2LB231	* NOR	21	TTL	4.0	1.45	0.85			128					3	10	15	64	
2LB232B	* NOR	20		4.0	1.45	0.85			112					4	10	15	64	
2LB401A	* NND			5.0	0.3	2.5			210						6	150	65	
2LB401B	* NND			5.0	0.3	2.5			210						4	150	65	
2LB401V	* NND			5.0	0.3	2.5			210						2	150	65	
2LB402	* NND			5.0	0.3	2.5			450						16	70	65	
2LB403A	* NND			5.0	0.3	2.5			135						6	150	65	
2LB403B	* NND			5.0	0.3	2.5			135						4	150	65	
2LB403V	* NND			5.0	0.3	2.5			135						2	150	65	
2LB404A	* NND			5.0	0.3	2.5			300						6	150	65	
2LB404B	* NND			5.0	0.3	2.5			300						4	150	65	
2LB404V	* NND			5.0	0.3	2.5			300						2	150	65	
2LB405	* NND			5.0	0.3	2.5			300						2	150	65	
2LB406A	* NND			5.0	0.3	2.5			190						6	150	65	
2LB406B	* NND			5.0	0.3	2.5			190						4	150	65	
2LB406V	* NND			5.0	0.3	2.5			190						2	150	65	
2LIO41	*	4	RTL			1.4			18					4	1	60	61	
2LL231		20	TTL	4.0	1.45	0.85			112					4	10	15	64	
2LN021	NND	2	5 DTL	4.0	0.3	1.4			35						3	70	58	
2LN022	* NND	2	5 DTL	4.0	0.3	1.4			35						5	70	58	
2LN051	* NND	8	DTL	4.0	0.4	3.0			8						3	250	61	
2LN052	NND	8	RTL	4.0	0.3	1.4			25						2	250	61	
2LN111	NND	5	RTL	3.0	0.35	0.8			35					10	3	500	56	
2LN112	NND	5	RTL	3.0	0.35	0.8			35					10	4	500	56	
2LN113	NND	5	RTL	3.0	0.35	0.8			35					10	6	500	56	
2LN114	NND	5	RTL	3.0	0.35	0.8			40					10	3	250	61	
2LN115	NND	5	RTL	3.0	0.35	0.8			40					10	4	250	61	
2LN116	NND	5	RTL	3.0	0.35	0.8			40					10	6	250	61	
2LN151	* NND	2	5 RTL	4.0	0.33	1.4			35						5	36	58	
2LN161	* NOR	5	RTL	3.0	0.30	2.3			40					10	6	500	56	
2LN162	* NOR	5	RTL	3.0	0.30	2.3			40					10	6	500	56	
2LN163	* NOR	5	RTL	3.0	0.30	2.3			40					10	6	500	56	
2LN164	* NOR	5	RTL	3.0	0.30	2.3			45					10	6	350	56	
2LN165	* NOR	5	RTL	3.0	0.30	2.3			45					10	6	350	56	
2LN166	* NOR	5	RTL	3.0	0.30	2.3			45					10	6	350	56	
2LN181	* INV	3	RTL	6.3	6.0	4.0			<1						3		57	
2LN182	* INV	2	3 RTL	6.3	6.0	4.0			28						3		57	
2LN183	* INV	1	3 RTL	6.3	4.0	4.0			28						3		57	
2LN211	NOR	6		4.0	0.3	2.5			50						4		57	
2LP021	* DIO	9		4.0					23								58	
2LP022	* DIO	8		4.0					16								58	
2LP171	* EXP	10	2 DTL	6.0					<19								59	
2LP172	* EXP	9	1 DTL	6.0					9							4	59	
2LP173	* EXP	8		6.0			1		11								59	
2LP401	* EXP																65	
2LR171	* ANR	8	4 DTL	6.0	0.3	2.6			30					8	8	100	59	
2LR221	ANR	8	3 DTL	4.0	0.3	2.3			25					10	10	250	57	
2LS011	* ADR	6	RTL	4.0	1.3	0.3			30					6	8	100	58	
2LS021	* ADR	6	2 DTL	4.0	0.33	1.35			18					8	3	70	58	
2LS022	* ADR	6	2 DTL	4.0	0.33	1.35			18					8	5	70	58	
2LS023	* ADR	6	4 DTL	4.0	0.33	1.35			33					8	3	20	58	
2LS024	* ADR	6	4 DTL	4.0	0.33	1.35			33					8	5	20	58	
2LS025	* ADR	8	1 DTL	4.0	0.33	1.35		3	18					8	3	150	58	
2LS026	* ADR	8	1 DTL	4.0	0.33	1.35		3	18					8	5	150	58	
2LS027	ADR	8	2 DTL	4.0	0.33	1.35			21					8	3	50	58	



Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out		
2LS028	ADR	8	2	DTL	4.0	0.33	1.35			21					8	5	50	58	
2LS151	* ADR	6	2	DTL	4.0	0.33	1.4			22					8	5	35	58	
2LS152	* ADR	6	4	DTL	4.0	0.33	1.4			30					8	5	22	58	
2LS211		8			10.0				2									57	
2MP351	* MOD	4		RTL			0.03											55	
2MS191			2		5.0			<2			300	34h						55	
2MS192			3		5.0			<3			300	34h						55	
2ND021	* DIO	6			10.0				3								20	58	
2ND022	* DIO	9			10.0				3								20	58	
2NK041	*	4					1.4								4	1	10	61	
2NK051	* DIO	4					1.2	5										61	
2NK281	*	4			6.3			5										57	
2NS191A			4		5.0			<3				14M						55	
2NS191B			4		5.0			<3				14M						55	
2NT011	*		4		5.0			15		15				25				58	
2NT012	*		4		5.0					15				35				58	
2NT013	*		4		5.0			15		15				80				58	
2NT171	*		4		10.0			20						70				59	
2NT172	*		4		10.0			20						150				59	
2NT173	*		4		10.0			20						280				59	
2NT191			5		5.0													55	
2NYE281	*				15.0													57	
2PD281	* CN	14			6.3	1.0				50								57	
2PD282	* CN	14			6.3	1.0				50								57	
2PM351	* AMP	3	3	RTL	6.3		2.0			30	800k	2M	5	3				55	
2PN151	*	6	4		4.0	3.45	0.33	10		28					6			61	
2PN152	*	3	6		4.0	0.33	1.8			73					5			61	
2PN381	* AGC		12	RTL														55	
K2PP241	* REG		2	RTL				4										65	
2PP351	* AGC	4	1	RTL	6.3	2.5				20								55	
2PS351	* CN		7	DTL	6.3					35		40M	5	2				55	
2SV381	* AMP		11	RTL			11.3											55	
2TK041	* FLP	4	5		4.0	2.4	0.3			37							400	61	
2TK171A	* FLP	16	2	DTL	6.0	0.3	2.6			52		3M			4			59	
2TK171B	* FLP	16	2	DTL	6.0	0.3	2.6			52		5M			4			59	
2TK181	* FLP	3	6	DTL	6.3	6.0	4.0			21		2M			4	300		57	
2TR071			16		3.0	0.35	0.65			10					3	200		60	
2TR072			16		3.0	0.35	0.65			10					4	200		60	
2TR073			16		3.0	0.35	0.65			10					5	200		60	
2TR111	NOR		12	RTL	3.0	0.35	0.8			35					3	500		56	
2TR112	NOR		12	RTL	3.0	0.35	0.8			35					4	500		56	
2TR113	NOR		12	RTL	3.0	0.35	0.8			35					6	500		56	
2TR114	NOR		8	RTL	3.0	0.35	0.8			20					2	400		56	
2TR115	NOR		8	RTL	3.0	0.35	0.8			20					3	400		56	
2TR116	NOR		8	RTL	3.0	0.35	0.8			20					5	400		56	
2TR161	* FLP		12	RTL	3.0	0.30	2.3			45					10	6	500	56	
2TR162	* FLP		12	RTL	3.0	0.30	2.3			45					10	6	500	56	
2TR163	* FLP		12	RTL	3.0	0.30	2.3			45					10	6	500	56	
2TR164	* FLP		8	RTL	3.0	0.30	2.3			25							6	500	56
2TR165	* FLP		8	RTL	3.0	0.30	2.3			25							6	500	56
2TR166	* FLP		8	RTL	3.0	0.30	2.3			25							6	500	56
2TR171A	*		14	2	DTL	6.0	0.3	2.6		31		6M			4			59	
2TR171B	*		14	2	DTL	6.0	0.3	2.6		31		6M			6			59	
2TR172			14	2	DTL	3.0	0.3	2.6		40		6M			5			59	
2TR211	FLP	6	3		4.0		2.7			25								1 $\mu$	57

Group X-A—INTEGRATED CIRCUITS—Continued

Type No.	Kind	No.		Logic	Voltage			Current		Max P mW	Frequency		Input res ohms		Max gain dB	Fan		Max time ns	Dwg No.
		Diodes	Xistors		Supply V	In Logic V	Out Logic V	In mA	Out $\mu$ A		Min Hz	Max Hz	No.	Exp		In	Out		
2TR231	* FLP	25	TTL	4.0	1.45	0.85			128							10	35	64	
2TS051	* FLP	4	4	4.0	0.3	1.4			25							2	250	61	
K2TS241	* FLP	4		12.0		5.0					10k	20k					5 $\mu$	65	
K2UB241	* AMP	3	RTL	12.0				15				6M		@				65	
2UE181	* EMF	1	RTL	6.3	4.0				7					3 3				57	
2UE182	* EMF	1	RTL	6.3	0.8				33					3 3			100	57	
2UI021	* AMP	1	5 DTL	4.0	0.3	1.35			40							15	200	58	
2UI071	AMP	12	TTL	3.0	0.35	0.65			14						1	20	200	60	
2UI111	AMP	10	TTL	3.0	0.35	0.85			30								300	56	
2UI151	* AMP	1	5 RTL	4.0	0.33	1.4			48							5	18	58	
2UI181	* AMP	1	RTL	6.3	1.0				22	60	1hk	8 2	3				500	57	
2UI182	* AMP	2	RTL	6.3	1.0				31	250	4hk	6 2	3				500	57	
2UI183	* AMP	2	RTL	6.3	0.25				48			8 2	3				500	57	
2UN021	*	2	5	4.0	0.33	1.35			28							3	210	58	
2UN022	*	2	5	4.0	0.33	1.35			28							5	210	58	
2UP161	* AMP	14	RTL	3.0	0.30	2.3			60							10	20	500	56
K2UP241	* MIX	3	RTL	9.0			<4			30M	1hM							65	
2US181	* AMP	2	RTL	6.3					62	22M	37M		7					57	
2US191A	AMP	2		5.0			<3			44M	50M		35					55	
2US191B	AMP	2		5.0			<3			44M	50M		70					55	
2US192	AMP	3		5.0			<2			5hk	1M		6h					55	
2US193	AMP	2		5.0			<2			300	34h		2h					55	
2US194	AMP	2		5.0			<2			300	34h							55	
2US201	AMP	6		7.5				4		500	3k	7 3	1k					55	
2US202		1	1	7.5			<2			40k	1hk							55	
K2US241	* AMP	2	RTL	12.0				4				2 2						65	
K2US242	* AMP	1	RTL	9.0						1hk	30M		2 2					65	
K2US243	* AMP	1	RTL	9.0			<2					15 1						65	
K2US244	* LFA	4	RTL	9.0				6				20 3	1h					65	
K2US245	* LFA	5	RTL	12.0			<6					15 3	1h					65	
K2US246	* AMP	3	RTL	12.0				8		30M	45M							65	
K2US247	* LFA	2	RTL	12.0				28		30M	45M							65	
K2US248	* LFA	3	RTL	12.0				15		4M	10M							65	
K2US249	* LFA	1	RTL	12.0				4		5hk	50M							65	
2US281	* AMP	1	RTL	6.3				4	70			2 2						57	
2US282	* AMP	3	RTL	6.3				5	70			2 2						57	
2US283	* AMP	2	RTL	6.3				5	70			2 2						57	
2US284	* AMP	2	RTL	6.3				5	85			4 2						57	
2US285	* AMP	6	3	6.3	1.4	2.3			65									57	
2US351	* AMP	2	3 DTL	6.3					20		150M	5 1	5					55	
2US352	* AMP	4	RTL	6.3		1.5			17	5hk	25M	5 2	1h					55	
2US353	* AGC	4	4 DTL	6.3		0.6			30	5hk	25M	2 3	70					55	
2US354	* LFA	1	6 DTL	6.3					16	5	10M	4 3	20					55	
2US355	* LFA	4	DTL	6.3					14	20	20k	4 3	4h					55	
2US356	* AMP	2	2 DTL	6.3					32			18 2	10					55	
2US357	* AGC	2	3 RTL	6.3					30	5hk	25M	2 2	30					55	
K2US371	* LFA	9	RTL	9.0	0.03	1.8		5		60	10k							63	
K2US372	* LFA	5	RTL	12.0	0.05				225	50	15k							63	
K2US373	* AMP	6	RTL	5.0			<3		14				18k					63	
2US381	* AMP	5	RTL									3 3	6					55	
2US382	* AMP	2	RTL									75 1	55					55	
2UYE181	* AMP	1		6.3	4.0				7	200	3hk	3 3					<2 $\mu$	57	
K2ZHA241	* MIX	2	RTL	25.0				3		65M	1hM	15 1						65	
K2ZHA242	* MIX	2	RTL	9.0						1hk	30M	5 2						65	
K2ZHA243	* AGC	2	RTL	3.0								5 2						65	

Group X-A – INTEGRATED CIRCUITS – Continued

Type No.	Kind	No.		Logic	Voltage			Current			Frequency		Input res		Max gain	Fan		Max time	Dwg No.
		Diodes	Xistors		Sup- ply V	In Logic V	Out Logic V	In mA	Out $\mu$ A	Max P mW	Min Hz	Max Hz	ohms	dB		In	Out		
K2ZHA244	* AMP	3	RTL	12.0			10			3M	6M								65
K2ZHA371	* CN	6	RTL	5.0			3						2h						63
K2ZHA372	* DET	8	RTL	5.0			4					1	3						63
K2ZHA373	* AMP	4	RTL	5.0			4		22					7					63

Group X-B – MOS TRANSISTORS

Type No.	Kind	$I_{DS}$		S (gain)		$V_{\mu S}$		$V_{DS}$	$V_{DG}$	$I_{GR}$	Max noise $\mu$ V	$C_{IN}$	$C_{SD}$	Fig
		Min	Max	Min	Max	Min	Max	Max	Max					
KP101D	*SFP	0.3	5.0	0.35				10			*10	12		34
KP101G	*SFP	0.15	2.0	0.15				10			*5	12		34
KP101YE	*SFP	0.3	5.0	0.35				10				12		34
KP102I	*SFP	0.7	1.8	0.35	1.0		10	15	15	15	10	10	0.2	30
KP102K	*SFP	1.3	3.0	0.45	1.2		10.0	15	15	15	10	10	0.2	30
KP102L	*SFP	2.4	6.0	0.65	1.3		10.0	15	15	15	10	10	0.2	30
KP102YE	*SFP	0.18	0.55	0.25	0.7		10.0	15	15	15	10	10	0.2	30
KP102ZH	*SFP	0.4	1.0	0.3	0.9		10.0	15	15	15	10	10	0.2	30
KP103I	*SFP	1.0	2.1	0.8	2.6	0.8	3.0	10	15	20	*3	20	8.0	30
KP103K	*SFP	1.7	3.8	1.4	3.5	1.4	4.0	10	15	20	*3	20	8.0	30
KP103L	*SFP	3.0	6.6	1.8	3.8	2.0	6.0	10	17	20	*3	20	8.0	30
KP103M	*SFP	5.4	12.0	2.0	4.4	2.8	7.0	10	17	20	*3	20	8.0	30
KP103YE	*SFP	0.3	0.7	0.4	0.8	0.4	1.5	10	15	20	*3	20	8.0	30
KP103ZH	*SFP	0.55	1.2	0.7	2.1	0.5	2.2	15	15	20	*3	17	8.0	30
KP301B	*SJP	0.5 $\mu$			1.0		30		20			<4		31
KP901A	*SFN		20	50			50		100			50		40

Group XI—DIODES—RECTIFIERS

Type No.	Type	Maximum			Maximum @ 25 °C			Maximum			Recovery			f <sub>Max</sub> MHz	Fig No.
		I <sub>F</sub> @ 25 mA	T <sub>OPR</sub> °C	I <sub>S</sub> @ 25 °C mA	PIV V	E <sub>F</sub> *Min V	@ I <sub>F</sub> mA	I <sub>R</sub> @ μA	E <sub>R</sub> @ V	T °C	τ @ μs	I <sub>F</sub> mA	E <sub>R</sub> V		
D1A	GEP	.16	70		20	1.0	2	250	10	20				150M	1
D1B	GEP	16	70		30	1.0	1	250	25	20				150M	1
D1D	GEP	16	70		75	1.0	2	250	75	20				150M	1
D1G	GEP	16	70		50	1.0	5	250	50	20				150M	1
D1V	GEP	25	70		30	1.0	8	250	25	20				150M	1
D1YE	GEP	12	70		100	1.0	1	250	100	20				150M	1
D1ZH	GEP	12	70		100	1.0	5	250	100	20				150M	1
D2A	GEP	50	70		7	1.0	50	250	7	20				150M	6
D2B	* GEP	16	70	50	30	1.0	5	100	30	25				250M	6
D2D	* GEP	16	70	50	75	1.0	15	250	75	25				150M	6
D2G	* GEP	16	70	50	75	1.0	2	250	75	25				150M	6
D2I	* GEP	16	70	50	100	*1.0	2	250	100	25				150M	4
D2K	GEP	16	70		100	1.0	5	800	100	20					4
D2M	GEP	16	70		100	1.0	5	250	100	20					4
D2N	GEP	16	70		150	1.0	5	800	150	20					4
D2P	GEP	16	70		150	1.0	5	250	150	20					4
D2R	GEP	16	70		200	1.0	5	250	200	20					4
D2V	* GEP	25	70	78	40	1.0	9	250	40	20				150M	4
D2YE	* GEP	16	70	50	100	1.0	<5	250	100	25				150M	4
D2ZH	* GEP	8	70	50	150	1.0	8	250	150	25				150M	4
MD3	* GEA	12	70	50	15	1.0	5	100	15	25	0.1	20	10		1
D7A	* GEA	300	70	25	50	0.5	300	100	50	20					11
D7B	* GEA	300	70	25	100	0.5	300	100	100	20				50 k	11
D7D	* GEA	300	70	25	300	0.5	300	100	300	20				50 k	11
D7G	* GEA	300	70	25	200	0.5	300	100	200	20				50 k	11
D7V	* GEA	300	70	25	150	0.5	300	100	150	20				50 k	11
D7YE	* GEA	300	70	25	350	0.5	300	100	350	20				50 k	11
D7ZH	* GEA	300	70	25	400	0.5	300	100	400	20				50 k	11
D9A	GEP	25	70		10	1.0	10	250	10	20				40M	1
D9B	* GEP	40	70	125	10	1.0	90	250	10	20				1hk	1B
D9G	* GEP	30	70	98	30	1.0	30	250	30	20				1hk	1B
D9D	* GEP	30	70	98	30	1.0	60	250	30	20				1hk	1B
D9I	* GEP	30	70	98	30	1.0	30	120	30	20				1hk	1B
D9K	* GEP	30	70	98	30	1.0	60	60	30	20				1hk	1B
D9L	* GEP	15	70	48	100	1.0	30	250	100	25				1hk	1B
D9M	GEP	30	70		30	1.0	60	250	50	20					1
D9V	* GEP	20	70	62	30	1.0	10	250	30	25				1hk	1B
D9YE	* GEP	20	70	62	50	1.0	30	250	50	25				1hk	1B
D9ZH	* GEP	15	70	48	100	1.0	10	250	100	20				1hk	1B
D10	* GEP	50	70		10	1.5	3	100	10	20				100M	2
D10A	* GEP	50	70		10	1.5	5	200	10	20				100M	2
D10B	* GEP	50	70		10	1.5	8	200	10	20				100M	2
D11	* GEP	20	70		30	1.0	100	250	30	20				50M	2
D12	* GEP	20	70		50	1.0	50	250	50	20				50M	2
D12A	* GEP	20	70		50	1.0	100	250	50	20				50M	2
D13	* GEP	20	70		75	1.0	100	250	75	20				50M	2
D14	* GEP	20	70		100	1.0	30	250	100	20				50M	2
D14A	* GEP	20	70		100	1.0	100	250	100	20				50M	2
D15	GEP				30	1.0	15	300	30					300M	
D16	GEP				50	1.0	5	500	50					500M	
D16A	GEP				50	1.0	10	500	50					300M	
D17	GEP				100	1.0	4	400	100					300M	
D18	* GEP	16	60	50	20	1.0	20	10	20	25	0.1	50	10	40M	2
D19	GEP	45	70		40	1.0	45	100	40	50					1
D19A	GEP	60	70		20	1.0	60	100	20	50					1

