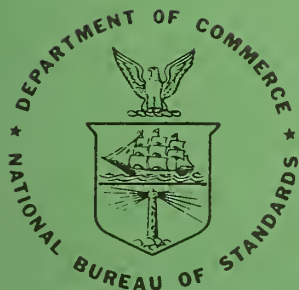


NBS

TECHNICAL NOTE

441

TABULATION OF PUBLISHED DATA ON SOVIET ELECTRON DEVICES THROUGH OCTOBER 1967



U.S. DEPARTMENT OF COMMERCE
National Bureau of Standards

NATIONAL BUREAU OF STANDARDS

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TECHNICAL NOTE 441

ISSUED JULY 1968

(Supersedes Technical Note 265)

TABULATION OF PUBLISHED DATA ON SOVIET ELECTRON DEVICES THROUGH OCTOBER 1967

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National Bureau of Standards
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NBS Technical Notes are designed to supplement the Bureau's regular publications program. They provide a means for making available scientific data that are of transient or limited interest. Technical Notes may be listed or referred to in the open literature.

FOREWORD

This tabulation of published data on Soviet electron devices has been prepared as part of the National Bureau of Standards Electron Devices Data Service. Established in 1948 to provide technical data on radio tubes to members of the Bureau staff, the service has since been extended to other scientists and engineers in government and industry. In the course of the program, a large volume of information on tubes, transistors, diodes, and other electron devices has been accumulated on punched cards. To make this information more readily available, a system has been worked out for automatically tabulating the data in handbook form. Previous tabulations include Tabulation on Data on Microwave Tubes, NBS Handbook 104 (1967), Tabulation of Data on Receiving Tubes, NBS Handbook 103 (1967), and Tabulation of Published Data on East European Devices, Technical Note 460.

The present tabulation is a revision of Technical Note 265 and is the result of compilation efforts extending over the past ten years. All the included information was taken from published specifications, and every effort has been made to ensure accuracy and completeness. However, the Bureau cannot assume responsibility for omissions nor for results obtained with these data.

A. V. Astin, Director

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Tabulation of Published Data on Soviet Electron Devices

Through October 1967

Charles P. Marsden

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

Key Words. electron devices, electron tubes, Soviet, semiconductors.

1. Introduction

The increased circulation of published literature from the USSR and the importation of Soviet equipment has created a need for factual information on Soviet electron devices. To satisfy this need, the National Bureau of Standards Electron Devices Data Service has prepared the present tabulation in a format that could be reproduced directly from punched cards.

This publication is the fourth revision and is an expansion of Technical Note No. 265 published in October, 1965. More than 200 new types have been added.

The sources of the data are the various publications produced in the USSR and include books published by the various ministries, and technical magazines. This information has been intercompared and correlated to eliminate errors and thus assure that this tabulation is as accurate as possible. Because of this intercomparison, references for the data are not given, as data for any one type of device may have been derived from several sources.

2. Description of the Tabulation

In each group the type numbers are arranged in alpha-numerical order in which the first numerical part of the type number is the prime sorting means. Alphabetical prefixes are the secondary sorting means and alphabetical postfixes are the tertiary means. For example in the numerical list, these type numbers will be found in the following order:

V1-0.1/40	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	А	К	К	Т	Т
Б	В	Л	Л	У	У
В	В	М	М	Ф	Ф
Г	Г	Н	Н	Х	Kh
Д	Д	О	О	Ц	Ts
Е	Ye	П	Р	Ш	Sh
Ж	Zh	Р	Р	Э	Э
И	И	С	С		

This transliteration was necessary to put the information on punched cards and it is believed that it will cause little difficulty in use.

3. Organization of the Tabulation

The tabulation is divided into 24 groups, each with a different format and different columnar headings so that the maximum pertinent data may be included.

Group I is a numerical listing of all type numbers in the complete tabulation and also includes discontinued and obsolete types. All these types are defined by the same three-letter code to indicate the kind and type of tube. 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. In the last column, the GOST (State National Standard) Specification Number (followed by the year of publication of the specification) is shown for the type number. These specifications include the information in and follow the format of the domestic military specifications.

This group is also an interchangeability list and known similar types are shown. Further, by means of the following symbol code, the manufacturing area and the obsolescence of the type are indicated.

\$	Domestic manufacture
=	European "
+	Russian "
*	Obsolete or inactive

The above definitions of these symbols are pertinent only to their use in Group I. Due to the limitation of available symbols on listing equipment, these same symbols are used in the other groups but are then defined as shown at the end of the definitions under the paragraph entitled "Code" (p. 4).

The other groups have titles describing the particular class of

devices listed therein. As mentioned previously, the individual type numbers are arranged in the same alpha-numerical order.

Under each heading of the group format, the unit of measurement most common for the characteristic is shown. For example under the heading of Maximum Plate Current (I_p), the unit in the heading is mA (milliamperes). However, where the I_p data are in amperes, the value will be tabulated with the number followed by the letter "A", e.g., 15A. All these changes of units are included in the list of alphabetical symbols under code on pages 4 to 7.

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

Group XXIV, "Bases", lists the basing connections for the particular "Base No." of the previous groups by a system compatible with punched cards.

Instead of the usual base diagram or line drawing, the number of each base pin is given in the column under the symbol of the electrode. 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 the semiconductor diodes and transistors.

4. Terminology used in the Tabulation

4.1 Column Headings

The headings used in the various formats are the standard symbols as defined by the Institute of Radio Engineers or descriptive words for the characteristics. They 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, etc. 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 American Standard. The alphabetical part of the code is explained on the following page.

PREFIX

A - Air-cooled anode
 B - Bell-shape
 C - Ceramic construction
 G - Globe-shaped bulb
 F - Flat top of Soviet design
 H - Helix-shaped flash tube
 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
 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 and having a diameter of 3/8 inch.

4.3 Special Symbols

Receiving tubes have postfixed letters with the following meaning:

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

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

4.4 Code

Due to the limitations of available columns in the punched card, one- to three-letter codes have been liberally developed and used in the tabulation. These have been chosen to be readily understood. The following table lists the definitions of this code for all groups in alphabetical order.

Code

A	Change of unit to amperes	AHN	Argon-helium-neon gas-filled
AAB	Alpha and Beta radiation	AKN	Argon-krypton gas-filled
ACO	Acorn tube	AL	Aluminum cathode; countertube
AF	{ Audio frequency Forced air cooling	ALP	Alpha radiation
AHE	Argon-Helium gas-filled	AMK	Aluminum-Magnesium alloy with potassium surface

AN	Natural air cooling	DBA	Double anode beam pentode
AO	Argon-oxygen gas-filled	DEC	Decatron
AR	Argon gas-filled	DET	Detector operation
ARC	Arc rectifier-Mercury pool	DIO	{ Diode
			{ With diode, e.g., triode-diode
BA	Barium (metal) cathode	DSC	Disc shape
BAG	Beta and gamma radiation	DUO	Double, e.g., double diode
BAL	Ballast or current regulator		with separate cathodes
BAO	Barium oxide cathode	DWD	{ Duo diode (single cathode)
BEA	{ Beam pentode		{ With duodiode, e.g., triode
	{ With beam pentode, e.g.,		duodiode
	triode-beam pentode	E	Common emitter operation
BET	Beta radiation	EL	Electrometer tube
BIS	Bismuth sulphide	ELM	Electromagnetic focus or
BL	Blue luminescence		deflection
BWT	Backward Wave Tube	ELS	Electrostatic focus or
	{ Circular dynode arrangement		deflection
C	{ Common collector operation	F	Filamentary type cathode
	{ Cold cathode	FE	Iron cathode; counter tube
	{ Continuous wave operation	FLS	Flash tube (photographic)
CAM	Copper-Aluminum-Magnesium	G	Giga (10^9)
CDS	Cadmium sulphide	GAM	Gamma radiation
CDSE	Cadmium selenide	GAN	Germanium alloy, n-type
CN	Converter	GAP	Germanium alloy, p-type
COM	{ Commutator tubes	GAS	Gallium Arsenide
	{ Compensation of temperature	GDN	Germanium diffused junction,
	thermistors		n-type
CON	{ Control Switch	GDP	Germanium diffused junction,
	{ Temperature control		p-type
COU	Counter tube	GE	Germanium
CP	Cap, external in tabulation	GEA	Germanium alloy junction
	of bases	GEP	Germanium point-contact
CS	Cesium photo surface	GPP	Germanium point-contact,
			p-type
CSB	Cesium antimony photo surface		
CU	Copper cathode; counter tube		
CYL	Cylindrical shape (Thermistors)	GR	{ Green luminescence
			{ Graphite cathode; counter tube

GS	Gas-filled	MX	} Mixer
GSP	Germanium surface-barrier, p-type	MIX	
		MO	
GTB	Gated beam pentode	MOD	Modulator
H	{ Heater type cathode Hecto (10^2)	N	{ Nano (10^{-9}) n-type construction S/C
HE		NA	
	Helium gas-filled		Neon-argon gas-filled
HEX	Hexode	NE	Neon gas-filled
HG	Mercury vapor-filled	NEH	Neon-helium gas-filled
HH	Mercury-argon-hydrogen gas-filled	NI	Nickel cathode
HK	Hydrogen-krypton gas-filled	NK	Neon-krypton gas-filled
HPT	Heptagrid	NOI	Noise Generator
		NSP	Nuclear Spectrometry
HY	Hydrogen gas-filled	NUV	Nuvistor
IC	Iconoscope	OD	Double beam oscilloscope Tube
ID	Indicator tube	OS	Oscilloscope Tube
IF	Intermediate frequency	P	Pulse operation, p-type construction
IGN	Ignitron tube		
		PA	Power amplifier
IM	Image orthicon	PB	Purple-blue luminescence
J	Joules	PBS	Lead Sulphide
	{ Kilo (10^3) Potassium	PEN	Pencil tube
K		PHC	Photoconductive diode
KLA	Klystron Amplifier		
KLO	Klystron Oscillator	PHM	Photomultiplier
		PHO	Phototube
KX	Krypton-xenon gas-filled		{ Pentode With pentode e.g., triode,- pentode
L	Linear dynode arrangement	PND	
LAM	Light Amplifier		
LD	Lead cathode; counter tube	POW	Power rectifier
LIT	Lighthouse	PR	Projection Kinescope
LO	Long persistence screen	PTG	Pentagrid
	{ Mega (10^6) Milli (10^{-3})	RD	Red luminescence
M		REC	Rectifier
MAG	Magnetron	REG	Regulator (voltage)
MD	Medium persistence screen	RF	Radio frequency
MEA	Temperature measurement		
		ROC	Rocket tube
MG	Magnesium cathode		

SL-S7	Spectral sensitivity of photo surface	TWN	Twin with separate cathodes, e.g., twin triode
S	Max. dimension of cathode ray tube face	TWT	Traveling-wave tube
		U	{ Micro (10^{-6}) U-shaped
SAN	Silicon alloy, n-type	UF	Ultra high frequency
SAP	Silicon alloy, p-type	V	Venetian-blind dynode arrangement
SCC	Scintillation Counters		
SCG	Space-charge Grid (with)	VAR	Varactor
SCR	Silicon Controlled-rectifier	VC	Vacuum
SDN	Silicon diffused junction, n-type	VB	Violet-blue luminescence
SDP	Silicon diffused Junction p-type	VI	Vidicon
		VID	Video detector
SH	Short persistence screen	VR	Voltage regulator
SI	Silicon		{ Change of units to watts
SIA	Silicon alloy junction	W	{ Tungsten cathode Water-cooled
SID	Silicon Diffused junction	WG	Wave guide coupling
SIN	Single e.g., single triode	WH	White luminescence
		X	Smallest dimension-rectangular photocathode
SIP	Silicon, point contact		
SI4	Silicon, 4-layer rectifier		
SM	Secondary emission pentode	XE	Xenon gas-filled
SN	Tin cathode; counter tube	YO	Yellow-orange luminescence
SPN	Silicon planar-n type	3C	Three color screen for television
SQ	Self-quenching type of counter tube		
SWI	Switching diode	::	{ The meaning of these symbols
T	Thoriated tungsten cathode	#	{ indicated in the column heading
TET	Tetrode	/	Less than (before digits)
THM	Thermocouple tube	*	Obsolete type
THY	Thyratron		
TMS	Thermistor		
TRD	With triple diode		
TRI	{ Triode With triode e.g., pentode-triode		
TTR	Triode twin		
TUN	Tunnel diode		
TV	Television tube		

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
FS-AG	PHC	XV			
FS-A0	PHC	XV			
FS-AV	PHC	XV			
FS-D0	PHC	XV			
FS-KG	PHC	XV			
FS-K0	PHC	XV			
FS-KV	PHC	XV			
TOS-M	TMS	CON XIX			
0.24812-18	BAL	SIN VI			
0.3817-35	BAL	SIN VI			
0.3865-135	BAL	SIN VI			
0.425855-128	BAL	SIN VI			
0.6P26	PND	SIN II		CK505AX	
0.6Z466	PND	SIN II			
0.85855-12	BAL	SIN VI			
GRI-0.25/1.5	DWD	SIN IV			
TG-0.3/0.3	TRI	THY		TG1-0.1/0.3+, 884\$	
TG-0.5/1.3	TET	THY		TG1-0.1/1.3+, 2050\$	
GR-0.8/1.6	DWD	SIN		GR1-0.25/1.5+	
V60251500	DIO	SIN		GR1-0.25/1.5+	
AS-1	COU	XXI			
D1A	REC	XI			
D1B	REC	XI			
D1D	REC	XI			
D1G	REC	XI			
D1V	REC	XI			
D1YE	REC	XI			
D1ZH	REC	XI			
OG-S1	MIX	XIV			
OG-TS1	REC	XI		D2G+	
DK-I1	MIX	XIV			
DK-S1	MIX	XIV			
DK-V1	DET	XIV			
DL-S1	MIX				
F-1	PHO	XVI			
FD-1	PHC	XV			
FDK-1	PHC	XV			
FEU-1	PHM	XVI			
FEU-1B	PHM	XVI			
FEU-1B1V	PHM	XVI			
FEU-1B2V	PHM	XVI			
FEU-1S	PHM	XVI			
FEU-1V	PHM	XVI			
FS-A1	PHC	XV			
FS-D1	PHC	XV			
FS-K1	PHC	XV			
FT-1	PHC	XV			
FTG-1	PHC	XV			
GE-1	TET	SIN III		GKE-100*	
GG-1-0.3/8	DIO	SIN IV			
GG1-0.5/5	DIO	SIN IV		VG1.5/5000+	
GG-1-0.5/20	DIO	SIN IV			
GG-1-1/22	DIO	SIN IV			
GG-1-2/5	DIO	SIN IV			
GG-1-2/16	DIO	SIN IV			
GG-1.5/15	DIO	SIN		GG1-0.5/5+	
GK1A	TRI	SIN III			
GM1A	TRI	SIN III			
GMI-1B	TRI	SIN III			
GR1-02/15	DIO	SIN IV			
GR1-0.25/1.5	DWD	SIN IV			
GR-1-0.3/8.5	DIO	SIN IV			
GR-1-25/15	DWD	SIN IV			
GS-1B	TRI	SIN III			
GUZH-1	PND	SIN		G411+	
I-1-70/0.8	TRI	IGN	IV		
I-1-100/1.5	TRI	IGN	IV		
I-1-140/0.8	TRI	IGN	IV		
I-1-350/0.8	TRI	IGN	IV		
IN-1	DEC	XXIII			

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
KF-1	TET	TWN		GU-29+, 8298\$	
KMT-1	TMS	XIX			
KZH1	*PND	SIN		G411+	
LD1	*TRI	SIN		1253S+	
LG-1	DWD	SIN		12KH35+	
LI-1	IC	VIII			
MMT-1	TMS	XIX			
MS1	TRI	SIN		GM-60+	
OG-1	DEC	XXIII			
P1A		X			
P1B		X			
P1D		X			
P1G		X			
P1I		X			
P1V		X			
P1YE		X			
P1ZH		X			
RB-1		XXII			
S1A		X			
S1B		X			
S1D		X			
S1G		X			
S1V		X			
S1YE		X			
SBS-1	COU	XXI			
SG1B	DIO	SIN		0A2\$	
SG1P	DIO	SIN V		0A2\$	
SG1P-V	REG	V			
SG1P-YE	REG	V			
SI-1B6	COU	XXI			
SI-1G	COU	XXI			
SK1-5.6/1000	REG	XIII			
SK1-6.8/1000	REG	XIII			
SK1-8.2/1000	REG	XIII			
SK1-10/500	REG	XIII			
SK1-12/500	REG	XIII			
SK1-15/500	REG	XIII			
SK1-18/500	REG	XIII			
SK1-22/150	REG	XIII			
SK1-24/150	REG	XIII			
SK1-28/150	REG	XIII			
SK1-30/150	REG	XIII			
SK1-36/150	REG	XIII			
SK1-43/150	REG	XIII			
SK1-51/150	REG	XIII			
SK1-62/50	REG	XIII			
SK1-75/50	REG	XIII			
SK1-95/50	REG	XIII			
SK1-110/50	REG	XIII			
SK1-120/50	REG	XIII			
SK1-150/50	REG	XIII			
SK1-180/50	REG	XIII			
SK1-220/25	REG	XIII			
SK1-270/25	REG	XIII			
SK1-300/25	REG	XIII			
T-1B	TRI	THY		TG-1B+	
TG1B	TRI	THY VII			
TG1B-V	TRI	THY VII			
TG1-01/03	TRI	THY VII		884\$	
TG1-01/13	TET	THY VII		2050\$	7843-55
TG1-02/05	TET	THY VII			
TG1-05/12	TRI	THY VII			
TG1-5/3	TRI	THY VII			
TG1-1.0/0.8	TET	THY VII			
TG1-1.5/2	TRI	THY VII			
TG1-1-5/1.1	TRI	THY VII			
TG1-1.6/1.3	TRI	THY VII			
TG1-2.5/3	TRI	THY		TG1-2.5/4**	
TG1-2.5/4	TRI	THY VII		TG8/3, TG1-2.5/3**	7952-56
TG1-2.5/10	TET	VII			

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
TGI-3.2/1.3	TRI	THY	VII		
TGI-6.4/1.3	TRI	THY	VII		
TGI-12.5/1.3	TRI	THY	VII		
TGI-0.1/0.3	TRI	THY	VII		
TGI-16	TRI	THY	VII		
TGI-1-3/1	TET	THY	VII		
TGI-1-10/1	TRI	THY	VII		
TGI-1-35/3	TRI	THY	VII	3C45	
TGI-1-50/5	TRI	THY	VII		
TGI-1-90/8	TRI	THY	VII	MTI-4**	
TGI-1-130/8	TRI	THY	VII		
TGI-1-130/10	TRI	THY	VII		
TGI-1-325/16	TRI	THY	VII	MTI-5+, TGI-325/16+	
TGI-1-400/3.5	TRI	THY	VII		
TGI-1-400/16	TRI	THY	VII		
TGI-1-700/25	TRI	THY	VII		
TKI-1	TMS	MEA	XIX		
TKH1	TRI	THY	VII	313C	
TKH1B	TRI	THY	VII		
TKH1-16	PND	VII			
TM-1	TRI	SIN		655D+, 2C405	
TNI-1.5	DEC	XXIII			
TO-1	PND	SIN		10ZH12S+	
TR1-5/2	TRI	THY	VII	VT-3	7954-56
TR1-6/15	TRI	THY	VII		7955-56
TR1-15/15	TRI	THY	VII		
TR1-40/15	TRI	THY	VII		7956-56
TR1-85/15	TRI	THY	VII		
TR1-130/15	TRI	THY	VII		
TS6-1	PHO	XVI			
TSH-1	TMS	MEA	XIX		
TST-1A	TMS	REG	XIX		
TSV-1	PHO	XVI			
TVB-1	THM	XVIII			
V1-00313	DIO	SIN	IV	V13/30+	
V1-02/20	DIO	SIN	IV		
V1-03/13	DIO	SIN	IV		
V1-05/70	DIO	SIN	IV		
V1-06/30	DIO	SIN	IV		
V1-1/2.5	DIO	SIN	IV		
V1-1/30	DIO	SIN	IV		
V1-1/40	DIO	SIN	IV		
V1-2/40	DIO	SIN	IV		
V1-3/16	DIO	SIN	IV		
V1-3/70	DIO	SIN	IV		
V1-4/40	DIO	SIN	IV		
V1-15/55	DIO	SIN	IV		
VD1	DIO	SIN		V1-1/40+	
VDI-10	DIO	SIN		V1-1-100/50+	
VG1/8500	DIO	SIN	IV		
VG1.5/5000	DIO	SIN	IV	GG2-0.5/5+	
VI-1-5/20	DIO	SIN	IV		
VI-1-5/30	DIO	SIN	IV		
VI-1-18/32	DIO	SIN	IV		
VI-1-27/35	DIO	SIN	IV		
VI-1-30/25	DIO	SIN	IV		
VI-1-70/32	DIO	SIN	IV		
VI-1-100/50	DIO	SIN	IV		
VO-1	DIO	SIN	IV		
VST5-1	PHO	XVI		F-3+	
VT-1	TRI	THY		TG-2.5/5+	
1A1P	PTG	SIN	II	1R5%, DK91, DK192	770A-55
1A2P	PTG	SIN	II	DK96=, 1R5%	9836-61
1B1P	PND	DIO	II	1S5%, DAF91=, DAF191	800A-56
1B2P	PND	DIO	II	DAF96=, 1S5%	9837-61
1B5-9	BAL	SIN	VI		
1B10-17	BAL	SIN	VI		
1E1P	TET	SIN	II		
1E3P	*TRI	SIN	II	EM-4+	
1F2B	PND	TRI	II		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
1I2P	PND	TRI	II		
1I-302A	TUN	GAS	XI-B		
1I-302B	TUN	GAS	XI-B		
1I-302G	TUN	GAS	XI-B		
1I-302V	TUN	GAS	XI-B		
1K1P	PND	SIN	II	1T4%, DF91=	7707-55
1K2P	PND	SIN	II	DF96=, 1T4%	9946-62
1K12B	PND	SIN	II		
1N1	*TRI	TWN		1N35=	
1N3S	TRI	TWN	II	1N1+, 1G6-6T5	
1P2B	PND	SIN	II	CK507AX	
1P3B	PND	SIN	II		
1P4B	PND	SIN	II		
1P5B	PND	SIN	II		
1P22B	PND	SIN	II		
1P24B	PND	SIN	II		
1P32B	PND	SIN	II		
1S12P	TRI	SIN	II	DC96=	
1S38A	TRI	SIN	II		
1T303A			X		
1T303B			X		
1T303D			X		
1T303G			X		
1T303V			X		
1T303YE			X		
1T308A			X		
1T308B			X		
1T308G			X		
1T308V			X		
1T403A			X		
1T403B			X		
1T403D			X		
1T403G			X		
1T403I			X		
1T403V			X		
1T403YE			X		
1T403ZH			X		
1TS1	*DIO	SIN		1TS1S+, 1VD1+	
1TS1S	DIO	SIN	II	1TS1+, 1VD1+	
1TS7S	DIO	SIN	II	0Y30=, 1B3/8016%	8359-57
1TS11P	DIO	SIN	II		
1TS21P	DIO	SIN	II		
1V3/8016	*DIO	SIN		1TS7S+, 1B3/8016%	
1VD1	*DIO	SIN		1TS1, 1TS1S+	
1VD2	*DIO	SIN		1TS7S+, 1B3/8016%	
1YE4A	TRI	SIN	II		
1ZH12H	PND	SIN	II		
1ZH2	*PND	SIN		1ZH2M+	
1ZH2M	PND	SIN	II	1ZH2*	
1ZH17B	PND	SIN	II		
1ZH18B	PND	SIN	II		
1ZH24B	PND	SIN	II		
1ZH26A	PND	SIN	II		
1ZH29B	PND	SIN	II		
1ZH30B	PND	SIN	II		
1ZH36B	PND	SIN	II		
1ZH37B	PND	SIN	II		
1ZH42A	PND	SIN	II		
AS-2	COU	XXI			
D2A	*REC	XI		DG-TS9**	
D2B	*REC	XI		DG-TS10**	
D2D	*REC	XI		DG-TS2**	
D2G	*REC	XI		DG-TS1**	
D2I	REC	XI			
D2K	REC	XI		DG-TS6**	
D2M	REC	XI		DG-TS7**	
D2N	REC	XI		DG-TS15**	
D2P	REC	XI		DG-TS16**	
D2R	REC	XI			
D2V	*REC	XI		DG-TS8+	

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
D2YE	*REC	XI		DG-TS4**	
D2ZH	*REC	XI		DG-TS5**	
DG-S2	MIX	XIV			
DG-TS2	REC	XI		D2D+	
D1-2-10	*DIO	SIN		2D1S+	
DK-I2	MIX	XIV			
DK-S2	MIX	XIV			
DK-V2	DET	XIV			
DL-S2	MIX				
DSh2-10	*DIO	SIN		2D2S+	
F-2	PHO	XVI			
FD-2	PHC	XV			
FEU-2	PHM	XVI			
FEU-2R	PHM	XVI			
FEU-2B1V	PHM	XVI			
FEU-2M	PHM	XVI			
FEU-2V	PHM	XVI			
FS-2A	PHC	XV			
FS-B2	PHC	XV			
FS-K2	PHC	XV			
GE-2	TET SIN	III		GKE-150=	
GMI-2B	TET SIN	III			
GS-2R	TRI SIN	III			
GU-2	REA SIN	II			
GUZH-2	REA SIN			6807+, 807\$	
GZH2	*PND SIN			G413+	
I-2-50/1.5	TRI IGN	IV			
IN-2	DEC	XXIII			
KF-2	REA TWN			GU-32+, 832-A5	
KS-2	TRI SIN			GU-4+	
KZH-2	REA SIN			G-807+, 807\$	
MTI-2	TRI THY			TGI-200+	
OG-2	DEC	XXIII			
P2A		X			
P2d		X		OC821=	
PI-2	TRI THY			TG-213*	
R-2		XXII			
RB-2		XXII			
S2A		X			
S2B		X			
S2G		X			
S2V		X			
SG2P	DIO SIN	V		OB2\$	
SG2S	DIO SIN	V		OA3\$	
SI-2b	COU	XXI			
SI-2bG	COU	XXI			
SK2-5.6/2000	REG	XIII			
SK2-5.8/2000	REG	XIII			
SK2-6.2/2000	REG	XIII			
SK2-10/1000	REG	XIII			
SK2-12/1000	REG	XIII			
SK2-15/1000	REG	XIII			
SK2-18/700	REG	XIII			
SK2-22/300	REG	XIII			
SK2-24/300	REG	XIII			
SK2-28/300	REG	XIII			
SK2-30/300	REG	XIII			
SK2-36/300	REG	XIII			
SK2-43/300	REG	XIII			
SK2-51/200	REG	XIII			
SK2-62/200	REG	XIII			
SK2-75/100	REG	XIII			
SK2-91/100	REG	XIII			
SK2-110/100	REG	XIII			
SK2-120/100	REG	XIII			
SK2-150/100	REG	XIII			
SK2-180/100	REG	XIII			
SK2-220/50	REG	XIII			
SK2-270/50	REG	XIII			
SK2-300/50	REG	XIII			

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
ST2S	BAL TWN	VI			
ST5-2	COU	XXI			
STSV-2A	PHO	XVI		F-2+	
TG2-01/01	TRI THY	VII		1050\$	
TG2-0.5/12	TRI THY	VII			
TG-2.5/5	TRI THY	VII		VT-1	
TGI-2-260/12	TRI THY	VII			
TGI-2-32516	TRI THY	VII			
TGI-2-40035	TRI THY	VII			
TKH-2	TRI THY	VII			
TKI-2	TMS MEA	XIX			
T0-2	PND SIN			10P12S+	
TP-2/0.5	REG	V			
TP-2/2	REG	V			
TSH-2	TMS MEA	XIX			
TV-2	THM	XVIII			
TVB-2	THM	XVIII			
VD2	DIO SIN			V1-2/40+	
VI-2-27/35	DIO SIN	IV			
VI-2-70/32	DIO SIN	IV			
VI-2-100/50	DIO SIN	IV			
2A1	PTG SIN	II		S0242** 2A1M	
2A1M	*PTG SIN			S0242**	
2A3	TRI SIN			2S4S+, 2A3\$	
2D1L	DWD SIN	II			
2D1S	DIO SIN	II		D1-2-10+	
2D2S	DIO SIN	II		DSH2-10+	
2D3R	DIO SIN	II			
2D3S	DIO SIN	II			
2D7S	DIO SIN	II			
2D9S	DIO SIN	II			
2D21	TET THY			TG3-0.1/1.3+, 2D21\$	
2D503A	SI	XI			
2D503B	SI	XI			
2E1	*TET SIN	II			
2E2	*TET SIN	II		UB155+	
2E2P	TET TWN	II			
2F2M	TRI SIN				
2J55	MAG	IX			
2K1	*PND	II		2K1M+	
2K1M	*PND SIN	II		2K1*, SB241*	
2K2	PND SIN			2K2M*	
2K2M	*PND SIN	II		1E5G\$, 2K2*, S0241*	
2KH1	*DWD SIN			2KH1L+	
2KH1L	DWD SIN	II		2KH1*	
2KH2	*DIO SIN			2VD8A+, 2TS2S+, 2X2\$	
2N1	TRI DUO	II		1J6GT\$, 2N1M*, SB243, S0243	
2N1M	*TRI DUO			2N1+, SB243+, S0243+	
2N-2	DEC	XXIII			
2P1	REA SIN	II		SB244+, S0244+	
2P1M	*BEA SIN			2P1P+, SB244	
2P1P	REA SIN	II		DL94=, 2P1M, 3S4\$	8005-56
2P2	*BEA SIN	II		3S4\$	
2P2P	REA SIN	II		DL96=, 3S4\$	
2P3	REA SIN	II		SB258+, S0258+, 2P2M+	
2P5H	PND SIN	II			
2P9	*BEA SIN			2P9M+, 2P9S	
2P9M	*BEA SIN	II		2P9+, 2P9S, 6AK7	
2P9S	REA SIN			2P9M+, 2P9	
2P19B	PND SIN	II			
2P21S	REA SIN				
2P29	*PND SIN			2P29L+	
2P29L	PND SIN	II			
2P29P	PND SIN	II			
2S1	TRI SIN	II		UB152+	
2S2	TRI SIN	II		UB240+	
2S3	*TRI SIN			2S4S+, 2A3\$	
2S3A	TRI SIN				
2S3M	*TRI SIN			2S2+	
2S4S	TRI SIN	II		2A3\$	