Group XI—DIODES—RECTIFIERS—Continued

Type No.	Type	Maximum			Maximum @ 25 °C			Maximum			Recovery			f <sub>Max</sub> MHz	Fig No.
		I <sub>F</sub> @ 25 mA	T <sub>Opr</sub> °C	I <sub>S</sub> @ 25 °C mA	PIV V	E <sub>F</sub> *Min V	E <sub>F</sub> @ I <sub>F</sub> mA	I <sub>R</sub> @ E <sub>r</sub> @ T μA V °C	τ @ I <sub>F</sub> mA	E <sub>R</sub> V					
D19B	GEP	45	70		20	1.0	45	100	20	50					1
D20	* GEP	16	70		10	1.0	20	1m	20	25				40M	2
D21	GEP	16	70		150	1.0	5	250	100	20				150M	4
D101	* SIP	30	150	100	75	2.0	2	10	75	125				600M	2
D101A	* SIP	30	150	100	75	1.0	1	10	75	125				600M	2
D102	* SIP	30	150	100	50	2.0	2	10	50	125				600M	2
D102A	* SIP	30	150	100	50	1.0	1	10	50	125				600M	2
KD102A	* SID	100	100	2A	250	1.0	50	50	250	100					1A
KD102B	* SID	100	100		300	1.0	50	3	100	300	100				1A
D103	* SIP	30	150	100	30	2.0	2	30	30	125				100M	2
D103A	* SIP	30	150	100	30	1.0	1	30	30	125				100M	2
KD103A	* SID	100	100	2A	50	1.0	50	50	50	100	4.0	50	20		1A
KD103B	* SID	100	100	2A	50	1.2	50	50	50	100	4.0	50	20		1A
D104	* SIP	30	150	100	100	2.0	2	150	100	100				100M	2
D104A	* SIP	30	150	100	100	1.0	1	150	100	100				100M	2
D105	* SIP	30	150	100	75	2.0	2	100	75	100				100M	2
D105A	* SIP	30	150	100	75	1.0	1	100	75	100				100M	2
KD105A	SIA	300			200	1.0	300	300	150	85					7A
KD105B	* SIA	300		85	400	1.0	300	300	300	85				1k	7A
KD105G	* SID	300	85		800	1.0	300	1h	300	800	85			1k	7A
KD105V	* SIA	300		85	600	1.0	300	300	450	85				1k	7A
D106	* SIP	30	150	100	30	2.0	2	30	30	25				100M	2
D106A	* SIP	30	150	100	30	1.0	1	30	30	25				100M	2
D107	SIP	10	125		10	1.0	10	<1	10	50					2
D107A	SIP	10	125		10	1.0	10	10	10	125					2
D108	SIP	10	125		30	1.0	10	35	30	25					2
KD108G	* SID	300	85		1k	1.0	300	1h	300	1k	85			1k	7A
D109	SIP	10	125		50	1.0	10	20	30	25					2
D201A	SI	200	125		25	1.5		500	25					100k	13
D201B	SI	200	125		50	1.5		500	50					100k	13
D201D	SI	400	125		100	2.0		500	100					100k	13
D201G	SI	200	125		100	1.5		500	100					100k	13
D201TS	SI	400	125		200	2.0		500	200					100k	13
D201V	SI	400	125		50	2.0		500	50					100k	13
D201YE	SI	200	125		200	2.0		500	200					100k	13
D201ZH	SI	400	125		200	2.0	400	500	200					100k	13
D202	* SIA	400	125		100	1.0	400	500	100	85				100k	13
KD202A	* SID	3A	130		50	1.0	3A	1000	50	120				12h	13
KD202B	* SID	1A	130		50	1.0	1A	1000	50	120				12h	13
KD202D	* SID	3A	120		200	1.0	3000	1000	200	120				12h	13
KD202G	* SID	1A	120		100	1.0	1000	1000	100	120				12h	13
KD202I	* SID	1A	120		300	1.0	1000	1000	300	120				12h	13
KD202K	* SID	3A	120		400	1.0	3000	1000	400	120				12h	13
KD202L	* SID	1A	120		400	1.0	1000	1000	400	120				12h	13
KD202M	* SID	3A	120		500	1.0	3000	1000	500	120				12h	13
KD202N	* SID	1A	120		500	1.0	1000	1000	500	120				12h	13
KD202R	* SID	3A	120		600	1.0	3000	1000	600	120				12h	13
KD202S	* SID	1A	120		600	1.0	1000	1000	600	120				12h	13
KD202V	* SID	3A	120		100	1.0	3000	1000	100	120				12h	13
KD202YE	* SID	1A	120		200	1.0	1000	1000	200	120				12h	13
KD202ZH	* SID	3A	120		300	1.0	3000	1000	300	120				12h	13
D203	* SIA	400	125		200	1.0	400	500	200	85				100k	13
KD203A	* SID	10A	100		600	1.0	10A	1.5	15h	600	100			1k	14
KD203B	* SID	10A	100		800	1.0	10A	1.5	15h	800	100			1k	14
KD203D	* SID	10A	100		1k	1.0	10A	1.5	15h	1k	100			1k	14

Group XI - DIODES - RECTIFIERS - Continued

Type No.	Type	Maximum			Maximum @ 25 °C			Maximum			Recovery			f <sub>Max</sub> MHz	Fig No.
		I <sub>F</sub> @ 25 mA	T <sub>opr</sub> °C	I <sub>S</sub> @ 25 mA	PIV V	E <sub>F</sub> *Min V	E <sub>F</sub> @ mA	I <sub>R</sub> @ μA	E <sub>r</sub> @ V	@ T °C	τ @ μs	I <sub>F</sub> mA	E <sub>R</sub> V		
KD203G	* SID	10A	100		1k	1.0	10A	1.5	15h	1k	100			1k	14
KD203V	* SID	10A	100		800	1.0	10A	1.5	15h	800	100			1k	14
D204	* SIA	400	125		300	1.0	400	500	300	85				100k	13
D205	* SIA	400	125		400	1.0	400	500	400	85				100k	13
KD205A	* SIA	500	70		500	1.0	500	1h	200	500	70			1k	19D
KD205B	* SIA	500	70		400	1.0	500	1h	200	400	70			1k	19D
KD205D	* SIA	500	70		100	1.0	500	1h	200	100	70			1k	19D
KD205G	* SIA	500	70		200	1.0	500	1h	200	200	70			1k	19D
KD205V	* SIA	500	70		300	1.0	500	1h	200	300	70			1k	19D
KD205YE	* SIA	300	70		500	1.5	300	1h	200	500	70			1k	19D
D206	* SIA	100	100		100	1.0	100	100	100	100				100k	10
D207	* SIA	100	100		200	1.0	100	100	200	100				100k	10
D208	* SIA	100	100		300	1.0	100	100	300	100				100k	10
D209	* SIA	100	100		400	1.0	100	100	400	100				100k	10
D210	* SIA	100	100		500	1.0	100	100	500	100				100k	10
D211	* SIA	100	100		600	1.0	100	100	600	100				100k	10
D214	SIA	5A	125		100	1.0	5A	3000	100	125					14
D214A	SIA	10A	125		100	1.0	10A	3000	100	125					14
D214B	SIA	2A	125		100	1.0	2000	3000	100	20				1k	14
D215	* SIA	5A	125		200	1.0	5A	3000	200	125					14
D215A	SIA	10A	125		200	1.0	10A	3000	200	125					14
D215B	SIA	2A	125		200	1.0	2000	3000	200	20				1k	14
D217	* SIA	100	100		800	1.0	100	150	800	100				1k	9
MD217	* SID	100	100		800	1.0	100	75	150	800	100			1μ	9
D218	* SIA	100	100		1000	1.0	100	150	1000	100				1k	9
D219A	* SIA	50	100	500	70	1.0	50	30	70	100	0.5	30	30		2
D219S	* SIA	50	120	500	100	1.0	50	1							2
D220	* SIA	50	100	500	50	1.5	50	20	50	100	0.5	30	30		2
D220A	* SIA	50	100	500	70	1.5	50	30	70	100	0.5	30	30		2
D220B	* SIA	50	100	500	100	1.5	50	40	100	100	0.5	30	30		2
D220S	* SIA	50	120	500		1.5	50								2
D221	SIA	400	125		400	1.0	400	500	400	125				3k	13
D222	SIA	400	125		600	1.0	400	500	600	125				3k	13
D223	* SIA	50	125	500	50	1.0	50	50	50	100				30k	2
D223A	* SIA	50	125	500	100	1.0	50	50	100	100				20k	2
D223B	* SIA	50	125	500	150	1.0	50	50	150	100				20k	2
D224	SIA	5A	125		50	1.0	5000	3000	50	20					14
D224A	SIA	10A	125		50	1.0	10A	3000	50	20					14
D224B	SIA	2A	125		50	1.0	2000	3000	50	20					14
D225	SIA	30	125		5	1.0	30		5	20					8
D226	* SIA	300	125		400	1.0	300	30	400	20					9
D226A	SIA	300	125		300	1.0	300	30	300	20					9
D226B	* SIA	300	80		400	1.0	300	300	300	80				1k	9
D226D	* SIA	300	80		100	1.0	300	300	70	80				1k	9
D226G	* SIA	300	80		200	1.0	300	300	150	80				1k	9
D226V	* SIA	300	80		300	1.0	300	300	200	80				1k	9
D226YE	SIA	300	125		400	1.0	300	300	400	80					9
D229A	SIA	400	125		200	1.0	400	50	200	20					3
D229B	SIA	400	125		400	1.0	400	50	400	20					3
D229D	* SID	400	85		300	1.0	400	500	300	85				1k	13
D229YE	* SID	400	85		400	1.0	400	500	400	85				1k	13
D229G	* SID	400	85		200	1.0	400	500	200	85				1k	13
D229V	* SID	400	85		100	1.0	400	500	100	85				1k	13
D230A	SIA	300	125		200	1.0	300	50	200	20					9
D230B	SIA	300	125		400	1.0	300	50	400	20					9

Group XI—DIODES—RECTIFIERS—Continued

Type No.	Type	Maximum			Maximum @ 25 °C			Maximum			Recovery			f <sub>Max</sub> MHz	Fig No.
		I <sub>F</sub> @ 25 mA	T <sub>Opr</sub> °C	I <sub>S</sub> @ 25 °C mA	PIV V	E <sub>F</sub> *Min V	@ I <sub>F</sub> mA	I <sub>R</sub> μA	@ E <sub>R</sub> V	@ T °C	τ μs	@ I <sub>F</sub> mA	E <sub>R</sub> V		
D231, P	SIA	10A	130		300	1.0	10A	3000	300	130					14
D231A, P	SIA	10A	130		300	1.0	10A	3000	300	130					14
D232, P	SIA	10A	130		400	1.0	10A	3000	400	130					14
D232A, P	SIA	10A	130		400	1.0	10A	3000	400	130					14
D232B, P	SIA	10A	130		400	1.0	10A	3000	400	130					14
D233, P	SIA	10A	130		500	1.0	10A	3000	500	130					14
D233A	SIA	10A	125		500	1.5	10A	3000	500	20					14
D233B, P	SIA	10A	130		500	1.0	10A	3000	500	130					14
D234B, P	SIA	10A	130		600	1.0	10A	3000	600	130					14
D242, P	* SID	10A	130		100	1.25	10A	3m	100	120				1k	14
D242A, P*	SID	10A	130		100	1.0	10A	3m	100	120				1k	14
D242B, P*	SID	5A	130		100	1.5	5A	3m	100	120				1k	14
D243, P	* SID	10A	130		200	1.25	10A	3m	200	120				1k	14
D243A, P*	SID	10A	130		200	1.0	10A	3m	200	120				1k	14
D243B, P*	SID	5A	130		200	1.5	5A	3m	200	120				1k	14
D244, P	* SID	10A	130		50	1.25	10A	3m	50	120				1k	14
D244A, P*	SID	10A	130		50	1.0	10A	3m	50	120				1k	14
D244B, P*	SID	5A	130		50	1.5	5A	3m	50	120				1k	14
D245	* SID	10A	130		300	1.25	10A	3m	300	120				1k	14
D245A	* SID	10A	130		300	1.0	10A	3m	300	120				1k	14
D245B	* SID	5A	130		300	1.5	5A	3m	300	120				1k	14
D246	* SID	10A	130		400	1.25	10A	3m	400	120				1k	14
D246A	* SID	10A	130		400	1.0	10A	3m	400	120				1k	14
D246B	* SID	5A	130		400	1.5	5A	3m	400	120				1k	14
D247	* SID	10A	130		500	1.25	10A	3m	500	120				1k	14
D247B	* SID	5A	130		500	1.5	5A	3m	500	120				1k	14
D248B	* SID	5A	130		600	1.5	5A	3m	600	120				1k	14
D302	* GEA	1A	70		200	0.3	1A	800	200	20				50k	16
D302A	* GEA	1A	55		200	0.3	1A	1200	200	20				50k	16
D303	* GEA	3A	70		150	0.35	3A	1000	150	20				50k	16
D303A	* GEA	3A			150	0.35	3A	1200	150	20					16
D304	* GEA	5A	70		100	0.3	5A	2000	100	20				50k	16
D305	* GEA	10A	70		50	0.35	10A	2500	50	20				50k	16
D310	* GEM	250	60	800	20	0.5	500	100	20	70	0.3	500	20		2
D311	* GEM	40	70	500	30	0.4	10	100	30	25	0.05	50	10		2
D311A	* GEM	80	70	600	30	0.4	10	100	30	25	0.05	50	10		2
D311B	* GE	20	60	250	30	0.5	10	100	30	25	0.05	50	10		2
D312	* GEM	50	60	500	100	0.5	10	100	100	20	0.5	50	10		2
D312A	* GEM	50	60	500	75	0.5	10	100	75	20	0.5	50	10		2
D312B	* GEM	50	70	500	100	0.5	10	100	100	25	0.7	50	10		2
KD401A	* SIM	30	100		75	1.0	5	5	75	25	2.0	10	30		2
KD401B	* SIM	30	100		75	1.0	5	5	75	25	2.0	10	30		2
KTS401A	* SI	500	70	5A	500	2.5	400	100	500	25					21
KTS401B	* SI	500	70	5A	500	2.5	400	100	500	25					22
KTS401V	* SI	500	60		400	2.5	500	100	400	25					22A
GD402A	* GE	25	60		15	0.5	25	100	15	25				100M	2
GD402B	* GE	25	60		15	0.5	25	100	15	25				100M	2
GD403A	* GE	5	55		5										2
GD403B	* GE	5	55		5										2
GD403V	* GE	5	55		5										2
GD405A	* GEA	30	72		18	1.0	4		40	10					1A
GD406A	* GEA	30	72		25	1.0	7		100	18					1A
KD503A	* SPN	20	70	200	30	1.0	10	10			0.01	10	10		1
KD503B	* SPN	20	70	200	30	1.2	10	10			0.01	10	10		1
KD503V	* SPN	10			10	1.3	10		1		0.05	10	10		2

Group XI—DIODES—RECTIFIERS—Continued

Type No.	Type	Maximum			Maximum @ 25 °C			Maximum			Recovery			f <sub>Max</sub> MHz	Fig No.	
		I <sub>F</sub> @ 25 mA	T <sub>opr</sub> °C	I <sub>S</sub> @ 25 °C mA	PIV V	E <sub>F</sub> *Min V	E <sub>F</sub> @ I <sub>F</sub> mA	I <sub>R</sub> @ μA	E <sub>r</sub> @ V	T °C	τ @ μs	I <sub>F</sub> mA	E <sub>R</sub> V			
KD504A	* SIA	240	100		40	1.2	100	2			0.01	300	30		5	
GD507A	* GEB	16	60	100	20	0.5	16	50	20	25	0.1	20	10		2	
KD509A	* SEN	150	85	15h	50	1.1	100	5			4.0n	10	10		5	
KD510A	* SEN	250	85	15h	50	1.1	200	5			4.0n	10	10		5	
KD512A	* SEN	20	100	200	15	1.0	10	100	15	100	1.0n	10	10		1	
KD513A	* SEN	100	85	15H	50	1.1	100	100	50	85	4.0n	10	10		33A	
KD514A	* SEN	50	85		10	1.0	10	5			0.1n				1C	
D1001	GE	100	80		2000	6.5	100	150	2000						100k	17
D1001A	GE	100	80		1000	3.5	100	150	1000						100k	17
D1002	GE	300	80		2000	7.5	300	300	2000						100k	17
D1002A	GE	300	80		1000	4.0	300	300	1000						100k	17
D1003A	GE	300	80		500	2.0	300	300	500						100k	17
D1004	* SIA	100	100	600	2000	6.0	100	250	2000	100					1k	20A
D1005A	* SIA	50	100	300	4000	6.0	100	250	4000	100					1k	20A
D1005B	* SIA	100	100	600	4000	11.0	100	250	4000	100					1k	20B
D1006	* SIA	100	100	600	6000	11.0	100	250	6000	100					1k	20B
D1006A	* SIA	500	100	3A	6k	11.0	500	1h	250	6k	100				1k	20B
D1007	* SIA	75	100	450	8000	11.0	100	250	8000	100					1k	20B
D1007A	* SIA	500	100	3A	8k	11.0	500	1h	250	8k	100				1k	20B
D1008	* SIA	50	100	300	10k	11.0	500	250	10k	100					1k	20B
D1008A	* SIA	500	100	3A	10k	11.0	500	1h	250	10k	100				1k	20B
D1009	* SIA	100	125	600	2000	4.0	100	300	2000	70					1k	18A
D1009A	* SIA	100	125	600	1000	3.0	100	300	1000	70					1k	19B
D1010	* SIA	300	125	18h	2000	8.0	300	300	2000	70					1k	18B
D1010A	* SIA	300	125	18h	1000	5.0	300	300	1000	70					1k	19C
D1011A	* SIA	300	125	18h	500	2.5	300	300	500	70					1k	19B
D1602A	GE	300	70		200	1.0	300	1	200							
D1602B	GE	300	70		300	1.0	300	1	300							
D1602V	GE	300	70		400	1.0	300	1	400							
DG-TS1	GEP	16	70	100	50	*1.0		2	1000	50	20					6
DG-TS2	GEP	16	70	100	75	*1.0		4	500	50	20					6
DG-TS3	GEP	25			50	1.0		2	100	50	20					6
DG-TS4	GEP	16	70	100	100	*1.0		2	800	75	20					6
DG-TS5	GEP	16	70	100	100	*1.0		1	250	75	20					6
DG-TS6	GEP	16	70	100	125	*1.0		1	800	100	20					6
DG-TS7	GEP	16	70	100	125	*1.0		1	250	100	20					6
DG-TS8	GEP	25	70	100	50	*1.0		10	500	30	20					6
DG-TS9	GEP	50	70	100	45	*1.0		10	100	10	20					6
DGTS10	GEP	50	70	100	45	*1.0		5	60	10	20	150				6
DGTS12	GEP	16	70		30	1.0						150				6
DGTS13	GEP	16	70		30	1.0										6
DGTS14	GEP	16	70		50	1.0										6
DGTS15	GEP	50	70		150	1.0		1	800	150	20					6
DGTS16	GEP	50	70		150	1.0		1	250	150	20					6
DGTS17	GEP	50	70		200	*1.0		1	800	200	20					6
DGTS21	GEA	300	70		50	0.5	300	300	50	20					50k	3
DGTS22	GEA	300	70		100	0.5	300	300	100	20					50k	3
DGTS23	GEA	300	70		150	0.5	300	300	150	20					50k	3
DGTS24	GEA	300	70		200	0.5	300	300	200	20					50k	3
DGTS25	GEA	100	70		300	0.3	100	300	300	20					50k	3
DGTS26	GEA	100	70		350	0.3	100	300	350	20					50k	3
DGTS27	GEA	100	70		400	0.3	100	300	400	20					50k	3



Group XI-A—DIODES—SWITCHING

Type No.	Kind	Type	Switch range		Maximum current				Switchtime		Capacity pF	Fig No.
			Min V	Max V	Switch		I <sub>F</sub> mA	Leak- age $\mu$ A	Off $\mu$ s	On $\mu$ s		
					Off mA	On mA						
D227-A	SWI	SI4	10	20	15	5	200	100	10	0.5	100	13
D227-B	SWI	SI4	14	28	15	5	200	100	10	0.5	100	13
D227-D	SWI	SI4	40	80	15	5	200	100	10	0.5	100	13
D227-G	SWI	SI4	28	56	15	5	200	100	10	0.5	100	13
D227-I	SWI	SI4	100	200	15	5	200	100	10	0.5	100	13
D227-V	SWI	SI4	20	40	15	5	200	100	10	0.5	100	13
D227YE	SWI	SI4	56	112	15	5	200	100	10	0.5	100	13
D227-ZH	SWI	SI4	80	160	15	5	200	100	10	0.5	100	13
D228-A	SWI	SI4	10	20	15	1	50	60	5	0.1	80	9
D228-B	SWI	SI4	14	28	15	1	50	60	5	0.1	80	9
D228-D	SWI	SI4	40	80	15	1	50	60	5	0.1	80	9
D228-G	SWI	SI4	28	56	15	1	50	60	5	0.1	80	9
D228-I	SWI	SI4	100	200	15	1	50	60	5	0.1	80	9
D228-V	SWI	SI4	20	40	15	1	50	60	5	0.1	80	9
D228YE	SWI	SI4	56	112	15	1	50	60	5	0.1	80	9
D228-ZH	SWI	SI4	80	160	15	1	50	60	5	0.1	80	9