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC NO.
2S14B	TRI	SIN	II		
2S22	TRI	SIN		6S8S+, 2C22\$	
2S49D	TRI	SIN	II		
2S-156A	REG	SI	XIII		
2S-168A	REG	SI	XIII		
2S920A(P)	REG	SI	XIII		
2S930A(P)	REG	SI	XIII		
2S950A(P)	REG	SI	XIII		
2S980A(P)	REG	SI	XIII		
2T301			X		
2T301A			X		
2T301B			X		
2T301D			X		
2T301E			X		
2T301V			X		
2T301YE			X		
2T301ZH			X		
2TM-20	TRI	SIN	III		
2TM-100	TRI	TWN	III		
2TS2S	DIO	SIN	II	2X2\$	8527=57
2U-101A	SCR		XII-A		
2U-101B	SCR		XII-A		
2U-101D	SCR		XII-A		
2U-101E	SCR		XII-A		
2U-101V	SCR		XII-A		
2U-101YESCR			XII-A		
2V6	DIO	ARC	IV		
2V12	DIO	ARC	IV		
2V20	DIO	ARC	IV		
2V08	DIO	SIN	II		
2VN12	DIO	ARC	IV		
2VN20	DIO	ARC	IV		
2ZH1M	*PND	SIN	II	SB245+	
2ZH2B	PND	SIN			
2ZH2M	PND	SIN	II		
2ZH4	*PND	SIN	II	50257+	
2ZH14B	PND	SIN	II		
2ZH15B	PND	SIN	II		
2ZH27	*PND	SIN		2ZH27L+	
2ZH27L	PND	SIN	II	2ZH27+	
2ZH27P	PND	SIN	II		
2ZH28L	PND	SIN	II		
D3A	DET		XIV		
D3B	DET		XIV		
DG-S3	MIX		XIV		
D6-TS3	REC		XI		
DK-S3	MIX		XIV		
DK-V3	DET		XIV		
DL-S3	MIX				
EM-3	TET	SIN	II		
F-3	PHO		XVI		
FD-3	PHC		XV		
FEU-3B	PHM		XVI		
FEU-3M	PHM		XVI		
FEU-R3	PHM		XVI		
FS-3A	PHC		XV		
FS-K3	PHC		XV		
GI-3	TRI	SIN	III	2C26A\$	
GI-3/100	TRI	SIN		GI-3+	
GK3A	TRI	SIN	III		
GMI-3	TET	SIN	III		
GS-3B	TET	SIN	III		
GU-3	BEA	SIN	II		
GUZH-3	BEA	SIN		61625+, 1625\$	
KF-3	BEA	SIN		6U-13+, 813\$	
KZH-3	BEA	SIN		6-1625+, 1625\$	
LI-3	IC		VIII		
LIM-3	LAM		XXIV		
MS3	*TRI	SIN		6M57+, UB180=, M457+	
OG-3	DEC		XXIII		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
P3A			X		
P3B			X		
P3V			X		
PIM-3	IC		VIII		
PT-3	TRI	THY		T6-235**	
R-3			XXII		
RB-3			XXII		
S3A			X		
S3B			X		
S3D			X		
S3G			X		
S3V			X		
S3YE			X		
SAT-3	COU		XXI		
S63P	REG		V		
S63S	DIO	SIN	V	OC3\$	
SI-3B	COU		XXI		
SNM-3	COU		XXI		
ST3P	DIO	SIN	VI		
STS-3	COU		XXI		
STSV-3	PHO		XVI		
T63-0.1/1.3	TET	THY	VII		
T63-2.5/10	TRI	THY	VII		
TKH3B	TET	THY	VII		
TKI-3	TMS	MEA	XIX		
TO-3	PND	SIN		7ZH12S+	
TS6-3	PHO		XVI		
TSV-3	PHO		XVI		
TVB-3	THM		XVIII		
VDI-3D	DIO	SIN		VI-1-30/25+	
VT-3	TRI	THY		TRI-5/2**	
3A4S	PND	SIN	II		
3B4S	BEA	SIN	II		
3E29	*BEA	TWN		GI-30+, 3E29\$	
3I-301A	TUN		XI-B		
3I-301B	TUN		XI-B		
3I-301G	TUN		XI-B		
3I-301V	TUN		XI-B		
3J21	MAG		IX		
3L01-I			VIII		
3S1	TRI	SIN	II	T0-141+	
3S2	TRI	SIN	II	T0-142+	
3S9	*TRI	SIN	II		
3TS16S	DIO		II	3A3\$, 3B2\$	
3TS18P	DIO	SIN	II		
3V30	DIO	ARC	IV		
3VN30	DIO	ARC	IV		
3VN60	DIO	ARC	IV		
3VN100	DIO	ARC	IV		
3VP1	*OS			8L029+, 3BP1A\$	
DG-S4	MIX		XIV		
D6-TS4	REC		XI	D2YE**	
DK-S4	MIX		XIV		
DK-V4	DET		XIV		
DL-S4	MIX				
EM-4	TRI	SIN	II	1E3P+	
F-4	PHO		XVI		
FS-A4	PHC		XV		
FS-K4	PHC		XV		
GI-4A	TRI	SIN	III		
GKV-4	TRI	SIN		6U-4+	
GMI-4B	TET	SIN	III		
GS-4	TRI	SIN	III		
GS-4	COU		XXI		
GS-4B	TRI	SIN		6431A+	
GS4D	TRI	SIN	III		
GU4	TRI	SIN	III		
GU4A	TRI	SIN	III		
KMT-4	TMS		XIX		
KS-4	TRI	SIN		6U-150+	

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
LIM-4	LAM		XXIV		
LP-4	COM		VII		
MMT-4	TMS		XIX		
MS-4	CDU		XXI		
MSTR-4	COU		XXI		
MTI-4	TRI	THY		TGI-1-90/8+	
DG-4	DEC		XXIII		
P4			X	2N68\$	
P4A			X		
P4B			X		
P4D			X		
P4G			X		
P4L			X		
P4V			X		
PIM-4	IC		VIII		
R-4			XXII		
S4A			X		
S4B			X		
S4G			X		
S4V			X		
SBS-4	COU		XXI		
SG4S	DID SIN	V		OD3\$	
SI-4G	CDU		XXI		
STSV-4	PHO		XVI		
TGI-4	TRI	THY		TGI-1-130/10+	
TKH-46	TET	THY	VII		
TD-4	PND	SIN		7P12S+	
TSG-4	PHD		XVI		
TSV-4	PHD		XVII		
TV-4	THM		XVIII		
TVB-4	THM		XVIII		
VDI-4D	DID SIN			VI-1-70/32+	
VS-4	CDU		XXI		
4D2	*DID SIN			4TS6S+	
4D5S	*DID SIN	II			
4D17P	DID SIN	II			
4E1	*TET SIN	II			
4E2	*TET SIN	II			
4E3	*TET SIN	II			
4F6S	BEA SIN	II			
4J26-30	MAG		IX		
4J45	MAG		IX		
4J50	MAG		IX		
4N1	TRI	DUD	II	SB259+, SD259+	
4P1	*PND	SIN	II		
4P1L	PND	SIN	II		
4P2	PND	SIN			
4P6L	PND	SIN			
4P10S	PND	SIN	II		
4S1	TRI	SIN	II	UB107+	
4S2	TRI	SIN	II	UB110+	
4S3	*TRI	SIN	II		
4S3S	TRI	SIN	II		
4S4	*TRI	SIN	II		
4S5	TRI	SIN	II	50-185+	
4TS1M	*DID SIN			4TS6S+	
4TS6S	DID SIN	II			
4TS14S	DID SIN	II			
4VD1	DID SIN	II			
4VKH1	*DID	TWN	II	VD-188**	
4VKH2	*DID SIN	II		VD-188**	
4ZH1L	PND	SIN	II		
4ZH1P	PND	SIN	II		
4ZH4	PND	SIN		SD124+	
4ZH5	*TET	SIN	II	4ZH5S+	
4ZH5S	PND	SIN	II		
DG-TSS	REC		XI	D2ZH**	
DK-S5	MIX		XIV		
DK-V5	DET		XIV		
F-5	PHO		XVI		

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
FFU-R5	PHM		XVI		
FS-R5	PHC		XV		
G-5	TRI	SIN		M39+	
G-5A	TRI	SIN		GU5A+	
G-5RA	TRI	SIN		GU-5R+	
GI-5B	TRI	SIN	III		
GK5A	TRI	SIN	III		
GMI-5	TET	SIN	III		
GS-5R	TRI	SIN		6433A+	
GSH-5	NOI		IX		
GU5A	TRI	SIN	III		
GU5B	TRI	SIN	III		
GUO-5	TRI	SIN		6120+	
LP-5	COM		VII		
MMT-5	TMS	MEA	XIX		
MTI-5	*TRI	THY		TGI-1-32516+	
DG-5	DEC		XXIII		
P5A			X		
P5B			X	2N107\$	
P5D			X	CK727\$	
P5G			X	2N65\$	
P5V			X		
P5YE			X		
R-5			XXII		
RB-5			XXII		
RB-5A			XXII		
SBS-5	CDU		XXI		
SG5R	DID	SIN	V		
SG5B-V	REG		V		
SGS-5	CDU		XXI		
SNM-5	CDU		XXI		
STS-5	CDU		XXI		
TKH-5A	TRI	THY	VII		
TKH-5B	TRI	THY	VII		
TV-5	THM		XVIII		
TVB-5	THM		XVIII		
UV-5	TWT		IX		
VG-5	PDW		XII		
5L01B	*OS			5L03B+, 2AP1\$	
5LD38I	DS		VIII	2AP1\$	
5SR1	*OS			5CP1A\$	
5SR7	*DS			5CP7A\$	
5TS3S	DWD	SIN	II	5U46\$	8360-57
5TS4	DID	DUD		5TS4S+, 5Z4G\$	
5TS4M	DID	DUD	II		
5TS4S	DID	DUD	II	5Z4\$	8079-56
5TSAS	DWD	SIN	II		8361-57
5TS9S	DWD	SIN	II	1502+	8362-57
5TS9SE	DWD	SIN	II		
5TS12P	DID	SIN	II		
5VKH1	*DWD	SIN		5Z46\$	
5VKH2	*DWD	SIN	II	5U46\$	
5VKH3	*DWD	SIN	II	5Y36\$	
D6	REG		XIII		
DG-TS6	REC		XI	D2K+	
DK-V6	DET		XIV		
F-6	PHO		XVI		
FS-A6	PHC		XV		
FS-D6	PHC		XV		
FS-K6	PHC		XV		
GI-6B	TRI	SIN	III	LD6	
GK6A	TRI	SIN	III		
GMI-6	BEA	TWN	III		
GS6	TRI	SIN	III		
GS-6	CDU		XXI		
GSH-6	NDI		IX		
LD-6	TRI	SIN		GI-6B+	
LI-6	IC		VIII		
MMT-6	TMS		XIX		
MS-6	CDU		XXI		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
P6A		X			
P6B		X		0C821=	
P6D		X		0C812=	
P6E		X			
P6V		X		0C814=	
R6		XXII			
S6S	REG	TRI	III		
SGS-6	COU	XXI			
STS-6	COU	XXI			
STSV-6	PHO	XVI		F=4+	
TKH-6G	HEXT	VII			
TP-6/2	REG	V			
TSV-6	PHO	XVI		F=5+	
TVB-6	THM	XVIII			
UV-6	TWT	IX			
VS-6	COU	XXI			
6A1B	*PTG	SIN		6SA7\$	
6A2P	PTG	SIN	II	6BE6\$, EK90=	8354-57
6A3P	*GTR	SIN	II	6BN6\$	
6A4P	PTG	DBA	II		
6A5B	*PTG	SIN		6L7\$	
6A6A	*DIO				
6A7	PTG	SIN	II	6SA7\$	8086-56
6A8	PTG	SIN	II	6A8B+, 6A8\$	8367-57
6A8B	*PTG	SIN		6A8\$	
6A8M	*PTG	SIN		6A8S++	
6A10S	PTG	SIN	II	6SA7\$	8087-56
6A15B	*PTG	SIN		6SA7\$	
6AG7	*BEA	SIN		6P9+, 6AG7\$	
6AZH5	*PND	SIN		6AG5\$ EF96=	
6B1P	PND	DIO	II		
6B2P	PND	DIO	II	L100**	
6B4	*TRI	SIN		6A3\$	
6B8	*PND	DWD		6B8\$, 6B8G\$, 6B8M*	
6B8M	*PND	DWD		6B8S+, 6B8G\$	
6B8S	PND	DWD	II	6B8G\$, 6B8M*	8369-57
6BKH1	*DIO	DUO		6KH5S+	
6D1A	*DIO	SIN		6D6A*, 5704\$	
6D1ZH	*DIO	SIN		6D4ZH*, 9004\$	
6D3D	DIO	SIN	II	559\$	
6D4ZH	DIO	SIN	II	9004\$	
6D6A	DIO	SIN	II	5704\$, *6D1A+	
6D8D	DIO	SIN	II		
6D10D	DIO		II		
6D13D	DIO	SIN	II		
6D14P	DIO	SIN	II		
6D15D	DIO	SIN	II		
6D16D	DIO	SIN	II		
6D20P	DIO	SIN	II		
6ESP	TET	SIN	II		
6E6P	TET	SIN	II		
6E6P-YE	BEA	SIN	II	E7119+	
6E7P	TET	SIN	II		
6E12N	TET	SIN	II		
6F1P	PND	TRI	II	EF80=, 6U8\$	
6F3P	TRI	PND	II		
6F4P	PND	TRI	II		
6F5	TRI	SIN		6S4R+, 6F5\$	
6F5B	TRI	SIN		6S4B+, 6F5\$	
6F5M	*TRI	II		6F5G\$, 6S4+	8372-57
6F5P	TRI	PND	II		
6F5S	TRI	SIN	II		
6F6	PND	SIN		6P6B+, 6F6\$	
6F6M1	PND	SIN	II		
6F6S	PND	SIN	II	6F6-GT\$	8082-56
6F7	PND	TRI	II		
6G1	TRI	DWD	II	6SR7\$	
6G2	TRI	DWD	II	6S07\$	8370-57
6G2P-K	TRI	DWD	II		
6G2S	*TRI	DWD		6S07G\$	

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
6G3P	TRD	TRI	II		
6G3S	*TRI	DWD			
6G7	TRI	DWD	II	6G7=	8371-57
6I1P	PTG	TRI	II	ECH81=, 6AJ8\$	
6I3P	PTG	TRI	II		
6I14P	PTG	TRI	II	ECH81=, 6I1P+	
6K1B	PND	SIN	II	5702\$	
6K1L	PND	SIN	II		
6K1P	PND	SIN	II	9003\$	
6K1ZH	PND	SIN	II	956\$	
6K2P	*PND	SIN		6K4P+	
6K3	PND	SIN	II	6SK7\$	8084-56
6K4	PND	SIN	II	6SG7\$	8083-56
6K4P	PND	SIN	II	EF93=, 6BA6\$	8352-57
6K4P-E	DWD	SIN		6K4P	
6K6A	PND	SIN	II		
6K7	PND	SIN	II	6K7S*, 6K7G\$, 6K9S+	8363-57
6K7S	*PND	SIN	II	6K9S+, 6K7G\$, 6K7	
6K8B	PND	SIN	II		
6K8P	PND	SIN	II		
6K9S	PND	SIN	II	6K7G\$, 6SK7\$	
6K11B-K	PND	SIN	II	6K1B+	
6K12	*PND	SIN		6SG7	
6K13P	PND	SIN	II		
6K14B	PND	SIN	II		
6K14B-V	PND	SIN	II		
6K15B	*PND	SIN		6AB7\$	
6K17B	*PND	SIN		6SK7\$	
6K19B	*PND	SIN		9003\$	
6K19P	*PND	SIN		6K1P+, 9003\$	
6KH1ZH	*DIO	SIN		6D4ZH+, 9004\$	
6KH2P	DIO	TWN	II	EAA91=, 6AL5\$	834R-57
6KH2P-E	DIO	TWN		6KH2P, E7099+	
6KH4P	DWD	SIN		6TS4P+	
6KH5	DWD	SIN		6VKH1+, 6X5G7\$	
6KH5S	DWD	SIN		6VKH1+, 6X5G7\$	
6KH6	DIO	TWN		6KH6B+, 6H6\$	
6KH6B	DIO	TWN	II	6H6-G\$	
6KH6M	DIO	TWN		6KH6S+, 6H6G\$	
6KH6S	DIO	TWN	II	6H6-G\$	8080-56
6KH7B	DIO	TWN	II		
6L1P	HPT	SIN	II		
6L7	PTG	SIN	II	6L7\$	
6LK1A	ELM	VIII			
6LK1B	ELM	VIII			
6L01I	ELS	VIII			
6N1P	TRI	TWN	II	6BK7\$	8355-57
6N1P-E	TRI	TWN		6N1P, E7100+	
6N2P	TRI	TWN	II	ECC83=, 6AX7\$	8356-57
6N2P-E	TRI	TWN		6N2P, E7101+	
6N3P	TRI	TWN	II	ECH42=, 2C51\$	8357-57
6N3P-E	TRI	TWN		6N3P, E7102+	
6N4P	TRI	TWN	II	12AY7\$	
6N5P	TRI	TWN	II		
6N5S	TRI	TWN	II	6AS7G\$	
6N6	DIO	TWN		6KH6B+, 6H6\$	
6N6P	TRI	TWN	II		
6N7	TRI	TWN	II	6N7\$, 6N7S+	
6N7S	TRI	TWN	II	6N7-GT\$	8374-57
6N8	TRI	TWN		6N8S+, 6SN7G7\$	
6N8M	TRI	TWN		6N8S+, 6SN7G7\$	
6N8S	TRI	TWN	II	6SN7-GT\$	
6N9	TRI	TWN		6N9S+, 6SL7G7\$	
6N9M	TRI	TWN		6N9S+, 6SL7G7\$	
6N9S	TRI	TWN	II	6SL7G7\$	
6N10	TRI	TWN		6N10S+, 6SC7G7\$	
6N10M	TRI	TWN		6N10S+, 6SC7G7\$	
6N10S	TRI	TWN	II	6SC7G7\$	
6N11	TRI	TWN		6N5S+, 6AS7G\$	
6N12S	TRI	TWN	II	6DN7\$, 56B7\$	

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
6N13S	TRI	TWN II		6080\$, 6AS7\$	837A-57
6N14P	TRI	TWN II		ECC84=, 6BX8\$	
6N15	*TRI	TWN II		6J6\$, 6N15P+	
6N15P	TRI	TWN II		6J6\$, ECC91=	
6N16B	TRI	TWN II			
6N17B	TRI	TWN II			
6N18B	TRI	TWN II			
6N19P	TTR	DWD II			
6N21B	TRI	TWN II			
6N23P	TRI	TWN II		6FW8\$	
6N24P	TRI	DUO II			
6N25G	TET	TWN II			
6N26P	TRI	TWN II			
6N27P	TRI	TWN II			
6N28B	TRI	TWN II			
6N28B-V	TRI	TWN II			
6P1P	BEA	SIN II		EL90=, 6A05\$	835A-57
6P2	BEA	SIN		6P65+, 6V6GT\$	
6P2P	PND	SIN II			
6P3	BEA	SIN		6P35+, 6L6G\$	
6P3B	BEA	SIN		6P35+, 6L6G\$	
6P3S	BEA	SIN II		6L6G\$	8376-57
6P3S-YF	BEA	SIN		6P35, E7121+	
6P4	*PND	SIN II		666G\$	
6P6	BEA	SIN		6P65+, 6V6GT\$	
6P6B	*PND	SIN II		6F6\$	
6P6P	*BEA	SIN			
6P6S	BEA	SIN II		6V6-GT\$	8375-57
6P7	*BEA	SIN		6P75+*, 6RG6GA\$	
6P7S	BEA	SIN II		6P7+*, 6RG6GA\$	
6P8P	TRI	SIN		6S1P+, 9002\$	
6P8S	*PND	SIN II		666G\$	
6P9	BEA	SIN II		6AG7\$	8377-57
6P9E	BEA	SIN II		6AK7\$	
6P13S	BEA	SIN II			
6P14P	BEA	SIN II		EL84=, 6R05\$	
6P15P	BEA	SIN II			
6P17S	BEA	SIN II			
6P18P	BEA	SIN II		6R06\$, EL82	
6P20S	*BEA	SIN II		6CB5\$, 6CD6\$	
6P21S	*BEA	SIN II			
6P23P	BEA	SIN II			
6P25B	PND	SIN II			
6P27S	BEA	SIN II			
6P30B	PND	SIN II			
6P31S	BEA	SIN II			
6P33P	PND	SIN II			
6P34S	PND	SIN II			
6P36S	BEA	SIN II			
6R1B	TRI	DWD		661+, 6SR7\$	
6R2P	BEA	DUO II			
6R3S	BEA	DUO II			
6R7	TRI	DWD		667+, 6Q7\$	
6R7B	TRI	DWD		667+, 6Q7\$	
6R17B	TRI	DWD		662+, 6S07\$	
6S1B	TRI	SIN		6S6B+, 5703\$	
6S1P	TRI	SIN II		9002\$	
6S1ZH	TRI	SIN II		4671\$, 955\$	
6S2	TRI	SIN		6J5-GT\$	
6S2B	TRI	SIN II		6S7B+, 5744\$	
6S2P	TRI	SIN II		6J4\$	8353-57
6S2S	TRI	SIN II		6J5-GT\$	
6S3B	TRI	SIN II		6K4A\$	8081-56
6S3P	TRI	SIN II			
6S4	*TRI	SIN		6F5\$	
6S4B	TRI	SIN II		6F5\$	
6S4P	TRI	SIN II			
6S4S	TRI	SIN II		6B4-G\$	8373-57
6S5	TRI	SIN II		6S5S+, 6C5GT\$, 6J5GT\$	
6S5B	TRI	SIN		6C5-GT\$	

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
6S5D	TRI	SIN II		TM1+*, 2C40\$	
6S5S	TRI	SIN II		6C5-GT\$, 6J5GT, 6S5\$	836A-57
6S6B	TRI	SIN II		5703\$	
6S7B	TRI	SIN II		5744\$	
6S8P	TRI	SIN		6S1P+, 9002\$	
6S8S	TRI	SIN II		2C22\$	
6S9D	TRI	SIN II			
6S10D	TRI	SIN II			
6S11D	TRI	SIN II			
6S13D	TRI	SIN II			
6S15P	TRI	SIN II			
6S16D	TRI	SIN II			
6S17K	TRI	SIN II			
6S18S	TRI	SIN II			
6S19P	TRI	SIN II			
6S20S	TRI	SIN II		68K4\$	
6S21D	*TRI	SIN II			
6S25B	TRI	SIN II			
6S26B	TRI	SIN II		6S6B+	
6S27B	TRI	SIN II		6S7B+	
6S28B-V	TRI	SIN II			
6S29B-V	TRI	SIN II			
6S30B	TRI	SIN II			
6S31B	TRI	SIN II			
6S32B	TRI	SIN II			
6S33S	TRI	SIN II			
6S34A-V	TRI	SIN II			
6S35A-V	TRI	SIN II			
6S36K	TRI	SIN II			
6S37B	TRI	SIN II			
6S39S	TRI	SIN II			
6S40P	TRI	SIN II			
6S41S	TRI	SIN II			
6S44D	TRI	SIN II			
6S45K	TRI	SIN II			
6S46G	TRI	SIN II			
6S47S	TRI	SIN II			
6S48D	TRI	SIN II			
6S51N	TRI	SIN II			
6S52N	TRI	SIN II			
6S53N	TRI	SIN II			
6SK7	PND	TRI II			
6TS4P	DWD	SIN II		6X4\$	
6TS4S	DIO	SIN II			8347-57
6TS5S	DWD	SIN II		6X5GT\$	
6TS10P	DIO	SIN II		683\$	
6TS13P	DIO	SIN II			
6TS15S	DIO	TWN II			
6TS17S	DIO	SIN II		6BL4	
6TS19P	DIO	SIN II			
6V1P	PND	SIN II			
6V2P	PND	SIN II			
6V3S	PND	SIN II			
6VKH1	DWD	SIN II			
6YE1P	TRI	SIN II		EM80=, 6BR5\$	
6YE2P	TRI	SIN II			
6YE3P	TRI	SIN II			
6YE5	*TRI	SIN		6YE5S+	
6YE5S	TRI	SIN II		6YE5+, 6E5\$	8379-57
6ZH1B	PND	SIN II		5702\$	
6ZH1L	PND	SIN II			
6ZH1P	PND	SIN II		6AK5\$, EF95=	8349-57
6ZH1P-E	PND	SIN		6ZH1P, E7112+	
6ZH1ZH	PND	SIN II		954\$	
6ZH2B	PND	SIN II		5784\$, 5639\$	
6ZH2M	PND	SIN II		1851\$	
6ZH2P	PND	SIN		6ZH2P-E, E7113+, 6AS6\$	
6ZH2P-E	PND	SIN		6ZH2P, E7113+	
6ZH3	PND	SIN II		6SH7\$	8085-56
6ZH3M	*PND	SIN II		6AB7/1853\$	

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
6ZH3P	PND	SIN	II	6AG5\$, EF96=	8350-57
6ZH4	PND	SIN	II	6AC7\$, 6AB7\$	8364-57
6ZH4B	*PND	SIN	II	6AG7\$	
6ZH4E	PND	SIN	II	6A87\$, 6AC7\$	
6ZH4P	PND	SIN	II	6AU6\$, EF94=	
6ZH5	*TRI	SIN		6J5\$	
6ZH5A	*PND	SIN	II		
6ZH5B	PND	SIN	II		
6ZH5P	8EA	SIN	II	6AH6\$	8351-57
6ZH6M	*PND	SIN		6J7\$	
6ZH6P	*PND	SIN		6J7\$	
6ZH6S	PND	SIN	II	262=	
6ZH7	PND	SIN	II	6J7	8365-57
6ZH78	*PND	SIN		6W76\$	
6ZH8	PND	SIN	II	6SJ7\$	8366-57
6ZH8S	PND	SIN	II		
6ZH9B	PND	SIN	II		
6ZH9P	PND	SIN	II		
6ZH9P-E	PND	SIN		6ZH9P, F7114+	
6ZH10B	PND	SIN	II		
6ZH10P	PND	SIN	II		
6ZH11B	*PND	SIN		6SH7\$	
6ZH11P	PND	SIN	II	6BQ5\$	
6ZH11P-EPND	SIN			6ZH11P+, E7115+	
6ZH12B	*PND	SIN		6S67\$	
6ZH13	PND	SIN		6ZH13L+	
6ZH13L	PND	SIN	II	6ZH13	
6ZH20P	BEA	DIO	II		
6ZH21P	8EA	DIO	II		
6ZH22P	DIO	BEA	II		
6ZH23P	PND		II		
6ZH318K	PND	SIN	II	EF95=	
6ZH32B	PND	SIN	II		
6ZH32P	PND	SIN	II		
6ZH33AV	PND	SIN	II		
6ZH358V	PND	SIN	II		
6ZH38P	PND	SIN	II		
6ZH40P	PND	SIN	II		
6ZH43P	PND	SIN	II		
6ZH458V	PND	SIN	II		
6ZH468YEPND	SIN	II			
D7	REG		XIII		
D7A	REC		XI	DG-TS21**	
D7B	REC		XI	DG-TS22**	
D7D	REC		XI	DG-TS25**	
D7G	REC		XI	DG-TS24**	
D7V	REC		XI	DG-TS23**	
D7YE	REC		XI	DGTS26	
D7ZH	REC		XI	DG-TS27**	
DG-TS7	REC		XI	D2M+	
DK-S7	MIX		XIV		
DK-S7M	MIX		XIV		
DK-V7	DET		XIV		
EM-7	TRI	SIN	II		
FS-K7	PHC		XV		
GI-7B	TRI	SIN	III	LD7	
GMI-7	TET	SIN	III		
GS-7	COU		XXI		
GS-7	TRI	SIN		GK-3000+	
GS-7A	TRI	SIN	III		
GS-7B	TRI	SIN	III		
KS-7	TRI	SIN		6-811+, 811-A\$	
LD-7	TRI	SIN		GI-7B+	
LI-7	IC		VIII		
MS-7	COU		XXI		
P7			X		
R-7			XXII		
SAT-7	COU		XXI		
SBM-7	COU		XXI		
SBT-7	COU		XXI		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
SG7S	DIO	SIN	V		
SNM-7	COU		XXI		
TVB-7	THM		XVIII		
UV-7	TWT		IX		
7L01M	OS		VIII		
7L055I	OS		VIII	3MP1\$	
7P12S	PND	SIN	II		
7ZH12S	PND	SIN	II	328A\$	
D8	REG		XIII		
DG-TS8	REC		XI	D2V+	
DK-V8	VID	SI	XIV		
F-8	PHO		XVI		
FS-K8	PHC		XV		
GI-8	PND	SIN	III		
GS-8	COU		XXI		
GS-8B	TET	SIN	III		
GU8	TRI	SIN	III		
KMT-8	TMS		XIX		
MMT-8	TMS		XIX		
MS-8	COU		XXI		
P8			X		
P8A			X		
R-8			XXII		
SAT-8	COU		XXI		
SBM-8	COU		XXI		
S8T-8	COU		XXI		
SG8S	DIO	SIN	V		
SNM-8	COU		XXI		
STS-8	COU		XXI		
T8D	TMS		XIX		
T8E	TMS		XIX		
T8M	TMS		XIX		
T8R	TMS		XIX		
T8S1	TMS		XIX		
T8S1M	TMS		XIX		
T8S2	TMS		XIX		
T8S2M	TMS		XIX		
T8S3	TMS		XIX		
T8S3M	TMS		XIX		
T88/3	TRI	THY		TG1-2.5/4+	
TKH-8G	HEX		VII		
TVB-8	THM		XVIII		
VS-8	COU		XXI		
8LM3V	OS		VIII		
8L02B	OS			8L029+, 3BP1A\$	
8L029I	OS		VIII	38P1\$	
8L029M	OS		VIII		
8L030I	OS		VIII	30P1\$	
8L030M	OS		VIII		
8L039V	OS		VIII	3JP7\$	
D9A	REC		XI		
D9B	REC		XI		
D9D	REC		XI		
D9G	REC		XI		
D9I	REC		XI		
D9K	REC		XI		
D9L	REC		XI		
D9M	GEP		XI		
D9V	REC		XI		
D9YE	REC		XI		
D9ZH	REC		XI		
DG-TS9	REC		XI	D2A+	
G-9	TRI	SIN		GU65+	
GS-9	COU		XXI		
GS9B	TRI	SIN	III		
LD-9	TRI	SIN		GS-9B+	
MMT-9	TMS		XIX		
MS-9	COU		XXI		
P9			X	2N35\$	
P9A			X		

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
R-9			XXII		
SG9S	DIO	SIN	V		
SNM-9	COU		XXI		
T9	TMS		XIX		
TVR-9	THM		XVIII		
VS-9	COU		XXI		
D10	REC		XI		
D10A	REC		XI		
D10B	REC		XI		
DGTS10	REC		XI	D2B+	
G10	TRI	SIN	III		
G-10A	TRI	SIN		GU-10A+	
G-10RA	TRI	SIN		GU-10B+	
GK0-10	TRI	SIN		GK-2000+	
GS-10	COU		XXI		
GSH-10	NOI		IX		
GT-10	TRI	SIN		G46+	
GU10A	TRI	SIN	III		
GU10B	TRI	SIN	III		
ISK10			XX		
ISP10			XX		
IST10			XX		
KMT-10	TMS		XIX		
MO-10	TRI	SIN	III		
P10			X	2N35\$	
P10A	GAP		X		
P10B	GAP		X		
R-10			XXII		
SBT-10	COU		XXI		
SG10S	REG		V		
T0-10	PND	SIN		10P12S	
VG-10	POW		XII		
VG-10-30	POW		XII		
VG-10-45	POW		XII		
VG-10-55	POW		XII		
VG-10-80	POW		XII		
VG-10-110	POW		XII		
VG-10-150	POW		XII		
VK-10	POW		XII		
VKU-10-0.25	SCR	SI4	XII-A		
VKU-10-0.5	SCR	SI4	XII-A		
VKU-10-0.75	SCR	SI4	XII-A		
VKU-10-1.0	SCR	SI4	XII-A		
VKU-10-1.5	SCR	SI4	XII-A		
VKU-10-2.0	SCR	SI4	XII-A		
VKU-10-2.5	SCR	SI4	XII-A		
VKU-10-3.0	SCR	SI4	XII-A		
10LK2B	PR		VIII		
10L043I	OD		VIII		
10P12S	PND	SIN	II		
10ZH1L	PND	SIN	II	10ZH3L+	
10ZH3L	PND	SIN	II	10ZH1L+	
10ZH3P	PND	SIN			
10ZH12S	PND	SIN	II	310A\$	
D11	REC		XI		
OK-V11	VID	SI	XIV		
FEU-11	PHM		XVI		
GI-11B	TRI	SIN	III	LD-11	
GS-11	COU		XXI		
GSH-11	NOI		IX		
GU11A	TRI	SIN	III		
GU11B	TRI	SIN	III		
KMT-11	TMS		XIX		
LD11	TRI	SIN		GI-11B+	
MS-11	COU		XXI		
P11			X	2N94\$	
P11A	GAP		X		
R-11			XXII		
TKH-11G	TET		VII		
VS-11	COU		XXI		

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
D12	REC		XI		
D12A	REC		XI		
DGTS12	REC		XI		
FEU-12	PHM		XVI		
GI-12B	TRI	SIN	III	LD-12	
GS-12	COU		XXI		
GU12A	TRI	SIN	III	880\$	
K-12	KLO		IX		
KIU12	KLA		IX		
KMT-12	TMS		XIX		
LD12	TRI	SIN		GI-12B\$	
MI-12	MAG		IX		
MMT-12	TMS		XIX		
MS-12	COU		XXI		
OS12/500	*PND	SIN		6837=	
P12			X	2N112\$	
P12A	GAP		X		
R-12			XXII		
12B1M	PND	DWD	II		
12B2M	PND	DWD	II		
12G1	TRI	DWD	II	12SR7\$	
12G2	TRI	DWD	II	12SG7\$	
12K1M	PND	SIN	II		
12K3	PND	SIN	II	12SK7\$	
12K4	PND	SIN	II	12SG7\$	
12K12B	*PND	SIN		12SG7\$	
12K17B	*PND	SIN		12SK7\$	
12KH3S	DWD	SIN	II	L61	
12M1M	PND	TRI	II		
12N1	TRI	TWN		12N11S+, 12AH7GT\$	
12N4P	TRI	TWN	II	12AY7\$	
12N10	TRI	TWN		12N10S+, 12SC7GT\$	
12N10M	TRI	TWN		12N10S+, 12SC7GT\$	
12N10S	TRI	DUO	II	12SC7\$	
12N11S	TRI	TWN	II	12AH7GT\$	
12P4S	PND	SIN	II	12A6\$	
12P14S	BEA	SIN	II		
12P17L	PND	SIN	II		
12R1B	TRI	DWD		12G1+, 12SR7\$	
12R17B	TRI	DWD		12G2+, 12SG7\$	
12S2	*TRI	SIN	II		
12S3S	*TRI	SIN	II	LD1+	
12S42S	TRI	SIN	II		
12ZH1	*PND	SIN		12ZH1L+	
12ZH1L	PND	SIN	II	12ZH1	
12ZH1M	PND	SIN	II		
12ZH3L	PND	SIN	II		
12ZH8	PND	SIN	II	12SJ7\$	
12ZH6B	*PND	SIN		12SJ7\$	
12ZH17B	*PND	SIN		12SJ7\$	
D13	REC		XI		
DGTS13	REC		XI		
FEU-13	PHM		XVI		
G-13	TRI	SIN	III		
GI-13	TRI	SIN	III		
GI-13B	TRI	SIN	III		
GM13	TET	SIN	III		
GU13	BEA	SIN	III	813\$	
LI-13	IM		VIII		
MS-13	COU		XXI		
P13			X	2N43\$	
P13A			X	2N34\$	
P13B			X		
SG13P	DIO	SIN	V		
UV-13	TWT		IX		
V13/30	*DIO	SIN		V1-0	
VS-13	COU		XXI		
13LK1B	TV		VIII	5FP4\$	
13LK2B	TV		VIII		
13LM4V	OS		VIII		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC NO.
13LM31M	OS		VIII	5FP7s	
13LM31V	OS		VIII		
13LM56I	OS		VIII	5FP1s	
13LM57	OS		VIII	5FP7s	
13LM57D	OS		VIII		
13LM58K	OS		VIII		
13L018	*		VIII		
13L02B	*		VIII	5CP1-A*s	
13L03I	OS		VIII		
13L04I	OS		VIII		
13L05P	*		VIII	5CP7-A*s	
13L06P	*		VIII	5FP7-A*s	
13L036	OS		VIII	5FP7s, L0736+	
13L036V	OS		VIII		
13L037A	OS		VIII	5CP7s	
13L037I	OS		VIII	5CP1s, L0737+	
13L037M	OS		VIII		
13L048A	OD		VIII	L0748+	
13L048I	OD		VIII	5SP1s	
13L048M	OD		VIII		
13L054A	OS		VIII	L0754	
13L054M	OS		VIII		
13L054V	OS		VIII		
13L0101M			VIII		
13L0102M			VIII		
13L0104A	TV		VIII		
13P1	*BEA	SIN		13P1M+, 13P1S+	
13P1M	BEA	SIN		13P1+, 13P1S+	
13P1S	BEA	SIN	II	13P1+, 13P1M+	
13ZH41S	PND	SIN	II		
D14	REC		XI		
D14A	REC		XI		
DGTS14	REC		XI		
FEU-14	PHM		XVI		
GI-14B	TRI	SIN	III	LD-14	
LI-14	IM		VIII		
MI-14	MAG		IX		
MS-14	COU		XXI		
P14			X	2N65s	
P14A			X		
P14B			X		
SG14P	REG	AH	V		
TV-14	THM		XVIII		
UV-14	TWT		IX		
VS-14	COU		XXI		
D15	REC		XI		
DGTS15	REC		XI	D2N+	
FEU-15	PHM		XVI		
G-15A	TRI	SIN		GU-11A+	
G-15RA	TRI	SIN		GU-16B+	
GN0-15	TRI	SIN		G-61+	
GS-15B	TET	SIN	III		
GU15	BEA	SIN	III		
IFK15-1			XX		
ISSH15			XX		
K-15	KLO		IX		
KIU15	KLA		IX		
LI-15	IM		VIII		
MI-15	MAG		IX		
P15			X	2N43s, OC604=	
P15A	GAP		X		
SG15P	DIO	SIN	V		
SG15P1	DIO	SIN	V		
T6-15/3	TRI	THY		T61-5/3+	
TR-15/2	TRI	THY		TR-1-5/2+	
TV-15	THM		XVIII		
V615/5000	DIO	SIN		GG1-0.5/5+	
15A6S	PND	SIN	II		
D16	REC		XI		
D16A	REC		XI		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC NO.
DGTS16	REC		XI	D2P+	
FEU-16	PHM		XVI		
GI-16B	TET	SIN	III		
GU16B	TRI	SIN	III		
LG-16	DIO	SIN		2D2S+	
MI-16	MAG		IX		
MS-16	COU		XXI		
P16			X	2N55s, OC604=	
P16A			X		
P16B			X		
SG16P	DIO	SIN	V		
TV-16	THM		XVIII		
VS-16	COU		XXI		
D17	REC		XI		
DGTS17	REC		XI		
FEU-17	PHM		XVI		
FEU-17A	PHM		XVI		
G-17B	TRI	SIN	III		
GI-17	TRI	SIN	III	G480*	
GU-17	BEA	TWN	III		
LI-17	IM		VIII		
MST-17	COU		XXI		
P17			X		
P17A			X		
P17B			X		
SG17S	DIO	SIN	V		
D18	GEP		XI		
FEU-18	PHM		XVI		
FEU-18A	PHM		XVI		
GI-18B	TRI	SIN	III		
GS-18	TRI	SIN		GK-2000+	
GU-18	BEA	TWN	III		
LI-18	VI		VIII		
P18			X		
P18A			X		
P18B			X		
SG18S	DIO	SIN	V		
18LK16	TV		VIII		
18LK2B	TV		VIII	70P4s	
18LK3V	*		VIII		
18LK4B	TV		VIII		
18LK5B	TV		VIII		
18LK7B	TV		VIII		
18LK14T	ELS		VIII		
18LK15	TV		VIII		
18LM35	OS		VIII	7BP7As	
18LM35V	OS		VIII	7BP7s	
18LO1P	*		VIII	7BP7As	
18LO40B	TV		VIII	7JP4s, LK740+	
18LO47A	OD		VIII		
18LO47V	OD		VIII		
D19	GEP		XI		
D19A	GEP		XI		
D19B	GEP		XI		
FFU-19M	PHM		XVI		
GI-19B	TRI	SIN	III		
GU-19	BEA	TWN	III		
P19			X		
SG19S	DIO	SIN	V		
19LK4B	TV		VIII		
D20	GEP		XI		
FFU-20	PHM		XVI		
GK20	TRI	SIN	III		
I-20/1.5	TRI	IGN	IV		
I-20/1500	*DIO	IGN	IV		
IFK20			XX		
M-20/35	TRI	SIN		GM-1A+	
MO20	TRI	SIN	III		
P20			X		
QV20-P18	*TET	SIN		GMI-83=	

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
SG206	DIO	SIN	V		
T-20RFL	COU		XXI		
TKP-20	TMS	POW	XIX		
TR-20/15	TRI	THY		TR-1-6/15+	
V20/20	*DIO	SIN		V1-0.02/20+	
VKU=20-0.25	SCR	SI4	XII-A		
VKU=20-0.5	SCR	SI4	XII-A		
VKU=20-0.75	SCR	SI4	XII-A		
VKU=20-1.0	SCR	SI4	XII-A		
VKU=20-1.5	SCR	SI4	XII-A		
VKU=20-2.0	SCR	SI4	XII-A		
VKU=20-2.5	SCR	SI4	XII-A		
VKU=20-3.0	SCR	SI4	XII-A		
20LM1YE			VIII		
DGTS21	REC	XI		D7A+	
GI=21B	TRI	SIN	III		
GU21B	TRI	SIN	III		
P21			X		
P21A			X		
P21B			X		
DGTS22	REC	XI		D7B+	
FEU-22	PHM		XVI		
GI-22	TRI	SIN	III		
GU22A	TRI	SIN	III		
P22			X		
DGTS23	REC	XI		D7V+	
FEU-23	PHM		XVI		
GU23A	TRI	SIN	III		
GU-23B	TRI	SIN	III		
LI-23			VIII		
P23			X		
23LK1B	TV		VIII	9CP4\$	
23LK2B	TV		VIII		
23LK7B	TV		VIII		
23LK8B	TV		VIII		
23LK9B	ELS		VIII		
23LM34	OS		VIII	9GP7\$	
23LM34V	OS		VIII		
23LO1P	OS			9GP7\$	
23LO51A	OS		VIII		
DGTS24	REC	XI		D7G+	
FEU-24	PHM		XVI		
GI=24A	TRI	SIN	III		
GU24A			III		
DGTS25	REC	XI		D7D+	
FEU-25	PHM		XVI		
GI-25	TRI	SIN	III		
GU25B	TRI	SIN	III		
ISK25			XX		
P25			X		
P25A			X		
P25B			X		
T-25BFL	COU		XXI		
VK-25	POW		XII		
25P1	BEA	SIN	II	25L6\$	
25P1S	BEA	SIN	II	25L6\$	
DGTS26	REC	XI		D7E+	
FEU-26L	PHM		XVI		
GU26A	TRI	SIN	III		
GU26B	TRI	SIN	III		
K-26	KLO		IX		
P26			X		
P26A			X		
P26B			X		
DGTS27	REC	XI		D7ZH+	
FEU-27	PHM		XVI		
GU27A	TET	SIN	III		
GU27B	TET	SIN	III	827-R\$	
P27			X		
P27A			X		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
GSH-28	NOI		IX		
GU28A	TET	SIN	III		
GU28B	TET	SIN	III		
M28	TRI	SIN	III		
P28			X		
FEU-29	PHM		XVI		
G29	TRI	SIN	III		
GSH-29	NOI		IX		
GU29	BEA	TWN	III	829-B\$	
K-29	KLO		IX		
P29			X		
P29A			X		
GNO-30	TRI	SIN		GS-3B+	
GI-30	BEA	TWN	III	3E29\$	
GMI-30	TRI	SIN	III		
GS-30	COU		XXI		
GU30A	TRI	SIN	III		
K-30	KLO		IX		
M-30/450	TRI	SIN		GMI-30+	
P30			X		
T-30BFL	COU		XXI		
VG-30	POW		XII		
30LK1B	TV		VIII	31LK1B+	
30P1	BEA	SIN		30P1S+	
30P1M	*BEA	SIN		30P1S+	
30P1S	BEA	SIN	II	30P1M	
30TS1M	DIO	SIN	II	30VKH1+, 30TS6S+	
30TS6S	DIO	TWN	II	30VKH1+, 30TS14*	
30VD1	DIO	SIN	II	30TS1M+	
30VKH1	DIO	SIN	II	30TS6S+	
FEU-31	PHM		XVI		
GU31	TET	SIN	III		
K-31	KLO		IX		
31LK1B	TV		VIII		
31LK2B	TV		VIII	12LP4\$	
31LM32	OS		VIII	120P7A\$	
31LM32V	OS		VIII		
31LO1P			VIII	120P7\$	
31LO33	OS		VIII	126P7\$	
31LO33V	OS		VIII		
FEU-32	PHM		XVI		
G32	TRI	SIN	III		
GU32	BEA	TWN	III	832\$	
K-32	KLO		IX		
FEU-33	PHM		XVI		
GU33B	TET	SIN	III		
K-33	KLO		IX		
FEU-34	PHM		XVI		
GU34B	TET	SIN	III		
K-34	KLO		IX		
FEU-35	PHM		XVI		
GU-35B	TET	SIN	III		
K-35	KLO		IX		
35LK2B	TV		VIII		
FEU-36	PHM		XVI		
G36	TRI	SIN	III		
GK36	TRI	SIN		GK-20+	
GU-36B	TET	SIN	III		
FEU-37	PHM		XVI		
GU-37B	TRI	SIN	III		
FEU-38	PHM		XVI		
FEU-39	PHM		XVI		
GU-39A	TET	SIN	III		
GU-39B	TET	SIN	III		
M39	TRI	SIN	III		
P39B			X		
FEU-40	NSP		XVI		
GU-40B	TET	SIN	III		
P40			X		
P40A			X		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
T-408FL V40/100 40LK1B K-41 P41	COU DIO TV KLO	SIN	XXI VIII IX X	V1-0.1/40+ 16AP4\$	
P41A FFU-42 K-42 P42A P42B	NSP KLO		X XVI IX X X		
42LM2YE FFU-43 43LK2B 43LK3B 43LK6B	NSP TV TV TV		VIII XVI VIII VIII VIII		
43LK7B 43LK8B 43LK9B	TV TV TV		VIII VIII VIII		
FFU-44 FFU-45	NSP NSP		XVI XVI		
45LM1B FFU-46 G46 FFU-47 G47	NSP TRI NSP TRI	SIN SIN SIN SIN	VIII XVI III XVI III		
SB-47 47LK1B 47LK2B	PND TV ELS	SIN SIN SIN	II VIII VIII		
FFU-48 K-48	NSP KLO		XVI IX		
FFU-49 G-49 GD-50 GU50 I-50/1.5	PHM TRI TRI PND TRI	SIN SIN SIN SIN IGN	XVI SIN SIN SIN IV	6S-4+ G-46+ LS50=	
I-50/1500 IFK50 LS50 M50 T-50RFL	DIO *PND TRI COU	IGN SIN SIN SIN SIN	IV XX SIN III XXI	GU50=	
TKP-50A TKP-50B V6-50 VK-50 VKU-50-0.25	TMS TMS POW POW SCR	POW POW POW POW SIN	XIX XIX XII XII SIN	XII-A	
VKU-50-0.5 VKU-50-0.75 VKU-50-1.0 VKU-50-1.5 VKU-50-2.0	SCR SCR SCR SCR SCR	SIN SIN SIN SIN SIN	XII-A XII-A XII-A XII-A XII-A		
VKU-50-2.5 VKU-50-3.0 GMS1A MI-51 SB-51	SCR SCR TRI MAG PND	SIN SIN SIN SIN SIN	XII-A XII-A III IX II		
STSV51 FEU-52 MI-52 FEU-53 M53	PHO PHM MAG PHM TRI		XVI XVI IX XVI SIN	III	
MI-53 53LK2B 53LK3B 53LK4TS 53LK5B	MAG TV TV TV TV		IX VIII VIII VIII VIII		
53LK6B G-54 MI-54 R-54 G-56	TV TRI MAG TRI TRI	SIN SIN SIN SIN SIN	VIII SIN IX XXII SIN	6S-6+ 629+	

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
GM57 M57 SO-57 G-58 59LK1B	TRI TRI PND TRI TV	SIN SIN SIN SIN SIN	III III II III VIII	MS50++, M457+, UB180=	
59LK2B GM60 GS-60 T-60BFL 661	ELS TRI COU COU TRI	SIN SIN SIN SIN SIN	VIII III XXI XXI III	6600++	
662 M62 G-64 G65 G68	TRI MAG TRI TRI TRI	SIN SIN SIN SIN SIN	III IX SIN III III	6S-3B+	
GI-70R GM-70 GM70R ISP70 LD70	TRI TRI TRI TRI TRI	SIN SIN SIN SIN SIN	III III III XX SIN	LD-70 GI-70R+	
V70/1000 GK71 GU72 M74 7555-30	DIO PND PND TRI *DIO	SIN SIN SIN SIN SIN	SIN III III III SIN	V1-0.3/70+ G471+, 471A* SG2S+, 0A3\$	
GI-76B GU80 M80 T-80RFL GU81	TRI PND TRI COU PND	SIN SIN SIN SIN SIN	III III III XXI III	05450=, P800++	
GMI-83 G88 VO-88 GMI-89 GU89A	TET TRI DIO TET TRI	SIN SIN TWN SIN SIN	III III SIN III III	QV20=P18=	
GU89B M89 GMI-90 GS90B LD-90	TRI TRI TET TRI TRI	SIN SIN SIN SIN SIN	III III III III SIN	889R-A\$ G-490*+ LD-90 GS-90B+	
MTKH90 RB-90 TGI-90/8 G91 G-92	TRI TRI TRI TRI TRI	THY THY THY SIN SIN	VII XXII III III SIN	TGI-1-90/8+ 6K-2000+	
K-92A K-92B K-92G K-92V MI-95	KLO KLO KLO KLO MAG		IX IX IX IX IX		
L-99 G-100 G-100A GD-100 GKE100	PTG TRI TRI TRI *TET	SIN SIN SIN SIN SIN	SIN SIN SIN SIN III	6A2P+, 6BE6\$ G-29+ 6K-3A+ G-47+ GE-1=	
GM100 I-100/1.0 I-100/5.0 I-100/1000 I-100/5000	TRI TRI TRI *DIO *DIO	SIN IGN IGN IGN IGN	III IV IV IV IV		
ISSH100-1 ISSH100-3 L100 VG-100 VK-100			XX XX *PND POW POW	DIO XII XII	6B2P*
VKU100-0.25 VKU100-0.5 VKU100-0.75 VKU100-1.0 VKU100-1.5	SCR SCR SCR SCR SCR	SIN SIN SIN SIN SIN	XII-A XII-A XII-A XII-A XII-A		

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
VKU100-2.0	SCR	SI4	XII-A		
VKU100-2.5	SCR	SI4	XII-A		
VKU100-3.0	SCR	SI4	XII-A		
VKUV-100-0.25	SCR	SI4	XII-A		
VKUV-100-0.5	SCR	SI4	XII-A		
VKUV-100-0.75	SCR	SI4	XII-A		
VKUV-100-1.0	SCR	SI4	XII-A		
VKUV-100-1.5	SCR	SI4	XII-A		
VKUV-100-2.0	SCR	SI4	XII-A		
VKUV-100-2.5	SCR	SI4	XII-A		
VKUV-100-3.0	SCR	SI4	XII-A		
AI-101A	TUN	XI-B			
AI-101B	TUN	XI-B			
AI-101D	TUN	XI-B			
AI-101G	TUN	XI-B			
AI-101I	TUN	XI-B			
AI-101V	TUN	XI-B			
AI-101YE	TUN	XI-B			
AI-101ZH	TUN	XI-B			
D101	REC	XI			
D101A	REC	XI			
LI-101	IC	VIII			
P101		X			
P101A		X			
P101B		X			
D102	REC	XI			
D102A	REC	XI			
P102		X			
D103	REC	XI			
D103A	REC	XI			
P103		X			
S-103	TET	SIN		GKE-1000+	
D104	REC	XI			
D104A	REC	XI			
L-104	PND	SIN		6K4P+, 6BA6\$	
P104		X			
D105	REC	XI			
D105A	REC	XI			
P105		X			
105S5-30	DIO	SIN		5G3S+, 0C3\$	
D106	REC	XI			
D106A	REC	XI			
P106		X			
S-106	TET	SIN		GKE-150+	
D107	REC	SIP	XI		
D107A	REC	SIP	XI		
P107		X			
UB107	*TRI	SIN		4S1+	
D108	REC	SIP	XI		
GT108A		X			
GT108B		X			
GT108G		X			
GT108V		X			
D109	REC	SIP	XI		
GT109A		X			
GT109B		X			
GT109D		X			
GT109G		X			
GT109V		X			
GT109YE		X			
S-109	TET	SIN		GKE-300+	
UB110	*TRI	SIN		4S2+	
VU-111D	DIO	SIN	IV		
SB-112	PND	SIN	II	4E1+	
SO-118	TRI	SIN		4S5+	
G120	TRI	SIN	III		
IFK120		XX			
MI-120	MAG	IX			
TR-120/15	TRI	THY		TR-1-40/15+	
SO-122	PND	SIN		4P1+	

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
SO-124	PND	SIN	II	4ZH5+	
VO-125	DIO	SIN	IV		
SK-127		XXII			
VG-129	DIO	SIN	IV		
UR-132	*TRI	SIN	II	4S3+	
P135		X			
MI-137	MAG	IX			
TO-141	*TRI	SIN	II	3S1+	
TO-142	*TRI	SIN	II	3S2+, 3S9+	
SA-147	TET	SIN		4E2+	
SO-148	PND	SIN	II	4E3+	
GI-150	TRI	SIN	III		
GKE150	*TET	SIN	III	GE-2=	
GU150	TRI	SIN	III		
I-150/1.0	TRI	IGN	IV		7712-55
M150	TRI	SIN	III		
150S5-30	*DIO	SIN		5G4S+, 0D3\$	
SR-152	TRI	SIN	II		
UH-152	TRI	SIN	II	2S1+	
UR-153	TRI	SIN	II		
SR-154	PND	SIN	II	2E1+	
SR-155	BEA	SIN		2P2+	
UR-155	*BEA	SIN	II	2E2+	
VG-161	DIO	SIN	IV		
VG-163	DIO	SIN	IV		
VG-176	DIO	SIN	IV		
UR-178	TRI	SIN	II		
SO-182	PND	SIN	II		
UR-182	*TRI	SIN	II		
SO-185	TRI	SIN		4S5+	
U0186	*TRI	SIN	II	4S4+	
US-186	TRI	SIN		4S4+	
VO-188	DWD	SIN	IV	4VKH1*	
SR-190	PND	SIN	II		
191P	TET	SIN	II		
VO-196	DIO	SIN	IV		
VO-197	DWD	SIN	IV		
GD-200	TRI	SIN		GS-4+	
I-200/1.5	TRI	IGN	IV		
IFP200		XX			
IVS200/2		IGN	IV		
TGI-200	TRI	THY	VII	MTI-2+	
VG200	POW	XII			
VK-200	POW	XII			
VKV200	POW	XII			
AI-201A	TUN	XI-B			
AI-201B	TUN	XI-B			
AI-201D	TUN	XI-B			
AI-201G	TUN	XI-B			
AI-201I	TUN	XI-B			
AI-201K	TUN	XI-B			
AI-201L	TUN	XI-B			
AI-201V	TUN	XI-B			
AI-201YE	TUN	XI-B			
AI-201ZH	TUN	XI-B			
D201A	REC	XI			
D201B	REC	XI			
D201D	REC	XI			
D201G	REC	XI			
D201TS	REC	XI			
D201V	REC	XI			
D201YE	REC	XI			
D201ZH	REC	XI			
KU-201A	SCR	XII-A			
KU-201B	SCR	XII-A			
KU-201D	SCR	XII-A			
KU-201G	SCR	XII-A			
KU-201I	SCR	XII-A			
KU-201K	SCR	XII-A			
KU-201L	SCR	XII-A			

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
KU-201V	SCR		XII-A		
KU-201YE	SCR		XII-A		
KU-201ZH	SCR		XII-A		
LI-201	IM		VIII		
P201			X		
P201A			X		
SG201S	DID	SIN	V		
D202	REC		XI	2N685	
P202			X		
SG202B	DID	SIN	V		
VD-202	DWD	SIN	IV		
D203	REC		XI		
LI-203			VIII		
P203			X	2N685	
SG203K	DID	SIN	V		
D204	REC		XI		
UV-204	TWT		IX		
D205	REC		XI		
UV-205	TWT		IX		
D206	REC		XI		
D207	REC		XI		
P207			X		
P207A			X		
D208	REC		XI		
P208			X		
P208A			X		
D209	REC		XI		
P209	GAP		X		
P209A	GAP		X		
D210	REC		XI		
P210	GAP		X		
P210A	GAP		X		
D211	REC		XI		
P211			X		
P212			X		
P212A			X		
T6212M	TRI	THY	VII		
P213			X		
P213A			X		
P213B			X		
T6-213	TRI	THY	VII	PT-2**	
D214	REC	SIA	XI		
D214A	REC	SIA	XI		
D214B	REC		XI		
P214			X		
P214A			X		
P214B			X		
P214C			X		
P214V			X		
D215	REC	SIA	XI		
D215A	REC	SIA	XI		
D215B	REC	SIA	XI		
P215			X		
P216			X		
P216A			X		
P216B			X		
P216D			X		
P216G			X		
P216V			X		
D217	REC	SIA	XI		
P217			X		
P217A			X		
P217B			X		
P217G			X		
P217V			X		
D218	REC	SIA	XI		
D219A	REC	SIA	XI		
D220	REC	SIA	XI		
D220A	REC	SIA	XI		
D220B	REC	SIA	XI		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
Sk-220			XXII		
D221	REC	SIA	XI		
D222	REC	SIA	XI		
D223	REC	SIA	XI		
D223A	REC	SIA	XI		
D223B	REC	SIA	XI		
D224	REC	SIA	XI		
D224A	REC	SIA	XI		
D224B	REC	SIA	XI		
D225	REC	SIA	XI		
D226	REC	SIA	XI		
D226A	REC	SIA	XI		
D226D	SIA		XI		
D226G	SIA		XI		
D226V	SIA		XI		
D226YE	SIA		XI		
SG226	DID	SIN	V		
D227-A	SWI	SIA	XI-A		
D227-B	SWI	SIA	XI-A		
D227-D	SWI	SIA	XI-A		
D227-G	SWI	SIA	XI-A		
D227-I	SWI	SIA	XI-A		
D227-V	SWI	SIA	XI-A		
D227YE	SWI	SIA	XI-A		
D227-ZH	SWI	SIA	XI-A		
SG227	DID	SIN	V		
D228-A	SWI	SIA	XI-A		
D228-B	SWI	SIA	XI-A		
D228-D	SWI	SIA	XI-A		
D228-G	SWI	SIA	XI-A		
D228-I	SWI	SIA	XI-A		
D228-V	SWI	SIA	XI-A		
D228YE	SWI	SIA	XI-A		
D228-ZH	SWI	SIA	XI-A		
D229A	SIA		XI		
D229B	SIA		XI		
D230A	SIA		XI		
D230B	SIA		XI		
V6-230	DID	SIN	IV		
D231A(P)	REC	SIA	XI		
D231B(P)	REC	SIA	XI		
D231(P)	REC	SIA	XI		
D232A(P)	REC	SIA	XI		
D232B(P)	REC	SIA	XI		
D232(P)	REC	SIA	XI		
D233A	REC	SIA	XI		
D233B(P)	REC	SIA	XI		
D233(P)	SIA		XI		
D234B(P)	REC	SIA	XI		
D235A	CON	SI	XI-C		
D235B	CON	SI	XI-C		
D235G	CON	SI	XI-C		
D235V	CON	SI	XI-C		
T6-235	TRI	THY	VII	PT-3**	
V6-236	DIO	SIN	IV		
V6-237	DID	SIN	IV		
D238A	CON	SI	XI-C		
D238B	CON	SI	XI-C		
D238D	CON	SI	XI-C		
D238G	CON	SI	XI-C		
D238V	CON	SI	XI-C		
D238YE	CON	SI	XI-C		
V6-239	DID	SIN	IV		
UR-240	TRI	SIN	II	2S2+	
SB241	*PND	SIN		2K1*, 2K1M*, S0241*	
S0241	*PND	SIN		2K1*, 2K1M*, S0241*	
D242	REC		XI		
D242A	REC		XI		
D242B	REC		XI		
SR-242	PTG	SIN		2A1+	

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC NO.
SO-242	PTG	SIN	II	SB242, 2A1, 2A1M	
D243	REC		XI		
D243A	REC		XI		
D243B	REC		XI		
SB243	*TRI	DUO		2N1*, 2N1M*, S0243*	
SO-243	*TRI	TWN	II	2N1+	
D244	REC		XI		
D244A	REC		XI		
D244B	REC		XI		
S3244	*BEA	SIN		2P1+, S0244+	
SO-244	PND	SIN	II	2P1+	
D245	REC		XI		
D245A	REC		XI		
D245B	REC		XI		
SB245	*PND	SIN		2ZH1M+	
D246	REC		XI		
D246B	REC		XI		
D247	REC		XI		
D247B	REC		XI		
LO-247	OS		VIII		
D248B	REC		XI		
LO-248	OS		VIII		
LO-249	OS		VIII		
GK0-250	TRI	SIN		GK-1A+	
VG-252	DIO	SIN	IV		
G256	TRI	SIN	III		
S0257	*PND	SIN	II	2ZH4+	
SB258	*BEA	SIN		2P3+, 2P2M+, S0258+	
SO-258	*PND	SIN	II	2P3+	
SB259	*TRI	DUO		4N1+	
S0259	*TRI	DUO		4N1+	
RA-280			XXII		
G-300	TRI	SIN		668	
GI-300	TRI	SIN		GI-18B+	
GK-300	TRI	SIN		GU-A+	
GKE300	TET	SIN	III		
IFB300			XX		
TKP-300	TMS	POW	XIX		
SG301S	DIO	SIN	V		9103-59
D302	REC		XI		
P302			X		
SG302S	DIO	SIN	V		9103-59
D303	REC		XI		
P303			X		
P303A			X		
SG303S	DIO	SIN	V		9103-59
D304	REC		XI		
KU304	KLA		IX		
KU304A	KLA		IX		
P304			X		
SG304S	DIO	SIN	V		
D305	REC		XI		
SG305K	REG		V		
P306			X		
P306A			X		
SG306K	REG		V		
P307			X		
K-308	KLO		IX		
KU308	KLA		IX		
P308			X		
GT309A			X		
GT309B			X		
GT309D			X		
GT309G			X		
GT309V			X		
GT309YE			X		
KU309	KLA		IX		
D310	GEA		XI		
GT310A			X		
GT310B			X		

GROUP I, NUMERICAL					
TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
GT310D			X		
GT310G			X		
GT310V			X		
GT310YE			X		
KU310A	KLA		IX		
KU310B	KLA		IX		
SG311S	REG		V		
KT312B			X		
KT312G			X		
KT312V			X		
GT313A			X		
GT313B			X		
P314A			X		
P314B			X		
P314C			X		
P322			X		
TGI-325/16	TRI	THY		MTI-5+, TGI-1-325/16+	
R-350			XXII		
RB-350			XXII		
K-351	KLO		IX		
K-352	KLO		IX		
VO-360	DIO	SIN	IV		
GO-400	TRI	SIN		GS-6+	
M400	TRI	SIN	III		
TG-400/15	TRI	THY		TRI-130/15+	
TGI400/3.5	TRI	THY		TGI-2-400/3.5+	
D401	MOD		XIV		
KTS401A	REC		XI		
KTS401B	REC		XI		
LI-401			VIII		
M401	TRI	SIN	III		
P401			X	2N112\$	
D402	MIX	SI	XIV		
P402			X	SB-100\$	
D403A	MIX		XIV		
D403B	MIX		XIV		
D403V	MIX		XIV		
P403			X	OC614=	
P403A			X	OC614=	
D404	MIX	SI	XIV		
P404			X		
P404A			X		
D405	DET		XIV		
D405A	DET		XIV		
D405AP	DET		XIV		
D405B	DET		XIV	1N23D\$	
D405BP	DET		XIV		
P405			X		
P405A			X		
D406	MIX	SI	XIV		
P406			X	GT-60=, 2N113\$	
P407			X	2N114\$	
D408	MIX	SI	XIV		
P408			X		
P409			X		
T-409	DIO	IGM	IV		
G410	TRI	SIN	III		
P410			X		
P410A			X		
T-410	DIO	IGM	IV		
410R	KLO		IX		
G411	PND	SIN	III	KZH1**	
P411			X	AF114=	
P411A			X	AF114=	
T-411	DIO	IGM	IV		
G412	PND	SIN	III		
G413	PND	SIN	III	GZH2**	
G414	PND	SIN	III		
P414			X		
P414A			X		