Group XI-B—DIODES—TUNNEL

Type No.	Kind	Type	Maximum		Min	V <sub>FM</sub>		Capacity pF	Fig No.
			I <sub>p</sub> mA	I <sub>p</sub> /I <sub>v</sub>	V <sub>p</sub> mV	Min mV	Max mV		
AI-101A	*	TUN GAS	1	5	160			4	23D
AI-101B	*	TUN GAS	1	5	160			8	23D
AI-101D	*	TUN GAS	2	6	160			10	23D
AI-101G	*	TUN GAS	2	6	160			4	23D
AI-101I	*	TUN GAS	5	6	180			13	23D
AI-101V	*	TUN GAS	2	6	160			5	23D
AI-101YE	*	TUN GAS	5	6	180			8	23D
AI-101ZH	*	TUN GAS	5	6	180			6	23D
AI-201A	*	TUN GAS	10	10	180			8	23D
AI-201B	*	TUN GAS	10	10	180			6	23D
AI-201D	*	TUN GAS	20	10	200			7	23D
AI-201G	*	TUN GAS	20	10	200			10	23D
AI-201I	*	TUN GAS	50	10	260			30	23D
AI-201K	*	TUN GAS	H1	10	330			20	23D
AI-201L	*	TUN GAS	H1	10	330			50	23D
AI-201V	*	TUN GAS	10	10	180			15	23D
AI-201ZH	*	TUN GAS	50	10	260			15	23D
AI-301A	*	TUN GAS	2	8	180	650		12	23D
AI-301B	*	TUN GAS	5	8	180	850	1150	25	23D
AI-301G	*	TUN GAS	10	8	180	800		50	23D
AI-301V	*	TUN GAS	5	8	180	1000	1300	25	23D
GI304A	*	TUN GEA	5.1	5	75	420		20	23A
GI304B	*	TUN GEA	5.5	5	75	420		20	23A
GI305A	*	TUN GEA	10.1	5	85	430		30	23A
GI305B	*	TUN GEA	11.0	5	85	430		30	23A
1I-302A	*	TUN GE	2.3	4.5	60		400	80	23A
1I-302B	*	TUN GE	5.8	4.5	60		400	150	23A
1I-302C	*	TUN GE	17	4.5	60		400	200	23A
1I-302V	*	TUN GE	11.5	4.5	60		400	180	23A

Group XI-C – DIODES – SWITCH CONTROL

Type No.	Kind	Type	Voltage		Maximum currents				Power		Time max		Temp		Fig No.	
			Switch max V	Res min V	Cont max mA	Switch off mA	On A	Leak mA	Max W	K <sub>θ</sub> mW/°C	Off μs	On μs	Min (-)°C	Max (+)°C		
D235A	CON	SI	40	2	20	100	2	1	4	120	5	35	60	125	15	
D235B	CON	SI	100	2	20	100	2	1	4	120	5	35	60	125	15	
D235G	CON	SI	100	2	20	100	2	1	4	120	5	35	60	125	15	
D235V	CON	SI	40	2	20	100	2	1	4	120	5	35	60	125	15	
D238A	CON	SI	50	2				10		20	330	10	35	50	100	33
D238B	CON	SI	100	2				10		20	330	10	35	50	100	33
D238D	CON	SI	100	2				10		20	330	10	35	50	100	33
D238G	CON	SI	50	2				10		20	330	10	35	50	100	33
D238V	CON	SI	150	2				10		20	330	10	35	50	100	33
D238YE	CON	SI	150	2				10		20	330	10	35	50	100	33

Group XI-D – DIODES – VARACTORS

Type No.	Kind	Type	Maximum		Capacity @ 4V				Q	Power max mW	Temp		Fig No.
			Volts V	I <sub>R</sub> μA	Min pF	Max pF	TC	Exp (-)			Min (-)°C	Max (+)°C	
KV101A	* VAR	SID	4		160	240			12		10	55	23D
KV102A	* VAR	SID	45	1	14	23	3	4	40	90	40	85	1A
KV102B	* VAR	SID	45	1	19	30	3	4	40	90	40	85	1A
KV102D	* VAR	SID	45	1	19	30	4	4	40	90	40	85	1A
KV102G	* VAR	SID	45	1	19	30	3	4	100	90	40	85	1A
KV102V	* VAR	SID	80	1	25	40	3	4	40	90	40	85	1A
KV103A	* VAR	SID	80		18	32			50	5W	40	85	14
KV103B	* VAR	SID	80		28	48			40	5W	40	85	14
KV104A	* VAR	SI	45	5	90	120	3	4	100	100	40	85	1A
KV104B	* VAR	SI	45	5	106	144	3	4	100	100	40	85	1A
KV104D	* VAR	SI	80	5	128	192	4	4	100	100	40	85	1A
KV104G	* VAR	SI	80	5	95	143	4	4	100	100	40	85	1A
KV104V	* VAR	SI	45	5	128	192	3	4	100	100	40	85	1A
KV104YE	* VAR	SI	45	5	95	143	3	4	150	100	40	85	1A
KV105A	* VAR	SI	90	50	400	600	4	4	500	150	55	100	9
KV105B	* VAR	SI	50	50	400	600	3	4	500	150	55	100	9
KV106A	* VAR	SID	120		20	50			40	5W	55	100	13
KV106B	* VAR	SID	90		15	35			60	5W	55	100	13
KA602A	* VAR	SEN	60	100	<5	<9				25h	60	100	30A
KA602B	* VAR	SEN	60	100	<3	<5				15h	60	100	30A
D901A	* VAR	SIA	80	1	22	32	4	4	25	250	55	85	8
D901B	* VAR	SIA	45	1	22	32	3	4	30	250	55	85	8
D901D	* VAR	SIA	80	1	34	44	4	4	25	250	55	85	8
D901G	* VAR	SIA	45	1	28	38	3	4	30	250	55	85	8
D901V	* VAR	SIA	80	1	28	38	4	4	25	250	55	85	8
D901YE	* VAR	SIA	45	1	34	44	3	4	30	250	55	85	8
D902	* VAR	SIA	25	10	6	12			30	250	40	100	2

Group XI-E—LIGHT EMITTING DIODES

Type No.	Kind	Type	Output Cd/m <sup>2</sup> *mW	I <sub>F</sub> Typ mA	E <sub>F</sub> Typ V	I <sub>F</sub> Max mA	Temperature		Fig No.
							Min -°C	Max +°C	
KL101A	*	LED SCD	10	10	5.5	10	10	70	39
KL101B	*	LED SCD	15	20	5.5	20	10	70	39
KL101V	*	LED SCD	20	40	5.5	40	10	70	39
AL102A	*	LED GPE	5	5	3.2	10	60	70	40
AL102B	*	LED GPE	40	20	4.5	20	60	70	40
AL102V	*	LED GPE	50	30	5.0	30	60	70	40
AL103A	*	LED GAE	*1	50	1.6		60	85	41
AL103B	*	LED GAE	*0.6	50	1.6		60	85	41
KL104A	*	DIN SCD	15	10	5.5		10	70	42

Group XI-F—HALL TRANSDUCERS

Type No.	Kind	I max mA	Mean Sens mV/mA T	TC Sens %/°C	Impedance		TC Res %/°C	Non-Equi Potential × 10 <sup>-3</sup>	Active Area mm <sup>2</sup>	Max	
					In Ω	Out Ω				Lgth mm	Width mm
DKHG-05	* GE	30	.085	0.03	40	90	0.6	3.0	20	10	7
DKHG-05M	* GE	12	.085	0.03	40	120	0.6	3.0	4.2	3	3
DKHG-05S	* GE	50	.085	0.03	40	110	0.6	1.1	72	15	10
DKHG-1	* GE	20	.17	0.3	120	200	0.5	2.1	20	10	7
DKHG-2	* GE	13	.35	0.3	200	320	0.5	2.0	18	10	7
DKHG-2S	* GE	22	.35	0.3	220	360	0.5	1.1	72	15	10
DKHG-2M	* GE	6	.35	0.3	200	350	0.5	1.1	4.2	3	3
K-7	* SI	10	45	0.08	500	1000	1.3	1.0	18	10	7
K-7M	* SI	5	45	0.08	500	1000	1.3	1.0	4.2	3	3
K-7S	* SI	20	45	0.08	500	1000	1.3	1.0	72	15	10
K-14	* SI	5	90	0.15	1100	2100	1.0	1.0	18	10	7

Group XI-G—MISCELLANEOUS DIODES

Type No.	Kind	Type	Current			Voltage		Max cap pF	Switching			Power mW	Fig No.
			I <sub>F</sub> mA	I <sub>S</sub> mA	I <sub>R</sub> μA	V <sub>F</sub> V	V <sub>R</sub> V		Ratio	Damp dB	t <sub>rr</sub> ns		
GI401A	* BWD	GE	0.3		40H	0.33	<0.1	2.5					23C
GI401B	* BWD	GE	0.5		56H	0.33	<0.1	5.0					23C
AI402B	* BWD	GAS	0.1		10H	0.6	<0.3	4					23B
AI402G	* BWD	GAS	0.1		10H	0.6	<0.3	8					23B
AI402I	* BWD	GAS	0.4		40H	0.6	<0.3	10					23B
AI402YE	* BWD	GAS	0.2		20H	0.6	<0.3	8					23B
403A	* BWD	GEA	100			0.12	<0.4	8					23A
1A501A		PIN				0.5		0.1	150	0.8		100	
1A501G		PIN				0.5		0.16	150	0.8		100	
1A501I		PIN				0.5		0.07	150	0.8		100	
1A504A		PIN			100			0.9	500	0.5		25h	
1A504B		PIN			100			0.9	200	0.8		25h	
KD901A	* 1DA	SI	10			0.2	0.7	4.0					36
KD901B	* 2DA	SI	10			0.2	0.7	4.0					36
KD901G	* 4DA	SI	10			0.2	0.7	4.0					36
KD901V	* 3DA	SI	10			0.2	0.7	4.0					36
KD902D	* 1DA	SI	1.0			0.2	0.85	2.0					36
KD902I	* 4DA	SI	1.0			0.2	0.85	2.0					36
KD902YE	* 2DA	SI	1.0			0.2	0.85	2.0					36
KD902ZH	* 3DA	SI	1.0			0.2	0.85	2.0					36
KD903A	* 8DA	SI	1.0	350		0.5	1.2	10.0			150		35
KD903B	* 8DA	SI	75	350		0.5	1.2	10.0			150		35
KD904A	* 1DA	SI	1.0			0.2	0.8	2.5					36
KD904B	* 2DA	SI	1.0			0.2	0.8	2.5					36
KD904D	* 3DA	SI	1.0			0.2	0.8	2.5					36
KD904G	* 4DA	SI	1.0			0.2	0.8	2.5					36
KD904V	* 3DA	SI	1.0			0.2	0.8	2.5					36
KD904YE	* 4DA	SI	1.0			0.2	0.8	2.5					36
KD906	* 4DA	SI	50			1.0	1.0	75					34
KD907	* DA	SI	50			6.0	1.0	6.0			6		37
KD907A	* 1DA	SEN	10	700		6.0	1.0	40	4.0		4		37
KD907B	* 2DA	SEN	10	700		6.0	1.0	40	4.0		4		37
KD907G	* 4DA	SEN	10	700		6.0	1.0	40	4.0		4		37
KD907V	* 3DA	SEN	10	700		6.0	1.0	40	4.0		4		37
KD908A	* 8DA	SEN	200	15h	10.0	1.2	40	5.0			6		36
KD909	* 8DA	SI	200	800				40	5.0		50		38
KD910A	* 1DA	SPN	2			0.5	0.5	5.0	1.5		5		39
KD910B	* 2DA	SPN	2			0.5	0.5	5.0	1.5		5		39
KD910V	* 3DA	SPN	2			0.5	0.5	5.0	1.5		5		39
KD911A	* 3DA	SPN	200	800		0.5	0.62	5.0			30		39



## Group XII—A—SILICON CONTROLLED DIODES HIGH POWER

Type No.	Kind	Type	Max forward current					PIV	Maximum					I <sub>R</sub> mA	Fig No.
			None	Air-cool		Water-cool			Power		Gate pulse				
				With rad	Forced air rad	2l./m	5L/m		W	Gate W	V	A	Width μs		
VKDU25	*	SCR SI4		25		200	1 k							10	25
VKDU50	*	SCR SI4		50		200	1 k							10	26
VKDU100	*	SCR SI4		100		200	1 k							10	26A
VKDU150	*	SCR SI4		150		200	1 k							10	26A
VKDUV-200	*	SCR SI4				200	1 k							10	43
VKU-10-0.25		SCR SI4	1	5	10		50	20	1.25	20	1.0	20		20	24
VKU-10-0.5		SCR SI4	1	5	10		100	20	1.25	20	1.0	20		20	24
VKU-10-0.75		SCR SI4	1	5	10		150	20	1.25	20	1.0	20		20	24
VKU-10-1.0		SCR SI4	1	5	10		200	20	1.25	20	1.0	20		20	24
VKU-10-1.5		SCR SI4	1	5	10		250	20	1.25	20	1.0	20		20	24
VKU-10-2.0		SCR SI4	1	5	10		400	20	1.25	20	1.0	20		20	24
VKU-10-2.5		SCR SI4	1	5	10		500	20	1.25	20	1.0	20		20	24
VKU-10-3.0		SCR SI4	1	5	10		600	20	1.25	20	1.0	20		20	24
VKU-20-0.25		SCR SI4	3	10	20		50	20	1.25	20	1.0	20		20	25
VKU-20-0.5		SCR SI4	3	10	20		100	20	1.25	20	1.0	20		20	25
VKU-20-0.75		SCR SI4	3	10	20		150	20	1.25	20	1.0	20		20	25
VKU-20-1.0		SCR SI4	3	10	20		200	20	1.25	20	1.0	20		20	25
VKU-20-1.5		SCR SI4	3	10	20		250	20	1.25	20	1.0	20		20	25
VKU-20-2.0		SCR SI4	3	10	20		400	20	1.25	20	1.0	20		20	25
VKU-20-2.5		SCR SI4	3	10	20		500	20	1.25	20	1.0	20		20	25
VKU-20-3.0		SCR SI4	3	10	20		600	20	1.25	20	1.0	20		20	25
VKU-50-0.25		SCR SI4	15	32	50		50	30	1.87	20	1.5	20		20	25
VKU-50-0.5		SCR SI4	15	32	50		100	30	1.87	20	1.5	20		20	25
VKU-50-0.75		SCR SI4	15	32	50		150	30	1.87	20	1.5	20		20	25
VKU-50-1.0		SCR SI4	15	32	50		200	30	1.87	20	1.5	20		20	25
VKU-50-1.5		SCR SI4	15	32	50		250	30	1.87	20	1.5	20		20	25
VKU-50-2.0		SCR SI4	15	32	50		400	30	1.87	20	1.5	20		20	25
VKU-50-2.5		SCR SI4	15	32	50		500	30	1.87	20	1.5	20		20	25
VKU-50-3.0		SCR SI4	15	32	50		600	30	1.87	20	1.5	20		20	25
VKU100-0.25		SCR SI4		22	100		50	40	2.5	20	2.0	20		20	26
VKU100-0.5		SCR SI4		22	100		100	40	2.5	20	2.0	20		20	26
VKU100-0.75		SCR SI4		22	100		150	40	2.5	20	2.0	20		20	26
VKU100-1.0		SCR SI4		22	100		200	40	2.5	20	2.0	20		20	26
VKU100-1.5		SCR SI4		22	100		250	40	2.5	20	2.0	20		20	26
VKU100-2.0		SCR SI4		22	100		400	40	2.5	20	2.0	20		20	26
VKU100-2.5		SCR SI4		22	100		500	40	2.5	20	2.0	20		20	26
VKU100-3.0		SCR SI4		22	100		600	40	2.5	20	2.0	20		20	26
VKUV-100-0.25		SCR SI4	15			60	100	50	40	2.5	20	2.0	20	20	27
VKUV-100-0.5		SCR SI4	15			60	100	100	40	2.5	20	2.0	20	20	27
VKUV-100-0.75		SCR SI4	15			60	100	150	40	2.5	20	2.0	20	20	27
VKUV-100-1.0		SCR SI4	15			60	100	200	40	2.5	20	2.0	20	20	27
VKUV-100-1.5		SCR SI4	15			60	100	250	40	2.5	20	2.0	20	20	27
VKUV-100-2.0		SCR SI4	15			60	100	400	40	2.5	20	2.0	20	20	27
VKUV-100-2.5		SCR SI4	15			60	100	500	40	2.5	20	2.0	20	20	27
VKUV-100-3.0		SCR SI4	15			60	100	600	40	2.5	20	2.0	20	20	27

Group XII-B—SILICON CONTROLLED DIODES LOW POWER

Type No.	Kind	Voltages					Currents					Time $t_q$ $\mu s$	Temp max $^{\circ}C$	Fig. No.
		max $E_F$ V	max $E_R$ V	$V_{BO}$ V	$E_R$ V	$E_F$ V	$I_F$ mA	$I_{Sat}$ mA	max $I_S$ mA	$I_{holdline}$				
									min mA	max mA				
KN102A	* SIA	5	10	20	1.5	0.5	200	250	2 k	0.1	15	40	70	11
KN102B	* SIA	7	10	28	1.5	0.5	200	250	2 k	0.1	15	40	70	11
KN102V	* SIA	10	10	40	1.5	0.5	200	250	2 k	0.1	15	40	70	11
KN102G	* SIA	14	10	56	1.5	0.5	200	250	2 k	0.1	15	40	70	11
KN102D	* SIA	20	10	80	1.5	0.5	200	250	2 k	0.1	15	40	70	11
KN102ZH	* SIA	30	10	120	1.5	0.5	200	250	2 k	0.1	15	40	70	11
KN102I	* SIA	50	10	150	1.5	0.5	20	250	2 k	0.1	15	40	70	11

Group XII-C - SILICON CONTROLLED RECTIFIERS

Type No.	Kind	Forward		Gate		Maximum control			Time		Maximum						Fig No.	
		Operating		Trigger		V <sub>CGQ</sub>	I <sub>GQ</sub>	I <sub>Q</sub>	on t <sub>t</sub>	off t <sub>q</sub>	I <sub>F</sub>	P	I <sub>GF</sub>	V <sub>GF</sub>	I <sub>GR</sub>	V <sub>GR</sub>		Gate Power
		E <sub>F</sub>	I <sub>F</sub>	V <sub>GT</sub>	I <sub>GT</sub>													
		.V	mA	V	mA	V	mA	mA	μs	μs	mA	mW	mA	V	mA	V		mW
KU101A	* TRI	50	75	<8				25	2	35	1A	150	15	2			500	13
KU101B	* TRI	50	75	<8				25	2	35	1A	150	15	2			500	13
KU101G	* TRI	80	75	<8				25	2	35	1A	150	15	2			500	13
KU101YE	* TRI	100	75	<8				25	2	35	1A	150	15	2			500	13
KU201A	* TRI	25	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201B	* TRI	25	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201V	* TRI	50	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201G	* TRI	50	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201D	* TRI	100	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201YE	* TRI	100	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201ZH	* TRI	200	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201I	* TRI	200	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201K	* TRI	300	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU201L	* TRI	300	2A	7	100			1h	10	100	10A	4W	200	10	5	10	1W	15
KU202A	* TRI	25	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202B	* TRI	25	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202V	* TRI	50	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202G	* TRI	50	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202D	* TRI	100	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202YE	* TRI	100	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202ZH	* TRI	200	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202I	* TRI	200	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202K	* TRI	300	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202L	* TRI	300	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202M	* TRI	400	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU202N	* TRI	400	10A	5	100			3h	10	150	30A	20W	300	10	5	10	15h	15
KU204A	* TRI	50	5	5	150	36	400					8W	600			100	17h	14
KU204B	* TRI	100	5	5	150	36	400					8W	600			100	17h	14
KU204V	* TRI	200	5	5	150	36	400					8W	600			100	17h	14
T-320V	* TRI	15h							15		5kA		600	8				
TCH-10	* TRI	1k	10A	2					6	15			800					
TCH-25	* TRI	1k	25A	2					6	15			800					
TCH-50	* TRI	1k	50A	<2					6	15			900					
TCH100	* TRI	1k	1hA	<2					6	15			1k					
TCH125	* TRI	1k	1hA	<2					6	15			1k					
TD-20	* TRI	16h	20A							20	3hA				3			
TD-25	* TRI	16h	25A							20	6hA				3			
TD-40	* TRI	16h	40A							20	8hA				4			
TD-63	* TRI	16h	63A							20	11hA				4			
TD-80	* TRI	16h	80A							20	14hA				4			
TD-100	* TRI	16h	1hA							20	16hA				4			
TD-125	* TRI	16h	1hA							20	19hA				4			
TD-160	* TRI	16h	1hA							20	23hA				4			
TD-200	* TRI	16h	2hA							20	28hA				4			
TD-250	* TRI	16h	2hA							20	35hA				5			
TD-320A	* TRI	16h	3hA							20	40hA				5			
TD-320B	* TRI	16h	3hA							20	40hA				5			
TI-800	* TRI	600		4	15,				3	10	8hA		5A		40			
TI1600	* TRI	600		4	15,				5	10	16hA		5A		40			
TS-10	* TRI	12h	10A						10	200	1hA		150		7			