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
P414B		X			
P415		X			
P415A		X			
P415B		X			
P416		X			
P416A		X			
P416B		X			
P416V		X			
G417	TRI SIN	III			
P417		X			
P417A		X			
G418	PND SIN	III			
P418		X			
P418A		X			
P418B		X			
P418V		X			
P420		X			
P421		X			
UV-421	TWT	IX			
G422	PND SIN	III			
P422		X			
P422A		X			
UV-422	TWT	IX			
P423		X			
P423A		X			
G424	PND SIN	III			
G425	PND SIN	III			
G430	TRI SIN	III			
RR-430		XXII			
G431	TRI SIN	III		G431A+	
G431A	TRI SIN	III		G431	
G-431R	TRI SIN			GS-40+	
G433	TRI SIN	III		G433A+	
G433A	TRI SIN	III		G433	
M435	TRI SIN	III			
UV-438	TWT	IX			
UV-440	TWT	IX			
G441	TRI SIN	III			
G-450	TRI SIN	III			
OS450	*PND SIN			GUR0, P800**	
R-450		XXII			
M-451	TRI SIN			GM-51A+	
G-452	TRI SIN	III		G-431A+	
G-454	TRI SIN	III		GS-3B+	
M457	*TRI SIN	II		MS3**+, UB180=, GM57+	
M-470	TRI SIN			GM-70+	
G471	*PND SIN			GK71+	
G472	TRI SIN	III			
G480	*TRI SIN			GI-17**	
G-483	TET SIN			GMI-83+	
G484	TRI SIN	III			
G-489	*TET SIN			GMI-89+	
G-490	*TET SIN			GMI-90**	
IFK500		XX			
IFP500		XX			
ISSH500		XX			
VG500	POW	XII			
D501		XIV			
P501		X			
P501A		X			
P502		X			
P502A		X			
P502B		X			
P502V		X			
P503		X			
P503A		X			
P504		X			
P504A		X			
P505		X			
P505A		X			

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST SPEC. NO.
M-532	MAG	IX			
M571	MAG	IX			
MT-588	MAG	IX			
MI-589A	MAG	IX			
MI-589B	MAG	IX			
MI-589V	MAG	IX			
M600	*TRI SIN			GM60+	
KT601A		X			
P601		X			
P601A		X			
P601B		X			
P601BI		X			
P601I		X			
D602A	VID	XIV			
D602B	VID	XIV			
D602V	DET	XIV			
P602		X			
P602A		X			
P602AI		X			
P602I		X			
D603	VID	XIV			
D604	VID SI	XIV			
P604	GAP	X			
P604A	GAP	X			
P604B	GAP	X			
D605	MIX SI	XIV			
P605	GDP	X			
P605A	GDP	X			
P606	GDP	X			
P606A	GDP	X			
P607		X			
P607A		X			
P608		X			
P608A		X			
P609		X			
P609A		X			
OV-612	BWT	IX			
OV-613	BWT	IX			
OV-614	BWT	IX			
OV-621	BWT	IX			
OV-622	BWT	IX			
700AD	MAG	IX			
P701		X			
P701A		X			
P702		X			
P702A		X			
706AU	MAG	IX			
707A/R	KLO	IX			
LO-709A	OS	VIII			
714AU	MAG	IX			
LK-715	*TV			18LK15+	
720AYE	MAG	IX			
723A/B	KLO	IX			
725A	MAG	IX			
LK-726	TV			18LK3B+	
726	KLO	IX			
LO-729	*OS			8L029+, 3BP1A5	
LO-730	OS			8L030+	
LO-731	OS			13LM31+	
LO-732	OS			31LM32+	
LO-733	*OS			31L033+	
LO-734	OS			23LM34+	
LO-735	OS			18LM35+	
LO-736	*OS			13L036+	
LO-737	*OS			13L037+	
LO-738	*OS			5L038+, 2AP15	
LO-739	OS			8L039+	
LK-740	*TV			18L040B+, 7JP45	
K-743	KLO	IX			
LO-743	*OD			10L043+	

GROUP I, NUMERICAL					
TYPE NUMBER	KINO	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
K-744	KLO	IX			
K-745	KLO	IX			
K-746	KLO	IX			
K-747	KLO	IX			
LO-747	*OD			18L047+	
LO-748	*OD			13L048+	
LO-749	*OS			13L049+	
GK750	TRI SIN	III			7709-55
LO751	OS			23L051+	
LO-754	*OS			13L054+	
K-765	KLO	IX			
K-766	KLO	IX			
K-767	KLO	IX			
K-768	KLO	IX			
K-769	KLO	IX			
K-770	KLO	IX			
K-771	KLO	IX			
M800	TRI SIN	III			
P800	*PND SIN			6UA0** 05450=	
K-801	KLO	IX			
KT801A		X			
KT801B		X			
K-802	KLO	IX			
KT802A		X			
K-803	KLO	IX			
K-804	KLO	IX			
K-805	KLO	IX			
K-806	KLO	IX			
G807	BEA SIN	III		807\$	8380-57
K-807	KLO	IX			
D808	REG	XIII			
D809	REG	XIII			
D810	REG	XIII			
D811	REG	XIII		811-A\$	
G811	TRI SIN	III			
D813	REG	XIII			
G-813	BEA SIN			GU-13+, 813\$	
D814-A	REG SI	XIII			
D814-B	REG SI	XIII			
D814-D	REG SI	XIII			
D814-G	REG SI	XIII			
D814-V	REG SI	XIII			
D815A(P)	REG SI	XIII			
D815B(P)	REG SI	XIII			
D815D(P)	REG SI	XIII			
D815G(P)	REG SI	XIII			
D815V(P)	REG SI	XIII			
D815YE(P)	REG SI	XIII			
D815ZH(P)	REG SI	XIII			
D816A(P)	REG SI	XIII			
D816B(P)	REG SI	XIII			
D816D(P)	REG SI	XIII			
D816G(P)	REG SI	XIII			
D816V(P)	REG SI	XIII			
D817A(P)	REG SI	XIII			
D817B(P)	REG SI	XIII			
D817G(P)	REG SI	XIII			
D817V(P)	REG SI	XIII			
D818A	REG SI	XIII			
D818B	REG SI	XIII			
D818D	REG SI	XIII			
D818G	REG SI	XIII			
D818V	REG SI	XIII			
D818YE	REG SI	XIII			
G-827	TET SIN			GU-27B+, 827R\$	
G-829	TET TWN			GU-29+, 829-R\$	
G-832	BEA TWN			GU-32+, 832A\$	
G837	*PND SIN	III		OS12/500=, 837\$	
G-880	TRI TWN			GU-12A+, 880\$	
TG-884	TRI THY			TG1-0.1/0.3+, 884*	

GROUP I, NUMERICAL					
TYPE NUMBER	KINO	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
G889	TRI SIN	III		889-A\$	
G891	TRI SIN	III		891\$	
D901A	VAR SI	XI-D			
D901B	VAR SI	XI-D			
D901D	VAR SI	XI-D			
D901G	VAR SI	XI-D			
D901V	VAR SI	XI-D			
D901YE	VAR SI	XI-D			
D902	VAR SI	XI-D			
G91000	TRI SIN			G-29+	
GKE1000	TET SIN	III			
M-1000	TRI SIN			GM-100+	
VGV1000	POW	XII			
VKV1000	POW	XII			
D1001	REC	XI			
D1001A	REC	XI			
D1002	REC	XI			
D1002A	REC	XI			
D1003A	REC	XI			
D1004	SIA	XI			
D1005A	SIA	XI			
D1005B	SIA	XI			
D1006	SIA	XI			
D1007	SIA	XI			
D1008	SIA	XI			
D1009	SIA	XI			
D1009A	SIA	XI			
D1010	SIA	XI			
D1010A	SIA	XI			
D1011A	SIA	XI			
TG1050	TRI THY			TG2-0.1/0.1+	
IFP1500		XX			
1502	DIO SIN	IV		5TS9\$	
1504	TRI SIN	II			
1506	BEA TWN	II			
1509	BEA TWN	II			
1511	PND SIN	II			
1512	PND SIN	II		6AG7\$	
1514	PND SIN	II			
1515	BEA SIN	II		6KH2P+, EAA91=, 6AL5\$	
1536	DIO TWN	II			
1538	BEA SIN	II			
1539	TRI SIN	II			
1540	BEA SIN	II			
1550	DWD SIN	II			
D1602A	REC	XI			
D1602B	REC	XI			
D1602V	REC	XI			
G1625	BEA SIN	III		1625\$	
GK2000	TRI SIN	III			
IFK2000		XX			
TG2050	TET THY			TG1-0.1/1.3+, 2050\$	
GK3000	TRI SIN	III			7710-55
M-3000	TRI SIN			GMI-18+	
PI-3000	*PND SIN			GI-8**	
GI-3100	TRI SIN	III			
IFP4000		XX			
4671	*TRI SIN			6S1ZH+	
G-5000	TRI TWN			GS-38+	
IFP15000		XX			
IFK20000		XX			
G40011	TRI SIN	III			
IFK80000		XX			

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL							CAPACITY		f _{max} MHz	BASE
								E _b V	I _b mA	P _p W	E _b V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF		
06P2B	PND	SIN	T3F	AF	F	0.6	30	35	350U	/0.1	30	30	0	90U	/0.1	.1		1M				5CL
06ZH6R	PND	SIN	T3F	AF	F	0.6	20	35	350U	8M	30	30	0	150U	0.1	.1		900K	5.0	3.0		5CL
1A1P	PTG	SIN	T6		F	1.2	60	100		0.3	90	45	0	/1	1.7	.3		500K	7.0	7.0		7AT
1A2P	PTG	SIN	T6		F	1.2	30	90		0.3	90	45	0	/1	1.1	.2			5.1	6.3		7AT
1B1P	PND	DIO	T6		F	1.2	60	100	4	0.2	67	67	0	2	0.3	.6		1M	2.2	2.4		6AU
1B2P	PND	DIO	T6		F	1.2	30	90	2	0.1	60	45	0	900U	0.2	.5		1M	1.8	2.1		6AU
1E1P	TET	SIN	T5	EL	F	1.0	46				6	4	3	100U	0.4	/1	1		3.5			TE2
1E3P	TRI	SIN			F	1.3	24				8		3	300U		/1	2		3.5			
1F2B	TRI	PND			F	1.2	60				45		0	1		0.4			2.5	1.5		
1F2B	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		F	1.2	30	90	3	0.3	60	45	0	1	0.3	.7		1M	3.0	4.9		6AR
1K12B	PND	SIN	T3		F	1.2	60	120	6		60	40	0	2	0.7	1.0		30K	3.7	2.8		
1N3S	TRI	DUO	T10		F	1.2	120	150		1.0	120		5	/3		1.8	11	14K				7AB
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
1P4B	PND	SIN	T3F	AF	F	1.3	20	50	/2	5.0	45	45	2	1	0.3	.3		200K	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	T3B		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	T3B		F	1.2	250	300	25	2.5	150	125	14	17	3.0	2.8			7.1	4.0	60	
1P32B	PND	SIN	T3B		F	1.2	215	200	20	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			F	0.9	85				70		0	2		0.9	24		0.9	1.2		
1TS1S	DIO	SIN	T10		F	0.7	185	15K	5					/1					2.0			8HC
1TS7S	DIO	SIN	T10		F	1.3	200	30K	17					2							300	8HC
1TS11P	DIO	SIN	T6		F	1.2	200	20K	2					300U				1.5				DS3
1TS21P	DIO	SIN	T7		H	1.4	690	25K	40					8								DS5
1YE4A	TRI	SIN			F	1.2	25			0.2	150		/1	900U				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	/1.5						
1ZH17A	PND	SIN	T3B		F	1.2	60	90	5	0.5	60	40	0	2	0.1	1.0		25K	3.7	2.7		
1ZH18A	PND	SIN	T3B		F	1.2	60	90	5	0.3	60	40	0	1	20.2	1.0		60K	3.7	2.7		
1ZH24B	PND	SIN	T3B		F	1.2	12	120	/2		60	45	0	1	0.2	0.9		40K	3.6	2.4		

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL										CAPACITY		f _{max} MHz	BASE	
								E _b V	I _b mA	P _p W	E _b V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF						
1Z426A	PND	SIN			F	1.4	130				135	70	/1	4	0.5	1.2										
1Z429A	PND	SIN	T3B		F	1.2	60	150	8	1.2	60	45	0	5	0.2	2.5		35K	4.9	3.3						
1Z430A	PND	SIN	T3		F	1.2	15	20	1		12	12	0	1		.8		13K	8.5	3.5						
1Z436B	PND	SIN	T3B		F	1.3	75	200			150	45	1	3	0.4	1.5		30K	4.2	3.0						
1Z437A	PND	SIN	T3		F	1.2	6	100	/5		45	45	0	/2	0.4	1.0			2.2	2.6						
1Z442A	PND	SIN	T3		F	1.2	15				6	6	0	/1	0.2	0.5		100K	10.0	3.5						
6U-2	BEA	SIN	S18		H	6.3	900	750	120	30.0	250	250				10.0		150K	9.6	11.4					60	8A
2A1	PTG	SIN		CN	H	2.0	160	160		0.7	120	70	4	2		0.4										DW3
2D1L	DWD	SIN	F10		H	2.2	130				50			2												3G D12
2D1S	DIO	SIN	LIT		H	2.3	400	100		/0.1				1												3G
2D2S	DIO	SIN	F10		F	1.5	1500	200	40	5.0																
2D3B	DIO	SIN	T3F		F	2.2	110				150			5					2.4							
2D3S	DIO	SIN	T3F		H	2.2	110				150															
2D7S	DIO	SIN	T6		H	1.4	2				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								5Y
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						
2KH1L	DWD	SIN	F10		H	2.2	130				50			2					2.2							7AB
2N1	TRI	DUO			F	2.0	240	160		1.5	120		0	3		2.1	32		2.8	5.7						6X
2P1	BEA	SIN			F	2.0	185			0.2	120	120	2	4	0.7	1.8		150K								7AV
2P1P	BEA	SIN	T5		F	1.2	120	90	15	0.8	90	90	4	10	2.2	2.0		100K	5.5	4.0						
2P2	* BEA	SIN			F	2.0	220			0.3	120	100	4	10	1.8	2.2		90K								
2P2P	BEA	SIN	T5		F	1.2	60	60	7	0.4	90	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	02.3	90		4	12	1.2	3.3			7.1	4.7	100					6X
2P9M	* BEA	SIN	T10		F	2.0	1000	300		8.0	250	150	5	35	1.5	2.5		40K	8.5	8.5						PS6
2P19B	PND	SIN	T3B		F	2.2	70	200	15	1.0	120	90	5	8	3.5	1.7			4.5	7.0						
2P29L	PND	SIN	T9		F	2.2	120	200	20	2.0	160	120	6	10	2.0	1.9		50K	4.3	5.5						PS2
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					PS8
2S1	TRI	SIN			F	2.0	110	120		2.0	80		0	/6		1.5	14	9K	3.6	3.0						5S
2S2	TRI	SIN	T8		F	2.0	120	160		0.6	120			1		1.3	22	17K	2.8	2.7						
2S4S	TRI	SIN		PA	F	2.5	2500	360		15.0	300		62	40		4.0	4	800K	7.5	5.5						4D

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM			TYPICAL							CAPACITY			BASE	
						E _f V	I _f mA	E _b V	I _b mA	P _p W	E _b V	E _{q1} V	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF		f _{max} MHz
2S14B	TRI	SIN	T3F		F	2.2	60	250	5	0.7	90	3	1.8	15	8400	2.8	2.1	300	TS2	
2S49D	TRI	SIN	L1T		H	2.4	480	300	50	4.0	250	1	6.0	62	500M	3.3	0.1		4AC	
2TS2S	DIO	SIN	S12		H	2.5	1750	12K	100		4K	7								
2VD8	DIO	SIN			F	2.5	1750	12K	100											
2ZH1M *	PND	SIN			F	2.0	320			0.5	160	2	1.8						PS8	
2ZH2M	PND	SIN	T9		F	2.0	60	160		0.5	120	7	0.5		1M	5.4	8.1		5Y	
2ZH4 *	PND	SIN			F	2.0	275			1.2	200	100	1.8		110K				PS8	
2ZH14A	PND	SIN	T3B		F	2.2	30	90	5	0.5	90	45	0.8			4.5	6.0		PS6	
2ZH15A	PND	SIN	T3B		F	2.2	14	200	5	1.0	60	45	0.7			4.0	5.0		P4S	
2ZH27L	PND	SIN	F10		F	2.2	57	200	5	1.0	120	45	0.5		700K	5.3	4.9		PS3	
2ZH27P	PND	SIN	T5		F	2.2	57	200	5	1.0	120	45	0.5		/2M	4.5	2.0		PS4	
2ZH28L	PND	SIN			F	2.2	28			1.0	120	45	0.5		/2M	5.4	4.8		PS3	
EM-3	TET	SIN	T16		F	3.0	120				6	4	0.4	1					60	
GU-3	BEA	SIN	S18		H	12.6	450	750	120	30.0	250	250	10.0						P7S	
3A4S	PND	SIN			F	3.2	100				150	90	1.9						P8S	
3B4S	BEA	SIN	T5		F	3.2	150				180	150	2.4							
3S1	TRI	SIN			F	2.5	1A				220		2.2	22	10K					
3S2	TRI	SIN			F	2.5	1A				220		2.4	11	4K				4F	
3S9	TRI	SIN			F	2.5	1000			6.0	220		2.4	11		5.0	2.5		4AC	
3TS16S	DIO	SIN	T10		H	3.2	220	25K	80										300 DS3	
3TS18P	DIO	SIN	T6		H	3.2	210	25K	15											
EM4	TRI	SIN	T6		F	1.3	24			8			/0.1	2		3.5				
4D5S	DIO	SIN	T4		H	4.0	240			10									D12	
4D17P	DIO	SIN			F	4.0	1750	60	16	1.0	60								D10	
4E1	TET	SIN			F	4.0	75	200		2.0	160	80	.8	350		8.0	6.3		TES	
4E2	TET	SIN			F	4.0	150	200		2.0	160	80	1.8	400		10.5	8.0		TES	
4E3	TET	SIN			H	4.0	1000	250			160	60	3.0		200K	6.5	4.5			
4F6S	BEA	SIN		PA	H	4.0	1100			10.0	250		2.5	200	80K					
4N1	TRI	DUO			F	4.0	2A			6.0	120		3.2							
4P1 *	PND	SIN			F	4.0	1A				140		2.1							
4P1L	PND	SIN	T10		F	4.2	325	250	50	7.5	200	150	6.0		30K	8.5	9.4	100	PS2	
4P10S	PND	SIN			F	4.0	1750				315	210	1.4	8.5						
4S1	TRI	SIN			F	4.0	70				120		1.3	11	8K					
4S2	TRI	SIN			F	4.0	70				160		1.3	25	18K					
4S3	TRI	SIN			F	4.0	155	200		3.0	160		2.1	9		3.8	2.4			

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM					TYPICAL										CAPACITY			BASE
						E _f V	I _f mA	E _b V	I _b mA	P _p W	E _b V	E _{g₂} V	E _{g₁} V	I _{g₂} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF	f _{max} MHz				
4S3S	TRI	SIN	F9		H	4.4	330	300	30	5.0	100		4	27	3.0	12	4200	1.5	0.6	1K	TS3			
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	T10		F	4.0	1750			1.0	50			7							DS4			
4TS14S	DIO	SIN	T11		F	4.0	1750	60	20	1.2	60			7							DS4			
4VD1	DIO	SIN			F	4.0	700				350			50										
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	0.5	150	75	0	7	1.5	1.5	1M	4.0	4.2	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					
5TS3S	DWD	SIN	S16		F	5.0	3000	17H	750		500			125							DW1			
5TS4M	DIO	DUO	T11		H	5.0	2000	15H	415		400			133							DW4			
5TS4S	DIO	DUO	T14		H	5.0	2000	13H	375		500			62							DW4			
5TS8S	DWD	SIN	T17		H	5.0	5000	17H	1200	30.0	500			400							DW2			
5TS9S	DWD	SIN	F13		H	5.0	3000	17H	600	12.0	500			190							DW2			
5TS9SE	DWD	SIN	F13		H	5.0	3000	/2K	600	12.0	500			190							DW2			
5TS12P	DIO	SIN	T7		H	5.0	770	5K	350	5.0	2K			50							DS1			
5VKH2	DWD	SIN				5.0	2000	14H	375															
5VKH3	DWD	SIN				5.0	3000	15H	675															
6A2P	PTG	SIN	T5	CN	H	6.3	300	330	14	1.1	250	100		3	1.0	.5	100K	7.0	8.6		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	16.0			10.5	2.8					
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	330	15	1.0	250	100	0	4	2.7	.5	360K	12.5	12.5		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				150			15				9.0	4.0		PS5			
6B1P	PND	DIO	T7		H	6.3	400			1.1	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			
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			
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					27							3G	DS2		
6D4ZH	DIO	SIN	ACO		H	6.3	150	365	30		165			5				0.9			4G			
6D6A	DIO	SIN	T2F		H	6.3	150	450	70	0.2	165			8				3.0						

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL							CAPACITY			BASE
								E _b V	I _b mA	P _p W	E _b V	E _{q₂} V	E _{q₁} V	I _b mA	I _{q₂} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF	f _{max} MHz	
6D8D	DIO	SIN	PEN		H	6.3	450	450	180U	0.1												5G
6D10D	DIO	SIN	PEN		H	6.3	750	100	30		100			10								3.5
6D13D	DIO	SIN	PEN		F	6.3	200	450		1.0	150			150								48H
6D14P	DIO	SIN	T7		H	6.3	1100	56H	600		20			175								9CR
6D15D	DIO	SIN			H	6.3	330	200	750	0.5												
6D16D	DIO	SIN			H	6.3	140	450			100											DS9
6D20P	DIO	SIN			H	6.3	1800	6K	600	5.0				220								98D
6E5P	TET	SIN	T6		H	6.3	600	150	70	8.3	150	150	2	45	14.0	27.0		8K	16.0	2.3		TE1
6E6P	TET	SIN		CN	H	6.3	600			8.4	150	150		44	10.0	30.5		15K	15.0	5.8		9EQ
6E6P-YF	TET	SIN	T7		H	6.3	600	250	100	8.3	150	150		44	10.0	30.5		15K	15.0	2.7		11E
6E7P	TET	SIN		CN	H	6.3	750			10.0	5K	25	2	2		1.6			5.6	1.1		TE9
6E12N	TET	SIN	NUV	CN	H	6.3	130	250	20	2.2	125	50		10	3.6	10.0			7.1	1.6		TE8
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	250	170	2	10	4.0	6.2		400K	5.5	3.4		9AE
6F3P	TRI	PND	T7		H	6.3	850	250	15	1.0	170		1	2		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	TRI	PND	T9		H	6.3	720	250	12	1.0	200			3		4.0	65	16K	4.0	0.6		PT4
6F4P	PND	TRI	T9		H	6.3	720	250	40	4.5	170	170		18	7.0	11.0		100K	9.5	4.0		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			5		7.0	70	10K	3.5	0.3		PT6
6F5P	PND	TRI	T7		H	6.3	900	300		9.0	185	185		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
6F7	PND	TRI	M11		H	6.3	300	275		2.2	250	100	3	7	1.6	1.1						PT2
6G1	TRI	DWD	M10		H	6.3	300	275		2.7	250		9	9		1.9	16	8500	3.6	2.8		8Q
6G2	TRI	DWD	M10		H	6.3	300	330		0.9	250		2	1		1.1	100		3.2	3.0		8Q
6G2P-K	TRI	DWD	T6		H	6.3	300				250		2	1		1.8	100					
6G3P	TRD	TRI	T6		H	6.3	450	350	75					10								TT1
6G3P	TRI	TRD	T6		H	6.3	450	300		1.0	250		3	1		1.3	63	48K	2.0	1.2		TT1
6G7	TRI	DWD			H	6.3	300	330		1.0	250		3	1		1.3	70	54K	5.0	3.8		TD3
6I1P	TRI	PTG	T6		H	6.3	300	250	12	0.8	100		0	11		4.0	23	6K	2.6	2.0		9CA
6I1P	PTG	TRI	T6		H	6.3	300	300	6	1.7	250	100	2	7	3.5	.8		1M	5.1	7.4		9CA
6I3P	TRI	PTG	T6		H	6.3	300	250	10	1.0	100		2	/7		2.7	20		2.6	2.0		9CA

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL						CAPACITY			BASE
							E _b V	I _b mA	P _p W	E _{b1} V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF	
6I3P	PTG	TRI T6		H	6.3	300	300	12	1.9	250	100	2	5	2.8	2.5		700K	5.1	7.4	9CA
6I14P	TRI	PTG T6		H	6.3	300	250	12	0.8	100			11		4.0	23	6K	2.6	2.0	9CA
6I14P	PTG	TRI T6		H	6.3	300	300	6	1.7	250	100	2	7	3.5	.8		1M	5.1	7.4	9CA
6K1B	PND	SIN T3		H	6.3	200	150	15	1.2	120	120		8	4.0	4.8			5.1	3.8	
6K1L	PND	SIN F11		H	6.3	150			1.0	150	75	2	3	0.9	1.3		700K	3.8	4.2	PS1
6K1P	PND	SIN T5		H	6.3	150	275		1.8	250	100	3	6	2.7	1.8		400K	3.4	3.0	7CM
6K1ZH	PND	SIN ACO		H	6.3	150	275		1.8	250	100	3	7	2.7	1.8		400K	3.0	3.0	
6K3	PND	SIN M8		H	6.3	300	330		4.4	250	100	3	9	2.5	2.0		800K	6.0	7.0	8N
6K4	PND	SIN M8		H	6.3	300	330		3.3	250	125	1	12	4.4	4.7		900K	8.5	7.0	88K
6K4P	PND	SIN T6		H	6.3	300	300	20	3.0	250	100	1	11	3.7	4.4		800K	6.5	5.5	78D
6K6A	PND	SIN T2B		H	6.3	127	150	15	1.3	120	100		9	4.0	4.5			2.8	2.5	P28
6K7	PND	SIN M10		H	6.3	300	330		3.0	250	100	3	7	1.7	1.6		830K	7.0	12.0	7R
6K8B	PND	SIN T6		H	6.3	300	30	15	0.5	25	12		/4	4.2	1.0		12K	6.7	4.1	78D
6K9P	PND	SIN M10	RF	H	6.3	300	330		0.5	13	3		900U	0.2	1.1		190K	6.7	4.1	6CC
6K11B-K	PND	SIN T3B		H	6.3	200	150	15	4.4	250	100	3	9	2.5	2.0		800K	4.8	11.0	7R
6K13P	PND	SIN T7		H	6.3	300	250	20	2.5	200	90		8	4.0	4.8			3.9	2.8	P29
6K14B	PND	SIN	RF	H	6.3	120							12	4.5	12.5		500K	11.7	3.9	P20
6K14B-V	PND	SIN T3		H	6.3	125	150	10	0.5	50	50	1	6	1.5	5.0			6.1	2.1	P26
6KH2P	DIO	TWN T9		H	6.3	300	450	90	0.5	150		1	/6	1.5	5.0			6.1	2.1	
6KH6B	DIO	TWN		H	6.3	300	100	4					10					3.8		6BT
6KH6S	DIO	TWN T9		H	6.3	300	465	50		165			9					4.0		DW9
6KH7B	DIO	TWN T3B		H	6.3	300	450	10	0.2	165			8							8AN
6L1P	HPT	SIN T6		H	6.3	320	300		3.0	150	150		/10					5.8		DW5
6L7	PTG	SIN M11	MX	H	6.3	300	330		1.5	250	100	3	5	6.6	1.1			3.5	2.6	P37
6N1P	TRI	TWN T6		H	6.3	600	300	25	2.2	250		4	8		4.3	35	1M	7.5	11.0	7T
6N2P	TRI	TWN T6		H	6.3	340	300	10	1.0	250		1	2		2.1	98	47K	3.1	1.8	9AJ
6N3P	TRI	TWN T6		H	6.3	350	300	18	1.5	150		2	8		5.9	37	6K	2.7	1.4	9AJ
6N4P	TRI	TWN T6		H	6.3	300	300	10	1.5	250		4	3		1.7	47	23K	1.5	1.6	9AJ
6N5P	TRI	TWN T6		H	6.3	600	300	25	2.2	200		5	8		4.2	27	650K	3.0	1.7	9AJ
6N5S	TRI	TWN S16	PA	H	6.3	2500	250	125	13.0	35		30	100		6.7	3	460	9.5	5.0	8BD
6N6P	TRI	TWN T7		H	6.3	750	300	45	4.8	120		2	30		10.5	20	1800	4.4	1.9	9AJ
6N7	TRI	TWN M9		H	6.3	800	300		1.0	250			7		2.0	32	16K			
6N7S	TRI	DUO T9		H	6.3	810	300		4.2	250		6	7		3.2	35	11K	1.6	3.2	8B
6N8S	TRI	TWN T10		H	6.3	600	330	20	2.7	250		8	9		2.6	20	8K	2.8	3.8	8BD

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL					CAPACITY				BASE
								E _b V	I _b mA	P _p W	E _b V	E _{q₂} V	E _{q₁} V	I _b mA	I _{q₂} mA	S _m mmho	μ	R _p Ω	CAPACITY		
																			IN pF	OUT pF	
6N9S	TRI	TWN	T10		H	6.3	300	275		1.1	250		2	2		1.6	70	44K	3.0	2.8	8BD
6N10S	TRI	DUO	T11		H	6.3	300	275		11.0	250		2	2		1.3	70	54K	1.4	0.2	8S
6N12S	TRI	TWN	T11		H	6.3	900	300	34	4.2	180		7	23		6.4	17	2700			8BD
6N13S	TRI	TWN	S16		H	6.3	2500	250	130	13.0	90	30	30	80		5.0	2	460	7.0	9.0	8BD
6N14P	TRI	TWN	T5		H	6.3	350	180		1.5	90		1	10		6.8	25	3200	4.9	2.9	90D
6N15 *	TRI	TWN			H	6.3	450				100			9		5.6	38				
6N15P	TRI	DUO	T5		H	6.3	450	300		1.6	100		/1	9		5.6	38	6800	2.0	1.4	7BF
6N16B	TRI	TWN	T3B		H	6.3	400	200	14	0.9	100		2	6		5.0	25	5K	2.5	1.6	TD1
6N17B	TRI	TWN	T3B		H	6.3	400	250	10	0.9	200		1	3		3.8	75	20K	2.8	1.5	TD1
6N18B	TRI	TWN	T3B		H	6.3	330	200	14	0.9	100			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	T3		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	120			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		6.3	3.2	90D
6N25G	TET	TWN	T4B		H	6.3	350	200	30	1.2	75			/10		1.5	18		1.1	0.7	T20
6N26P	TRI	TWN	T6		H	6.3	600	250	30	2.6	150			14		9.5	48	5K	4.0	2.2	8CJ
6N27P	TRI	TWN	T6B		H	6.3	330	30	20	0.6	25		0	8		8.0	16		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	TD6
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	T14		H	6.3	900	400	90	20.0	250	250	14	72	8.0	6.0		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	75	4.5	4.1		52K	9.5	9.5	7S
6P7S	BEA	SIN	T16		H	6.3	900	6K	100	20.0	250	250	14	72	8.0	5.9		32K	11.5	6.0	58T
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	13.0	7.5	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	14.0	18.0	58T
6P14P	BEA	SIN	T6		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		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		H	6.3	760	250	75	12.0	170	170	6	53	8.0	11.0		23K	11.5	6.0	9CV
6P20S	BEA	SIN	T16		H	6.3	2500	700	200	27.0	175	175	30	90	6.0	8.5		7K	24.0	10.0	58T

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM				TYPICAL										CAPACITY			BASE
						E _f V	I _f mA	E _b V	I _b mA	P _p W	E _b V	E _{g₂} V	E _{g₁} V	I _b mA	I _{g₂} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF	f _{max} MHz		
6P21S	BEA	SIN			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		F	6.3	750	350	100	11.0	300	200	16	40	5.0	4.5	44K	7.5	4.5		P38		
6P25B	PND	SIN	T3		H	6.3	450	170		4.1	110	110	8	30	5.0	4.2		7.5	8.5		P30		
6P27S	BEA	SIN	T11		H	6.3	1500	800	150	27.5	250	265	13	100	15.0	10.0		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		H	6.3	1300	300		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		10.0		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		
6P36S	BEA	SIN	T13		H	6.3	2000	250	250	17.0	100	100	7	120		20.0	4500	36.0	21.0		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	4.5		10.0	4.0		PD8		
6S1P	TRI	SIN	T5	RF	H	6.3	150	275		1.8	250		7	6	2.2	2.2	26	11K	1.4	1.1	78S		
6S1ZH	TRI	SIN	ACO		H	6.3	150	275		1.8	250		7	6	2.2	2.2	26	11K	1.0	0.6	600	T3S	
6S2B	TRI	SIN	T3B		H	6.3	250	250		2.5	150			11		11.0		6.5	4.4		T12		
6S2P	TRI	SIN	T5		H	6.3	400	165		2.5	150		1	14		11.5	48	4200	5.3	4.2		7B0	
6S2S	TRI	SIN	T9		H	6.3	300	330	20	2.7	250		8	9		2.5	20	8000	3.0	4.5		60	
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		60	
6S5D	TRI	SIN	LIT		H	6.3	770	300	25	6.5	250		3	15		5.0	42	9K	2.3	0.5		3G 68Y	
6S5S	TRI	SIN	T10		H	6.3	300	350		2.7	250		6	8		2.2	20	9K	3.8	12.0		60	
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		TS5	
6S8S	TRI	SIN	T10		H	6.3	300	500		3.6	300		10	11		3.0	20	6700	2.2	0.6			
6S9D	TRI	SIN	LIT		H	6.3	570	300	25	5.5	250		1	15		10.0	100	10K	2.9	/0.1		900 68Y	
6S10D	TRI	SIN	LIT		H	6.3	920	5K	8500	9.0						6.5	17	2500	2.5	0.1		3G 68Y	
6S11D	TRI	SIN	PEN		H	6.0	176	120	30	3.6	110		2	20		5.2	32	6200	2.7	/0.1		18H	
6S13D	TRI	SIN	ROC		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	6.3	440	160		7.5	150			40		4.5	52		10.5	1.5		T2S	
6S16D	TRI	SIN	PEN		H	6.3	192	170	35	3.6	135		4	12		6.0	17	2800	2.5	0.1		18H	
6S17K	TRI	SIN	ROC		H	6.3	400	200		2.0	175		1	10		12.0	125	10K	3.5	/0.1			
6S18S	TRI	SIN	T20		H	6.3	6600	450	500	60.0	120		20	550		40.0	2	60				TS6	

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL							CAPACITY			BASE
								E _b V	I _b mA	P _p W	E _b V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF		
6S19P	TRI SIN	T7			H	6.3	1000	350	110	11.0	100	20	95	7.5	4	500	6.5	6.0		TS7		
6S20S	TRI SIN	T13			H	6.3	200	25K	/2	25.0	25K	8	1	.2	2K	10M				TS8		
6S21D	TRI SIN	PEN			H	6.3	176			3.6	110	2	20	6.5	16	2500	2.5	0.1				
6S25B	TRI SIN	T3B			H	6.3	220	250	15	1.4	120		8	5.0	29	220K	3.3	3.5				
6S26H	TRI SIN	T3B			H	6.3	200	250	15	1.4	120	2	9	5.0	25	220K	3.3	3.5				
6S27B	TRI SIN	T3B			H	6.3	200	300	7	1.4	250	/5	/5	4.0	65	16K	3.3	3.4				
6S28B-V	TRI SIN	T4B			H	6.3	310	150	35	2.4	120	16	16	19.0	40	2500	5.8	2.2				
6S29B-V	TRI SIN	T4B			H	6.3	310	150	35	2.4	120	16	16	19.0	40	2500	9.5	3.9				
6S30B	TRI SIN	T3B			H	6.3	425	200	60	5.0	50		40	21.0	17	800K	7.0	1.5				
6S31B	TRI SIN				H	6.3	220			2.5	50	0	40	18.0			4.1	1.5		T13		
6S32B	TRI SIN				H	6.3	165			1.5	200		14	3.5	100		2.8	0.7		T14		
6S33S	TRI SIN	T20			H	6.3	6600	600	600	60.0	120		550	4.0		80	30.0	9.0		T16		
6S34A-V	TRI SIN	T2B			H	6.3	127	200	15	1.4	100		8	4.6	25		2.0	2.3				
6S35A-V	TRI SIN	T2B			H	6.3	127	300	7	0.9	200		3	4.0	70	17K	2.0	3.3				
6S36K	TRI SIN	C5			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	6.3	440	300	70	4.5	120		40	16.5	13	800K	6.0	4.7				
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				H	6.3	110			20K		14	300U	0.2	1K		2.5	0.5		T15		
6S41S	TRI SIN				H	6.3	2700			90			250	21.0			11.0	5.0		T16		
6S44D	TRI SIN				H	6.3	330			250			22	6.0	25		4.0	0.1				
6S45K	TRI SIN				H	6.3	310			18H			500	13.0			2.8	10.1				
6S46G	TRI SIN	NUV			H	6.3	500			42		1	60	20.0	7					TS6		
6S47S	TRI SIN				H	6.3	3100			70			2500	45.0								
6S48D	TRI SIN				H	6.3	95			3.0	50	0	/3	3.5	40		3.0	/0.1				
6S51N	TRI SIN	NUV			H	6.3	130	110	15	1.0	75		10	11.2	32		4.7	2.2	800			
6S52N	TRI SIN	NUV			H	6.3	130	125	15	1.0	110		8	10.0	64		4.7	2.4	800			
6S53N	TRI SIN	NUV			H	6.3	130	130	15	1.0	120		11	13.0	75		4.7	10.1	800			
6SK7	TRI PND				H	6.3	300			100		3	3	.5	8		2.5	3.0				
6SK7	PND TRI				H	6.3	300			250	100	3	6	1.1			3.2	12.5				
6TS4P	DWD SIN	T6			H	6.3	600	1K	300	3.0	350		37							DW6		
6TS4S	DIO SIN				H	6.3	600	1K	300		400		75							DW7		
6TS5S	DWD SIN	T10			H	6.3	600	11H	300				37									
6TS10P	DIO SIN	T6			H	6.3	1050	45H	450		1K		120				5.0			98D		
6TS13P	DIO SIN	T7			H	6.3	950	16H	900	8.0	650		120							68Y		
6TS15S	DIO TWN	T13			H	6.3	1430	1K	375		350		62							8AN		

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM					TYPICAL										CAPACITY			BASE
						E_f	I_f	E_b	I_b	P_p	E_{q_1}	E_{q_2}	E_b	I_{q_2}	S_m	μ	R_p	IN	OUT	f_{max}				
						V	mA	V	mA	W	V	V	V	mA	mmho		Ω	pF	pF	MHz				
6TS17S	DIO	SIN	T10		H	6.3	1800	4K	1200					250							DS8			
6TS19P	DIO	SIN			H	6.3	1100	/5K	450				700	120							98D			
6V1P	PND	SIN	T6	SM	H	6.3	400			4.5	250	250		2	26	2.7		9.0	4.6		PS5			
6V2P	PND	SIN	T7	SM	H	6.3	1800	600	1500	3.0	600	300			H2.2						PD9			
6V3S	PND	SIN	T7	SM	H	6.3	900	700	1500	5.0	700	400		1200	H2.0						P34			
6VKH1	DWD	SIN			H	6.3	600	1K	200					70							DW7			
6YE1P	TRI	SIN	T5	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	270	300		0.5	300			3							ID2			
6YE5S	TRI	SIN	T11	ID	H	6.3	300	250			250			4	5	1.2	24				8B			
6ZH1B	PND	SIN	T3F		H	6.3	200	150	14	1.2	120	120		/8	3.5	4.8		4.8	3.8		PS1			
6ZH1L	PND	SIN	F10		H	6.3	150			2.0	150	75		2	0.2	1.5		4.0	4.2					
6ZH1P	PND	SIN	T6	UF	H	6.3	170	200	20	1.8	120	120		2	7	3.0		4.3	2.4		78D			
6ZH1ZM	PND	SIN	ACO		H	6.3	150	250		0.5	250	100		3	2	0.7	1.6	3.5	3.0					
6ZH2B	PND	SIN	T3F	RF	H	6.3	200	150	14	0.9	120	120		2	/6	6.0		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	1.8	120	120		0	6	5.0		4.5	2.4		7CM			
6ZH3	PND	SIN	M8	RF	H	6.3	300	330		3.3	250	150		1	11	4.0		8.5	7.0		8BK			
6ZH3M	PND	SIN			H	6.3	450	300		3.0	300	200		10	2.5	5.0		11.0	5.0		8N			
6ZH3P	PND	SIN	T5	UF	H	6.3	300	330		2.5	250	150	/2	7	2.0	5.0		6.5	1.5		78D			
6ZH4	PND	SIN	M10		H	6.3	450	330		3.3	300	150	0	10	2.2	9.0		11.0	5.0		8N			
6ZH4E	PND	SIN	M10		H	6.3	450	330		2.5	300	150	0	9	2.2	8.5					8N			
6ZH4P	PND	SIN	T5		H	6.3	300	300	20	3.5	250	150		1	11	4.3		6.3	6.3		78K			
6ZH5A *	PND	SIN			H	6.3	450				250	100		10	2.5	9.0					78K			
6ZH5B	PND	SIN	T3F		H	6.3	250	150	28	2.6	120	120		2	15	6.0		6.0	4.0					
6ZH5P	BEA	SIN	T6		H	6.3	450	300	20	3.6	300	150		2	10	2.0		8.5	2.2		78K			
6ZH6S	PND	SIN	M10		H	6.3	500			2.5	250	100		2	10	2.5	7.5	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	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	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					
6ZH9P	PND	SIN	T6		H	6.3	300	250	35	3.0	150	150		1	15	5.0	17.5	8.5	3.3		9E0			
6ZH10R	PND	SIN	T3F		H	6.3	250	150	28	0.8	120	120		1	/11	9.0		6.5	4.5					
6ZH10P	PND	SIN	T6		H	6.3	300	250	35	3.0	200	100		1	6	5.5		8.9	3.9		9E0			
6ZH11P	PND	SIN	T6		H	6.3	440	150	40	4.9	150	150	/2	25	5.0	28.0		14.0	3.5		9E0			

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL										CAPACITY			BASE
								E _b V	I _b mA	P _p W	E _b V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF	f _{max} MHz				
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			3.0	150	150	1	16	4.0	17.5		600K	8.5	2.5	245				P31
6ZH21P	PND	SCG	T7		H	6.3	350	200			150	150	1	17	4.0	17.0		60K	5.0	1.8	400				P32
6ZH22P	PND	SCG	T7		H	6.3	500	200			150	150	1	30	7.0	30.0		60K	8.5	2.4	440				P32
6ZH23P	PND	DBA	T7		H	6.3	440	150	40	2.4	150	150	2	14	7.5	14.0			14.0	3.5					PD3
6ZH31BK	PND	SIN	T3F		H	6.3	200	150	14	1.3	120	120		18	3.5	5.0			4.8	3.8					
6ZH32B	PND	SIN	T3B		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	1.8		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	T3		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	250	25	2.5	120	120		9	2.3	9.0		200K	5.8	2.4					7BK
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	DIO			H	6.3	470			3.1	150	150	16	15	9.0	14.5			13.5	3.0					PD3
6ZH45RV	PND	SIN	T3B		H	6.3	125	150	10	0.5	50	50	1	6	1.5	5.4			6.1	2.1					P26
6ZH46BY	PND	SIN	T3B		H	6.3	125	150	10	0.5	50	50	1	6	1.8	4.5			6.1	2.1					P36
FM7	TRI	SIN	T3B		F	1.0	18				7		2	200U	7.1		/2								
	PND	SIN	S12		H	7.3	850	200	60	8.0	135	135	15	31	7.0	2.8		500K	7.7	9.5					5F
7ZH12S	PND	SIN	S12		H	7.3	425	250		1.9	250	135	3	5	1.1	1.8			6.1	15.0					6F
10P12S	PND	SIN	S12		H	10.0	640	200	60	8.0	180	135	15	31	7.0	2.1		20M	7.7	9.7					5F
10ZH1L	PND	SIN	F10		H	10.0	93	250	11	2.0	150	75	2	7	0.5	1.6		1M	4.0	4.2	200				PS1
10ZH3L	PND	SIN	F10		H	10.0	93	250	11	2.0	150	75	2	7	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
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			H	12.6	150	330		3.3	250	125	1	11	4.4	4.7		900K	3.3	8.5					8N
12KH3S	DWD	SIN	F10		H	12.6	73	250	20	0.1	25	25	1	1	0.3	1.9		7500	0.5		1G				DW8
12M1M	PND	TRI			H	12.5	225				25	25	4	3		1.8	40	22K	1.6	1.6					PT3
12N4P	TRI	TWN			H	12.6	150			1.5	250														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

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM			TYPICAL							CAPACITY			BASE
								E _b V	I _b mA	P _p W	E _{q₁} V	E _{q₂} V	I _{q₁} mA	I _{q₂} mA	S _m mmho	μ	R _p Ω	CAPACITY			
																		IN pF	OUT pF	f _{max} MHz	
12P14S	BEA	SIN			H	12.6	150			7.5	250	250	12	30		3.0		9.0	9.0	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			H	12.6	4900				120			1000		60.0		40.0	15.0	T17	
12ZH1L	PND	SIN	F10		H	12.6	75	250	11	2.0	150	75	2	7	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	7	0.5	1.6		1300	4.0	4.2	PS1
12ZH8	PND	SIN	F10		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			6.0	110	80	2	52		7.5		15.5	10.5		
13ZH41S	PND	SIN		RF	H	3.3	295	80	2		80	80		/2	0.8	3.8		500K	11.0	3.0	P27
15A6S	PND	SIN			H	15.0	300				180	135		48		2.5		30K			
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			H	30.0	300	300	500					60							8AN
30VD1	DIO	SIN				25.0	300	500	500												4BQ
30VKH1	DIO	TWN			H	30.0	300	500	500					60							8AN
SB-47	PND	SIN			H	4.0	150			150	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				4F
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							
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	/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	2	1.1	33	30K				
SO-182	PND	SIN			H	4.0	1100			240	100	1	7	2.0	2.5		800K				

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM			TYPICAL										CAPACITY		f _{max} MHz	BASE
						E _f V	I _f mA	E _b V	I _b mA	P _p W	E _b V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF		
UB-182	*	TRI SIN			F	4.0	150			3.0	240		6	12		2.4	9	4K				4F
U0186	*	TRI SIN S16			F	4.0	1000			15.0	250		37	57		3.2	4	1K				5Y
SB-190		PND SIN			F	2.0	100				160	120	1	1	0.4	1.2		420K				TE2
191P		TET SIN T6	EL		H	1.0	46				6	3	4	100		50.0						
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	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	78P
1506		BEA TWN T19			H	12.6	1120	500		15.0	400			110								78P
1509		BEA TWN T19			H	12.6	800	500		15.0	500			72								
1511		PND SIN M10			H	6.3	450	330		3.3	300	150	0	10	2.2	9.0		900K				8N
1512		PND SIN M10			H	6.3	650	330		9.0	300	150	3	30	5.7	11.7		80K				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		52K	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		500K	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	1K	300		350			37								DW6

GROUP III, POWER TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL					CAPACITY			f _{max} MHz	BASE	
								E _b V	I _b mA	P _p W	E _b V	E _{o₂} V	E _{o₁} V	I _b mA	I _{o₂} mA	S _m mmho	μ	R _p 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					
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	
GMI-2B	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	4BR
GK3A	TRI	SIN	W43		W	17.0	430A	12K	50A	1H.K	5K			6A		35.0	40		1H	65.0	25	
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	
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	
GK6A	TRI	SIN	W30							M0.5												
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	
SG6S	REG	TRI	T12			6.3	825	25K	300U		20K			150	100U							D8
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

GROUP III, POWER TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM			TYPICAL										CAPACITY		BASE
						E_f	I_f	E_b	I_b	P_p	E_b	E_{q_2}	E_{q_1}	I_b	I_{q_2}	S_m	μ	R_p	IN	OUT	
						V	mA	V	mA	W	V	V	V	mA	mA	mmho		Ω	pF	pF	MHz
GS-88	TET	SIN	C12		H	6.3	2000			60.0	1K	250		210		16.0			8.0	5.0	2K
GU8	TRI	SIN				5.0	6500				3K					5.5			3.0	2.0	
GS9B	TRI	SIN	C11		H	12.6	1100	1K	4A	3.5H	1K			120		19.5			8.4	31.5	2G
G10	TRI	SIN				4.1	900			20.0	400			25		.6	19	35K			
GU10A	TRI	SIN	W21		T	7.0	75A	8K	15A	10.0K	2K			3A		20.0	50		40.0	34.0	25
GU10B	TRI	SIN	A21		T	7.0	75A	6K	15A	7.0K	2K			2500		20.0	50		40.0	34.0	25
MO-10	TRI	SIN				16.5	52A		10A	10.0K	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
GU11A	TRI	SIN	W27		W	12.7	240A	10K	20A	20.0K	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	20.0K	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	48B
GI-13	TRI	SIN	C9		H	12.6	650	800	/4A	80.0											
GI-13B	TRI	SIN	C8		H	12.6	650	800		80.0											
GM13	TET	SIN	T34		H	26.0	4750	28K	45A	80.0	28K			70		4.0			16.2	14.0	30 P13
GU13	BEA	SIN	T20		T	10.0	5A	2K		1.0H	2K	400	35	250		35.0					1G
GI-14B	TRI	SIN				12.6	3400	21K		5.0H	2K			240		16.0			7.0	2.0	3K
GS-15B	TET	SIN	C12		H	6.3	2300			H1.6	13H	300		50					10.5	12.5	60 P5S
GU15	BEA	SIN	F12		F	4.4	680	400	85	15.0	220	200	14		7.5	4.7					
GI-16B	TET	SIN	A60		W	8.3	115A	8K		H8.0											
GU16B	TRI	SIN	A23		W	13.5	200A	8K	15A	10.0K	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-17	TRI	SIN	A16		H	6.3	750	8K		1.0H	2K			10A		45.0	15		11.0	8.0	500
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 P07
GI-18B	TRI	SIN	A50		T	12.5	190A	16K	150A	6.0K	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 P08
GI-19B	TRI	SIN	W33		H	7.3	20A	14K	100A	1.0K	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 P08
GK20	TRI	SIN				5.6	850		200	20.0	750			2730		1.7	53				
MO20	TRI	SIN				22.0	61A		10A	20.0K	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	10.0K	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	20.0K	10K			2730		27.0	48		55.0	45.0	26

GROUP III, POWER TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL										CAPACITY		f _{max} MHz	BASE
								E _b V	I _b mA	P _p W	E _b V	E _{g2} V	E _{g1} V	I _b mA	I _{g2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF					
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						56			
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			375		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	78P		
GI-30	BEA	TWN	T16		H	6.3	2250	5K	9A	15.0	250			58		8.0			15.0	7.0		78P			
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	BT7		
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	A		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-36H	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			
M39	TRI	SIN				11.0	3500			30.0	1K			200		1.4	10	7K							
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			
GU-40B	TET	SIN	A		T	6.3	33A	45H		2.K	2K	900				18.0						250			
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								
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								

GROUP III, POWER TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	MAXIMUM			TYPICAL										CAPACITY		BASE	
						E_f V	I_f mA	E_b V	I_b mA	P_p W	E_b V	E_{g_2} V	E_{g_1} V	I_b mA	I_{g_2} mA	S_m mmho	μ	R_p Ω	IN pF	OUT pF		f_{max} MHz
GM51A	TRI	SIN	W19		W	22.0	102A	12K	10A	15.0K	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			4.0H	10K			1200		2.9	52	18K				
GM60	TRI	SIN	T32		W	17.0	8A	10K	550	6.0H	1K			100	2.2	1.6						
G61	TRI	SIN				16.5	52A			10.0K							47					
G62	TRI	SIN				16.5	51A			10.0K				10A		7.0	47	7K				
G65	TRI	SIN				5.2	1300			12.0				60		1.0	60	60K				
G68	TRI	SIN				17.0	18A			1.0K	10K			2A		5.0	180	36K				
GI-70B	TRI	SIN	C11		H	12.6	2100	9K	20A		1K			150		22.0			11.4	4.9	3G	
GM-70	TRI	SIN	T21		T	20.0	3A	1K	800	1.0H	600			200		6.0	7		8.0	12.0		
GM-70B	TRI	SIN	T21		T	20.0	3A	1K	800	1.0H	600			200		6.0	7		8.0	12.0	IF	
GK71	PND	SIN	T21		T	20.0	3A	1K		H1.2	600	400		200	62.0	4.2			18.0	17.0	20 P12	
GU72	PND	SIN	T25		T	20.0	3A	1K	900	H1.5	750	400		150		4.2			18.0	17.0	40 P14	
M74	TRI	SIN									450					.1	63					
GI-76B	TRI	SIN	C		T	12.6	2100	9K			1K			150		22.0			11.3		3G	
GU80	PND	SIN	T30		T	12.6	10A	3K		4.0H	2K	600	140	200		5.5			28.5	22.5	50 P65	
M80	TRI	SIN				11.0	3500		260	80.0	1K					1.4	10					
GU81	PND	SIN	T38		F	12.6	10A	3K		H4.5	2K	600				5.5			50.0	5.0	50	
GM1-83	TET	SIN	T20		H	25.0	2000	20K	15A	65.0	15K	1K										
G88	TRI	SIN				6.0	4A				600			120		.9	15	17K				TS5
GM1-89	TET	SIN	T32		H	25.0	4000	25K	20A	1.0H	25K	1K				22.0			60.0	12.0		
GU89A	TRI	SIN	W24		W	11.0	124A	8K	9A	5.0K	1K			3A		10.0	20		23.3	17.5	100	
GU89B	TRI	SIN	A24		W	11.0	124A	8K	9A	5.0K	1K			3A		10.0	20		23.3	17.5	100	
M89	TRI	SIN				11.0	6300			H4.5	1K					5.0	9	1800				
GM1-90	TET	SIN	T46		H	25.0	7800	33K	40A	1.0H	33K					4.0			1H	16.0		
GS90B	TRI	SIN	C12		H	12.6	1100	2K	4500	15.0	1K			175		19.5					3G	
G91	TRI	SIN				11.0	6200				600			400		.9	10	5K				P10
GKE100	*	TET	SIN	T20	H	11.0	2A	/2K	500	1.0H	15K	250	2	500	6.5	2.8	225		15.5		20 TE4	
GM100	TRI	SIN	T60		W	17.0	18A	5K	1600	1.0K	1K			600		6.5	18				IF	
G120	TRI	SIN				16.5	52A			5.0K	4K			700			14					
GI-150	TRI	SIN	C8		H	12.6	815	800	/5A	20.0	400			15		10.0					4G	
GKE150	*	TET	SIN		H	11.0	6300		420	1.0H	3K	500				2.0	350					TE4
GU150	TRI	SIN				11.0	10A		710	H1.5	2K					2.2	17					
M150	TRI	SIN				11.0	6300		420	H1.5	3K					1.4	11					

GROUP III, POWER TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _f V	I _f mA	MAXIMUM				TYPICAL							CAPACITY			f _{max} MHz	BASE	
								E _b V	I _b mA	P _p W	E _b V	E _{g₂} V	E _{g₁} V	I _b mA	I _{g₂} mA	S _m mmha	μ	R _p Ω	IN pF	OUT pF				
G256	TRI	SIN			H	17.0	10A		30.0	450													500	
GKE300	TET	SIN				17.0	18A		750	4.0	3K	500												
M400	TRI	SIN				17.0	18A		2300	4.0	1K													
M401	TRI	SIN				16.0	10A		1200	4.0	10K													
G410	TRI	SIN				10.0	450			10.0	400								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				P10
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	1K		1.0	1K	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	1K		1.0	750	300	60	180	40.0	3.0			15.5	15.5				
G424	PND	SIN				20.0	4600	1K		2.0	1K	400	140	300	80.0	5.0			27.0	33.0				
G425	PND	SIN				20.0	22A	4K		H7.5	4K	1K	100	350	70.0	4.0			21.0	18.0				
G430	TRI	SIN				22.0	51A	12K		10.0							45							
G431	TRI	SIN	W16		W	22.0	102A	15K		20.0	5K			3A		12.0	50		25.0	1.5	25			
G431A	TRI	SIN	W		W	22.0	102A	15K		12A	20.0	5K		3A		12.0	50		25.0	1.5	25			
G433	TRI	SIN	T46		W	33.0	210A	15K		60.0	6K			5A		32.0	45		80.0	67.0	20			
G433A	TRI	SIN				33.0	210A	15K		50A	60.0	6K		5A		32.0	45		80.0	6.0	20			
M435	TRI	SIN				20.0	24A			1.0	5K					6.0	9							
G441	TRI	SIN				11.0	51A			K2.5	7K						40							
G-450	TRI	SIN	W38		W	16.0	51A	10K		10.0	5K			4A		7.0	44					20		
G-452	TRI	SIN	W40		W	22.0	102A	15K		20.0	5K			4A		12.5	40					25		
G-454	TRI	SIN	W38		W	22.5	71A	10K		20.0	5K			4A		10.0	45					20		
G472	TRI	SIN				2.5	14A			1.0		18K				2.5	140							
G484	TRI	SIN	A30		W	22.0	60A	9K		5.0	3K			1A			9					320		
GK750	TRI	SIN				5.0	10A			H2.5	3K					6.6	37		5.8	2.9	40			
M800	TRI	SIN				17.0	8A		800	8.0	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	T15		
G837	* PND	SIN				12.6	700		200	500	200	85			30.0	3.4			16.0	10.0				
G889	TRI	SIN				11.0	125A			5.0	7K						21		23.3	3.0	100			
G891	TRI	SIN				11.0	60A			K3.5	8K						8							
GKE1000	TET	SIN				17.0	18A			H7.5	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	10.0	8K					7.0								
GK3000	TRI	SIN				17.0	18A		1600	1.0	10K					5.2	200							
GI-3100	TRI	SIN				6.3	1100			10.0	2K					2.2	16		2.6	1.1	300			
G40011	TRI	SIN				15.0	70A			3.0	4K					4.0	150		5.3	1.2				

GROUP IV, RECTIFIER TUBES

TYPE NUMBER	KIND	TYPE	BULB	GAS	CATHODE	E _f V	I _f mA	MAXIMUM		TYPICAL	
								E _b V	I _b mA	E _b V	I _b mA
GRI-0.25/1.5	DWD	SIN	S17		F	5.0	3300	16H	800		235
VO-1	DIO	SIN			H	4.0	3200			850	40
V1-00313	DIO	SIN	T10		F	2.5	4600	13K	3000		30
GR1-02/15	DIO	SIN	S16	HG	F	5.0	3300	/2K	800		235
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
GG-1-0.3/8	DIO	SIN	T14	AR	H	6.3	4A	8K	1A	30	/1
GR-1-0.3/8.5	DIO	SIN	S21	AR	F	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	/1
V1-1/2.5	DIO	SIN	W12	VC	F	15.0	12A	25H	1000		
GG-1-1/22	DIO	SIN	T30	GS	H	6.3	14A	22K	1A	30	1
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
GG-1-2/5	DIO	SIN	T22	XE	H	6.3	6500	9K	6500	16	2
GG-1-2/16	DIO	SIN	T30	AR	H	6.3	16A	16K	7A	30	2
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
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		
V1-15/55	DIO	SIN	T31	VC	F	6.3	7500	55K	700		180
VI-1-18/32	DIO	SIN	A23	VC	H	17.0	3700	40K	20A		500
GR-1-25/15	DWD	SIN		GS	F	5.0	3A	/2K	800	500	125
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
I-1-70/0.8	TRI	IGN	W48	HG	C			800			70A
VI-1-70/32	DIO	SIN						32K	70A		
I-1-100/1.5	TRI	IGN	W52	HG	C			15H	3HA		1HA
I-1-140/0.8	TRI	IGN	W56	HG	C			800			1HA
I-1-350/0.8	TRI	IGN	W70	HG	C			800			3HA
VG1/8500	DIO	SIN		GS	F	2.5	5500	8K	1A	6K	300

GROUP IV, RECTIFIER TUBES

TYPE NUMBER	KIND	TYPE	BULB	GAS	CATHODE	E _f V	I _f mA	MAXIMUM		TYPICAL	
								E _b V	I _b mA	E _b V	I _b mA
VI-1-10050	DIO	SIN						50K	100A		
VI-2-27/35	DIO	SIN	W20	VC	H	9.0	145A	35K	70A		
I-2-50/1.5	TRI	IGN	W52	HG	C			15H	1HA		50A
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		
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		
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	W70	HG	C			1K	6HA		1HA
I-100/5.0	TRI	IGN	123	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
VU-1110	DIO	SIN	S		F	4.0	1500	12K	400	160	80
VO-125	DIO	SIN			F	4.0	700			250	60
VG-129	DIO	SIN	S20	HG	F	2.5	9A	7K	1500		500
I-150/1.0	TRI	IGN	W52	HG	C			1K	1HA		1HA
VG-161	DIO	SIN		HG	F	2.5	6A	/3K	1A	/2K	300
VG-163	DIO	SIN				5.0		15K	50A	18	
VG-176	DIO	SIN	G16		M	2.5	11A	150	9A	20	
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
I-200/1.5	TRI	IGN	W65	HG	C			15H	6HA		2HA
IVS200/2		IGN	W	HG	C			/3K	450A	16	150
VO-202	DWD	SIN			F	4.0	700			250	60
VO-230	DIO	SIN			F	4.0	700			350	50
VG-236	DIO	SIN				2.5		7K	4A	16	
VG-237	DIO	SIN	G32		F	5.0	22A	10K	10A		3500
VO-239	DIO	SIN			F	4.0	2A			850	180
VG-252	DIO	SIN				2.5		300	30A	15	
VO-360	DIO	SIN			F	4.0	1A			500	100
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		
1502	DIO	SIN	F13		H	5.0	3000	/2K	1200	500	400