Group XIII - DIODES - REGULATORS

Type No.	Kind	Type	Maximum			Typical			Max Z $\Omega$	TC $^{\circ}\text{C}/^{\circ}\text{C}$	$K_{\theta}$ $\text{mW}/^{\circ}\text{C}$	Fig No.
			$I_z$ mA	$T_{\text{opr}}$ C	$P_z$ mW	$E_z$ V	$\Delta E_z$ $e_{\zeta}$	$I_z$ mA				
D6	REG	SI	18	150	125	6.5		5.0	10	.03		
D7	REG	SI	18	150	125	7.5		5.0	10	.06		
D8	REG	SI	14	150	125	8.5		5.0	10	.07		
KS133A	* REG	SIA	81	100	300	3.3	10	10.0	65	.1		12
KS139A	* REG	SIA	70	100	300	3.9	10	10.0	60	.1		12
KS147A	* REG	SIA	58	100	300	4.7	10	10.0	56	.08		12
KS156A	* REG	SIA	55	100	300	5.6	10	10.0	46	.05		12
KS168A	* REG	SIA	45	100	300	6.8	10	10.0	28	.06		12
KS194A	REG	SI		60		9.4	5		18	.005		
KS194B	REG	SI		60		9.4	5		18	.003		
KS194G	REG	SI		60		9.4	5		18	.001		
KS194V	REG	SI		60		9.4	5		18	.001		
KS211B	* REG	SI	33	120	280	11.0	20	10.0	15	.02		33
KS211D	* REG	SI	33	120	280	11.0	15	10.0	15	.005		33
KS211G	* REG	SI	33	120	280	11.0	15	10.0	15	.01		33
KS211V	* REG	SI	33	120	280	11.0	20	10.0	15	.02		33
KS620A	* REG	SIA	84	100	5W	120	15	50	150	.2		33
KS630A	* REG	SIA	72	100	5W	130	15	50	180	.2		33
KS650A	* REG	SIA	66	100	5W	150	15	25	255	.2		33
KS680A	* REG	SIA	56	100	5W	180	15	25	330	.2		33
D808	* REG	SI	33	125	280	7.7	10	5.0	6	.07	3	8
D809	* REG	SI	29	125	280	8.7	10	5.0	10	.08	3	8
D810	* REG	SI	26	125	280	9.7	10	5.0	12	.09	3	8
D811	* REG	SI	23	125	280	11.0	10	5.0	15	.095	3	8
D813	* REG	SI	20	125	280	12.7	10	5.0	18	.095	3	8
D814-A	* REG	SIA	40	100	340	7.8	10	5.0	6	.07		8
D814-B	* REG	SIA	36	100	340	8.8	10	5.0	10	.08		8
D814-D	* REG	SIA	24	100	340	12.8	10	5.0	18	.095		8
D814-G	* REG	SIA	29	100	340	11.0	10	5.0	15	.095		8
D814-V	* REG	SIA	32	100	340	9.8	10	5.0	12	.09		8
D815A,P	* REG	SIA	14H	125	8W	5.6	15	50.0	<1	.056		13
D815B,P	* REG	SIA	11H	125	8W	6.8	15	50.0	1	.062		13
D815D,P	* REG	SIA	650	125	8W	12.0	15	25.0	3	.11		13
D815G,P	* REG	SIA	800	125	8W	10.0	15	25.0	<3	.10		13
D815I	* REG	SIA	14H	125	8W	4.7	15	50.0	<1	.056		13
D815V,P	* REG	SIA	950	125	8W	8.2	15	50.0	1	.088		13
D815YE,P	* REG	SIA	550	125	8W	15.0	15	25.0	<4	.13		13
D815ZH,P	* REG	SIA	450	125	8W	18.0	15	25.0	<5	.14		13
D816A,P	* REG	SI	230	125	5W	22	10	10.0	7	.12		13
D816B,P	* REG	SIA	180	100	5W	27	15	15.0	12	.15		13
D816D,P	* REG	SIA	110	100	5W	47	15	15.0	22	.15		13
D816G,P	* REG	SIA	130	100	5W	39	15	15.0	18	.15		13
D816V,P	* REG	SIA	150	100	5W	33	15	15.0	15	.15		13
D817A,P	* REG	SIA	90	100	5W	56	15	50.0	52	.18		13
D817B,P	* REG	SIA	75	100	5W	68	15	50.0	60	.18		13
D817G,P	* REG	SIA	50	100	5W	100	15	50.0	60	.18		13
D817V,P	* REG	SIA	60	100	5W	82	15	50.0	75	.18		13
D818A	* REG	SID	33	100	300	9.0	10	11.0	25	.02	70	12
D818B	* REG	SID	33	100	300	9.0	10	11.0	25	.02	70	12
D818D	* REG	SI	33	120	300	9.0		11.0	25	.002	70	8
D818G	* REG	SID	33	100	300	9.0	10	11.0	25	.005	70	12
D818V	* REG	SID	33	100	300	9.0	10	11.0	25	.01	70	12
D818YE	* REG	SI	33	120	300	9.0		11.0	25	.001	70	8
KS162A	* REG	SIA	22	100	150	6.2	<1	10.0	33	-6		33A
KS168V	* REG	SIA	23	100	150	6.8	<1	10.0	28	5		33A

Group XIII—DIODES—REGULATORS—Continued

Type No.	Kind	Type	Maximum			Typical			Max Z Ω	TC %/°C	K <sub>θ</sub> mW/°C	Fig No.
			I <sub>z</sub> mA	T <sub>opr</sub> °C	P <sub>z</sub> mW	E <sub>z</sub> V	ΔE <sub>z</sub> %	I <sub>z</sub> mA				
KS170A	* REG	SIA	23	100	150	7.0	<1	10.0	20	1		33A
KS175A	* REG	SIA	18	100	150	7.5	<1	5.0	16	+4		33A
KS182A	* REG	SIA	17	100	150	8.2	<1	5.0	14	5		33A
KS191A	* REG	SIA	15	100	150	9.1	<1	5.0	18	6		33A
KS196B	* REG	SIA	20	100	200	9.4	5	5.0	18	0.25		12
KS196G	* REG	SIA	20	100	200	9.4	5	5.0	18	0.05		12
KS196V	* REG	SIA	20	100	200	9.4	5	5.0	18	0.1		12
KS210B	* REG	SIA	14	100	150	10.0	<1	5.0	22	7		33A
KS213B	* REG	SIA	10	100	150	13.0	<1	5.0	25	8		33A
KS433A	* REG	SIA	191	125	1W	3.3	10	60	14	-10		12
KS439A	* REG	SIA	176	125	1W	3.9	10	51	12	-10		12
KS447A	* REG	SIA	159	125	1W	4.7	10	43	10	-8		12
KS456A	* REG	SIA	139	125	1W	5.6	10	36	7	+5		12
KS468A	* REG	SIA	119	125	1W	6.8	10	29	5	+6.5		12
KS482A	* REG	SIA	96	125	1W	8.2	10	24	5	8		12
KS515A	* REG	SIA	53	125	1W	15.0	10	13.0	17	10		12
KS518A	* REG	SIA	45	125	1W	18.0	10	11.0	22	11		12
KS527A	* REG	SIA	30	125	1W	27.0	10	7.5	40	11		12
KS522A	* REG	SIA	37	125	1W	22.0	10	9.0	29	11		12
KS527A	* REG	SIA	30	125	1W	27.0	10	7.5	40	11		12
SK1-5.6/1000	REG	SI		65	10W	5.6		1A	<1	.045		24
SK1-6.8/1000	REG	SI		65	10W	6.8		1A	1	.05		24
SK1-8.2/1000	REG	SI		65	10W	8.2		1A	2	.07		24
SK1-10/500	REG	SI		65	10W	10.0		500	2	.08		24
SK1-12/500	REG	SI		65	10W	12.0		500	3	.09		24
SK1-15/500	REG	SI		65	10W	15.0		500	4	.10		24
SK1-18/500	REG	SI		65	10W	18.0		500	4	.11		24
SK1-22/150	REG	SI		65	10W	22.0		150	7	.11		24
SK1-24/150	REG	SI		65	10W	24.0		150	8	.12		24
SK1-28/150	REG	SI		65	10W	28.0		150	12	.12		24
SK1-30/150	REG	SI		65	10W	30.0		150	30	.12		24
SK1-36/150	REG	SI		65	10W	36.0		150	45	.12		24
SK1-43/150	REG	SI		65	10W	43.0		150	60	.12		24
SK1-51/150	REG	SI		65	10W	51.0		150	70	.12		24
SK1-62/50	REG	SI		65	10W	62.0		50	80	.14		24
SK1-75/50	REG	SI		65	10W	75.0		50	100	.14		24
SK1-95/50	REG	SI		65	10W	91.0		50	100	.14		24
SK1-110/50	REG	SI		65	10W	110.0		50	110	.14		24
SK1-120/50	REG	SI		65	10W	120.0		50	112	.14		24
SK1-150/50	REG	SI		65	10W	150.0		50	150	.15		24
SK1-180/50	REG	SI		65	10W	180.0		50	150	.15		24
SK1-220/25	REG	SI		65	10W	220.0		25	300	.15		24
SK1-270/25	REG	SI		65	10W	270.0		25	400	.15		24
SK1-300/25	REG	SI		65	10W	300.0		25	500	.15		24
SK2-5.6/2000	REG	SI		65	15W	5.6		2A	<1	.04		25
SK2-6.8/2000	REG	SI		65	15W	6.8		2A	1	.05		25
SK2-8.2/2000	REG	SI		65	15W	8.2		2A	2	.7		25
SK2-10/1000	REG	SI		65	15W	10.0		2A	2	.08		25
SK2-12/1000	REG	SI		65	15W	12.0		1A	2	.09		25
SK2-15/1000	REG	SI		65	15W	15.0		1A	3	.10		25
SK2-18/700	REG	SI		65	15W	18.0		700	4	.11		25
SK2-22/300	REG	SI		65	15W	22.0		300	5	.12		25
SK2-24/300	REG	SI		65	15W	24.0		300	6	.12		25
SK2-28/300	REG	SI		65	15W	28.0		300	8	.12		25
SK2-30/300	REG	SI		65	15W	30.0		300	25	.12		25
SK2-36/300	REG	SI		65	15W	36.0		300	30	.12		25

Group XIII – DIODES – REGULATORS – Continued

Type No.	Kind	Type	Maximum			Typical			Max Z $\Omega$	TC %/°C	K <sub>θ</sub> mW/°C	Fig No.
			I <sub>z</sub> mA	T <sub>opr</sub> C	P <sub>z</sub> mW	E <sub>z</sub> V	ΔE <sub>z</sub> %	I <sub>z</sub> mA				
SK2-43/300	REG	SI	65	15W	43.0	300	35	.12	25			
SK2-51/200	REG	SI	65	15W	51.0	200	45	.12	25			
SK2-62/200	REG	SI	65	15W	62.0	200	60	.14	25			
SK2-75/100	REG	SI	65	15W	75.0	100	80	.14	25			
SK2-91/100	REG	SI	65	15W	91.0	100	90	.14	25			
SK2-110/100	REG	SI	65	15W	110.0	100	100	.14	25			
SK2-120/100	REG	SI	65	15W	120.0	100	100	.14	25			
SK2-150/100	REG	SI	65	15W	150.0	100	120	.14	25			
SK2-180/100	REG	SI	65	15W	180.0	100	200	.15	25			
SK2-220/50	REG	SI	65	15W	220.0	50	300	.15	25			
SK2-270/50	REG	SI	65	15W	270.0	50	350	.15	25			
SK2-300/50	REG	SI	65	15W	300.0	50	450	.15	25			
2S-156A	REG	SI	55	120	300	5.6	10	46	.05	12		
2S-168A	REG	SI	45	120	300	6.8	10	28	.06	12		
2S920A,P	REG	SI	42	130	5W	120	5	100	.16	13		
2S930A,P	REG	SI	38	130	5W	130	5	120	.16	13		
2S950A,P	REG	SI	33	130	5W	150	2.5	170	.16	13		
2S980A,P	REG	SI	28	130	5W	180		220	.16	13		

Group XIV-DIODES—MIXERS AND DETECTORS

Type No.	Kind	Type	Typical wavelength cm	Maximum								Min cur sens A/W	Opr temp		Fig No.	
				Res Ω	L <sub>c</sub> dB	NF <sub>0</sub> dB	VSWR	Pulse pwr		Pulse energy			Min	Max		
								Cont mW	Peak mW	Cont erg	Peak erg					(-)°C
2A201A				1 k						20		5.5				
2A202A				1 k						20		2.5				
D3A	VID	SI	3.2	950			2.5	50	300			60		70	20	
D3B	VID	SI	9.8	950			2.5	50	300			60		70	20	
D401	MIX	GE	8.5	1 k	13.0				15			5		50	29	
D402	MIX	SI		650	10.0	2.5	3.0	10		0.02		60		85		
D403A	MIX	GE	9.8	700	9.0	3.0	3.0		150	0.15		60		100	20	
D403B	MIX	GE	9.8	600	8.5	3.0	3.5		150	0.15		60		100	20	
D403V	MIX	GE	9.8	600	9.0			2.8	150	0.15		60		100	20	
D404	MIX	SI		520	8.5	2.5	2.5	10	80	0.02	1.5	60		85		
D405	* MIX	SIP	3.0	400	7.0			2.0	20	300	0.6	0.3	60		100	30
D405A	* MIX	SIP	3.0	500	6.5			1.7	20	300	1.0	0.3	60		100	30
D405AP	* MIX	SIP	3.0	500	6.5			1.7		80	1.0	0.3	60		100	30
D405B	MIX	SI		330	8.0			1.4	80	1.0	1.5	60		100	31	
D405BP	MIX	SI		330	8.0			1.4	80	1.0	1.5	60		100	31	
D406	MIX	SI							40	300	0.1		60		100	30
D408	* MIX	SI	9.8	390	6.0	7.5	1.3	100	500		0.5	60		125	30	
D409A	* MIX	SI	9.8	575	7.5	21	1.7		300		0.7				30	
D409AP	* MIX	SI	9.8	575	7.5	21	1.7		300		0.7				30	
D501	* MUL	SIP		h.2						100			60		100	30
D602A	VID	GE	3.2	600				3.2		50		1.5	60		85	28
D602B	VID	GE	3.2	900				3.2		50		1.5	60		85	28
D602V	VID	GE	3.2	900				3.2		50		4.0	60		85	28
D603	* VID	SI	9.8	900				2.0		200		4.0	60		100	30
D604	* VID	SI	3.2	900		8.0	4.0	10	300			2.5	60		100	30
D605	* DET	SIP	3.2		14.0				600	2k			60		100	30
D607				12h						5		4.0				
D607A				12h						5		3.5				
D608				12h								4.0				
D609				2k						2		4.0				
DG-S1	MIX	GE	9.8	400	8.5	3.0	3.0	80	250	0.1	3.0	60		70	28	
DG-S2	MIX	GE	9.8	400	6.5	3.0	3.0	80	250	0.1	3.0	60		70	28	
DG-S3	MIX	GE	3.2	400	8.5	3.0	3.5	80	250	0.1	3.0	60		70	28	
DG-S4	MIX	GE	3.2	400	6.5	3.0	3.0	50	250	0.1	3.0	60		70	28	
DK-I1M	* DET	SIP	9.8							200		0.5	60		100	30
DK-I2M	* DET	SIP	3.2							200		0.2	60		100	30
DK-S1M	* MIX	SIP	9.8	400	8.5	2.7	3.5	80	300	0.3	2.0	60		100	30	
DK-S2M	* MIX	SIP	9.8	400	6.5	2.0	3.0	50	300	0.36	2.0	60		100	30	
DK-S3	MIX	SI	3.2	400	8.5	2.7	3.0	50	200	0.06	0.6	60		70	30	
DK-S4	MIX	SI	3.2	400	6.5	2.7	2.5	30	100	0.06	0.3	60		70	30	
DK-S5	MIX	SI	2.0	400	8.0	2.5	3.0	30	200	0.06	0.2	60		70	28	
DK-S7	MIX	SI	3.2	900	7.0	2.0	2.0	50		0.15		60		80	28	
DK-S7M	* MIX	SI	3.0	700	7.5	2.0	2.0		100	0.3		60		80	29	
DK-V1	* DET	SIP	9.8	15k					50	200		0.8	50		70	29
DK-V2	* DET	SIP	9.8	10k					50	100		1.2	50		70	29
DK-V3	* DET	SIP	3.2	15k					50	200		0.4	50		70	29
DK-V4	* DET	SI	3.2	10k					50	100		0.8	50		70	29
DK-V5M	* DET	SI	9.8	10k					50	200		0.8	60		100	30
DK-V6M	* DET	SI	9.8	25k					50	200		0.8	60		100	30
DK-V7M	* VID	SIP	3.2	10k					50	200		0.4	60		100	30
DK-V8	VID	SI	3.2	15h				3.0	50		0.3	60		70	28	
DK-V11	VID	SI		10k				2.5	50			1.5	50		70	28

Group XV – DIODES – PHOTOCONDUCTIVE DEVICES

Type No.	Kind	Maximum			Dark		Sensitivity			T.C. %/°C	Time constant μs	Temp		Weight gm	K area mm <sup>2</sup>	
		Volts	Cur	Power	Resist- ance	Current	μA/ lmV	Max	Cut off			Min	Max			
		V	μA	mW	MΩ	μA	μ	μ	(-)°C			(+)°C				
FS-AG	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-A0	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-AV	PBS	100			0.01		500	2.1	2.7	1.5		60	60		96	
FS-D0	CDSE	200			20.0		20m	0.75	1.2	2.0		60	40		25	
FS-KG	CDS				3.3		6000	0.64	0.9	0.2		60	80		25	
FS-K0	CDS	300			3.3		1200	0.52	0.9	0.12		60	80		25	
FS-KV	CDS	200			1.6		6000	0.64	0.9	0.2		60	80		50	
FD-1	* GE	15	800	15		30	20	1.4	1.7			10	0	40	1.0	20
FDK-1	SI	20				3	3	0.9	1.3			10	0	40	0.02	
FS-A1	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-D1	CDSE	20	15h	50	2.0		20m	0.75	1.2	2.0		60	40		25	
FS-K1	CDS	400			3.3		6000	0.64	0.9	0.2		60	80		25	
FSA-G1	PBS	75			0.05		500	2.1	2.7	1.5	40	60	60	19.5	30	
FSD-G1	CDSE	20	2k	50	20.0	1		0.75	1.2							
FSK-G1	CDS	.50	15h	120	0.5	10	1200	0.64	0.9							
FSK-P1	CDS	100	2k	100	10k	<1		0.64	0.9							25
FT-1	GE	3		50		30	500	1.4	1.7		200	60	50	0.9		
FTG-1	GE	15		50		1000	20	1.4	1.7			40	40	1.2	1	
FD-2	GE	30		15		25	20	1.4	1.7			10	0	40	0.85	14
FS-2A	PBS	17			0.3			0.7	3.5			60	40		9	
FS-B2	BIS	50			0.2		250	0.7	0.9			60	60		121	
FS-K2	* CDS	300			3.3		1200	0.52	0.9	0.12		60	80		25	
FSA-G2	PBS	75			0.05		500	2.1	2.7	1.5	40	60	60	19.5	96	
FSK-G2	CDS	50	4k	200	0.5	10	2400	0.64	0.9						64	
SF2-1	CDS	15	500	10	15			0.64	0.9						<1	
SF-2-2	CDS	10	15h	50	4.0	<1		0.64	0.9						60	
SF-2-4	* CDS	15	750	10	15.0	1		0.64	0.9	0.3	100				<1	
SF-2-5	* CDS	6	1k	25	1.0			0.54	0.9	0.2	20	60	70		8	
SF-2-8	* CDS	150	1k	125	1h			0.54	0.9	0.3	25	60	70		12	
SF-2-9	* CDS	100	900	125	3.3			0.64	0.9	0.4	50				20	
SF-2-12	* CDS	15	12h	10	15.0			0.64	0.9	0.2	25	60	70		<1	
SF-2-16	* CDS	15		10	3.3			0.54	0.9	0.9	100	60	70		<1	
FD-3	GE	10	250			10	20	1.4	1.7			10	0	40	0.02	9
FS-3A	PBS	10			2.0			0.7	3.5			60	40		52	
FS-K3	CDS	300			3.3		1200	0.52	0.9	0.12		60	80		25	
SF3-1	CDSE	15	750	10	30			0.72	1.2						<1	
SF-3-5	* CDSE	6		50	2.0			0.74	1.1	1.5	10				8	
SF-3-8	* CDSE	50	750	50	20	<1		0.74	1.2	1.5	10				<2	
FS-A4	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-K4	CDS	300			2.0		6000	0.64	0.9	0.2		60	80		24	
SF-4-1		200		25	0.01	15						60	40			
FS-K5	CDS	300			10.0		3000	0.64	0.9	0.2		60	80		7	
FS-A6	PBS	30	20	10	0.05		500	2.1	2.7	1.5		60	60		115	
FS-D6	BIS	200			20.0		20m	0.75	1.2	2.0		60	40		115	
FS-K6	CDS	300			3.3		3000	0.64	0.9	0.2		60	80		115	
FS-K7	CDS	100			0.05		3500	0.64	0.9	0.2		60	80		200	
FSK-7A	CDS	50	350	350	1.0	50		0.64	0.9							
FSK-7B	CDS	50	800	350	1.0	50	1200	0.64	0.9							
FSK-G7	CDS	50	2k	350	0.5	10	700	0.64	0.9						85	
FS-K8	CDS	300			10.0		1600	0.64	0.9	0.2		60	80		15	