GROUP V, VOLTAGE REGULATOR TUBES

TYPE NUMBER	KIND	GAS		CATH MAT'L	VOLT. RANGE		CUR. RANGE		DIMEN		BASE
		KIND	PRES		MAX	MIN	MAX	MIN	DIA	LTH	
SG1P	REG	AHE			190	145	30	5	22	65	7DN
SG1P-V	REG				170	145	30	5	22	65	7DN
SG1P-YE	REG				170	143	30	5	22	65	7DN
SG2P	REG	AKN			150	104	30	5	22	65	7DN
SG2S	REG	NA	30		110	70	40	5	32	75	4AJ
SG3P	REG	AHE			170	144	40	5	22	65	
SG3S	REG	AHN	30		133	105	40	5	32	75	4AJ
SG4S	REG	AHE	30	NI	180	145	30	5	32	75	4AJ
SG5B	REG	AHE			190	142	10	5	10	36	
SG5B-V	REG				170	142	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	180	143	30	5	19	55	7DN
SG14P	REG	AHN			125	115	40	20	22	75	7DN
SG15P	REG	AHN	54	MO	150	104	30	5	19	55	7DN
SG15P1	REG				160	103	30	5	19	60	
SG16P	REG	AHE	40	MO	130	80	30	5	19	55	7DN
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	85	15	4	10	45	
SG201S	REG	NK	50	MO	150	86	15	4	32	40	4AJ
SG202B	REG	NA	35	MO	140	81	5	1.5	10	40	
SG203K	REG				150	79	10	1	12	20	
SG226	REG	NE			95	70	40	8	50	130	
SG227	REG	NE			95	70	60	10	65	135	
SG301S	REG	HY	16	NI	439	380	0.1	0.003	12	55	
SG302S	REG	HY	82	NI	970	880	0.1	0.003	12	55	
SG303S	REG	HY	143	NI	1350	1220	0.1	0.01	12	55	
SG304S	REG	HY			4200	3800	1	0.05	25	129	
SG305K	REG				10K	9K	1.5	0.05	33	180	
SG306K	REG				26K	24K	1.5	0.05	48	245	
SG311S	REG				430	400	1	0.05		86	D13
TP-2/0.5	REG	TMS			1	3	0.2	2.0	/1	1	
TP-2/2	REG	TMS			1	3	0.4	6.0	/1	1	
TP-6/2	REG	TMS			4	8	0.4	6.0	/1	1	

GROUP VI, CURRENT REGULATOR TUBES

TYPE NUMBER	KIND	TYPE	BULB	VOLT. RANGE		CUR. RANGE		BASE
				MAX	MIN	MAX	MIN	
				V	V	mA	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
185-9	BAL	SIN	T14	9	5	1080	960	DS7
1810-17	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 NUMBER	KIND	BULB			CATHODE			MAXIMUM ANODE					AVG I _b mA	MAXIMUM GRID			BASE				
		SHAPE	LTH mm	DIAM mm	GAS	E _f V	I _f mA	WARM-UP MIN.	PIV V	E _f V	FIRING V	TUBE DROP V		PULSE I _b mA	BIAS RES kΩ	INPUT RES kΩ		IGN. V	TIME μS	PULSE I _r nS	pps 10 ³
TG1R	TRI T	36	10	KX H	6.3	225	10	240	240	30	20	120	20	100	1M	100	30	10			
TG1R-V	TRI T	36	10	KX H	6.3	225		240			16	120	20	28							
TG1-1R	TRI T	40	10	XE H	3.1	1500		500		30	20A			6	1M						
TKH-1	TRI	85	34	NE C				150			60	100	30								
TKH1R	TRI			C				160			85	30	10	10M	85						
TKH1-16	PND T	45	13	AR C				275	205		60A	25A		100							
TG1-0.02/0.5	TET T	38	19	XE H	6.3	165	10	500	500	30	16	120	20	15	10M	15			8T1		
TG1-0.1/0.3	TRI	97	35	AR H	6.3	660	30	300	300		20	300	75	80	500	80			20		
TG1-0.1/1.3	TET T	105	33	KX H	6.3	600	10	1300	650	25	11	500	100	100	10M	100	5	60	10		
TG1-0.5/12	TRI T	225	62	AR H	6.3	5A	120	12K		500	27	3A	500	70	100				8T2		
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	201	66	XE H	5.0	6A	90	1300	1K		20	10A	/2A	100	100	100					
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		10K			16	8A	25H	50							
TG1-1-3/1	TET T	67	19	AR H	6.3	1100	90	1000	1K		35	3A	6	40			12	300	5		
TG1-3.2/1.3	TRI	222	66	XE H	5.0	8A	90	1300	1K		20	20A	3A	100	100	100			T22		
TG1-1-5/1.1	TRI T	67	19	HY H	6.3	2000		1100		70		5A	10	100					15		
TR1-5/2	TRI T	275	90	HG H	5.0	15A		2K			15	15A	500	24			6	500	T23		
TG1-1-35/3	TRI T	135	38	HY H	6.3	2500	180	1500	3K		140	35A	45	100							
TR1-40/15	TRI G	700	245	HG H	5.0	68A	3K	15K			20	1HA	40A	100	5						
TG1-5-3	TRI T	350	110	KX F	5.0	21A		3K			22	15A	5A	20							
TG1-6.4/1.3	TRI	242	66	XE H	5.0	13A	120	1300	1K		20	40A	6A	100	100	100					
TR1-6/15	TRI T	350	90	HG H	5.0	23A	900	15K			18	20A	6A	100	5						
TG1-1-10/1	TRI T	80	32	HY H	6.3	2600	60	1000	2K		20A	50	100	15			6	150	40		
TG1-12.5/1.3	TRI T	292	90	XE H	5.0	16A		13H			20	80A	12A	20							
TR1-15/15	TRI T	490	95	HG H	5.0	40A		15K			20	47A	15A	100							
TG1-1-50/5	TRI T	160	45	HY H	6.3	3600	180	5K			160	50A	50				/1		4		
TR1-85/15	TRI T	760	270	HG H	5.0	130A		15K			20	3HA	85A	100							
TG1-1-90/8	TRI T		60	HY H	6.3	7000		8K			90A	100					/1		2		
TG1-1-130/8	TRI T	180	64	HY H	6.3	500		3K			1HA	150					/1		2		
TG1-1-130/10	TRI T	205	62	HY H	6.3	5A	240	10K			150	1HA	250						4		
TR1-130/15	TRI T		220	HG H	5.0	130A		15K			3HA	85A									
TG1-1-325/16	TRI T	230	66	HY H	6.3	8500		16K			150	3HA	200			200	/1		1		
TG1-1-400/3.5	TRI S	280	85	HY H	5.0	18A	180	3500	1K		4HA	300			2		20				

GROUP VII, THYRATRONS

TYPE NUMBER	KIND	BULB			CATHODE			MAXIMUM ANODE					AVG I_b mA	MAXIMUM GRID					BASE		
		SHAPE	LTH mm	DIAM mm	GAS	E_f V	I_f mA	WARM- UP MIN.	PIV V	E_f V	FIRING V	TUBE DROP V		PULSE I_b mA	BIAS RES k Ω	INPUT RES k Ω	IGN. V	TIME μ S		t_r nS	PULSE t_r nS
TGI-1-400/16	TRI	T 268	78	HY	H	6.3	10A		16K			170	4HA 500			200			/1		
TGI-1-700/25	TRI	T 450	135	HY	H	6.3	20A		20K			200	7HA 1A			700	/1		/1		
TKH-2	TRI	57	19	HE	C				2800	350		80	100 12		8M				1		
TG2-0.1/0.1	TRI	T 105	40	XE	H	6.3	600	10	100	100		11	300 100		5M				T24		
TG2-0.5/12	TRI	T 225	62	HY	H	6.3	7A		12K			70	/4A 500 100								
TG2.5/5	TRI				F	5.0	13A		3K				8A 2A 18						/5		
TGI-2-260/12	TRI	T 285	90	HY	H	6.3	12A		12K				400			200					
TGI-2-325/16	TRI			HY	F	6.3	8500		16K				3HA 200								
TGI-2-400/35	TRI			HY	F	5.0	18A		3500	190		110	5 2		85	20M	67	15	1		
TKH3B	TET	T 40	10	NA	C																
TG3-0.1/1.3	TET	T 57	19	KX	H	6.3	600		1300	650	30	11	500 100		100	100	10	60	10		
TG3-2.5/10	TRI	T 290	90	KX	H	5.0	20A		10K			25	8A /3A 30								
LP-4	COM				H	4.0	270		260				1		70						
TKH4B	TET	40	10	NA	C				225	180		115	7 3		99M	92	10				
LP-5	COM				H	4.0	370		200				100		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								
TKH-6G	HEX	T 50	13		C				285				1			100	20				
TKH-8G	HEX	T 40	13		C				285				1			80	10				
TKH-11G	TET	T 60	13		C				215				10			35	7				
MTKH90	TRI	30	12	NE	C				160			50	20		20M	85					
TGI-200	TRI	S 280	85	KX	F	5.0	15A	60	3500			20	2HA		18	200					
TG212M	TRI	T 105	35	AR	H	4.0	950	30	300	300		27	500 125		7	100					
TG-213	TRI				F	2.5	9A					1A	500 15		15						
TG-235	TRI				F	5.0	12A					6A	1A 16		16						

GROUP VIII, CATHODE RAY TUBES

TYPE NUMBER	METH. OF		DIMENSIONS		CATHODE	TYPICAL										MAXIMUM		SCREEN		DEFL ANGLE degree	BASE
						USE	HEATER		E _{Foc} V	E _{A₁} kV	E _{A₂} kV	E _{A₃} kV	E _{A₄} kV	E _{C₁} V	I _K μA						
	FOCUS	DEFL	DIAM cm	LENGTH cm																	
		V	V	cm	cm		E V	I mA													
LI-1			4	17	IC H	6.3	510	400	1.2				50					F8			
LI-3	FLM	ELM	1		IC H	12.6	300	650	1.0				50	250				A4			
LI-6	ELM	ELM	2	32	IC H	12.6	300	850	1.3				50	250				A4			
LI-7	ELM	ELM	2	32	IC H	12.6	300	850	1.3				50	250				A4			
LI-13	ELM	ELM	3	39	IM H	6.3	600	285	0.6	0.9			35	150				C14			
LI-14	ELM	ELM	3	39	IM H			270	0.6	0.9			35	150				C14			
LI-15	ELM	ELM	3	39	IM H	6.3	600	285	0.6	0.9			35	150				C14			
LI-17	ELM	ELM	3	39	IM H	6.3	600	285	0.6	0.9			35	150				C14			
LI-18	ELM	ELM	/2	16	VI H	6.3	450	600					80	1				B9			
LI-23	ELM	ELM	34	16		6.3	600	300	0.3				125								
LI-101	ELM		15		IC H	13.6	300	800	1.2				5	50							
LI-201	ELM		15		IM H	6.3	600	15H	0.4												
LI-203	ELM	ELM	77	39		6.3	600	270	1.5												
LI-401	ELM	ELM	34	16		6.3	450						150								
LO-247	ELS	ELS	11		OS	4.0	700	112	0.8				16	160		GR MD					
LO-248	ELS	ELS	11		OS	4.0	700	600	3.0				50			GR MD					
LO-249	ELS	ELS	11		OS	4.0	700	600	3.0				50			GR MD					
LO-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					
3LO1-I	ELS	ELS	3	12		6.3	600	100	0.5				60	300	0.1A	GR MD					
5LO38I	ELS	ELS	5	19	OS H	6.3	600	300	0.5	1.0			60	1M	0.11	BL MD		11L			
6LK1A	ELM	ELM	6	27	IC H	6.3	600		25.0				65	100		BL					
6LK1B	ELM	ELM	6	27	PR H	6.3	600			25.0			60	200		WH SH					
6LO1I	ELS	ELS	5	14	H	6.3	600	170	0.3	1.2			60	300	0.15	GR		14A			
7LO1M	ELS	ELS	7	19	OS H	6.3	600	235	1.4	2.8			76			PB SH		A12			
7LO55I	ELS	ELS	7	19	OS H	6.3	600	180	1.1	2.0			76	500	0.12	BL MD		A12			
8LM3V	ELS	ELS	8	21	OS H	6.3	600	400	0.7	4.0			50			WH LO		A7			
8LO29I	ELS	ELS	8	26	OS H	6.3	600	350	1.1	1.5			45		0.17	GR MD		14G			
8LO29M	ELS	ELS	8	26	OS H	6.3	600	350	1.1	1.5			45		0.17	PB SH		14G			
8LO30I	ELS	ELS	8	27	OS H	6.3	600	400	1.1	1.5			45		0.17	GR MD		14J			
8LO30M	ELS	ELS	8	27	OS H	6.3	600	400	1.1	1.5			45			PB SH		14J			
8LO39V	ELS	ELS	8	27	OS H	6.3	600	400	2.0	4.0			60		0.28	WH LO		14J			
10LK2B	ELM	ELM	8	32	PR H	1.5	25H		20.0				120	200		WH MD		G8			
10LO43I	ELS	ELS	10	41	OD H	6.3	600	550	1.0	2.5			60		0.20	GR MD		A25			

GROUP VIII, CATHODE RAY TUBES

TYPE NUMBER	METH OF		DIMENSIONS		CATHODE	HEATER		E _{Foc} V	TYPICAL				MAXIMUM		SCREEN		DEFL ANGLE degree	BASE
						E V	I mA		E _{A1} KV	E _{A2} KV	E _{A3} KV	E _{A4} KV	E _{C1} V	I _K μA	DEFL SENS mm/V	COL		
	FOCUS	DEFL	DIA cm	LENGTH cm	USE													
13LK1B	ELM	ELM	12	37	TV	H	6.3	550	7.0						WH	MD	D8	
13LK2B	ELM	ELM	S	31	TV	H	6.3	500							WH	SH	A9	
13LM4V	ELM	ELM	13	29	OS	H	6.3	600	0.4	12.0					WH	LO	A8	
13LM31M	ELM	ELM	11	28	OS	H	6.3	600	6.0						YO	LO	A8	
13LM31V	ELM	ELM	13	29	OS	H	6.3	600	0.2	4.0					WH	LO	A8	
13LM56I	ELS	ELM	13	29	OS	H	6.3	600	0.7	4.0					GR	MD	A8	
13LM57	ELM	ELM	11	28	OS	H	6.3	600	250	6.0					GR	LO	A8	
13LM57D	ELS	ELM	13	29	OS	H	6.3	600	0.7	4.0					PB	LO	A8	
13LM58K	ELS	ELM	13	29	OS	H	6.3	600	0.7	4.0					RD	LO	A8	
13LO1B	ELS	ELS	13				2.5	2A	2.0						GR	MD		
13LO2B	ELS	ELS	13				6.3	600	500	1.8	3.0				GR	MD	14J	
13LO3I	ELS	ELS	14	43	OS	H	6.3	600	410	1.5	1.5	3.0		0.45	GR	MD	A14	
13LO4I	ELS	ELS	14	43	OS	H	6.3	600	425	1.5	1.5	5.0	8.0	0.25	GR	MD	A14	
13LO5P	ELS	ELS	13				6.3	600	500	1.8	3.0				YO	LO	14J	
13LO6P	ELM	ELM	13				6.3	600	250	6.0					YO	LO	A8	
13LO36	ELS	ELS	13	42	OS	H	6.3	600	690	2.0	4.0			100	YO	LO	14J	
13LO36V	ELS	ELS	14	43	OS	H	6.3	600	525	1.1	2.0	4.0		0.29	WH	LO	14J	
13LO37A	ELS	ELS	14	43	OS	H	6.3	600	400	1.1	1.5	3.0		100	0.43	BL	SH	14J
13LO37I	ELS	ELS	14	43	OS	H	6.3	600	400	1.1	1.5	3.0		0.43	GR	MD	14J	
13LO37M	ELS	ELS	14	43	OS	H	6.3	600	400	1.1	1.5	3.0		0.43	PB	SH	14J	
13LO48A	ELS	ELS	14	41	OD	H	6.3	600	400	1.2	1.5			0.25	BL	SH	A14	
13LO48I	ELS	ELS	14	41	OD	H	6.3	600	400	1.2	1.5			0.25	GR	MD	A14	
13LO48M	ELS	ELS	14	41	OD	H	6.3	600	400	1.2	1.5			0.25	PB	SH	A14	
13LO54A	ELS	ELS	14	43	OS	H	6.3	600	300	1.1	1.5	3.5	6.0	750	0.20	BL	SH	B14
13LO54M	ELS	ELS	14	43	OS	H	6.3	600	300	1.1	1.5	3.5	6.0	750	0.20	PB	SH	B14
13LO54V	ELS	ELS	14	43	OS	H	6.3	600		1.1	1.5	3.5	6.0	750	0.20	WH	LO	B14
13LO101M	ELS	ELS	12	32			6.3	600	1K					125	BL	SH		
13LO102M	ELS	ELS	13	61			6.3	750	1K					300	BL	SH		
13LO104A			13	54		H	6.3	600	700	.4	.8	1.2	1.8	100	BL	SH	D14	
18LK1B	ELM	ELM	17	35	TV	H	2.5	21H	3.5					35	WH		D8	
18LK2B	ELM	ELM	14	42	TV	H	6.3	550		15.0				100	WH	SH	D8	
18LK3V	ELM	ELM	18				2.5	2A	3.5					60	GR	MD		
18LK4B	ELS	ELM	17	34	TV	H	6.3	600		6.0				150	WH	SH	B8	
18LK5B	ELM	ELM	17	35	TV	H	6.3	520		4.0				30	WH	SH	B8	
18LK7B	ELM	ELM	17	35	TV	H	6.3	560		4.0				100	WH	SH	B8	

GROUP VIII, CATHODE RAY TUBES

TYPE NUMBER	METH. OF FOCUS		DIMENSIONS		CATHODE	TYPICAL										MAXIMUM		SCREEN		DEFL ANGLE	BASE				
						USE		HEATER		E _{Foc}	E _{A₁}	E _{A₂}	E _{A₃}	E _{A₄}	E _{C₁}							I _k	DEFL SENS		
	DEFL	DIA	LENGTH	cm	V	I	V	kV	kV							kV	kV	V	μA	mm/V	COL			PERS	degree
18LK14T	ELS	ELM	17	42	TV						6.3	550			25.0			140				GR	SH	40	
18LK15	ELM	ELM	17	34	TV	H					6.3	550		5.0				38	100			WH	MD	B8	
18LM35	FLM	ELM	15	34	OS	H					6.3	600	250		6.0			48				YO	LO		
18LM35V	ELM	ELM	18	35	OS	H					6.3	600			4.0			50				WH	LO	A8	
18LO1P	ELM	ELM	18	47							6.3	600	250	6.0				45				YO	LO	A8	
18LO40R	ELS	ELS	18	36	TV	H					6.3	600		2.0				120				WH	MD	14G	
18LO47A	ELS	ELS	18	45	OD	H					6.3	600		1.0	2.0	6.0		100		0.23		BL	SH	A25	
18LO47V	ELS	ELS	18	45	OD	H					6.3	600		1.0	2.0	6.0		100				WH	LO	A25	
19LK4B	ELM	ELM	17		TV	H					6.3	600		6.0				60							
20LM1YE	ELS	ELM	20	46							6.3	12H	750					60	300			GR	LO		
23LK1B	ELM	ELM	19	38	TV	H					6.3	550		8.0				50				WH	MD	D8	
23LK2B	ELM	ELM	22	47	TV	H					6.3	550			10.0			18	100			WH	SH	D8	
23LK7B	ELM	ELM	S18	40	TV	H					6.3	520		8.0				55				WH	SH	D8	
23LK8B	ELM	ELM	S16	49	TV	H					6.3	550		15.0				60	100			WH	SH	D8	
23LK9B	ELS	ELM	S23	18	TV						12.0	65		0.3	9.0			25				WH	MD	90	
23LM34	ELM	ELM	19	43	OS	H					6.3	600	250					48				YO	LO		
23LM34V	ELM	ELM	23	46	OS	H					6.3	600			4.0			50				WH	LO	A8	
23LO51A	ELS	ELS	23	57	OS	H					6.3	600		6.6	20.0			200		0.03		BL	SH	A20	
30LK1B	FLM	ELM	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	D8	
31LK2B	ELM	ELM	30	47	TV	H					6.3	600			10.0			30	150			WH	SH	B8	
31LM32	ELM	ELM	25	51	OS	H					6.3	600	250	6.0				48				YO	LO	A8	
31LM32V	ELM	ELM	31	54	OS	H					6.3	600			4.0			50				GR	LO	A8	
31LO1P	ELM	ELM	31										250	1.8				50				WH	MD	A8	
31LO33	ELS	ELS	25	56	OS	H					6.3	600	1K	4.3	5.5			150				YO	LO		
31LO33V	ELS	ELS	31	57	OS	H					6.3	600		1.1	4.3	5.5		140				WH	LO	14J	
35LK2B	ELS	ELM	35	46	TV	H					6.3	600	300	0.5	12.0			60	150			WH	SH	C8	
40LK1B	ELM	ELM	40	49	TV	H					6.3	550		12.0				70	100			WH	MD	B8	
42LM2YE	ELS	ELM	42	59							6.3	12H	4K					60	300			GR	LO		
43LK2B	ELS	ELM	S45	50	TV	H					6.3	600		0.3	0.3	14.0		60	100			WH	SH	70 B12	
43LK3A	ELS	ELM	S43	51	TV	H					6.3	600		0.5	14.0			60	150			WH	SH	B12	
43LK6B	ELS	ELM	S45	30	TV	H					6.3	600		0.3	0.5	14.0		25				WH	SH	110 A7	
43LK7B	ELS	ELM	S45	50	TV	H					6.3	600		0.3	0.3	14.0		60	35			WH	SH	68 B12	
43LK8B	ELS	ELM	S45	50	TV	H					6.3	600		0.3	0.5	14.0		50	100			WH	SH	B7	
43LK9B	ELS	ELM	S37	33	TV	H					6.3	600	425	0.3	1.0	14.0		90	30			WH	SH	110 A7	
45LM1B	ELM	ELM	40	56							6.3	600		0.4	12.0			60	350			WH	SH	A8	
47LK1B	ELS	ELM	S47	31	TV	H					6.3	300	400	0.4	16.0			55	120			WH	SH	110 C8	
47LK2B	ELS	ELM	S47		TV						6.3	400	16					80	300			WH	MD	110	
53LK2B	ELS	ELM	S53	61	TV	H					6.3	600		0.5	16.0			60	150			WH	SH	B12	
53LK3B			S50	58	TV	H					6.3	600	300	0.4	16.0			140						B7	
53LK4TS	FLS	ELM	S47	65							6.3	18H	3K	0.8	20.0			300	500			3C			
53LK5B	ELS	ELM	S45	38	TV	H					6.3	600	300	0.5	16.0			25	100			WH	SH	110 B7	
53LK6B	ELS	ELM	S48	385	TV	H					6.3	600	425	0.3	0.5	16.0		90	30			WH	SH	110 A7	
59LK1B	ELS	ELM	S59	37	TV	H					6.3	300	425	0.4	16.0			55				WH	SH	110 C8	
59LK2B	ELS	ELM	S59		TV						6.3		400	0.4	16.0			80	300			WH	MD	110	

GROUP IX, MICROWAVE TUBES

TYPE NUMBER	KIND	FREQ		DUTY CYL %	CATHODE		MAXIMUM										COUPLING		DIMEN		WT g
		MIN GHz	MAX GHz		E _f V	I _f mA	E _b V	I _b mA	P _o mW	COL. V	E _g V	HELIX V	GAIN dB	NF dB	VSWR	BAND MHz	MAG FIELD GAUSS	LTH mm	DIAM mm		
2J55	MAG	13.3	13.3	1 P			12K	12A	53K								33H				
3J21	MAG	24.5	24.5	P			15K	15	60K								14H				
4J26-30	MAG	1.2	1.2	1 P			27K	46A	700K												
4J45	MAG	2.8	2.8	1 P			23K	45	650K												
4J50	MAG	12.1	12.1	1 P			22K	27A	28K								69H				
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												
KIU12	KLA	2.8		P	9.5		280K		20				40			14	800	WG	H13	300	50K
MI-12	MAG	3.0	3.1	P			15K	18A	100K							18H					
UV-13	TWT	3.4	4.4		2.4		600	350U	5				20	9			600				
MI-14	MAG	2.9	3.0	P			15K	18A	100K								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												
KIU15	KLA	1.8		P	12.0		280K		30				35			18	700	WG	H15	400	75K
MI-15	MAG	2.9	2.9	P			15K	18A	100K								18H				
MI-16	MAG	2.8	2.8	P			15K	18A	100K								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												
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										150	58	
K-32	KLO	5.6	7.1	C	6.3		320	50	20										141	46	
K-33	KLO	14.3	16.7	C	6.3		320	50	20										141	56	
							400	45	10										150	58	
K-34	KLO	12.0	14.4	C	6.3		400	45	10												
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	

GROUP IX, MICROWAVE TUBES

TYPE NUMBER	KIND	FREQ		DUTY CYL %	CATHODE		MAXIMUM										COUPLING		DIMEN		
		MIN GHZ	MAX GHZ		E _f V	I _f mA	E _b V	I _b mA	P _o mW	COL. V	E _g V	HELIX V	GAIN dB	NF dB	VSWR	BAND MHz	HIGTH MHz	MAG FIELD GAUSS	LTH mm	DIAM mm	WT g
MI-51	MAG	9.5	9.5	P		13K	16A	65K									48H				
MI-52	MAG	9.4	9.5	P		13K	16A	65K									48H				
MI-53	MAG	9.3	9.4	P		13K	16A	65K									48H				
MI-54	MAG	9.3	9.3	P		13K	16A	65K									48H				
M62	MAG	2.4	2.4	C		2300	150	150W									18H	200	140	700	
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	65K									48H				
MI-120	MAG	2.8	2.8			5K	7A	250K									13H				
MI-137	MAG	1.8	1.8			23K	25A	250K									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		10K					40				6 250	CO	H12	400 60K	
KU304A	KLA	0.8	0.8	C	6.5	15K		10K					37				10 350	CO	H10	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		4K					45				8 400	CO	H10	206 35K	
KU309	KLA	0.5	0.6	C	4.0	9K		3K					40				300	CO	H10	250 50K	
KU310A	KLA	0.5	0.6	C	5.0	15K		15K					35				8 500	CO	H12	250 85K	
KU310B	KLA	0.6	0.6	C	5.0	15K		15K					35				8 500	CO	H14	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			
410R	KLO																				
UV-421	TWT	0.9	1.2		2.8	200	300U	5					18	9			360				
UV-422	TWT	0.6	1.0		2.8	450	700U	5					15	8			420				
UV-438	TWT	3.5	5.3		3.0	560	400U	5					25	11			600				
UV-440	TWT	1.5	2.4		2.5	400	700U	10					25	10			500				
M-532	MAG	2.3	3.6			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			15K	12A	28K									PM				
MI-589A	MAG	9.4	9.5			135H	20A	95K									PM				
MI-589B	MAG	9.3	9.4			135H	20A	95K									PM				
MI-589V	MAG	9.3	9.3			135H	20A	95K									PM				
OV-612	BWT	37.5	53.6		5.0	1500	50	200	400				10					200	130	5K	

GROUP IX, MICROWAVE TUBES

TYPE NUMBER	KIND	FREQ		DUTY CYL %	CATHODE		MAXIMUM										COUPLING		DIMEN		WT g
		MIN GHz	MAX GHz		E _f V	I _f mA	E _b V	I _b mA	P _o mW	COL. V	E _g V	HELIX V	GAIN dB	NF dB	VSWR	BANDWIDTH MHz	MAG FIELD GAUSS	LTH mm	DIAM mm		
OV-613	BWT	52.6	81.0		5.0		1500	50	80	400			10					200	130	5K	
OV-614	BWT	79.0	H1.2		6.3		2500	50	50	400			10					200	130	5K	
OV-621	BWT	H1.8	H2.0		6.3		3000	50	15	500			13					240	140	95H	
OV-622	BWT	H1.2	H1.8		6.3		4000	50	50	500			13					240	140	95H	
700AN	MAG		0.6	20 P			12K	10A	40K							65 0					
706AU	MAG		3.1	P			22K	20	200K												
707A/R	KLO	2.4	3.5	C	6.3	250		100	275							20					
714AU	MAG		3.3	1 P			19K	20A	165K												
720AYE	MAG		2.8	/1 P			27K	65A	1M							70					
723A/B	KLO	8.5	9.6	C	6.3	300	20	30	300												
725A	MAG		9.3	P			12K	10	44K												
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		

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL		MAXIMUM			MINIMUM		TYP	MIN	MAXIMUM		FIG		
		V _{CB0} V	V _{EB0} V	V _{CEO} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON EMITTER	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻³	h ₂₂ μmho	h ₂₁	f _a MHz			f _{MAX} MHz	NF dB		K _M dB	C _{ob} pF
P1A	GAP	20			5	5	30	50	10	70	E	10	1			3.3	0.90	0.1	0.1	30					1
P1B	GAP	20			5	5	30	50	10	70	E	10	1			2.0	0.93	0.1	0.1	35	33		400		1
P1D	GAP	20			5	5	15	50	10	70	E	10	1			2.0	0.94	0.1	0.1	18	33		600		1
P1G	GAP	20			5	5	30	50	10	70	E	10	1			2.0	0.96	0.1	0.1		37		600		1
P1I	GAP	20			5	5	20	50	10	70	E	10	1			2.0	0.96	1.6	1.6	35		40			1
P1V	GAP	20			5	5	15	50	10	70	E	10	1			1.0	0.93	0.1	0.1	35	37		400		1
P1YE	GAP	20			5	5	30	50	10	70	E	10	1			2.0	0.95	0.5	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	0.1	35	35	45	1K		1
1T303A	GDN	12	2	10	15		8	100	3	70	E	5	5				15					10	*1K	13	
1T303R	GDN	12	2	10	15		8	100	3	70	E	5	5				30		90	6		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	
1T308A	GDP	20	3	15	50		1	150		85	E	1	10		30		25					8	*4H	12	
1T308R	GDP	20	3	15	50		1	150		85	E	1	10				50		120	6		8	*4H	12	
1T308G	GDP	20	3	15	50		1	150		85	E	1	10				1H		120	6		8	*5H	12	
1T308V	GDP	20	3	15	50		1	150		85	E	1	10				80		120			8	*5H	12	
1T403A	GAP	45	20	30	12H		50		70	85	C	5	100		50		20		/0.1					28	
1T403R	GAP	45	20	30	12H		50		70	85	C	5	100		50		50		/0.1					28	
1T403D	GAP	60	30	45	12H		50		70	85	C	5	100				50		//.1					28	
1T403G	GAP	60	20	45	12H		50		70	85	C	5	100				50		/0.1					28	
1T403I	GAP	80	20	60	12H		70		70	85	C	5	100				50		/0.1					28	
1T403V	GAP	60	20	45	12H		50		80	85	C	5	100				20		/0.1					28	
1T403YE	GAP	60	20	45	12H		50		80	85	C	5	100				30		/0.1					28	
1T403ZH	GAP	80	20	60	12H		70		70	85	C	5	100				50		/0.1					28	
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
2T301	SDN	20	3	20		10	40	150	2	120	E	10	3			3.0	20	30				10			27
2T301A	SDN	20	3	20		10	40	150	2	120	E	10	3			3.0	40	30				10			27
2T301R	SDN	30	3	30		10	40	150	2	120	E	10	3			3.0	10	30				10			27
2T301D	SDN	20	3	30		10	40	150	2	120	E	10	3			3.0	20	60				10			27
2T301G	SDN	20	3	30		10	40	150	2	120	E	10	3			3.0	10	60				10			27
2T301V	SDN	30	3	30		10	40	150	2	120	E	10	3			3.0	20	30				10			27
2T301YE	SDN	20	3	20		10	40	150	2	120	E	10	3			3.0	40	60				10			27