Group XVI—PHOTO AND PHOTOMULTIPLIER TUBES

Type No.	Kind	Type	Bulb dimen			Cathode			Maximum				Output sens		Dynodes		Application	
			Shape	Diam mm	Lth mm	Area cm <sup>2</sup>	Surf	Sens μA/ lm	E <sub>b</sub> V	I <sub>k</sub> μA	Dark I		Min Amp/ L	Opr E <sub>b</sub> V	Design	Mat'l		No.
											Amp	(-) Exp						
F-1	*PHO	VC T	39	93	<3	S4	100	300	1	14								
F-2	*PHO	VC T	20	67		S4	30	300	1	8	1							
F-3	*PHO	VC G	92	140		S10	70	50	1	9								
F-4	*PHO	VC T	39	93		S4	70	300	5	11								
F-5	*PHO	VC T	42	93		S1		300	8	11								
F-6	*PHO	VC G	33	76		S10	50	300	1	11								
F-7	*PHO	VC T	44	97		MG		300	1	11								
F-8	*PHO	VC G	27	62		S4	80	300	1	8								
F-9	*PHO	VC G	40	88		S20	100	300	1	13								
F-10	*PHO	VC T	60	100		S20	80	300	1	12								
FEU-1	*PHM	G	40	124		S4	400	350	1	7	1	220						
FEU-1B	PHM	B	80	285	44	S13	90	2000	300	1	7	3		L	AMK	11 6		
FEU-1B1V	PHM	T	80	225	44	S13	90	2500	1m	1	7	30		C	AMK	10 7		
FEU-1B2V	PHM	T	80	225	44	S13	30	2500		1	7	300		C	AMK	12 7		
FEU-1S	PHM	T	48	205	12	S13	90	1950	300	1	7	3		L	AMK	11 6		
FEU-1V	PHM	T	48	166	12	S13	90	2500	1m	1	7	30		C	AMK	10 7		
FEU-2	*PHM	G	31	71		S4	400	250	1	7	1	220					1	
FEU-2B	PHM		150	295	155	S13	90	2000	300	1	7	3		L	AMK	11 6		
FEU-2B1V	PHM	B	80	225	44	S13	90	2500		1	7			C		12 7		
FEU-2M	PHM	T	34	130	5	S13	90	1600	300	1	7	3		L	AMK	13 5		
FEU-2V	PHM	T	50	170	12	S10	90	2500	1m	1	7	300		C	AMK	12 7		
FEU-3B	PHM	B	200	295	227	S13	90	2000	300	1	7	3		L	AMK	11 6		
FEU-3M	PHM	T	19	75	<2	S13	90	1500	100	5	8	1		L	AMK	8 5		
FEU-4	*PHM	G	38	110	2	S20	600	240		1	14						1	
FEU-5	*PHM	T	34	100	2	S5	400	240		1	14						1	
FEU-11	PHM	T	52	179	16	S4	80	2500	25m	8	7	5	1700	V	CAM	12 7		
FEU-12	*PHM	T	52	179	16	S10	80	2500		8	7	5		V	CAM	12 7		
FEU-12A	*PHM	T	52	179	20	S10	50	1700	25	8	7	5	1700	V		12		
FEU-13	*PHM	T	52	129	17	S5	50	2200	5m	4	7	6	2200	V	CAM	12		
FEU-14	*PHM	T	52	129	17	S10	60	2200	5m	4	7	6	2200	V	CAM	12		
FEU-14A	*PHM	T	52	129	20	S10	60	1700	5	4	7	6	1700	V		12		
FEU-15	*PHM	T	34	115	5	S10	40	2000	5m	1	7	30	1700	L	CAM	12		
FEU-15A	*PHM	T	34	113	5	S10	40	2000		1	7	30	1700	V		12		
FEU-15B	PHM	T	34	113	5	S10	20	2000		6	8	20	1700	V		12		
FEU-16	*PHM	T	34	115	5	S4	25	2000	5m	4	7	5	1700	L	CAM	12		
FEU-16A	*PHM	T	34	113	5	S4	40	2000		1	7	30	1700	V		12		
FEU-17	PHM	T	48	181	<1	S2	20	1400	100	3	7	10	900	L		13		
FEU-17A	PHM	T	48	181	<1	S4	20	1400	100	3	7	10	900	L		13		
FEU-18	*PHM	T	48	181	<1	S5	20	1400	100	3	7	10	900	L		13		
FEU-18A	PHM	T	48	181	<1	S5	20	1400	100	3	7	10	900	L		13		
FEU-19A	*PHM	T	48	195	9	S4	15	2600	200	1	6	1000	1700	L		13 7		
FEU-19M	*PHM	T	34	200	19		10	2600		12	6	1	1100	V		12		
FEU-20	*PHM	T	34	95	<2	S4	20	900	100	8	9	1	900	L		8		
FEU-22	*PHM	T	48	181	<1	S1	25	2000	300	2	8	3	1400	L		13		
FEU-23	PHM		305	450	700	S10	20	2400	10			10		L	AMK	11 5		
FEU-24	*PHM	T	80	230	12	S4	35	2000	200	3	7	10	1600	L		13 6		
FEU-25	*PHM	T	34	109	8	S4	20	1700	100	5	8	1	1250	L		9 6		
FEU-26	*PHM	T	22	70	<1	S4	20	900	75	5	8	11	900			7		
FEU-27	*PHM	T	30	108	5	S10	30	2000		5	9	1	1100			11		
FEU-28	*PHM	T	34	122	5	S1	20	1800	100	2	6	10	1800			11		
FEU-29	*PHM	T	48	195	5	S4	45	2300	200	3	8	10	1000	L	CAM	13 7		
FEU-30	*PHM	T	67	210	20	S4	40	3500		1	4	10k	3500			14		
FEU-31	*PHM	T	22	79	10	S4	20	1400	75	5	7	10	1300	L		8		
FEU-32	*PHM	T	34	123	5	S10	25	1800	200	1	8	1	1250	L	AMK	11 6		
FEU-33	*SCC	T	48	195	9	S4	30	2900		1	6	100	2100	L		13 7		

Group XVI—PHOTO AND PHOTOMULTIPLIER TUBES—Continued

Type No.	Kind	Bulb dimen			Cathode			Maximum				Output sens		Dynodes		Application		
		Type	Shape	Diam mm	Lth mm	Area cm <sup>2</sup>	Surf	Sens μA/ lm	E <sub>b</sub> V	I <sub>k</sub> μA	Dark I		Min Amp/ L	Opr E <sub>b</sub> V	Design		Mat'l	No.
											Amp	(-) Exp						
FEU-34	PHM					9 S13	30	2700			1	5	1000		L		13	
FEU-35	*PHM	T	31	113	5	S4	40	1750	50	2	9	1	1700	L			8	
FEU-36	*PHM	T	48	195	9	S4	40	2900	200	2	5	100	1600	L			13	
FEU-37	*PHM	T	48	193	11	S4	30	2000	200	5	6	1000	2000	L			11	
FEU-38	*PHM	T	48	200	9	S20	100	2900	400	5	6		1300	L			13	
FEU-39	*PHM	T	48	178	9		10	2600		12	6	1	1100	V			11	
FEU-39A	*PHM	T	48	178	9	S4	25	1800	10	1	6	1000	1800	L			11	
FEU-40	NSP	T	20	91		S13	30	1900		5	7	1					8	
FEU-42	NSP	T	48	205		S13	30	2200		1	7	1	1800				11	
FEU-43	NSP	T	80	290		S13	30	2200		1	7	1	1800				11	
FEU-44	NSP	B	150	310		S13	30	2200		1	7	1	1800				11	
FEU-45	NSP	B	200	340		S13	30	2200		1	7	1	1800				11	
FEU-46	NSP	T	48	130		S13	30	1800		1	10	1	1800				10	
FEU-47	NSP	T	48	169		S13	30	2500		1	7	1	2300				10	
FEU-48	NSP	T	80	230		S13	30	2500		1	7	1	2300				10	
FEU-49	*PHM	B	170	202	180	S20	50	2500	10m	3	6	10	1650	V			12	
FEU-50	*PHM	T	89	360	23	S4	20					1000					13	
FEU-51	*PHM	T	34	110	5	S20	60		100	3	7	100	2300				11	
FEU-52	*PHM	B	80	125	28	S20	50	2500	10m	5	8	10	1700	V	CAM	12	7	
FEU-53	*PHM	T	51	110	16	S4	25	2500	10m	1	7	2000	2500	V	CAM	14	7	
FEU-54	*PHM	T	22	90	2	S4	20	1800	500	8	7	25	1700	V			14	
FEU-55	*PHM	T	22	90	2	S10	20	1800	500	8	7	25	1700	V			14	
FEU-56	*PHM	B	80	120	28	S4	30	2500	10m	8	8	10	1700	V			12	
FEU-58	*PHM	T	22	90	2	S4	15	2100	500	2	7	30	2000	V			14	
FEU-59	*PHM	T	51	107	15	S4	20		10m	2	5	20		V			14	
FEU-60	*PHM	T	15	59	<1	S4	20	1600	50	3	8	30	1600				10	
FEU-62	*PHM	T	34	86	<1	S1	15	1800	100	6	7	10	1500				11	
FEU-63	*PHM				78	S20	60					1000						
FEU-64	*PHM	T	48	170	<1	S4	25	1250	100	5	8	1000	1500				11	
FEU-65	*PHM				176	S5	40					1000						
FEU-67	*PHM	T	22	76	<1	S2	20	1250		5	9	3	1250				8	
FEU-68	*PHM		15	70			100			4	10	1	1200					
FEU-69	*PHM	T	22	75	<1	S20	90	1350				10						
FEU-70	*PHM	T	34	125		S10	50	1800		6	9	100	1800					
FEU-74	*PHM	T	3	30	4		40	1500		3	10	10						
FEU-75	*PHM		15	70			60			4	10	1	1200					
FEU-77	*PHM					S20												
FEU-80	*PHM																	
FEU-81	*PHM	T	52	122		S10	50	1800		8	8	100	1800					
FEU-82	*PHM	T	80	152		S10	50	2500		2	7	100	1800					
FEU-85	*PHM	T	30	90	5	S4	80			3	8	100	900					
FEU-93	*PHM	T	52	120	13	S4	30	2500		5	8	10	1600	V			12	
FEU-97	*PHM	T	52	110		S4		2000		7	9	30	1350					
FEU-R3	PHM	T	47	109	2	S13	90	1400		1	10				C		10	
FEU-R5	PHM	T	47	109	2	S13	90	1400		1	7	1			C		10	
STSV-3	*PHO	VC	G	27	62	5	S4	80	300	1	8	1	240					
STSV-4	*PHO	VC	G	39	129	114	S4	80	300	1	7	1	240					
STSV-6	PHO	VC	T	27	104		S1		30	5	11							
STSV51	*PHO	VC	G	30	63		S4	100	240	1	8							
TSG-1	PHO	GS	G	56	131		S1	75	240	1	7	1						
TSG-3	*PHO	GS	G	27	62		S1	100	300	1	7	1	240					
TSG-4	*PHO	GS	G	39	129		S1	100	300	1	7	1						
TSV-1	PHM	VC	G	56	131		S1	20	240	1	7	1						
TSV-3	PHO	VC	G	27	62		S1	20	240	1	7	1						
TSV-4	PHO	VC	G	39	129		S1	20	240	1	7	1						
TSV-6	PHO	VC	T	27	104		S1		30	5	11							

### Group XVIII – THERMOCOUPLES

Type No.	Kind	Dimen- sions		Typical		Response	$f_{max}$ MHz
		Diam mm	Lth mm	$I_H$ mA	Thermo elec mV		
TV-2	THM	13	23	100	30	35	5
TV-4	THM	13	23	50	30	35	5
TV-5	THM	13	23	75	30	35	5
TV-14	THM	13	23	250	30	15	5
TV-15	THM	15	20	500	30	35	5
TV-16	THM	15	20	1000	30	35	5
TVB-1	THM	20	30	1	<3	40	200
TVB-2	THM	20	30	3	5	40	200
TVB-3	THM	20	30	5	10	40	200
TVB-4	THM	20	30	10	12	40	200
TVB-5	THM	20	30	30	12	40	200
TVB-6	THM	20	30	30	12	40	200
TVB-7	THM	20	30	100	12	40	200
TVB-8	THM	20	30	300	12	40	200
TVB-9	THM	20	30	500	12	40	200



Group XIX—THERMISTORS

Type No.	Kind	Use	Dimen		Shape	Resistance			Temp		Power		Sens Ω/ mW
			Lth mm	Diam mm		Min Ω	Max Ω	T.C. %	Min (-)°C	Max (+)°C	Min mW	Max mW	
TOS-M	TMS	CON	6	3	DSC		6k	3.0		180		50	
KMT-1	TMS	MEA	13	4	CYL	20k	1M	5.1	20	180		8h	
MMT-1	TMS	MEA	13	4	CYL	1	200	2.9	70	120		4h	
ST1-17	TMS	MEA				300	22k	7.0	60	100		5h	
ST1-18			1			<2	2200	5.0	60	300		45	
ST1-19	TMS	MEA				3	2200	4.0	60	300		60	
ST-1-21	TMS		48	12	CYL	33	100		60	85		60	
ST-1-30	TMS		60	6	CYL	200	33k		60	85			
TKI-1	TMS	MEA	5	5	CYL	5	40	0.4	40	70			
TSH-1	TMS	MEA					125	3.4			7.0	11	
TST-1A	TMS	REG	6	18		4	20	1.4				40	
ST-2-26	TMS					1k	100k	3.0	60	125			
TKI-2	TMS	MEA	5	5	CYL	10	1000	2.6	40	70			
TSH-2	TMS	MEA					150	3.4			13.5	18	
ST3-17	TMS	MEA				33	340	4.5	60	100		5h	
ST3-18			<1			<1	3	4.1	90	125		15	
ST3-19	TMS	MEA				2	15	4.5	90	125		45	
ST-3-21	TMS					680	15k		60	85		60	
ST-3-22	TMS			40	CYL		1k	3.5	60	85	6.0	12	
ST3-23	TMS	COM				2	5	3.7	0	125		5h	
ST-3-24	TMS		<1		DSC	680	33h	3.0	60	85			
ST-3-25	TMS		<1		DSC	15h	33h	3.3	100	125	0.1	8	
ST-3-26	TMS					100	680	3.0	60	125			
TKI-3	TMS	MEA	5	5	CYL	10	20k	2.8	40	70			
KMT-4	TMS	MEA	24	7	CYL	20k	1M	5.1	20	180		8h	
MMT-4	TMS	MEA	24	7	CYL	1	200	2.9	70	120			
ST-4-15	TMS	MEA	<2	10		1500	1800	3.6	60	180		10	
MMT-5	TMS	MEA	5	14	CYL	1k	200k	2.9	70	120		4h	
MMT-6	TMS					10	1000	2.9	70	120		50	
KMT-8	TMS					100	10k	4.6	40	60			
MMT-8	TMS	COM	22	23	DSC	1	1000	2.9	40	60		10	
T8D	TMS		8	3	CYL	150					10	15	20
T8E	TMS		8	3	CYL	150					7	10	30
T8M	TMS		8	3	CYL	200					9	11	66
T8R	TMS		8	3	CYL	125					7	12	10
T8S1	TMS		8	3	CYL	120					9.5	24	10
T8S1M	TMS		8	3	CYL	120					9.5	24	10
T8S2	TMS		8	3	CYL	150					8	19	12
T8S2M	TMS		8	3	CYL	150					8	19	12
T8S3	TMS		8	3	CYL	150					7	23	10
T8S3M	TMS		8	3	CYL	150					7	23	10
MMT-9	TMS	COM	<3	19	DSC	10	5000	2.9	60	120		10	
T9	TMS		8	3	CYL	125					7	19	10
KMT10	TMS	CON	30	6	CYL	100k	3M	5.1	0	120		2h	
KMT-11	TMS	CON	<4	<1	CYL	100k	3M	5.1	0	120		2h	
KMT-12	TMS					100	10k	4.6	40	120			
MMT-12	TMS					5	5k	2.9	40	120		3	
MMT-13	TMS		9		DSC	10	2200	2.9	60	125	0.3		
KMT-14	TMS	MEA	4	80	CYL	510	7500	4.5		300		1h	
KMT-17	TMS		5		DSC	300	20k	4.2	60	155	0.1	5h	
TKP-20	TMS	POW	33	68			500	2.0				2h	
STI-21	TMS					10k	100k		60	85		60	
TKP-50A	TMS	POW	33	68			2000	2.3				2h	
TKP-50B	TMS	POW	33	68			750	2.3				2h	
TKP-300	TMS	POW	33	68			10k	3.5				20	

Group XX – STROBOTRONS

Type No.	Dimensions			Voltage			Power		Inter res $\Omega$	Flash conditions				Light output			Life	
	Shape	Diam mm	Lth mm	Min drop V	Oper V	Firing V	Avg W	Peak kW		Dischg cap pF	Time $\mu$ s	Flash freq pps	Energy j	Flash cd/s	Avg cd	Peak cd	No. of flsh	Hrs
IFB300	R	8	85	240	300	1500	40	36	2.5	65h	8k	0.13	300	500		60k	10k	
IFK15-1	T	29	60		300		3	90	1.5	800	400	0.1	36	36		9k	2k	
IFK20	T	4	10	100	130	700	2	100	1.6	25h	200	0.1	20	20		100k	10k	
IFK50	T	4	20	140	200	1k	5	125	0.3	25h	400	0.1	50	70		180k	10k	
IFK120	U	5	30	180	300	1k	12	120	0.8	25h	1k	0.1	120	250		250k	10k	
IFK500	P	30	45	400	500	3500	30	65	4.0	4k	8k	0.05	500	1000		130k	10k	
IFK2000	U	9	70	250	320	2k	300	200	4.5	8k	2k	0.7	400	1200		600k	40k	
IFK20000	G	85		2k	6k	20k	55h	10M	3.5	550	11h	0.55	10k	34k		30M	7k	
IFK80000	G	1h		3k	6k	20k	18k	13M	2.5	39h	5k	0.25	70k	240k		36M	5k	
IFP200	T	5	200	450	500	2k	27	140	2.0	16h	16h	0.13	200	400		250k	10k	
IFP500	T	5	350	450	500	3k	65	70	3.5	4k	7k	0.13	500	1000		140k	10k	
IFP1500	T	5	600	900	1k	4k	100	160	6.0	3k	9k	0.06	15h	4000		450k	10k	
IFP4000	T	6	800	1300	1400	5k	270	250	8.0	4k	16k	0.06	4k	12k		750k	10k	
IFP15000	T	9	600	1600	2400	5k	1250	3300	1.8	5k	45h	0.08	15k	50k		11M	10k	
ISK10	U	5	30	180	300	1000	10	3	0.8	1.0	15	200	<0.1	7 $\mu$	15	500	50	
ISK25	U	5	20	250	300	1000	20	130	0.4	450	150	1	20	40		30k	30	
ISP10	T	1	62	700	1000	3000	10	6	30	0.2	18	100	0.1	50 $\mu$	5	3k	500	
ISP70	T	0.5	70	900	1200	3000	70	10	1h	0.2	18	400	0.2	100 $\mu$	40	6k	100	
IS-SH15	T	1	2	250	1000	1200	1	20		20	15		10	5		300k	1	5k
IS-SH100-1	T	0.7	2	2200	3000	3500		4000		11	15		50	50		3M	1	2
IS-SH100-3	T	2	5	2500	3500	6k	150	1000		0.5	2	50	3	2	100	600k	5	
IS-SH500	T	1.2	8	5k	9k	15k	500	1000		0.12	6	100	5	5	500	1M	1	1
IST10	U	5	30	180	300	1000	10	50	0.8	220	200	1	10	8		40k	50	

Group XXI—COUNTERS

Type No.	Kind	Radiation	Quenching	Cathode	Dimen- sions		Plateau		Maximum			Temp		Cap	Min R <sub>i</sub>
					Lth	Diam	Min	Max	Rate	Plateau		Min	Max		
					mm	mm	V	V	10 <sup>3</sup> / min	Width V	Slope %V	(-) <sup>o</sup> C	(+) <sup>o</sup> C		
AS-1	COU	BAG			132	18	830	940		80	0.2	0	35		
SFK-1	COU	UV	CU	177	32	1100	1350	3	200			10	40		
AS-2	COU	BAG	AL	160	25	750	860		100	0.15		0	35		
GS-4	COU	GAM	SQ	GR	180	23	1250	1450		200	0.1			25	8
GS-6	COU	GAM	SQ	GR	266	23	1250	1450		200	0.1			25	8
GS-7	COU	GAM	SQ	GR	145	16	1200	1300		150	0.1			25	30
GS-8	COU	GAM	SQ	GR	185	16	1200	1300		150	0.1			25	30
GS-9	COU	GAM	SQ	GR	367	33	1250	1450		250	0.1			25	8
GS-10	COU	GAM	SQ	GR	225	16	1250	1450		150	0.1			25	30
GS-11	COU	GAM	SQ	GR	185	33	1250	1450		200	0.1			25	8
GS-12	COU	GAM	SQ	GR	145	16	1200	1300		150	0.1			25	30
GS-30	COU	GAM	SQ	GR	662	33	1250	1450		150	0.1			25	8
GS-60	COU	GAM	SQ	GR	667	63	1250	1450		150	0.1			25	8
MS-4	COU	GAM	SQ	CU	180	23	820	880	65	200	0.1	40	50	25	8
MS-6	COU	GAM	SQ	CU	266	23	820	880	20	200	0.1	40	50	25	8
MS-7	COU	GAM	SQ	CU	145	16	800	860	28	100	0.15	25	50	25	30
MS-8	COU	GAM	SQ	CU	185	16	800	860	55	100	0.15	25	50	25	30
MS-9	COU	GAM	SQ	CU	367	33	870	930	280	250	0.10	40	50	25	8
MS-11	COU	GAM	SQ	CU	185	33	870	930	105	200	0.10	40	50	25	8
MS-12	COU	GAM	SQ	CU	145	16	790	850	15	100	0.15	25	50	25	30
MS-13	COU	GAM	SQ	CU	100	23	870	930	30	200	0.15	40	50	25	8
MS-14	COU	GAM	SQ	CU	160	23	870	930	70	200	0.15	40	50	25	8
MS-16	COU	GAM	SQ	CU	250	23	870	930	120	200	0.10	40	50	25	8
MST-17	COU	BET	SQ	CU	100	40	1600		10	150	0.05	30	50	10	7
MST-18	COU	BET	SQ	CU	90	40	1650		10	150	0.03	20	40	10	7
MSTR-4	COU	BET	SQ	CU	180	40	1350		25	200	0.05	5	35	25	8
SAT-7	COU	ALP		NI	70	44	330	400		60	0.12	40	50		
SAT-8	COU	AAB			48	15	500	1000		300	0.03	40	50		
SBM-7	COU	BET	SQ	SS	335	26	800	2400		200	0.05		50		
SBM-8	COU	BET	SQ	SS	335	26	800	2400		200	0.05		50		
SBS-1	COU	BAG	SQ	SN	125	14	800	1200	2	150	0.03	50	50		
SBS-4	COU	BET	SQ	GR	362	23	800	1200	2	150	0.03	50	50		
SBS-5	COU	BET	SQ	GR	255	23	800	1200	2	150	0.03	50	50		
SBT-3	COU	AAB			93	50	1800	2100		150	0.05	30	50		
SBT-7	COU	BET		SS	72	20	320	420		80	0.12	40	50		
SBT-8	COU	AAB		CU	75	20	1100	1700		150	0.03	30	30		
SBT-9	* COU	BET	SQ	SS	72	11	320	420	100	80	0.12	30	50		
SBT-10	* COU	AAB		LD	88	51	340	460	<1	80		30	50		
SGS-5	COU	GAM	SQ	SS	60	8	320	440	2k	60	0.25	50	50		
SGS-6	COU	GAM	SQ	SS	90	8	340	440		80	0.15	40	80		
SI-1BG	COU	BAG	SQ	NI	60	15	375	410		35		40	50	5	<1
SI-2B	COU	BET	SQ	SN	90	70	1350	1750	8	150	0.05	30	50	10	7
SI-2BG	COU	BAG	SQ	NI	60	15	375	410		35		40	50	5	3
SI-3BG	* COU	BAG	SQ		60	10	290	330	72	80	0.25	40	50		
SI-4BG	COU	BAG	SQ	NI	60	14	380	460		80	0.25	40	50		
SI-9BG	COU	BAG	SQ	FE	25	10				60	0.15	40	50		
SI-10BG	COU	BAG	SQ	NI	76	17	375	400		80	0.25	40	50		
SI-11BG	* COU	BAG	SQ	NI	75	17	375	400		80	1.25	40	50		
SI-12BG	COU	BAG	SQ	FE	73	12		900		80	0.2	50	100		
SI-13G	* COU	GAM	SQ	NI	66	10	290	330		80	0.25	50	60		
SI-19BG	* COU	BET			18	9		390		80	0.3				
SI-19G	COU	GAM	SQ	FE	94	11	280	320		100	0.13	40	50		
SI-20G	COU	GAM	SQ	FE	180	19	285	335		100	0.13	40	50		
SI-21G	COU	GAM	SQ	FE	265	19	285	335		100	0.13	40	50		
SI-22G	COU	GAM	SQ	FE	220	19	285	335		100	0.13	40	50		

Group XXI—COUNTERS—Continued

Type No.	Kind	Radiation	Quenching	Cathode	Dimen- sions		Plateau		Maximum			Temp		Cap	Min R <sub>1</sub>
					Lth	Diam	Min	Max	Rate	Plateau		Min	Max		
					mm	mm	V	V	10 <sup>3</sup> / min	Width V	Slope %V	(-) <sup>o</sup> C	(+) <sup>o</sup> C		
SNM-3	*	COU NEU	SQ SS	130	42	1400	1800		100	0.01	10	30			10G
SNM-5		COU NEU	SQ SS	300	35	1200	1800		100	0.05	20	30			
SNM-7		COU NEU	SQ SS	650	35	1800	2500		100	0.05	0	30			
SNM-8	*	COU NEU	SQ SS	10h	94	2000	2500		150	0.05	0	30			10G
SNM-9	*	COU NEU	SQ SS	133	1	1100	1500		1k	0.05	0	50			
STS-1		COU GAM	SQ FE	94	16	280	320	60	80	0.12	40	50	10	5	
STS-2		COU GAM	SQ FE	180	24	285	335	40	80	0.12	40	50	10	5	
STS-3		COU GAM	SQ FE	265	23	285	335	30	80	0.12	40	50	10	5	
STS-5		COU BET	SQ FE	113	12	285	335	200	80	0.12	40	50	10	5	
STS-6		COU BET	SQ FE	200	22	285	335	60	80	0.12	40	50	10	5	
STS-8		COU GAM	SQ FE	220	23	285	335	40	80	0.12	40	50	10	5	
T20BFL		COU AAB		7	20	1200	1300		300	0.01	20	40			
T25BFL		COU AAB		7	25	1300	1400		300	0.01	20	40			
T30BFL		COU AAB		7	30	1400	1500		300	0.01	20	40			
T40BFL		COU AAB		7	40	1500	1600		300	0.01	20	40			
T50BFL		COU AAB		7	50	1500	1600		300	0.01	20	40			
T60BFL		COU AAB		7	60	1900	2000		300	0.01	20	40			
T80BFL		COU AAB		80	90	2000	2100		300	0.01	20	40			
VS-4		COU GAM	SQ W	180	23	720	800	25	200	0.07	40	50	25	8	
VS-6		COU GAM	SQ W	266	23	720	800	25	200	0.07	40	50	25	8	
VS-8		COU GAM	SQ W	185	16	720	800	25	150	0.07	40	50	25	30	
VS-9		COU GAM	SQ W	367	33	720	800	25	250	0.07	40	50	25	8	
VS-9T		COU GAM	SQ W	367	33	720	800	25	200	0.1	40	150	25	8	
VS-11		COU GAM	SQ W	185	33	720	800	25	200	0.07	40	50	25	8	
VS-13		COU GAM	SQ W	100	23	720	800	25	150	0.07	40	50	25	8	
VS-14		COU GAM	SQ W	160	23	720	800	25	200	0.07	40	50	25	8	
VS-16		COU GAM	SQ W	250	23	720	800	25	200	0.07	40	50	25	8	
S110N	*	COU NEU	SS	270	<20	2850	2950		100	0.1	10	100			1G
SNMU-5	*	COU NEU	SQ SS	300	<29	1700	2200		100	0.05	20	30			10G
SNM-10	*	COU NEU	SS	336	18	1500	3000			0.02	50	150			
SNM-11	*	COU NEU	SS	336	18	1500	3000			0.01	50	150			
SNM-12	*	COU NEU	SS	215	8	500	700			0.05	50	100			
SNM-13	*	COU NEU	SS	85	8	450	600			0.05	50	100			
SNM-14	*	COU NEU	SS	153	18	1500	3000			0.02	50	150			
SNM-15	*	COU NEU	SS	21h	150	1800	2300	5		0.03	30	40			
SNM-16	*	COU NEU	SS			2000	2800			0.03	50	150			
SNM-17	*	COU NEU	SS			2000	2800			0.03	50	150			
SNM-18	*	COU NEU	SS	320	32	1350				0.01	40	50	7		
SNM-20	*	COU NEU	SS	270	<20	1700	2200			0.05	10	100			1G
SNM-30	*	COU NEU	SS			1800	2800			0.02	50	150			
SNM-31	*	COU NEU	SS			1800	2800			0.02	50	150			
SNM-32	*	COU NEU	SS	323	19	1500	3000			0.02	50	150			
S1-9A	*	COU ALP		70	44	360	400		60	0.2					
S1-11N	*	COU NEU		314			2950		200	0.05					
SRM-1N	*	COU		274	52		300								

Group XXII—DISCHARGE DIODES

Type No.	Dimen		Gas	Cath		Firing		Pulse			Min inter res	Max cap	Amb temp			
	Lth	Diam		Type	Kind	Min	Max	I-amp	Time	Operating frequency			MΩ	pF	Min	Max
	mm	mm				V	V	J-joule	s						pps	(-°C)
R-1	*	16 24		C				2k		10			60	100		
R-2		17 16.5		C		1300		2k		600	20		50	80		
R2M	*	12 16		C				2k		10			60	200		
R-3	*	70 21.5		C	BA0			600	140	8μ	300	100	1	60 70		
R-4	*	20 7.5		C	BA0			75						60 50		
R-5	*	41 22		C	BA0	160	250					100		60 100		
R-6	*	110 55		C	WNB			800	2kW	200M		100	<3	60 100		
R-7	*	50 18	HK	C	BA0	270	330			2		20	10	60 100		
R-8	*	50 20	HK	C	BA0	450	550			2		20	10	60 100		
R-9	*	55 20	HK	C	BA0	900	1100			2		20	10	60 100		
R-10	*	55 24	HK	C	BA0	1350	1650			2		20	10	60 100		
R-11	*	137 40		C	NI	2250	2750	2hμ						60 100		
R-12	*	30 12	AR	C	K	128	192	20	1μ	100	1000			60 70		
R-18	*	36 14	AR	C	K		1500	5hW		650M			<1	60 70		
R-21	*	100 24	NA	C		1100	1500	500	30μ	40				60 100		
R-24	*	112 24	NA	C		2000	6700	300	1hμ					60 100		
R-54						7200	9800									
R-350	*	62 20	AR	C	NI	310	390	3	2	0.002	5k	10		50 70		
R-450		62 20	AR	C	BA	440	480	3	2	0.002	5k	10		50 50		
RB-1		52 19		C	BA	150	190				400					
RB-2	*	25 19		C	BA			220	50	15μ	50	100	<1	60 85		
RB-3	*	41 22		C	BA	220	235	30	1hμ	7		100		60 100		
RB-5	*	60 16		C	BA	340	460	10J		1		200		60 70		
RB-5A		60 16		C	BA	370	510	<1J		8				60 50		
RB-90		62 17.5	NA	C	BA	80	100	30m	2	0.005	100	100		60 70		
RB-280	*	210 95	AR	C	BA	250	310	30	10	0.002	40	20		60 70		
RB-350		210 95	AR	C	BA	310	390	30	10	0.002	40	20		60 70		
RB-430		210 95	AR	C	BA	390	470	30	10	0.002	40	20		60 70		
SK-127		37 20	NA		MG		72	1	20	1						
SK-220		37 20	HE				140	<1	20	1						
4378D	*	62 17		C	BA	80	100					100		60 70		

Group XXIII—DECATRONS

Type No.	Kind	Voltages					I <sub>k</sub>	Pulse	Counting Rate			Dimen		
		Ep	Typ Firing	Typ Oper	Typ K-K	Pulse reset			Max	Min	Min	Max	Lth	Diam
		Min V	V	V	V	Min V	mA	μs	Hz	Unit	Exp	mm	mm	
A101	*	DEC	420	375	150	40	150	0.45	200	.01	10	3	76	34
A102	*	DEC		430	210		165	1.5		.01	10	3	76	34
A103	*	DEC		430	275		140	0.85		50	10	3	76	34
A106	*	DEC		420	295		110	1.4			10	5	76	34
A107	*	DEC		440	290		50	1.75			10	6	38	18
A108	*	DEC		250	135		18	0.75		15	10	3	38	18
OG-1		DEC	450	300	150	50	1.3	40			8	3	76	34
OG-2		DEC	450	300	150	50	1.3	60			3	3	76	34
OG-3		DEC	460	420	190	40	0.7	18			20	3	83	30
OG-4	*	DEC	425	420	175	35	0.5	160	.01		2	3	76	30
OG-5		DEC	400	350	175	60	1.3	35			10	3	76	34

Group XXIII-A - CHARACTER AND NUMERICAL INDICATORS

Type No.	Characters					Start- ing age V	Current			Bulb			
	Al- pha	Num	Sym- bol	Hght	View- ing		Max mA	Min mA	Shape	Hght mm	Diam mm	Thick mm	
IN-1	*	X		18	END	200	3.0	2.5	CIR	65.0	30.5		
IN-2	*	X		9	END	200	2.0	1.5	CIR	35.5	17.0		
IN-4	*	X		17	END	170	3.0	2.5	CIR	46.0	31.0		
IN-7	* X		X	16	END	170	4.0	2.5	CIR	46.0	31.0		
IN-7A	* X		X	16	END	170	4.0	2.5	CIR	46.0	31.0		
IN-7B	*		X	16	END	170	4.0	2.5	CIR	46.0	31.0		
IN-8	*			18	SIDE	140	3.0						
IN-8-2	*			18	SIDE	140	3.0						
IN-11	* X		X	14	END	170	3.5	3.0	REC	36.0	31.0	28	
IN-12A	*	X	X	18	END	170	3.0	2.5	REC	35.0	31.0	21	
IN-12B	*	X	X	18	END	170	3.0	2.5	REC	35.0	31.0	21	
IN-14	*	X	X	18	SIDE	170	3.0	2.5	CIR	54.5	19.0		
IN-15A	* X		X	18	END	170	3.5	2.5	REC	31.0	28.0	21	
IN-15B	* X		X	18	END	170	3.5	2.5	REC	31.0	28.0	21	

Group XXIV - LIGHT AMPLIFIERS

Type No.	Kind	K	Scrn color	Max dimen			Amp $\mu$	Typ $E_b$ V	Resol	
				K	Screen				10 <sup>-r</sup>	Line per mm
					mm	mm	mm			
LIM-3	LAM	CSB	VB	15	65	20	2	18	8	70
LIM-4	LAM	CSB	VB	15	135	40	4	18	9	70







Group XXV – BASES – Continued

Base No.	Section 1											Section 2								Sec 4			Deflection 1				Deflection 2			
	H	H	K	g <sub>1</sub>	g <sub>2</sub>	g <sub>3</sub>	g <sub>4</sub>	g <sub>5</sub>	A	Sh	H	H	K	g <sub>1</sub>	g <sub>2</sub>	g <sub>3</sub>	A	A <sub>a</sub>	K	A	A <sub>3</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	
T20	3	9	1	2	4				5	6			8	1		11														
T21	5	10	1	3					4	2			8			9														
T22	3	4	2	5	1				6																					
T23	3	4	2	1					6																					
T24			1	4					CP																					
T25	4	8	2	5					1																					
T26	4	8	6	3					1																					
T27	4	8	6	1					3																					
T28	5	7	1	3					6																					
T29	2	4		3					1																					
T30	1	2		5					3																					
T31	2	3	5	4					1																					
T32	10	12	7	4					1																					
TD1	4	8	6	7					1				3			5														
TD3	2	7	8	CP					3							4	5													
TD6	3	8	2	4					1				9			6														
TE1	1	6	4	8	5				2																					
TE2	1	7		2	CP				4																					
TE3	4	5		8	2				3				C			9														
TE4	1	3		2	4				CP																					
TE5	1	3		4	2				CP																					
TE6	2	7		5	4				CP																					
TE7	1	7	7	3	6				CP																					
TE8	1	2	5	6	9				CP																					
TE9	4	5	1	9	8				CP																					
TS1	1	7		5					2																					
TS2	2	3		4					1																					
TS3	1	3	2	6					4																					
TS4	4	5	3	2					9																					
TS5	2	7	8	CP					CP																					
TS6	2	6	3	5					4																					
TS7	4	5	9	2					1																					
TS8	2	7	1	5					CP	3																				
TS9	2	7		CP					CP																					
TT1	4	5	7	8					9							1	6	3	2											
4AC	2	7	7						CP																					
4AJ				2					5	3																				
4BB	2	7	8	CP					CP																					
4BQ	2	7	8						3																					
4D	1	4		3					2																					
4F	1	3		4					2																					
4G	1	4	3						2																					
4T2	1	2		4					CP																					
5AA	2	7	8						5																					
5AW	1	5	4	3	2	4			CP																					
5BT	2	7	3	5	8	3			CP																					
5CL	3	5		4	2	5			1																					
5F	1	5	4	CP	3	4			2																					
5M	2	7	8	CP					4																					
5S	2	7		5					3																					
5Y	2	7		CP	4	7			3																					
6AR	1	7		6	3	5			2																					
6AU	1	7		6	4	1			5																					
6BT	3	4	5						2	6																				
6BY	2	7	3	CP					CP																					
6CC	3	4	2	1	6	2			5																					
6F	1	6	5	CP	3	4			2																					
6Q	2	7	8	5					3	1																				
6X	2	7		5	4	7			3																					
7AB	2	7		4					3				5			6														
7AT	1	7		4	3	6	3	1	2																					
7AV	1	7		3	4	5			1																					
7BA	1	7		3	4	5			2																					
7BD	3	4	2	1	6	7			5																					
7BF	3	4	7	5					2				6			1														

Group XXV – BASES – Continued

Base No.	Section 1										Section 2							Sec 4		Deflection 1				Deflection 2								
	H	H	K	g <sub>1</sub>	g <sub>2</sub>	g <sub>3</sub>	g <sub>4</sub>	g <sub>5</sub>	A	Sh	H	H	K	g <sub>1</sub>	g <sub>2</sub>	g <sub>3</sub>	A	A <sub>3</sub>	K	A	A <sub>3</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>			
7BK	3	4	7	1	6	2			5																							
7BP	1	7	4	2	3	4			CP				6			4	CP															
7BQ	3	4	2	1					7																							
7BS	3	4	2	6					1																							
7CH	3	4	2	1	6	7	6	2	5																							
7CM	3	4	2	1	6	7			5																							
7DF	3	4	1	2	5	6			7																							
7DN				2					1																							
7EM	3	4	2	1	5				6																							
7R	2	7	8	CP	4	5			3																							
7S	2	7	8	5	4	8			3																							
7T	2	7	8	CP	4	5	4	8	3																							
7Z	2	7		5	6	4	CP	4	3																							
8A	2	7	8	5	6	4	CP	4	3																							
8AN	2	7	4						3	1																						
8B	2	7	8	4					3				5																			
8BD	7	8	3	1					2				4																			
8BE	7	8	2	1					3				5																			
8BK	2	7	3	4	6	3			8																							
8CJ	1	9	2	3					4	5			7																			
8E	2	7	8	CP	6	8			3																							
8ES	2	7																														
8HC	2	7							CP																							
8N	2	7	5	4	6	3			8																							
8Q	7	8	3	2					6																							
8R	2	7	6	5	4	8	4	1	3																							
8S	7	8	6	3					2				4																			
8T1	3	4	2	1	5				7																							
8T2	2	7	8	5	6				3																							
8T3	2	7	8	5					3																							
8Y	2	7	5	4	6	1			8																							
9AE	4	5	7	2	3	7			6				9																			
9AJ	4	5	3	2					1	9			7																			
9BD	4	5	CP						2																							
9CA	4	5	3	2	1	7	1	3	6				9																			
9CB	4	5	CP						9																							
9CV	4	5	3	2	9	3			7																							
9DD	4	5	1	2					3				6																			
9EQ	4	5	1	2	9	8			7																							
10T	1	10	5	2	6				8																							
11L	1	11	2	10					7																							
14A	1	14	2	3					4																							
14G	1	14	2	3					9																							
14J	1	14	2	3					9																							