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL		MAXIMUM				MINIMUM		TYP		MAXIMUM				
		V _{CB0} V	V _{EB0} V	V _{CEO} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho	h ₂₁	f _a MHz	# f MAX	NF dB	K _M dB	C _{ob} pF	MAXIMUM			
																							r _b Ω	r _{1C} Ω	r _{bc} Ω	
2T3012H	SDN	20	3	20	10	10	40	150	2	120	E	10	3			3.0	80	60					10			27
P3A	GAP	50		50	150		500	3W	100	50	C	10	150				2.0	0.1	17							2
P3H	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
P4	G	55			2A			10W																		
P4A	GAP	60	50	40	2A		500	2W	500	90	C	10	2A			5.0	5.0	0.1	20					150	22	
P4B	GAP	70	60	50	2A		400	3W	500	90	C	10	2A			15	15	0.1	23					150	22	
P4D	GAP	60	50	30	2A		400	3W	500	90	C	10	2A			50	30	0.1	30					150	22	
P4G	GAP	60	50	40	2A		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	20	0.1	30					150	22	
P4V	GAP	40	35	25	2A		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	0.93	0.3	12				80		4	
P5B	* GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	0.95	0.3	12				80		4	
P5D	* GAP	10	20	10	10	10	30	25	1	75	E	2	1	36	500	2.6	0.95	0.3	7				80		4	
P5G	* GAP	10	20	10	10	10	30	25	1	75	E	2	1	36	500	2.6	0.97	0.3	10				80		4	
P5V	* GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	0.97	0.3	15				80		4	
P5YE	* GAP	10	20	10	10	10	15	25	1	75	E	2	1	36	500	2.6	0.96	0.3	18				80		4	
P6A	* GAP	30	30	10	10	10	30	150	2	100	E	5	1	32	500	3.3	0.90	0.1	30	30			50		10	
P6B	* GAP	30	30	15	10	10	15	150	2	100	E	5	1	32	60	2.0	0.90	0.5	30	34			50		10	
P6D	* GAP	30	30	15	10	10	15	150	2	100	E	5	1	32	60	2.0	0.90	0.5	12	34			50		10	
P6G	* GAP	30	30	10	10	10	15	150	2	100	E	5	1	32	60	3.3	0.97	1.0	30	37			50		10	
P6V	* GAP	30	30	15	10	10	15	150	2	100	E	5	1	32	60	2.0	0.94	0.5	30	34			50		10	
P7	GAP	13		45			30	45	5	85	E	2	1				0.97								4	
P8	GAN	15	15	25	20	10	30	150				5	1	34	500	2.5	10	1.0	15	32			65	150	10	
P8A	GAN																	1.0							10	
P9	GAN	20	20	15	10	10	15	150	2	100	E	5	1	32	60	2.0	10	0.5	12	32			60		10	
P9A	GAN	15	15	25	20		30	150	5	85	E	5	1	32	60	2.5	15	1.0	5	32			60	150	10	
P10	GAN	15	15	25	20	10	30	150	5	85	E	5	1	32	60	2.5	15	1.0	5	32			60	150	10	
P10A	GAN	30	30	30	20		100	150	5	85	E	5	1				25	1.0					60	150	10	
P10R	GAN	30	30	30	20		100	150	5	85	E	5	1				25	1.0					60	150	10	
P11	GAN	15	15	25	20	10	30	150	5	85	E	5	1	32	60	2.5	25	2.0	5	32			60		10	
P11A	GAN	15	15	25	20		30	150	5	85	E	5	1				45	2.0					60	150	10	
P12	GAP			6	5	5	6	30	2	85	E	6	1				0.95	5.0					20	150	17	
P12A	GAP	6		6	5	5	6	30	1	70	E	6	1				20	0.5					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	

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL			MAXIMUM			MINIMUM			TYP	MIN	MAXIMUM			
		V _{CBO} V	V _{EBO} V	V _{CEO} V	I _C mA	I _E mA	I _{CBO} μA	P _C mW	K _θ mW/°C	T _J °C	NOMINAL	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻³	h ₂₂ μmho	h ₂₁	f _a MHz	NF dB	K _M dB			C _{ob} pF	r _b Ω		
																								r _i Ω	r _{ic} Ω	r _o Ω
P13A	GAP	30			10	10	15	150	2	100	E	5	1		60	2.0	0.97	0.5	33			50	50		10	
P13R	GAP	15	15	15	20	10	15	150	3	100	E	5	1		60	3.3	20	0.5	12			50	50		10	
P14	GAP	15	15	15	20	10	15	150	3	100	E	5	1		500	3.3	20	1.0	33			50	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	50	150	10	
P14R	GAP	30	30	30	20	20	15	150	3	85	E	5	1	32	500	3.3	30	1.0				50	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	50	150	10	
P15A	GAP	15	15	15	20	10	15	150	3	85	E	5	1	32	500	3.3	50	2.0				50	50	150	10	
P16	GAP	30	15	15	50	50	25	200	5	100					20		20	1.0				50	50	150	10	
P16A	GAP	30	15	15	50	50	25	200	5	100					30		30	1.0				50	50	150	10	
P16R	GAP	30	15	15	50	50	25	200	5	100					45		45	1.0				50	50	150	10	
P17	GAP	40			400		200	150							9		9	0.2		20				8		
P17A	GAP	40			400		200	150							16		16	0.2		20				8		
P17R	GAP	40			400		200	150							32		32	0.2		20				8		
P18	GAP	70			400		200	150							9		9	0.2		20				8		
P18A	GAP	70			400		200	150							16		16	0.2		20				8		
P18R	GAP	70			400		200	150							32		32	0.2		20				8		
P19	GAP	20	20	6	5	5	6	30	1	90	E	5	1	33	2.0		0.95	5.0	5			20	20	150	10	
P20	GAP	50				1	50	150			C		25		50		50	1.0						10		
P21	GAP	50		30		1	50	150	3	85	C	5			20		20	1.0						10		
P21A	GAP	70		30		1	50	150	3	85	C	5	25		50		50	1.0						10		
P21R	GAP	50		30			50	150	3	85	C	5	25		50		50	1.0						10		
P22	GAP	40					25	100		85						3.3		1.0						10		
P23	GAP	35					25	100		85						3.3		2.0						10		
P25	GAP	40	60	60	400	6	150	200	5	75	E	20	/2		10		10	0.2		20		500	500	10		
P25A	GAP	40	60	60	400	6	150	200	5	75	E	20	/2		20		20	0.2		20		500	500	10		
P25H	GAP	40	60	60	400	6	150	200	5	75	E	20	/2		30		30	0.5		20	70	500	500	10		
P26	GAP	70	100	100	400	6	150	200	5	75	E	20	/2		10		10	0.2		20	50	500	500	10		
P26A	GAP	70	100	100	400	6	150	200	5	75	E	20	/2		20		20	0.2		20	50	500	500	10		
P26R	GAP	70	100	100	400	6	150	200	5	75	E	20	/2		30		30	0.5		20	50	500	500	10		
P27	GAP	5		5	6		3	30	1	70		5	/1		20		20	1.0	10		50	*6K	*6K	17		
P27A	GAP	5		5	6		3	30	1	70	E	5	/1		1.0		20	1.0		5	50	*6K	*6K	17		
P28	GAP	5		5	6		3	30	1	70	E	5	/1		1.0		20	5.0		5	50	*6K	*6K	17		
P29	GAP	12	12	10	100		4	30	1	70					25		25	5.0			20			17		
P29A	GAP	12	12	10	100		4	30	1	70					45		45	5.0			20			17		
P30	GAP	12	12	10	100		4	30	1	70					80		80	10.0			20			17		

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL		MAXIMUM				MINIMUM		TYP		MIN		MAXIMUM	
		V _{CE0}	V _{EB0}	V _{CE0}	I _C	I _E	I _{CEO}	P _C	K _g	T _J	h _{FE}	V _C	I	h ₁₁	h ₁₂	h ₂₂	h ₂₁	f _a	f _{MAX}	NF	K	C _{ob}	r _b	r ₁	f ₁₆
		V	V	V	mA	mA	μA	mW	mW/°C	°C	dB	V	mA	Ω	10 ⁻⁵	μmho		MHz	dB	dB	pF	Ω	Ω	Ω	Ω
P39R	GAP	10	5	10	40	15	150	5	85	E	5	1			3.3	20		0.5	12			60	220	17	
P40	GAP	10	5	10	40	15	150	5	85	E	5	1			3.3	20		1.0				60	220	17	
P40A	GAP	20	5	20	40	15	150	5	85	E	5	1			3.3	20		1.0				60	220	17	
P41	GAP	10	5	10	40	15	150	5	85	E	5	1			3.3	30		1.0				60	220	17	
P41A	GAP	10	5	10	40	15	150	5	85	E	5	1			3.3	50		1.0				60	220	17	
P42A	GAP	15		150		25	200	5	70	C	1	10					30	1.0						17	
P42B	GAP	15		150		25	200	5	70	C	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	
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	
P107	SAN	120					1	150									15	3.0							
GT108A	GAP	15		50			10	75	1	55	E	5	1		3.3	20		0.5				30	/3K	11	
GT108R	GAP	15		50			10	75	1	55	E	5	1		3.3	35		1.0				30	/3K	11	
GT108G	GAP	15		50			10	75	1	55	E	5	1		3.3	H1.1		1.0				30	/3K	11	
GT108V	GAP	15		50			10	75	1	55	E	5	1		3.3	60		1.0				30	/3K	11	
GT109A	GAP	15		6	20		5	30	/1	80	E	5	/1		3.3	20		1.0				30	*3K	29	
GT109B	GAP	15		6	20		5	30	/1	80	E	5	/1		3.3	35		1.0				30	*3K	29	
GT109D	GAP	15		6	20		2	30	/1	55	E	5	1		3.3	20		3.0				40	*3K	29	
GT109G	GAP	15		6	20		5	30	/1	80	E	5	/1		3.3	H1.1		1.0				30	*3K	29	
GT109V	GAP	15		6	20		5	30	/1	80	E	5	/1		3.3	60		1.0				30	*3K	29	
GT109YE	GAP	15		6	20		2	30	/1	55	E	5	1		3.3	50		5.0				40	*3K	29	
P135	GAP	30			10		10	150		100		5	1		60	2.0		0.5	12			50		10	
P201	GAP	45	45	30	15H		400	1W	300	100		5	1				20	0.1	25					25	
P201A	GAP	45	45	30	15H		400	1W	300	100							40	0.2	25					25	
P202	GAP	70	35	55	15H		400	1W	300	100							20	0.1	30					25	
P203	GAP	70	45	55	15H		400	1W	300	100							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	70	85							15							24	

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL		MAXIMUM				MINIMUM		TYP	MIN		MAXIMUM		FIG
		V _{CBO} V	V _{EBO} V	V _{CEO} V	I _C mA	I _E mA	I _{CBO} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON V	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho	h ₂₁	f _α # f MAX MHz	NF dB		K _M dB	C _{ob} pF	r _b r _{1C} r _b c		
P209	GAP	65		45	12A		8M	1500	43	85							15	0.1						23	
P209A	GAP	65		45	12A		8M	1500	43	85							15	0.1						23	
P210	GAP	45		65	12A		12M	1500	43	85							01	0.1						23	
P210A	GAP	45		65	12A		12M	1500	43	85							15	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		30	5A 1H		80	115H	314		C	10 100					20	0.2						25	
P213A	GAP	45	10	30	5A		1500	1700	30	85	C	5 200					20	/0.2						25	
P213R	GAP	45	10	30	5A		1500	1700	30	85	C	5 200					40	/0.2						25	
P214	P	60		45	5A 1H		300	10W	200		C	10 100					20	0.2						25	
P214A	P	60		45	5A 1H		300	10W	200		C	10 100					50	0.2						25	
P214R	P	60		45	5A 1H		150	115H	314		C	10 100					20	10.2						25	
P214G	GAP	60	10	55	5A			1500	30	85	C	5 200					20	/0.2						25	
P214V	GAP	60	10	55	5A			1500	30	85	C	5 200					20	/0.2						25	
P215	P	80		60	5A 1H		300	10W	200		C	10 100					20	0.2						25	
P216	N	40		30	75H 1H		500	30W	500		C	10 100					18	10.2						25	
P216A	N	40		30	75H 1H		500	30W	500		C	10 100					20	0.1						25	
P216R	GAN	35	10	35	7A		1500	1700	30	85	C	3 2A					10	0.1						25	
P216D	GAN	50	10	50	7A		2000	1700	30	85	C	3 2A					15	0.1						25	
P216G	GAN	50	10	50	7A		2500	1700	30	85	C	3 2A					5	0.1						25	
P216V	GAN	35	10	35	7A		2000	1700	30	85	C	3 2A					30	0.1						25	
P217	N	60		45	75H 1H		500	30W	500		C	10 100					15	0.1						25	
P217A	N	60		45	75H 1H		500	30W	500		C	10 100					20	0.1						25	
P217R	N	60		45	75H 1H		500	20W	500		C	10 100					20	0.1						25	
P217G	GAN	60	10	60	7A		3000	1700	30	85	C	3 2A						0.1						25	
P217V	GAN	60	10	60	7A		3000	1700	30	85	C	3 2A					15	0.1						25	
P302	SAP	35		35	500 5H		100	2000	100	130	E	10 120					10	0.2						20	
P303	SAP	60		60	500 5H		100	2000	100	130	E	10 300					6	0.1						*20 20	
P303A	SAP	60		60	500 5H		100	2000	100	130	E	10 120					6	0.1						*20 20	
P304	SAP	80		80	500 5H		100	2000	100	130	E	10 120					5	/0.1						20	
P306	N	60		60	400 1H		100	10W			C	10 100					7	/0.1							
P306A	N	80		80	400 50		100	10W			C	20 50					5	/0.1							
P307	N	80		80	30 4		3	250			C	20 4					15	3.0							
P308	N	120		120	15 4		3	250			C	20 4					15	3.0							

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL		MAXIMUM			TYP	MIN		MAXIMUM			
		V _{CB0} V	V _{EB0} V	V _{CEO} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₂₂ μmho	h ₂₁		f _a # f MAX MHz	NF dB	K _M dB	C _{ob} pF	r _b r _{1C} r _{2C}	FIG
GT309A	GDP	15	6	10	10		5	50	1	70	E	5	1		5.0	20	1.0				10	*5H	9
GT309H	GDP	15	6	10	10		5	50	1	70	E	5	1		5.0	60	1.0				10	*5H	9
GT309D	GDP	15	6	10	10		5	50	1	70	E	5	1		5.0	20	1.0				10	*1K	9
GT309G	GDP	15	6	10	10		5	50	1	70	E	5	1		5.0	60	1.0				10	*1K	9
GT309V	GDP	15	6	10	10		5	50	1	70	E	5	1		5.0	20	1.0				10	*1K	9
GT309YE	GDP	15	6	10	10		5	50	1	70	E	5	1		5.0	60	1.0				10	*1K	9
GT310A	GDP	12	10	10	10		5	20	/1	55	E	5	1	3A	20	20			3		4	*3H	29
GT310R	GDP	12	10	10	10		5	20	/1	55	E	5	1	38	60	60			3		4	*3H	29
GT310D	GDP	12	10	10	10		5	20	/1	55	E	5	1	38	20	20			4		5	*3H	29
GT310G	GDP	12	10	10	10		5	20	/1	55	E	5	1	38	60	60			4		5	*3H	29
GT310V	GDP	12	10	10	10		5	20	/1	55	E	5	1	38	20	20			4		5	*5H	29
GT310YE	GDP	12	10	10	10		5	20	/1	55	E	5	1	38	60	60			4		5	*5H	29
KT312R	SPN	30	30	30	30			225		150							*H1.0						
KT312G	SPN	15	15	15	30			225		150							*H1.4						
KT312V	SPN	30	30	30	30			225		150							*H1.4						
GT313A	GAP	12	15	15	10			100		85						20	300			/3			
GT313B	GAP	12	15	15	10			100		85						20	450			2			
P314A	GAP	10	1	1			10	100		85						0.94	30			15			
P314B	GAP	10	1	1			5	100		85						0.94	60			10			
P314C	GAP	10	1	1			5	100		85						0.94	120			6			
P322	* GDP	8		15	15		2	50		85					5.0	0.97	400			4			
P401	GDP	20	20	10	10		10	50	2	85	E	5	5		5.0	0.94	30			15			10
P402	GDP	20	20	10	10		5	50	2	85	E	5	5		5.0	0.94	60			10			10
P403	GDP	20	20	10	10		5	50	2	85	E	5	5		5.0	0.97	*H1.2			10			10
P403A	GDP	20	20	10	10		5	50	2	85	E	5	5		5.0	0.94	*H1.2			10			10
P404	GSP	5	5	/5	5		5	10	/1	85	E	3	/1		7.0	0.93	10			5			5
P404A	GSP	5	5	/5	5		2	10	/1	85	E	3	/1		7.0	0.93	10			5			5
P405	GSP	5	5	/5	5		5	10	/1	85	E	3	/1		7.0	0.95	30			5			5
P405A	GSP	5	5	/5	5		2	10	/1	85	E	3	/1		7.0	0.95	30			5			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	0.95	10		5		20	150	3
P409	G P	20	20	6	5	5	6	30	1	90	E	5	1	33	2.0	0.95	20		5		20	150	3
P410	GNP	6	8	6	20	20	2	100	2	85	E	5	5	10	120	0.97	*H2.0				4		6
P410A	GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	120	0.99	*H2.0				4		6

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL			MAXIMUM					TYP	MIN	MAXIMUM		
		V _{CB0} V	V _{EB0} V	V _{CEO} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻³	h ₂₂ μmho	h ₂₁	f _a # f MAX MHz	NF dB			K _M dB	C _{ob} pF	r _b r _{1C} #b c
P411	GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	120	10.0	0.97	*H4.0				4		6
P411A	GDP	6	8	6	20	20	2	100	2	85	E	5	5	10	120	10.0	0.99	*H4.0				4		6
P414	GDP	10	1	10	10		5	100	2	75						5.0	25	*60				10	*1K	10
P414A	GDP	10	1	10	10		5	100	2	75						5.0	60	*60				10	*1K	10
P414R	GDP	10	1	10	10		5	100	2	75						5.0	1H	*60				10	*1K	10
P415	GDP	10	1	10	10		5	100	2	75						5.0	25	*H1.2				10	*5H	10
P415A	GDP	10	1	10	10		5	100	2	75						5.0	60	*H1.2				10	*5H	10
P415R	GDP	10	1	10	10		5	100	2	75						5.0	1H	*H1.2				10	*5H	10
P416	GDP	3	3	15	15	50	3	100	2	70	C	5	5			5.0	25	*H1.2				8	*5H	16
P416A	GDP	3	3	15	15		3	100	2	70	C	5	5			5.0	60	H1.2				8	*5H	16
P416R	GDP	3	3	15	15		3	100	2	70	C	5	5			5.0	1H					8	*5H	16
P416V	P			15			2	100	2		C					H1.2								
P417	P			10		5	3	50	2		C	5	5			24	200							
P417A	P			10		5	3	50	2		C	5	5			65	200							
P418	P			10		5	3	50	2		C	5	5			24	400							
P418A	P			10		5	3	50	2		C	5	5			65	400							
P418R	P			10		10	3	50	2		C	6	10			24	700							
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		12	25		5	100								5.0	30	*60				10	*1K	10
P422A	GDP	40		12	25		5	100								5.0	15	*60				10	*1K	10
P423	GDP	40		12	25		5	100								5.0	30	*H1.2					*5H	10
P423A	GDP	40		12	25		5	100								5.0	15	*H1.2					*5H	10
P501	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	9	*10				10		19
P501A	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	19	*10				10		19
P502	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	9	*30				10		19
P502A	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	19	*30				10		19
P502R	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	9	*30				10		19
P502V	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	19	*30				10		19
P503	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	9	*10				10		19
P503A	SDN	20	1	20		3	50	150	1	150	E	10	3			3.0	19	*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

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL		MAXIMUM			MINIMUM		TYP	MIN	MAXIMUM		FIG		
		V _{CB0} V	V _{EB0} V	V _{CE0} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho	h ₂₁	f _α MHz			NF dB	K _M dB		C _{ob} pF	r _b Ω
P505A	SDN	20	2	20	10	2	150	2	120	E	10	5			2.0	20	20					7	*1K	14	
P601	GDP	25	/1	25	1A	200	1W	500		C	10	500				20	20			10	200	200	*5H		
KT601A	SPN	100	2		30		500		150							16	*40								
P601A	GDP	30	/1	30	1A	100	1W	500		C	10	500				40	20			10	200	200	*5H		
P601B	GDP	30	/1	25	1A	130	1W	500	85	C	10	500				80	20			10	200	200	*5H		
P601B1	GAP	30		25			3W		85							20	*13							26	
P601I	GAP	25		20			3W		85							20	*13							26	
P602	GDP	30	/1	30	1A	100	1W	500	85	C	10	500				40	20			10	200	200	*5H		
P602A	GDP	25	/1	25	1A	130	1W	500	85	C	10	500				80	20			10	200	200	*5H		
P602A1	GAP	30		25			3W		85							20	*13							26	
P602I	GAP	25		20			3W		85							20	*13							26	
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	
P605	GDP	45	1	45	15H		500	500	85	C		500			20	20					130	*5H	26		
P605A	GDP	45	1	35	15H		500	500	85	C		500			40	50					130	*5H	26		
P606	GDP	45	1	45	15H		500	500	85	C		500			20	20					130	*5H	26		
P606A	GDP	35	1	35	15H		500	30	85	C					50	50					130	*5H	26		
P607	G P	15	1		200		10	0500		85	C	10	100				20	40				40	*2H	26	
P607A	G P	15	1		200		100	1500		85	C	10	100			60	60	40				40	*2H	26	
P608	G P	15	1		200		100	1500		85	C	10	100			20	20	70				30	*2H	26	
P608A	G P	15	1		200		100	1500		85	C	10	100			60	60	70				30	*2H	26	
P609	G P	15	1		200		100	1500		85	C	10	100				20	100				30	*2H	26	
P609A	G P	15	1		200		100	1500		85	C	10	100				60	100				30	*2H	26	
P701	SDN	40		40	500	7H	100	1000	400	150					10	10	12.5							20	
P701A	SDN	60		60	500	7H	100	1000	400	150					10	10	12.5							20	
P702	SDN	70	3	60	2A		5000	4000	35	150	C	10	1A		25	25	4.0							20	
P702A	SDN	70	3	60	2A		2500	4000	35	150	C	10	1A				4.0							20	
KT801A	SDN			80	2A			5W		150					13	13	*10							16	
KT801B	SDN			80	2A			5W		150					13	13	*10							16	
KT802A	SPN	150	3	130	5A		60	50W			C	10	2A		15	15	*10							21	
S1A	* GPP	40			10	10		100			E	20	/1		1.0	1.0	0.5		19					7	
S1H	* GPP	40			6	10		50			E	20	/1		1.2	1.2	0.5		22					7	
S1D	* GPP	40			6	10		50			E	20	/1		1.2	1.2	5.0		22					7	
S1G	* GPP	40			6	10		50			E	20	/1		1.2	1.2	1.5		22					7	

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL			MAXIMUM			MINIMUM		TYP	MIN	MAXIMUM			FIG
		V _{CB0} V	V _{EB0} V	V _{CE0} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho	h ₂₁	f _α # f MAX MHz	NF dB			K _M dB	C _{ob} pF	r _b r ₁ C #b c	
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
S2R	* 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								7
S3A	* GPP	40			10	10		100			E	20	/1				1.0	0.5				19			8
S3R	* 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
S4R	* 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 XI, DIODES—RECTIFIERS

TYPE NUMBER	TYPE	MAXIMUM			MAXIMUM @ 25 °C			MAXIMUM			f _{Max} MHz	FIG
		I _F @ 25 mA	T _{opr} °C	I _S @ 25 °C A	PIV V	E _F * MIN V	I _F mA	I _R @ μA	E _r @ V	T °C		
D1A	GEP	16	70		20	1.0	2	250	10	20	150	1
D1B	GEP	16	70		30	1.0	1	250	25	20	150	1
D1D	GEP	16	70		75	1.0	2	250	75	20	150	1
D1G	GEP	16	70		50	1.0	5	250	50	20	150	1
D1V	GEP	25	70		30	1.0	8	250	25	20	150	1
D1YE	GEP	12	70		100	1.0	1	250	100	20	150	1
D1ZH	GEP	12	70		100	1.0	5	250	100	20	150	1
D2A *	GEP	50	70		7	1.0	50	250	7	20	150	6
D2B *	GEP	16	70		10	1.0	10	250	10	20	150	6
D2D *	GEP	16	70		50	1.0	10	250	50	20	150	6
D2G *	GEP	16	70		50	1.0	5	250	50	20	150	6
D2I *	GEP	16	70		150	*1.0	2	250	150	20	150	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		30	1.0	10	250	30	20	150	4
D2YE *	GEP	16	70		100	1.0	10	250	100	20	150	4
D2ZH	GEP	8	70		150	1.0	10	250	150	20	150	4
2D503A	SID	200	120		30	1.0	10	4	30			1
2D503B	SID	200	120		30	1.2	10	4	30			1
D7A	GEP	300	70	25	50	0.5	300	100	50	20		11
D7B	GEP	300	70	25	100	0.5	300	100	100	20	50K	11
D7D	GEP	300	70	25	300	0.5	300	100	300	20	50K	11
D7G	GEP	300	70	25	200	0.5	300	100	200	20	50K	11
D7V	GEP	300	70	25	150	0.5	300	100	150	20	50K	11
D7YE	GEP	300	70	25	350	0.5	300	100	350	20	50K	11
D7ZH	GEP	300	70	25	400	0.5	300	100	400	20	50K	11
D9A	GEP	25	70		10	1.0	10	250	10	20	40	1
D9B	GEP	40	70		10	1.0	90	250	10	20	40	1
D9D	GEP	30	70		30	1.0	60	250	30	20	40	1
D9G	GEP	25	70		30	1.0	30	250	30	20	40	1
D9I	GEP	30	70		30	1.0	30	120	30	20	40	1
D9K	GEP	30	70		30	1.0	60	60	30	20	40	1

GROUP XI, DIODES—RECTIFIERS

TYPE NUMBER	TYPE	MAXIMUM			MAXIMUM @ 25 °C			MAXIMUM			f _{Max} MHz	FIG
		I _F @ 25 mA	T _{Opr} °C	I _S @ 25°C A	PIV V	E _F * MIN V	E _F mA	I _R @ μA	E _r @ V	T°C		
D9L	GEP	15	70		100	1.0	30	250	100	20	40	1
D9M	GEP	30	70		30	1.0	60	250	50	20		1
D9V	GEP	20	70		30	1.0	10	250	30	20	40	1
D9YE	GEP	20	70		50	1.0	30	250	50	20	40	1
D9ZH	GEP	15	70		100	1.0	10	250	100	20	40	1
D10	GEP	50	70		20	1.5	3	100	10	20	150	4
D10A	GEP	50	70		20	1.5	5	200	10	20	150	4
D10B	GEP	50	70		20	1.5	8	200	10	20	150	4
D11	GEP	60	70		30	1.0	100	250	30	20	150	4
D12	GEP	60	70		50	1.0	100	250	50	20	150	4
D12A	GEP	70	70		50	1.0	100	250	50	20	150	4
D13	GEP	60	70		75	1.0	100	250	75	20	150	4
D14	GEP	60	70		100	1.0	100	250	100	20	150	4
D14A	GEP	60	70		100	1.0	100	250	100	20	150	4
D15	GEP				30	1.0	15	300	30		300	
D16	GEP				50	1.0	5	500	50		300	
D16A	GEP				50	1.0	10	500	50		300	
D17	GEP				100	1.0	4	400	100		300	
D18	GEP	20	70		20	1.0	20	50	20	20		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
D19B	GEP	45	70		20	1.0	45	100	20	50		1
D20	GEP	20	70		10	1.0	10	50	10	20		2
D21	GEP	16	70		150	1.0	5	250	100	20	150	4
D101	SIP	50	150	/1	100	2.0	2	100	75	125	600	4
D101A	SIP	75	150	/1	100	1.0	1	75	75	125	600	4
D102	SIP	50	150	/1	75	2.0	2	100	50	125	600	4
D102A	SIP	75	150	/1	75	1.0	1	100	50	125	600	4
D103	SIP	50	150	/1	30	2.0	2	100	30	125	600	4
D103A	SIP	75	150	/1	30	1.0	1	100	30	125	600	4
D104	SIP	30	150	/1	100	2.0	2	150	75	125	600	2
D104A	SIP	30	150	/1	100	1.0	1	150	75	125	600	2
D105	SIP	30	150	/1	75	2.0	2	100	50	125	600	2
D105A	SIP	30	150	/1	75	1.0	1	100	50	125	600	2
D106	SIP	30	150	/1	30	2.0	2	100	30	125	600	2

GROUP XI, DIODES — RECTIFIERS

TYPE NUMBER	TYPE	MAXIMUM			MAXIMUM @ 25 °C			MAXIMUM			f _{Max} MHz	FIG
		I _F @ 25 mA	T _{Op} °C	I _S @ 25°C A	PIV V	E _F * MIN V	I _F mA	I _R @ μA	E _r @ T°C V	°C		
D106A	SIP	30	150	/1	30	1.0	1	50	30	125	600	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
D109	SIP	10	125		50	1.0	10	20	30	25		2
D201A	SI	200	125		25	1.5		500	25		/0.1	13
D201B	SI	200	125		50	1.5		500	50		/0.1	13
D201D	SI	400	125		100	2.0		500	100		/0.1	13
D201G	SI	200	125		100	1.5		500	100		/0.1	13
D201TS	SI	400	125		200	2.0		500	200		/0.1	13
D201V	SI	400	125		50	2.0		500	50		/0.1	13
D201YE	SI	200	125		200	2.0		500	200		/0.1	13
D201ZH	SI	400	125		200	2.0	400	500	200		/0.1	13
D202	SIA	400	125		100	1.0	400	500	100	125	0.1	13
D203	SIA	400	125		200	1.0	400	500	200	125	0.1	13
D204	SIA	400	125		300	1.0	400	500	300	125	0.1	13
D205	SIA	400	125		400	1.0	400	500	400	125	0.1	13
D206	SIA	100	125		100	1.0	100	100	100	125	0.1	10
D207	SIA	100	125		200	1.0	100	100	200	125	0.1	10
D208	SIA	100	125		300	1.0	100	100	300	125	0.1	10
D209	SIA	100	125		400	1.0	100	100	400	125	0.1	10
D210	SIA	100	125		500	1.0	100	100	500	125	0.1	10
D211	SIA	100	125		600	1.0	100	100	600	125	0.1	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	125		800	0.5	100	50	800	20	1K	9
D218	SIA	100	125		1000	0.5	100	50	1000	20	1K	9
D219A	SIA	50	125	/1	70	1.0	50	30	70	100		2
D220	SIA	50	125	/1	50	1.5	50	20	50	100		2
D220A	SIA	50	125	/1	70	1.5	50	30	70	100		2
D220B	SIA	50	125	/1	100	1.5	50	40	100	100		2

GROUP XI, DIODES—RECTIFIERS

TYPE NUMBER	TYPE	MAXIMUM			MAXIMUM @ 25 °C			MAXIMUM			f _{Max} MHz	FIG
		I _P @ 25 mA	T _{Opr} °C	I _S @ 25°C A	PIV V	E _F * MIN E _F V	I _F mA	I _R μA	E _r V	@ T°C °C		
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	/1	50	1.0	50	50	50	125		2
D223A	SIA	50	125	/1	100	1.0	50	50	100	125		2
D223B	SIA	50	125	/1	150	1.0	50	50	150	125		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
D226D	SIA	300	125		100	1.0	300	300	100	80		9
D226G	SIA	300	125		200	1.0	300	300	200	80		9
D226V	SIA	300	125		300	1.0	300	300	300	80		9
D226YE	SIA	300	125		400	1.0	300	300	400	80		9
D229A	SIA	400	125		200	1.0	400	50	200	20		15
D229B	SIA	400	125		400	1.0	400	50	400	20		15
D230A	SIA	300	125		200	1.0	300	50	200	20		9
D230B	SIA	300	125		400	1.0	300	50	400	20		9
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
D231B(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)	SI	10A	130		100	1.25		3M	100	130	K1.0	14
D242A(P)	SI	10A	130		100	1.0		3M	100	130	K1.0	14
D242B(P)	SI	5A	130		100	1.5		3M	100	130	K1.0	14
D243(P)	SI	10A	130		200	1.25		3M	200	130	K1.0	14
D243A(P)	SI	10A	130		200	1.0		3M	200	130	K1.0	14
D243B(P)	SI	5A	130		200	1.5		3M	200	130	K1.0	14