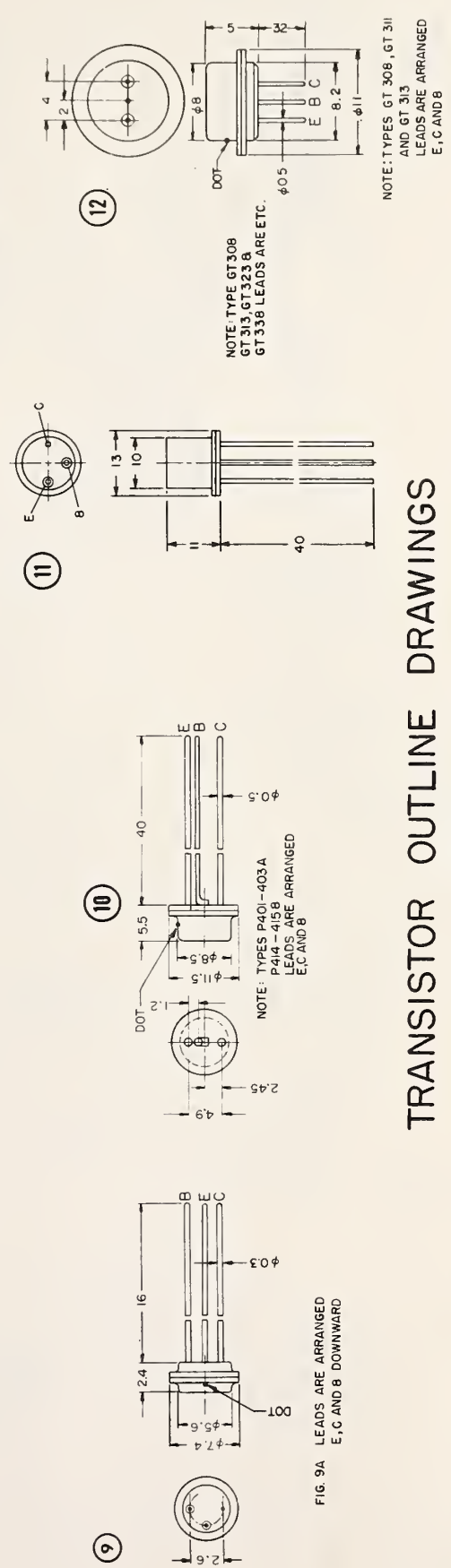
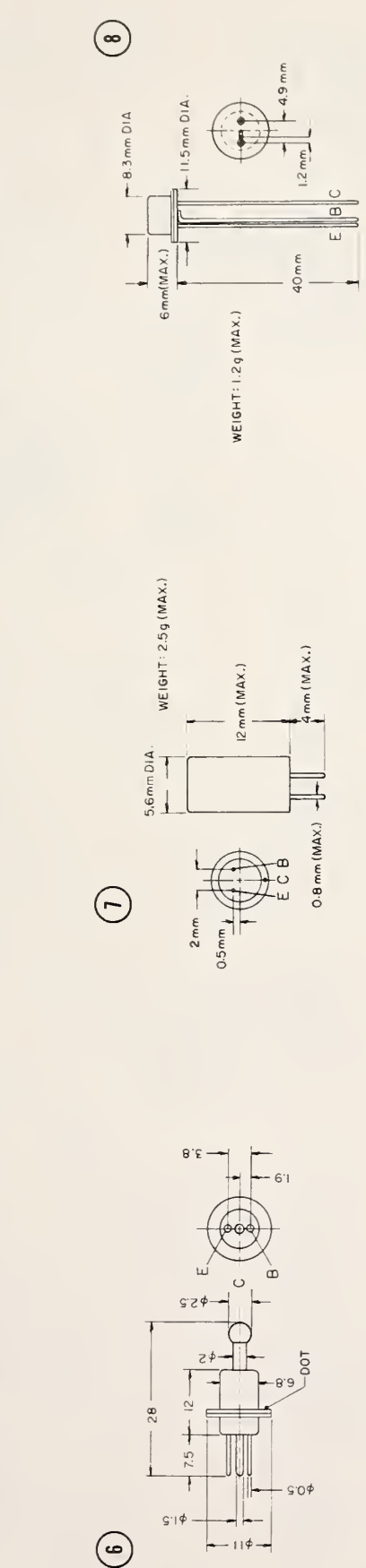
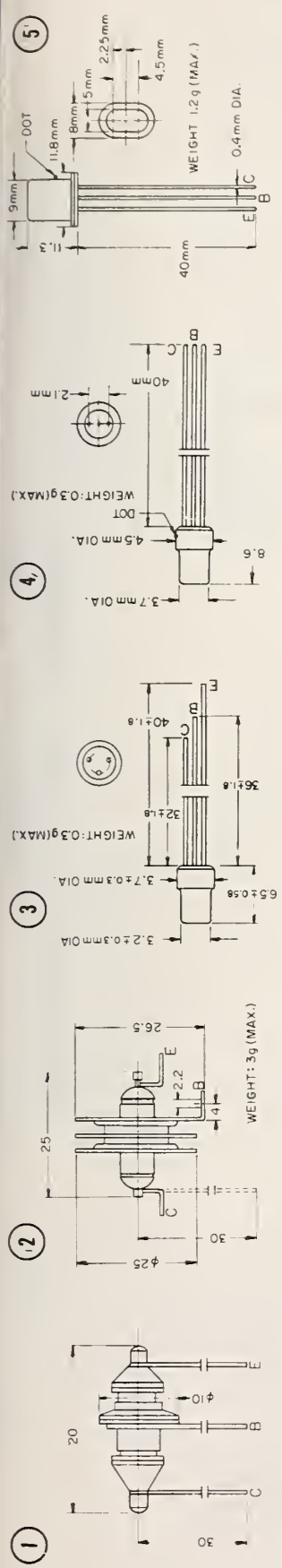


FIG. 9A LEADS ARE ARRANGED E, C AND B DOWNWARD

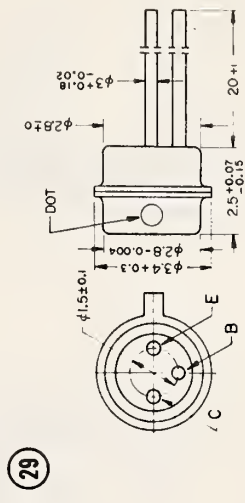
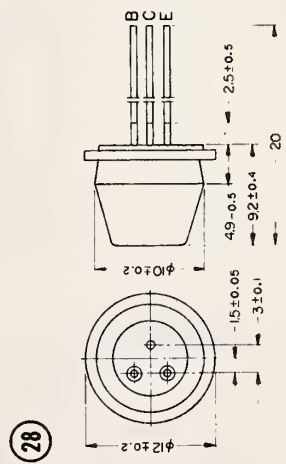
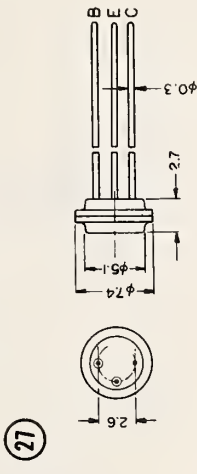
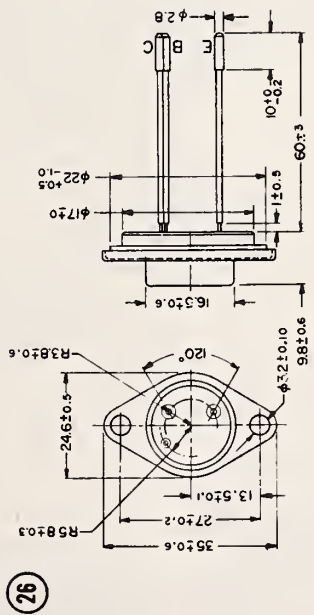
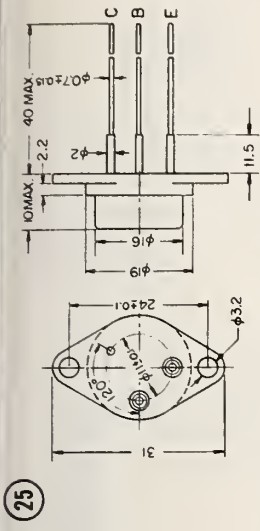
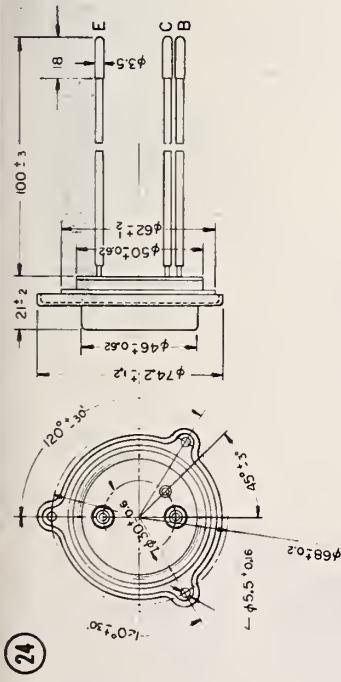
# TRANSISTOR OUTLINE DRAWINGS GROUP X

NOTE: TYPES GT 308, GT 311 AND GT 313 LEADS ARE ARRANGED E, C AND B

NOTE: TYPE GT 308 GT 313, GT 323 B GT 338 LEADS ARE ETC.

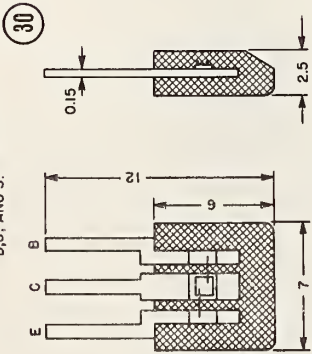
NOTE: TYPES P401-403 A P414-415 B LEADS ARE ARRANGED E, C AND B



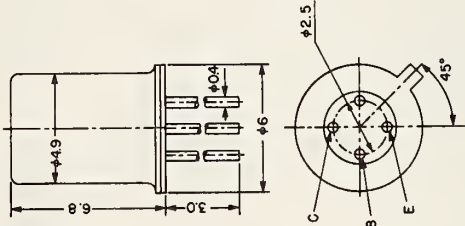


TRANSISTOR OUTLINE DRAWINGS  
(CON'T)

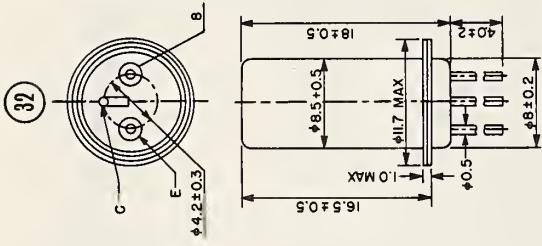
NOTE: TYPES KP102 AND KP103  
LEADS ARE ARRANGED  
D, G, AND S.



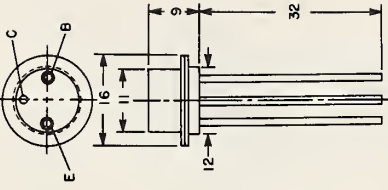
31



NOTE: TYPE KT339 LEADS ARE  
B, E, C.  
TYPE: KP301 LEADS ARE  
D, G, S.



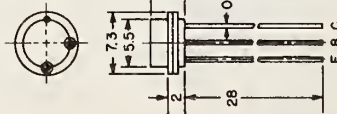
33



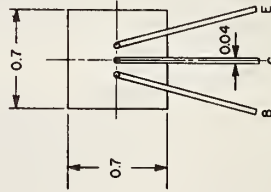
38



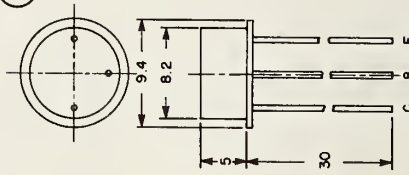
NOTE: TYPE KP101 LEADS  
ARE GSD



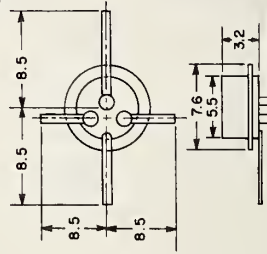
35



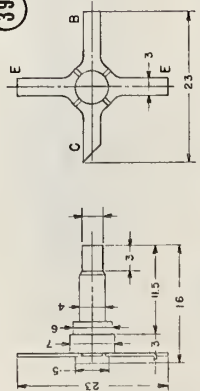
36



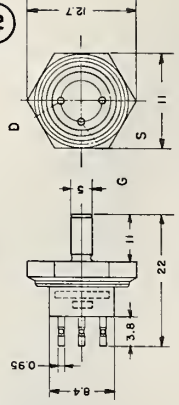
37



39

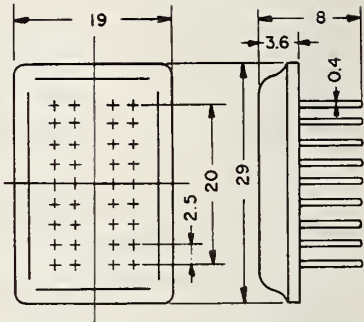
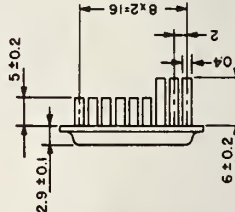
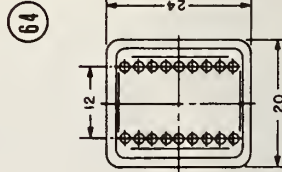
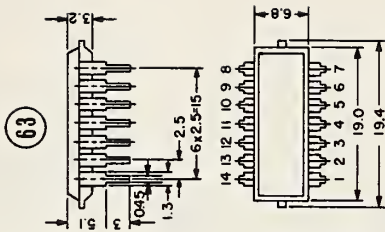
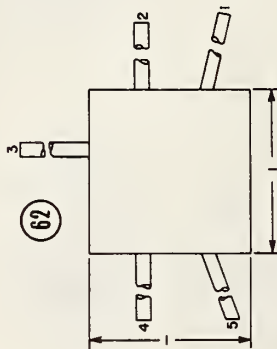
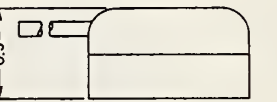
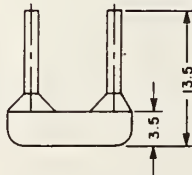
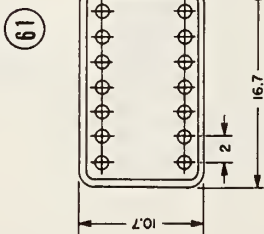
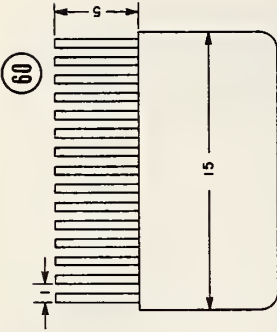
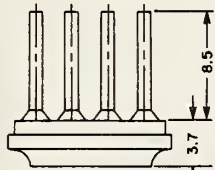
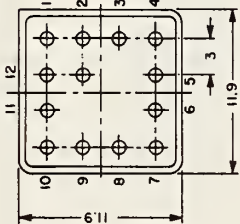
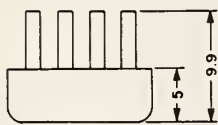
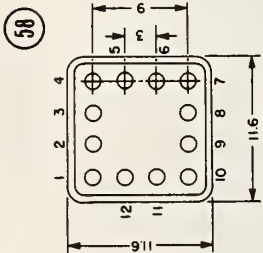


40

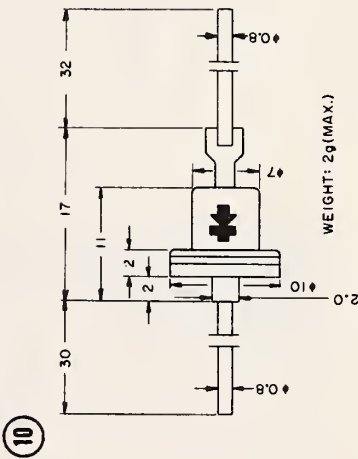
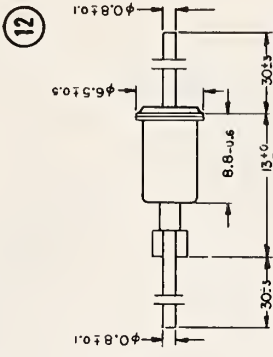
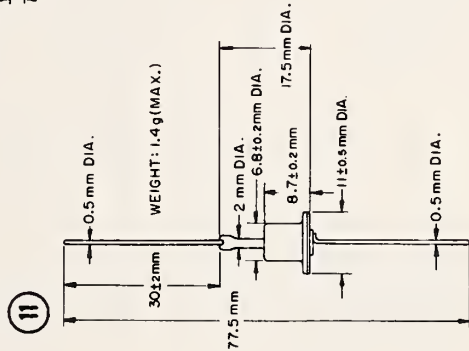
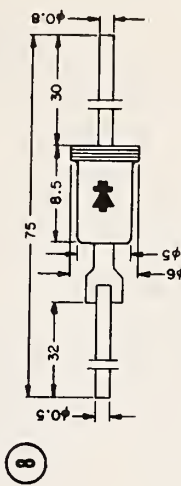
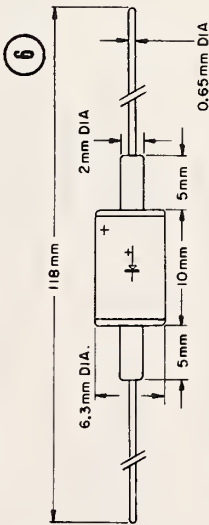
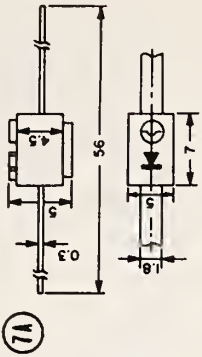
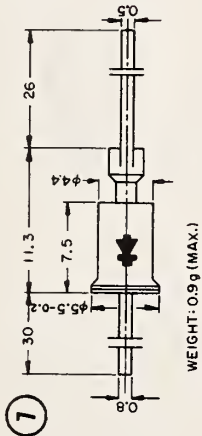
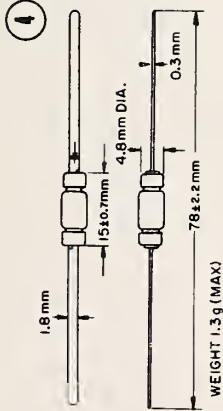
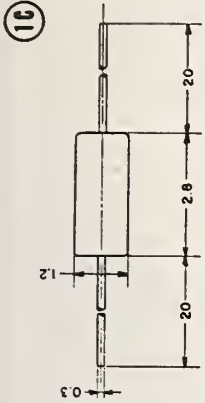
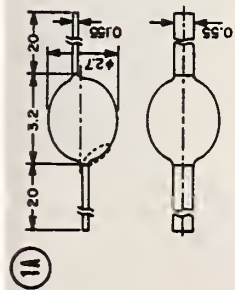
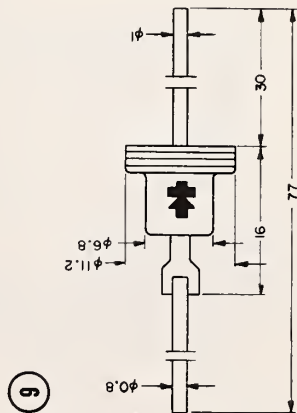
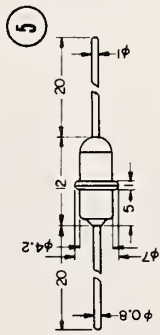
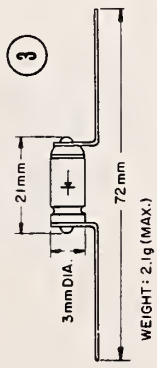
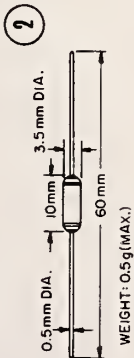
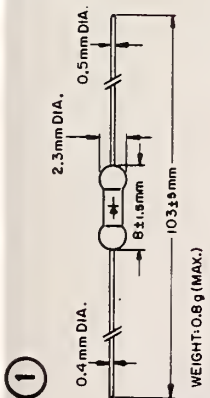


TRANSISTOR OUTLINE DRAWINGS  
(CON'T)



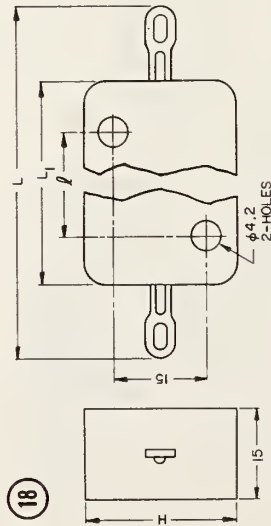
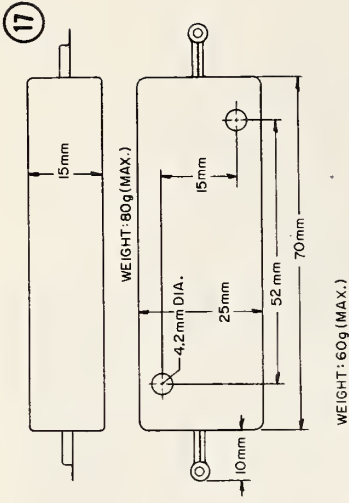
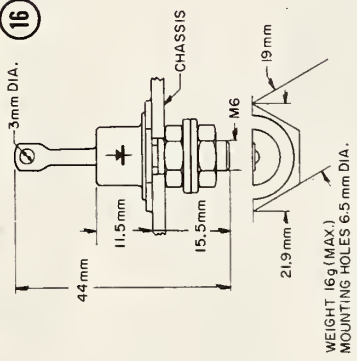
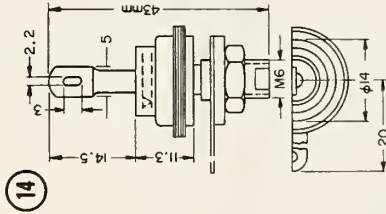
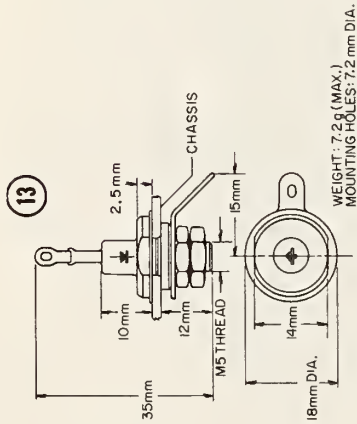




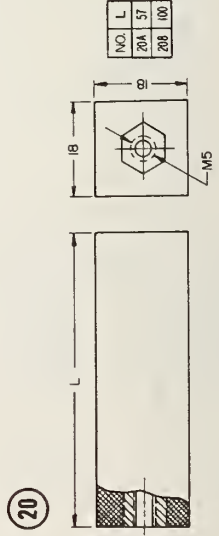


# DIODE OUTLINE DRAWINGS

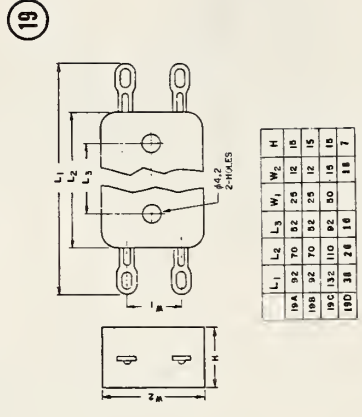
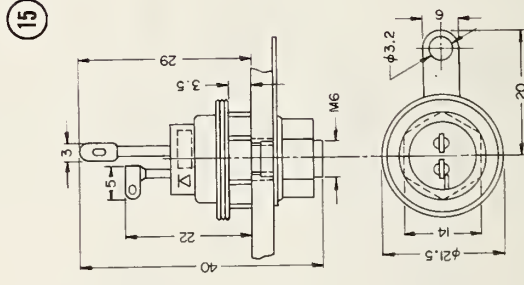
## GROUPS XI, XII, XIII & XIV



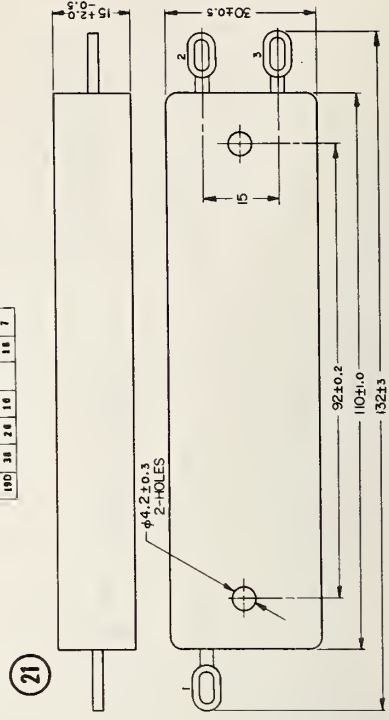
NO.	H	L	L <sub>1</sub>	L	φ
18A	25	92	70	52	
18B	30	132	110	92	



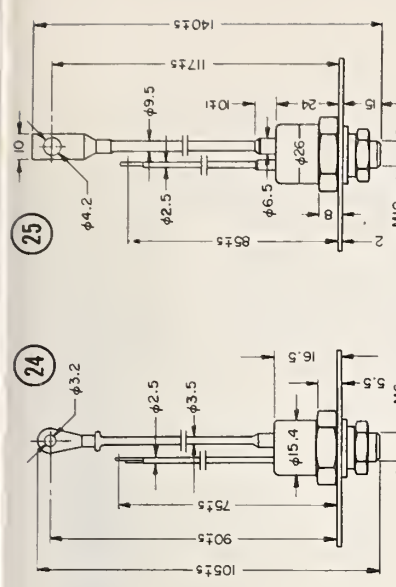
NO.	L	φ
20A	57	
20B	100	



L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	W <sub>1</sub>	W <sub>2</sub>	H
18A	92	70	52	25	18
18B	92	70	52	25	18
18C	132	110	92	50	18
18D	31	28	18	18	7

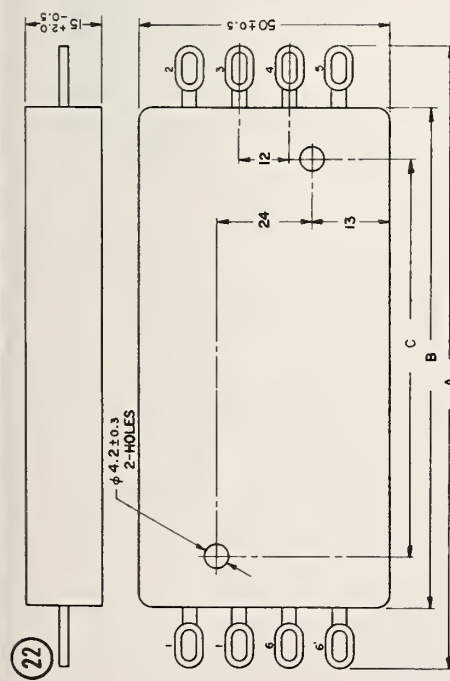
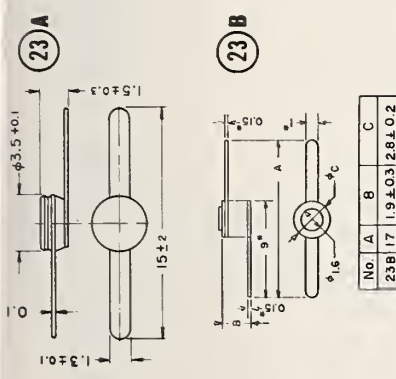


# DIODE OUTLINE DRAWINGS (CON'T)

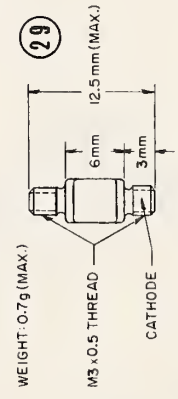
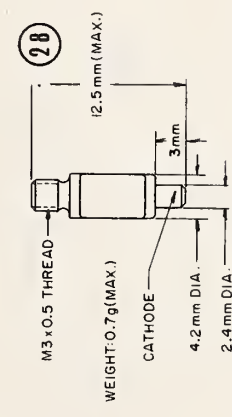
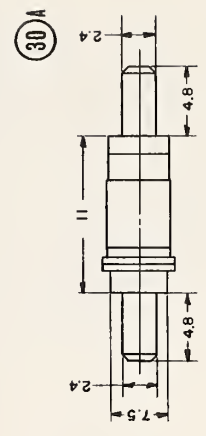
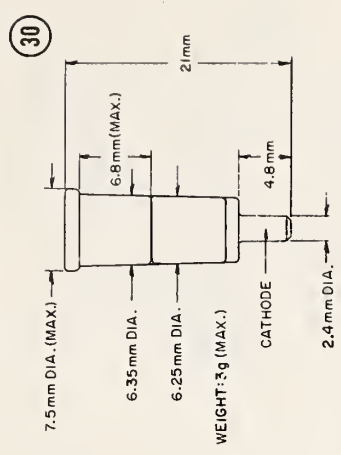
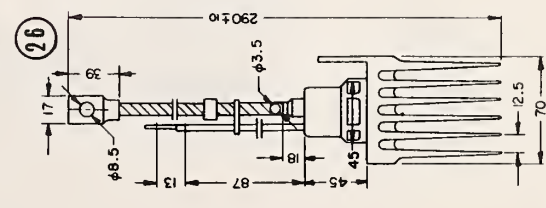
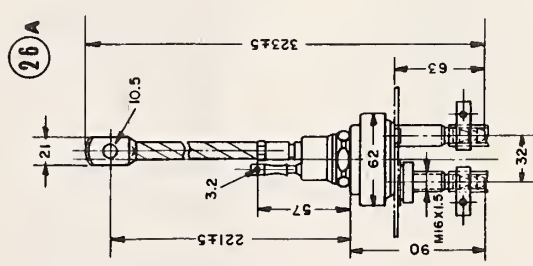
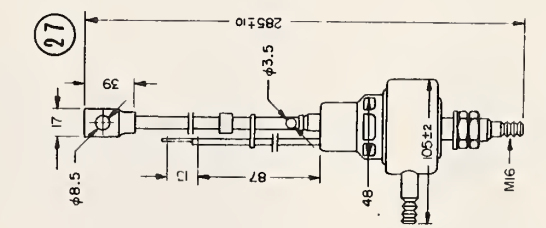
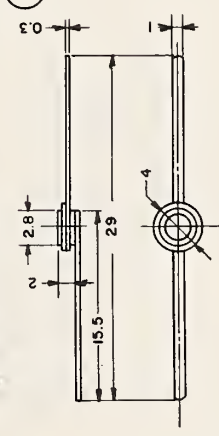


No.	A	B	C
23B	17	1.9 ± 0.3	2.8 ± 0.2
23C	18	2.0	4.7
23D	29	2.8	4.0 ± 0.2

NOTE: SK1 B, SK2 DIODES HAVE SAME DIMENSIONS EXCEPT FOR THE THIRD (CONTROL) LEAD



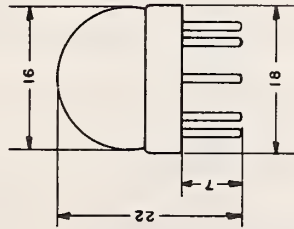
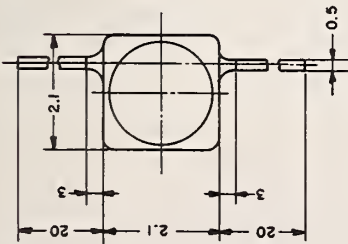
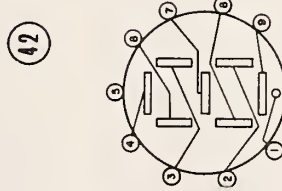
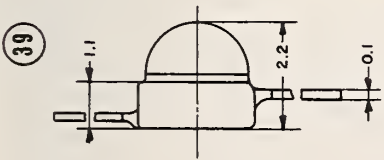
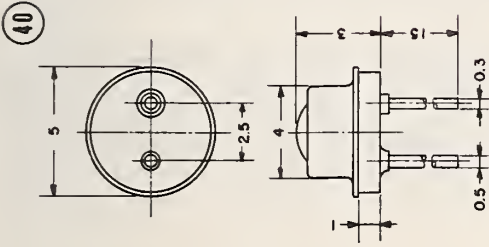
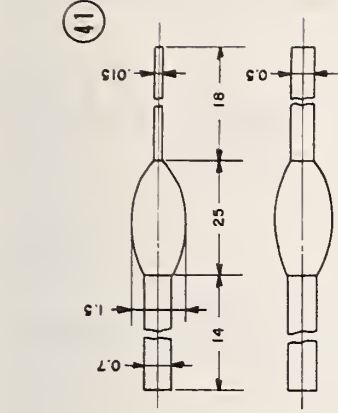
No.	A	B	C
22	62 ± 0.2	80 ± 1.0	102 ± 3
22A	74	64	52



# DIODE OUTLINE DRAWINGS (CON'T.)



# DIODE OUTLINE DRAWINGS (CON'T.)



U.S. DEPT. OF COMM. BIBLIOGRAPHIC DATA SHEET	1. PUBLICATION OR REPORT NO. NBS TN-835	2. Gov't Accession No.	3. Recipient's Accession No.
4. TITLE AND SUBTITLE TABULATION OF PUBLISHED DATA ON ELECTRON DEVICES OF THE U.S.S.R. THROUGH DECEMBER 1973		5. Publication Date November 1974	6. Performing Organization Code
7. AUTHOR(S) Charles P. Marsden		8. Performing Organ. Report No.	
9. PERFORMING ORGANIZATION NAME AND ADDRESS NATIONAL BUREAU OF STANDARDS DEPARTMENT OF COMMERCE WASHINGTON, D.C. 20234		10. Project/Task/Work Unit No. 4250654	11. Contract/Grant No. N/A
12. Sponsoring Organization Name and Complete Address (Street, City, State, ZIP) Same as 9.		13. Type of Report & Period Covered Final	14. Sponsoring Agency Code
15. SUPPLEMENTARY NOTES Library of Congress Catalog Card Number: 74-600094			
16. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)  This tabulation includes published data on U.S.S.R. electron devices as collected from publications, mostly handbooks, published by the various ministries and institutes of the U.S.S.R. Information is given on all active devices ranging from receiving to microwave devices, semiconductor devices, and miscellaneous devices such as photographic flash tubes and thermistors.			
17. KEY WORDS (six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons) Electron devices; electron tubes; semiconductors; U.S.S.R.			
18. AVAILABILITY <input checked="" type="checkbox"/> Unlimited  <input type="checkbox"/> For Official Distribution. Do Not Release to NTIS  <input checked="" type="checkbox"/> Order From Sup. of Doc., U.S. Government Printing Office Washington, D.C. 20402, SD Cat. No. C13, 46:835  <input type="checkbox"/> Order From National Technical Information Service (NTIS) Springfield, Virginia 22151	19. SECURITY CLASS (THIS REPORT)  UNCLASSIFIED	21. NO. OF PAGES  133	
		20. SECURITY CLASS (THIS PAGE)  UNCLASSIFIED	22. Price \$1.95

# NBS TECHNICAL PUBLICATIONS

## PERIODICALS

**JOURNAL OF RESEARCH** reports National Bureau of Standards research and development in physics, mathematics, and chemistry. Comprehensive scientific papers give complete details of the work, including laboratory data, experimental procedures, and theoretical and mathematical analyses. Illustrated with photographs, drawings, and charts. Includes listings of other NBS papers as issued.

Published in two sections, available separately:

• **Physics and Chemistry (Section A)**

Papers of interest primarily to scientists working in these fields. This section covers a broad range of physical and chemical research, with major emphasis on standards of physical measurement, fundamental constants, and properties of matter. Issued six times a year. Annual subscription: Domestic, \$17.00; Foreign, \$21.25.

• **Mathematical Sciences (Section B)**

Studies and compilations designed mainly for the mathematician and theoretical physicist. Topics in mathematical statistics, theory of experiment design, numerical analysis, theoretical physics and chemistry, logical design and programming of computers and computer systems. Short numerical tables. Issued quarterly. Annual subscription: Domestic, \$9.00; Foreign, \$11.25.

**DIMENSIONS/NBS** (formerly *Technical News Bulletin*)—This monthly magazine is published to inform scientists, engineers, businessmen, industry, teachers, students, and consumers of the latest advances in science and technology, with primary emphasis on the work at NBS.

**DIMENSIONS/NBS** highlights and reviews such issues as energy research, fire protection, building technology, metric conversion, pollution abatement, health and safety, and consumer product performance. In addition, **DIMENSIONS/NBS** reports the results of Bureau programs in measurement standards and techniques, properties of matter and materials, engineering standards and services, instrumentation, and automatic data processing.

## NONPERIODICALS

**Monographs**—Major contributions to the technical literature on various subjects related to the Bureau's scientific and technical activities.

**Handbooks**—Recommended codes of engineering and industrial practice (including safety codes) developed in cooperation with interested industries, professional organizations, and regulatory bodies.

**Special Publications**—Include proceedings of high-level national and international conferences sponsored by NBS, precision measurement and calibration volumes, NBS annual reports, and other special publications appropriate to this grouping such as wall charts and bibliographies.

**Applied Mathematics Series**—Mathematical tables, manuals, and studies of special interest to physicists, engineers, chemists, biologists, mathematicians, computer programmers, and others engaged in scientific and technical work.

**National Standard Reference Data Series**—Provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated. Developed under a world-wide program coordinated by NBS. Program under authority of National Standard Data Act (Public Law 90-396).

**Building Science Series**—Disseminates technical information developed at the Bureau on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

**Technical Notes**—Studies or reports which are complete in themselves but restrictive in their treatment of a subject. Analogous to monographs but not so comprehensive in scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NBS under the sponsorship of other government agencies.

**Voluntary Product Standards**—Developed under procedures published by the Department of Commerce in Part 10, Title 15, of the Code of Federal Regulations. The purpose of the standards is to establish nationally recognized requirements for products, and to provide all concerned interests with a basis for common understanding of the characteristics of the products. The National Bureau of Standards administers the Voluntary Product Standards program as a supplement to the activities of the private sector standardizing organizations.

**Federal Information Processing Standards Publications (FIPS PUBS)**—Publications in this series collectively constitute the Federal Information Processing Standards Register. The purpose of the Register is to serve as the official source of information in the Federal Government regarding standards issued by NBS pursuant to the Federal Property and Administrative Services Act of 1949 as amended, Public Law 89-306 (79 Stat. 1127), and as implemented by Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 CFR (Code of Federal Regulations). FIPS PUBS will include approved Federal information processing standards information of general interest, and a complete index of relevant standards publications.

**Consumer Information Series**—Practical information, based on NBS research and experience, covering areas of interest to the consumer. Easily understandable language and illustrations provide useful background knowledge for shopping in today's technological marketplace.

**NBS Interagency Reports**—A special series of interim or final reports on work performed by NBS for outside sponsors (both government and non-government). In general, initial distribution is handled by the sponsor; public distribution is by the National Technical Information Service (Springfield, Va. 22151) in paper copy or microfiche form.

Order NBS publications (except Bibliographic Subscription Services) from: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

## BIBLIOGRAPHIC SUBSCRIPTION SERVICES

The following current-awareness and literature-survey bibliographies are issued periodically by the Bureau:

**Cryogenic Data Center Current Awareness Service** (Publications and Reports of Interest in Cryogenics). A literature survey issued weekly. Annual subscription: Domestic, \$20.00; foreign, \$25.00.

**Liquefied Natural Gas.** A literature survey issued quarterly. Annual subscription: \$20.00.

**Superconducting Devices and Materials.** A literature survey issued quarterly. Annual subscription: \$20.00. Send subscription orders and remittances for the pre-

ceding bibliographic services to the U.S. Department of Commerce, National Technical Information Service, Springfield, Va. 22151.

**Electromagnetic Metrology Current Awareness Service** (Abstracts of Selected Articles on Measurement Techniques and Standards of Electromagnetic Quantities from D-C to Millimeter-Wave Frequencies). Issued monthly. Annual subscription: \$100.00 (Special rates for multi-subscriptions). Send subscription order and remittance to the Electromagnetic Metrology Information Center, Electromagnetics Division, National Bureau of Standards, Boulder, Colo. 80302.

**U.S. DEPARTMENT OF COMMERCE**  
**National Bureau of Standards**  
Washington, D.C. 20234

OFFICIAL BUSINESS

Penalty for Private Use, \$300

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF COMMERCE  
COM-215