GROUP XI, DIODES — RECTIFIER^c

TYPE NUMBER	TYPE	MAXIMUM			MAXIMUM @ 25 °C			MAXIMUM			f _{Mux} MHz	FIG
		I _F @ 25 mA	T _{opr} °C	I _S @ 25°C A	PIV V	E _F MIN V	I _F mA	I _R μA	E _r V	@ T°C		
D244 (P)	SI	10A	130		50	1.25		3M	50	130	K1.0	14
D244A (P)	SI	10A	130		50	1.0		3M	50	130	K1.0	14
D244B (P)	SI	5A	130		50	1.5		3M	50	130	K1.0	14
D245	SI	10A	130		300	1.25		3M	300	130	K1.0	14
D245A	SI	10A	130		300	1.0		3M	300	130	K1.0	14
D245B	SI	5A	130		300	1.5		3M	300	130	K1.0	14
D246	SI	10A	130		400	1.25		3M	400	130	K1.0	14
D246B	SI	5A	130		400	1.5		3M	400	130	K1.0	14
D247	SI	10A	130		500	1.25		3M	500	130	K1.0	14
D247B	SI	5A	130		500	1.5		3M	500	130	K1.0	14
D248B	SI	5A	130		600	1.5		3M	600	130	K1.0	14
D302	GEA	1A	70		200	0.25	1A	1000	200	20	50K	16
D303	GEA	3A	70		150	0.3	3A	1000	150	20	50K	16
D304	GEA	5A	70		100	0.3	5A	3000	100	20	50K	16
D305	GEA	10A	70		50	0.35	10A	3000	50	20	50K	16
D310	GEA	500	70		20			100	20	70		7
D1001	GE	100	80		2000	6.5	100	150	2000		/0.1	17
D1001A	GE	100	80		1000	3.5	100	150	1000		/0.1	17
D1002	GE	300	80		2000	7.5	300	300	2000		/0.1	17
D1002A	GE	300	80		1000	4.0	300	300	1000		/0.1	17
D1003A	GE	300	80		500	2.0	300	300	500		/0.1	17
D1004	SIA	100	125		2000	4.0	100	100	2000	20		20A
D1005A	SIA	50	125		4000	4.0	50	100	4000	20		20A
D1005B	SIA	100	125		4000	6.0	100	100	4000	20		20B
D1006	SIA	100	125		6000	6.0	100	100	6000	20		20B
D1007	SIA	75	125		8000	6.0	100	100	8000	20		20B
D1008	SIA	50	125		10K	6.0	100	100	10K	20		20B
D1009	SIA	100	125		2000	7.0	100	100	2000	20		18A
D1009A	SIA	100	125		1000	3.5	300	100	1000	20		19
D1010	SIA	300	125		2000	1.1	300	100	2000	20		18B
D1010A	SIA	300	125		1000	5.5	300	100	1000	20		19
D1011A	SIA	300	125		500	2.5	300	100	500	20		19
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			

GROUP XI, DIODES — RECTIFIERS

TYPE NUMBER	TYPE	MAXIMUM			MAXIMUM @ 25 °C			MAXIMUM			f _{Max} MHz	FIG
		I _F @ 25 mA	T _{Op} °C	I _S @ 25°C A	PIV V	E _F MIN V	E _F V	I _F mA	I _R @ μA	E _r @ V	T °C	
DG-TS1	* GEP	16	70	/1	50	*1.0		2	1000	50	20	6
DG-TS2	* GEP	16	70	/1	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	/1	100	*1.0		2	800	75	20	6
DG-TS5	* GEP	16	70	/1	100	*1.0		1	250	75	20	6
DG-TS6	* GEP	16	70	/1	125	*1.0		1	800	100	20	6
DG-TS7	* GEP	16	70	/1	125	*1.0		1	250	100	20	6
DG-TS8	* GEP	25	70	/1	50	*1.0		10	500	30	20	6
DG-TS9	GEP	50	70	/1	45	*1.0		10	100	10	20	6
DGTS10	GEP	50	70	/1	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
KTS401A	SI	400	70	5A	500	2.5		300	100	500	25	21
KTS401B	SI	500	70	5A	500	2.5		400	100	500	25	22

GROUP XI-A, DIODES — SWITCHING

TYPE NUMBER	KIND	TYPE	SWITCH RANGE		MAXIMUM CURRENT			SWITCH TIME		CAPACITY pF	FIG
			MIN V	MAX V	SWITCH OFF mA	ON mA	I _f mA	LEAKAGE μA	OFF μs	ON μs	
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 NUMBER	KIND	TYPE	MAXIMUM		MIN	V_{FM}		CAP	FIG			
			I_p mA	I_p/I_v		V_p mV	MIN mV	MAX mV				
AI-101A	TUN	GAS	1	5	160				3	23B		
AI-101B	TUN	GAS	1	5	160				6	23B		
AI-101D	TUN	GAS	2	6	160				6	23B		
AI-101G	TUN	GAS	2	6	160				4	23B		
AI-101I	TUN	GAS	5	6	180				10	23B		
AI-101V	TUN	GAS	2	6	160				2	23B		
AI-101YE	TUN	GAS	5	6	180				3	23B		
AI-101ZH	TUN	GAS	5	6	180				6	23B		
AI-201A	TUN	GAS	10	10	200				4	23B		
AI-201B	TUN	GAS	10	10	180				6	23B		
AI-201D	TUN	GAS	20	10	200				7	23B		
AI-201G	TUN	GAS	20	10	210				4	23B		
AI-201I	TUN	GAS	50	10	260				15	23B		
AI-201K	TUN	GAS	H1	10	330				15	23B		
AI-201L	TUN	GAS	H1	10	330				40	23B		
AI-201V	TUN	GAS	10	10	180				10	23B		
AI-201YE	TUN	GAS	20	10	200				12	23B		
AI-201ZH	TUN	GAS	50	10	260				8	23B		
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-302G	TUN	GE	17	4.5	60			400	200	23A		
1I-302V	TUN	GE	11.5	4.5	60			400	180	23A		
3I-301A	TUN	GAS	2	8	180	650			12	23B		
3I-301B	TUN	GAS	5	8	180	850	1150		25	23B		
3I-301G	TUN	GAS	10	8	180	800			50	23B		
3I-301V	TUN	GAS	5	8	180	1000	1300		25	23B		

GROUP XI-C, DIODES-SWITCH CONTROL															
TYPE NUMBER	KIND	TYPE	VOLTAGE		MAXIMUM CURRENTS				POWER		TIME MAX		TEMP		FIG
			SWITCH MAX V	RES. MIN V	CONT. MAX mA	SWITCH OFF mA	ON A	LEAK mA	MAX W	K_θ mW/°C	OFF μ s	ON μ s	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	32
D238B	CON	SI	100	2			10		20	330	10	35	50	100	32
D238D	CON	SI	100	2			10		20	330	10	35	50	100	32
D238G	CON	SI	50	2			10		20	330	10	35	50	100	32
D238V	CON	SI	150	2			10		20	330	10	35	50	100	32
D238YE	CON	SI	150	2			10		20	330	10	35	50	100	32

GROUP XI-D, DIODES-VARACTORS													
TYPE NUMBER	KIND	TYPE	MAXIMUM		CAPACITY @ 4V				Q	POWER MAX	TEMP		FIG
			VOLTS	I_R	MIN	MAX	TC	EXP			MIN	MAX	
			V	μ A	pF	pF		(-)			(-)°C	(+)°C	
D901A	VAR	SI	80	1	22	32	5	4	25	250	60	125	7
D901B	VAR	SI	45	1	22	32	5	4	30	250	60	125	7
D901D	VAR	SI	80	1	34	44	5	4	25	250	60	125	7
D901G	VAR	SI	45	1	28	38	5	4	30	250	60	125	7
D901V	VAR	SI	80	1	28	38	5	4	25	250	60	125	7
D901YE	VAR	SI	45	1	34	44	5	4	30	250	60	125	7
D902	VAR	SI	25		6	12			30	250			

GROUP XII, DIODES-POWER RECTIFIERS

TYPE NUMBER	KIND	TYPE	MAXIMUM			MAXIMUM E_r IN VOLTS																	COOLING			
			OPR TEMP °C	I_f Amp	E_f V	I_r mA	AVAILABLE FOR FOLLOWING SUBCLASSES																	KIND	RATE	RADIATOR
							15	30	45	50	55	70	80	100	110	150	2H	3H	4H	5H	6H	7H	8H			
VG-5	POW	GE	75	5	0.5					X	X			X	X		X	X	X					AN		
VG-5	POW	GE	75	10	0.5					X	X			X	X		X							AF	10M	
VG-10	POW	GE	75	10	0.5					X														AN		
VG-10-30	POW	GE	75	20	0.5	10				X														AF	10M	
VG-10-45	POW	GE	75	20	0.5	8					X													AF	10M	
VG-10-55	POW	GE	75	20	0.5	6						X												AF	10M	
VG-10-80	POW	GE	75	20	0.5	5								X										AF	10M	
VG-10-110	POW	GE	75	20	0.5	4											X							AF	10M	
VG-10-150	POW	GE	75	20	0.5	3												X						AF	10M	
VG-30	POW	GE	75	30	0.5				X		X			X	X		X							AF	10M	
VG-50	POW	GE	75	50	0.5	40	X	X																AF	10M	
VG-50	POW	GE	75	50	0.5	30				X		X												AF	10M	
VG-50	POW	GE	75	50	0.5	20							X				X	X						AF	10M	
VG-100	POW	GE	75	100	0.5				X		X			X	X		X							AF	10M	
VG-200	POW	GE	75	200	0.6	100	X	X	X	X	X			X	X									W	4L	
VG-500	POW	GE	75	500	0.6				X		X			X	X									W	4L	
VG-1000	POW	GE	75	1000	0.8				X		X			X	X									W	4L	
VK-10	POW	SI	200	10	0.9					X				X		X	X	X	X	X	X	X	X	AN		
VK-10	POW	SI	200	20	0.9					X				X		X	X	X	X	X	X	X	X	AF	15M	
VK-25	POW	SI	200	25	0.9					X				X		X	X	X	X	X	X	X	X	AF	5M	
VK-25	POW	SI	200	50	0.9					X				X		X	X	X	X	X	X	X	X	AF	15M	
VK-50	POW	SI	200	50	0.9					X				X		X	X	X	X	X	X	X	X	AF	5M	
VK-50	POW	SI	200	100	0.9					X				X		X	X	X	X	X	X	X	X	AF	15M	
VK-100	POW	SI	200	100	0.9					X				X		X	X	X	X	X	X	X	X	AF	10M	
VK-100	POW	SI	200	150	0.9					X				X		X	X	X	X	X	X	X	X	AF	15M	
VK-200	POW	SI	200	200	0.9					X				X		X	X	X	X	X	X	X	X	AF	15M	
VKV-200	POW	SI	200	200	0.9					X				X		X	X	X	X	X	X	X	X	W	4L	
VKV-200	POW	SI	200	500	0.9					X				X		X	X	X	X	X	X	X	X	W	4L	
VKV-1000	POW	SI	200	1000	0.9					X				X		X	X	X	X	X	X	X	X	W	4L	

GROUP XII-A SILICON CONTROLLED RECTIFIERS

TYPE NUMBER	KIND	TYPE	MAX. FORWARD CURRENT					PIV V	MAXIMUM					I _R mA	FIG
			NONE	AIR-COOL		WATER-COOL			POWER		GATE PULSE				
				WITH RAD	FORCED AIR RAD	2L/m	5L/m		W	GATE W	V	A	WIDTH μs		
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

GROUP XII-A SILICON CONTROLLED RECTIFIERS

TYPE NUMBER	KIND	TYPE	MAX. FORWARD CURRENT					PIV	MAXIMUM						I _R mA	FIG
			NONE	AIR-COOL		WATER-COOL			POWER		GATE PULSE					
				WITH RAD	FORCED AIR RAD	2L/m	5L/m		W	GATE W	V	A	WIDTH μs			
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	
2U-101A	SCR	TRI	.05					40								
2U-101B	SCR	TRI	.05					40								
2U-101D	SCR	TRI	.05					150								
2U-101G	SCR	TRI	.05					80								
2U-101V	SCR	TRI	.05					80								
2U-101YE	SCR	TRI	.05					150								
KU-201A	SCR	TRI	2					25								
KU-201B	SCR	TRI	2					25								
KU-201D	SCR	TRI	2					100								
KU-201G	SCR	TRI	2					50								
KU-201I	SCR	TRI	2					200								
KU-201K	SCR	TRI	2					300								
KU-201L	SCR	TRI	2					300								
KU-201V	SCR	TRI	2					50								
KU-201YE	SCR	TRI	2					100								
KU-201ZH	SCR	TRI	2					200								

GROUP XIII, DIODES-REGULATORS

TYPE NUMBER	KIND	TYPE	MAXIMUM			TYPICAL			MAX	TC	K _θ	FIG
			I _Z mA	T _{Opr} °C	P _Z mW	E _Z V	ΔE _Z %	I _Z mA	Z Ω			
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		
D808	REG	SI	33	125	280	7.7	10	5.0	6	.07	3	17
D809	REG	SI	29	125	280	8.7	10	5.0	10	.08	3	17
D810	REG	SI	26	125	280	9.7	10	5.0	12	.09	3	17
D811	REG	SI	23	125	280	11.0	10	5.0	15	.095	3	17
D813	REG	SI	20	125	280	12.7	10	5.0	18	.095	3	17
D814-A	REG	SI	40	125	340	7.8	10	5.0	6	.07		5
D814-B	REG	SI	36	125	340	8.8	10	5.0	10	.08		5
D814-D	REG	SI	24	125	340	12.8	10	5.0	18	.095		5
D814-G	REG	SI	29	125	340	11.0	10	5.0	15	.095		5
D814-V	REG	SI	32	125	340	9.8	10	5.0	12	.09		5
D815A(P)	REG	SI	14H	125	8W	5.6	10	50.0	/1	.045		13
D815B(P)	REG	SI	11H	125	8W	6.8	10	50.0	/1	.05		13
D815D(P)	REG	SI	650	125	8W	12.0	10	50.0	2	.09		13
D815G(P)	REG	SI	800	125	8W	10.0	10	50.0	2	.08		13
D815V(P)	REG	SI	950	125	8W	8.2	10	50.0	1	.07		13
D815YE(P)	REG	SI	550	125	8W	15.0	10	50.0	3	.10		13
D815ZH(P)	REG	SI	450	125	8W	18.0	10	50.0	3	.11		13
D816A(P)	REG	SI	230	125	5W	22	10	10.0	7	.12		13
D816B(P)	REG	SI	180	125	5W	27	10	10.0	8	.12		13
D816D(P)	REG	SI	110	125	5W	47	10	10.0	15	.12		13
D816G(P)	REG	SI	130	125	5W	39	10	10.0	12	.12		13
D816V(P)	REG	SI	150	125	5W	33	10	10.0	10	.12		13
D817A(P)	REG	SI	90	125	5W	56	10	5.0	35	.14		13
D817B(P)	REG	SI	75	125	5W	68	10	5.0	40	.14		13
D817G(P)	REG	SI	50	125	5W	100	10	5.0	50	.14		13
D817V(P)	REG	SI	60	125	5W	82	10	5.0	45	.14		13
D818A	REG	SI	33	120	300	9.0		11.0	18	.02	70	8
D818B	REG	SI	33	120	300	9.0		11.0	18	.02	70	8
D818D	REG	SI	33	120	300	9.0		11.0	18	.002	70	8
D818G	REG	SI	33	120	300	9.0		11.0	18	.005	70	8
D818V	REG	SI	33	120	300	9.0		11.0	18	.01	70	8
D818YE	REG	SI	33	120	300	9.0		11.0	18	.001	70	8

GROUP XIII, DIODES-REGULATORS

TYPE NUMBER	KIND	TYPE	MAXIMUM			TYPICAL			MAX	TC	K_{θ}	FIG
			I_Z mA	T_{opr} °C	P_Z mW	E_Z V	ΔE_Z %	I_Z mA	Z Ω			
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
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	10	46	.05		12
2S-168A	REG	SI	45	120	300	6.8	10	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 NUMBER	KIND	TYPE	TYPICAL WAVE- LENGTH cm	MAXIMUM								MIN CUR SENS A/W	OPR TEMP		FIG
				RES Ω	LC db	NF db	VSWR	PULSE PWR		PULSE ENERGY			MIN (-)°C	MAX (+)°C	
								CONT mW	PEAK mW	CONT erg	PEAK erg				
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	1K	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	13.0	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	SI		400	7.0		2.0		80	0.6	1.5		60	100	31
D405A	MIX	SI		350	6.0		1.7		80	1.0	1.5		60	100	31
D405AP	MIX	SI		350	6.0		1.7		80	1.0	1.5		60	100	31
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	
D408	MIX	SI	9.8	390	6.0	7.5	1.3	100	500		0.5		60	125	30
D501		SI	H.2										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	3.0				2.0		1K				60	100	30
D605	MIX	SI	3.2					600	2K				60	85	30
NG-S1	MIX	GE	9.8	400	8.5	3.0	3.0	80	250	0.1	3.0		60	70	28
NG-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
NG-S4	MIX	GE	3.2	400	6.5	3.0	3.0	50	250	0.1	3.0		60	70	28
DK-I1	DET	SI	9.8						200			0.5	50	70	30
DK-I2	DET	SI	3.2						200			0.2	50	70	30
DK-S1	MIX	SI	9.8	400	8.5	2.7	3.5	80	200	0.1	2.0		60	70	30
DK-S2	MIX	SI	9.8	400	6.5	2.0	3.0	50	100	0.06	2.0		60	70	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						100					60	80	30
DK-V1	VID	SI	9.8	15K				50	200			0.8	50	70	20
DK-V2	VID	SI	9.8	10K				50	100			1.2	50	70	20
DK-V3	VID	SI	3.2	15K				50	200			0.4	50	70	20
DK-V4	VID	SI	3.2	10K				50	100			0.8	50	70	20
DK-V5	VID	SI	9.8	10K				50	200			0.8	50	70	30
DK-V6	VID	SI	9.8	25K				50	200			0.8	50	70	30
DK-V7	VID	SI	3.2	10K				50	200			0.4	50	70	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 NUMBER	KIND	MAXIMUM			DARK		SENSITIVITY			T.C.		TIME CONT.	TEMP		WEIGHT gfm ^g	K AREA mm ²
		VOLTS	CUR. μ A	POWER mW	RESISTANCE m Ω	CURRENT μ A	mA/mm	MAX μ	CUT OFF μ	%	MIN (-) $^{\circ}$ C		MAX (+) $^{\circ}$ C			
FS-AG	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-AO	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-DO	CDSE	200			20.0		20K	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-KO	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		
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	
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-A1	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-A4	PBS	15			0.04		500	2.1	2.7	1.5		60	60		24	
FS-A6	PBS	30			0.05		500	2.1	2.7	1.5		60	60		115	
FS-B2	BIS	50			0.2		250	0.7	0.9			60	60		121	
FS-D1	CDSE	200			20.0		20M	0.75	1.2	2.0		60	40		25	
FS-D6	BIS	200			20.0		20M	0.75	1.2	2.0		60	40		115	
FS-K1	CDS	400			3.3		6000	0.64	0.9	0.2		60	80		25	
FS-K2	CDS	300			3.3		1200	0.52	0.9	0.12		60	80		25	
FS-K3	CDS	300			3.3		1200	0.52	0.9	0.12		60	80		25	
FS-K4	CDS	300			2.0		6000	0.64	0.9	0.2		60	80		24	
FS-K5	CDS	300			10.0		3000	0.64	0.9	0.2		60	80		7	
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	
FS-K8	CDS	300			10.0		1600	0.64	0.9	0.2		60	80		15	
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	

GROUP XVI, PHOTO AND PHOTOMULTIPLIER TUBES

TYPE NUMBER	KIND	TYPE	BULB DIMEN			CATHODE			MAXIMUM			OUTPUT SENS		DYNODES			AMPLIFICATION	
			SHAPE	DIAM mm	LGTH mm	AREA cm	SURF	SENS $\frac{\mu A}{lm}$	E_b V	I_k μA	DARK I		MIN Amp/L	OPR E_{vb}	DESIGN	MAT'L		NO
											Amp	(-) Exp						
F-1	PHO	VC	T	39	104		S2		30		5	11						
F-2	PHO	VC	T	20	67		S2	5	2		1	8	1					
F-3	PHM	VC	G	92	163			40	50									
F-4	PHO	VC	T	39	104		S2	70	80		1	14						
F-5	PHO		T	42	104		S1		100		8	11						
F-6	PHO		G	33	76		S7	40	100		1	11						
F-8	PHO		G	27	62		S2	80	150		1	8						
FEU-1	PHO		G	40	124		S2	400	250		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		S2	400	250		1	7	1	220				
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	7/2	S13	90	1500	100	5	8	1		L	AMK	8	5
FEU-11	PHM		T	52	235	16	S5	80	2500		8	7	5		V	CAM	12	7
FEU-12	PHM		T	52	235	16	S10	80	2500		8	7	5		V	CAM	12	7
FEU-13	PHM		T	52	162	17	S13	50	2200		4	7	6	2200	L	CAM	12	
FEU-14	PHM		T	52	162	17	S10	40	2200		4	7	6	2200	L	CAM	12	
FEU-15	SCC		T	31	115	3	S10	25	2200		4	7	6	1700	L	CAM	12	
FEU-16	SCC		T	31	115	12	S13	25	2200		4	7	6	1700	L	CAM	12	
FEU-17	PHM		T	48	181	7/1	S13	20	1400	100	3	7	10	900	L		13	
FEU-17A	PHM		T	48	181	7/1	S13	20	1400	100	3	7	10	900	L		13	
FEU-18	PHM		T	48	181	7/1	S3	20	1400	100	3	7	10	900	L		13	
FEU-18A	PHM		T	48	181	7/1	S3	20	1400		3	7	10	900	L		13	
FEU-19M	PHM		T	48	195	9	S10	35	2600	200	1	5	1000	2600	L		13	7
FEU-20	PHM		T	34	95	5	S13	20	1400	100	8	9	1	900	L		8	
FEU-22	PHM		T	48	181	7/1	S1	25	2000	300	2	8	1	1400	L		13	
FEU-23	PHM			305	450	700	S10	20	2400	10			10		L	AMK	11	5
FEU-24	SCC		T	80	230	44	S13	25	2000	100	3	7	10	1600	L		13	6

GROUP XVI, PHOTO AND PHOTOMULTIPLIER TUBES

TYPE NUMBER	KIND	TYPE	BULB DIMEN			CATHODE			MAXIMUM			OUTPUT SENS		DYNODES			AMPLIFICATION	
			SHAPE	DIAM mm	LGTH mm	AREA cm	SURF	SENS $\frac{\mu A}{lm}$	E_b V	I_k μA	DARK I		MIN Amp/L	OPR E_{vb}	DESIGN	MAT'L		NO
											Amp	(-) Exp						
FEU-25	PHM	T	34	109	5	S13	20	1700	100	5	8	1	1250	L		9	6	
FEU-26L	PHM	T	22	70	/1	S13	20	900		2	8	10	2000			7		
FEU-27	PHM	T	30	108	5	S17	30	2000		5	9					1		
FEU-29	SCC	T	48	195	9	S13	30	2300	200	3	8	10	1400	L	CAM	13	7	
FEU-31	PHM	T	22	79	10	S13	20	1400	750	5	7	10	1300	L		8		
FEU-32	PHM	T	34	123	5	S10	25	1800	200	1	8	1		L	AMK	11	6	
FEU-33	SCC	T	48	195	9	S13	30	2900		1	6	100	2100	L		13	7	
FEU-34	PHM				9	S13	30	2700		1	5	1000		L		13		
FEU-35	SCC	T	31	113	5	S13	30	1750		4	9	10	1400	L		8		
FEU-36	PHM		48	195	12	S13	30	2900	1M	2	5	2900		L		13		
FEU-37	PHM		48	178	9	S13	30	1800	200	3	6	1800		L		11		
FEU-38	PHM				9	S20	90	2000		1	7	100		L		13		
FEU-39	PHM				9	S13	25	1700		6	9	10		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	220	95	S20	80	3500		1	8	10	1800			12		
FEU-52	PHM	B	80	125	45	S20	80	3000		5	8	8	1700	V	CAM	12	7	
FEU-53	PHM	T	51	117	16	S9	40	2500	10M	4	7	40	1700	V	CAM	14	7	
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		S2	80	240		1	8	1					
STSV-4	PHO	VC	G	39	129		S2	80	240		1	7	1					
STSV-6	PHO	VC	T	27	104		S1	30			5	11						
STSV51	PHO	VC	G	30	63		S2	80	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	240		1	7	1					
TSG-4	PHO	GS	G	39	129		S1	100	240		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, THERMOCOUPLE								
TYPE NUMBER	KIND	DIMENSIONS		TYPICAL		RESPONSE s	f_{max} MHz	
		DIAM mm	LENGTH 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 NUMBER	KIND	USE	DIMEN		SHAPE	RESISTANCE			TEMP.		POWER		SENS $\frac{\Omega}{mW}$	
			DIAM mm	LTH 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		
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		
TKI-2	TMS	MEA	5	5	CYL	10	1000	2.6	40	70				
TSH-2	TMS	MEA					150	3.4			13.5	18		
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				
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	POW	8	3	CYL	150					10	15	20	
T8E	TMS	POW	8	3	CYL	150					7	10	30	
T8M	TMS	POW	8	3	CYL	200					9	11	66	
T8R	TMS	POW	8	3	CYL	125					7	12	10	
T8S1	TMS	POW	8	3	CYL	120					9.5	24	10	
T8S1M	TMS	POW	8	3	CYL	120					9.5	24	10	
T8S2	TMS	POW	8	3	CYL	150					8	19	12	
T8S2M	TMS	POW	8	3	CYL	150					8	19	12	
T8S3	TMS	POW	8	3	CYL	150					7	23	10	
T8S3M	TMS	POW	8	3	CYL	150					7	23	10	
MMT-9	TMS	COM	/3	19	DSC	10	5000	2.9	60	120		10		
T9	TMS	POW	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		
TKP-20	TMS	POW	33	68			500	2.0				2H		
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 NUMBER	DIMENSIONS			VOLTAGE			POWER		INTER RES	FLASH CONDITIONS				LIGHT OUTPUT			LIFE	
	SHAPE	DIAM	LTH	MIN DROP	OPER	FIRING	AVG	PEAK		DISCHG CAP	TIME	FLASH FREQ	ENERGY	FLASH	AVG	PEAK	NO.OF FLSH	HRS
		mm	mm	V	V	V	W	kW	Ω	pF	μs	pps	J	cd/s	cd	cd		
IFB300	R	8	85	240	300	1500	40	36	2.5	65H	8K	0.13	300	500	500	60K	10K	
IFK15-1	T	29	60	60	300		3	90	1.5	800	400	0.1	36	36	36	9K	2K	
IFK20	T	4	10	100	130	700	2	100	1.6	25H	200	0.1	20	20	20	100K	10K	
IFK50	T	4	20	140	200	1K	5	125	0.3	25H	400	0.1	50	70	70	180K	10K	
IFK120	U	5	30	180	300	1K	12	120	0.8	25H	1K	0.1	120	250	250	250K	10K	
IFK500	P	30	45	400	500	3500	30	65	4.0	4K	8K	0.05	500	1000	1000	130K	10K	
IFK2000	U	9	70	250	320	2K	300	200	4.5	8K	2K	0.7	400	1200	1200	600K	40K	
IFK20000	G	85		2K	6K	20K	55H	10M	3.5	550	11H	0.55	10K	34K	34K	30M	7K	
IFK80000	G	1H		3K	6K	20K	18K	13M	2.5	39H	5K	0.25	70K	240K	240K	36M	5K	
IFP200	T	5	200	450	500	2K	27	140	2.0	16H	16H	0.13	200	400	400	250K	10K	
IFP500	T	5	350	450	500	3K	65	70	3.5	4K	7K	0.13	500	1000	1000	140K	10K	
IFP1500	T	5	600	900	1K	4K	100	160	6.0	3K	9K	0.06	15H	4000	4000	450K	10K	
IFP4000	T	6	800	1300	1400	5K	270	250	8.0	4K	16K	0.06	4K	12K	12K	750K	10K	
IFP15000	T	9	600	1600	2400	5K	1250	3300	1.8	5K	45H	0.08	15K	50K	50K	11M	10K	
ISK10	U	5	30	180	300	1000	10	3	0.8	1.0	15	200	70.1	7U	15	500		50
ISK25	U	5	20	250	300	1000	20	130	0.4	450	150	1	20	40	40	30K		30
ISP10	T	1	62	700	1000	3000	10	6	30	0.2	18	100	0.1	50U	5	3K		500
ISP70	T	0.5	70	900	1200	3000	70	10	1H	0.2	18	400	0.2	100U	40	6K		100
IS-SH15	T	1	2	250	1000	1200	1	20		20	15		10	5	5	300K	1	5K
IS-SH100-1	T	0.7	2	2200	3000	3500		4000		11	15		50	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	8	40K		50

GROUP XXI, COUNTERS

TYPE NUMBER	KIND	RADIATION	QUENCHING	CATHODE	DIMENSIONS		PLATEAU		MAXIMUM			TEMP		CAP	MIN R _i	FIG
					DIAM	LENGTH	MIN	MAX	RATE 10 ³ /min	PLATEAU		MIN	MAX			
					mm	mm	V	V		WIDTH V	SCOPE % V	(-)°C	(+)°C	pF	MΩ	
AS-1	COU	RAG			132	18	830	940		80	0.2	0	35			
AS-2	COU	RAG		AL	160	25	750	860		100	0.15	0	35			
GS-4	COU	GAM	SQ	GR	180	23	1100	1300		200	1.0			25	8	3
GS-6	COU	GAM	SQ	GR	266	23	1100	1300		200	1.0			25	8	3
GS-7	COU	GAM	SQ	GR	145	16	1100	1300		150	1.0			25	30	3
GS-8	COU	GAM	SQ	GR	185	16	1100	1300		150	1.0			25	30	3
GS-9	COU	GAM	SQ	GR	367	33	1100	1300		250	1.0			25	8	3
GS-10	COU	GAM	SQ	GR	225	16	1100	1300		150	1.0			25	30	3
GS-11	COU	GAM	SQ	GR	185	33	1100	1300		200	1.0			25	8	3
GS-12	COU	GAM	SQ	GR	145	16	1100	1300		150	1.0			25	30	3
GS-30	COU	GAM	SQ	GR	662	33	1100	1300		150	1.0			25	8	3
GS-60	COU	GAM	SQ	GR	667	63	1100	1300		150	1.0			25	8	3
MS-4	COU	GAM	SQ	CU	180	23	720	780	25	200	1.0	40	50	25	8	4
MS-6	COU	GAM	SQ	CU	266	23	720	780	25	200	1.0	40	50	25	8	4
MS-7	COU	GAM	SQ	CU	145	16	720	780	25	100	1.5	25	50	25	30	4
MS-8	COU	GAM	SQ	CU	185	16	720	780	25	100	1.5	25	50	25	30	4
MS-9	COU	GAM	SQ	CU	367	33	720	780	25	250	1.0	40	50	25	8	4
MS-11	COU	GAM	SQ	CU	185	33	720	780	25	200	1.0	40	50	25	8	4
MS-12	COU	GAM	SQ	CU	145	16	720	780	25	100	1.5	25	50	25	30	4
MS-13	COU	GAM	SQ	CU	100	23	720	780	25	200	1.5	40	50	25	8	5
MS-14	COU	GAM	SQ	CU	160	23	720	780	25	200	1.0	40	50	25	8	5
MS-16	COU	GAM	SQ	CU	250	23	720	780	25	200	1.0	40	50	25	8	5
MST-17	COU	RET	SQ	CU	100	40	1600		10	150	0.5	30	50	10	7	6
MSTR-4	COU	RET	SQ	CU	180	40	1200	1350	25	200	0.5	5	35	25	8	7
SAT-7	COU	ALP			70	25	330	400		60	0.12	40	50			
SAT-8	COU	AAB				4	500	1000		300	0.03	40	50			
SBM-7	COU	RET			335	26							50			
SBM-8	COU	RET			335	26							50			
SBS-1	COU	RAG			125		800	1200		150	0.03	50	50			
SBS-4	COU	RET		GR	362	23							50			
SBS-5	COU	BET		GR	255	23							50			
SBT-10	COU	AAB		LD		51	340	460		80		60	60			
SBT-3	COU	AAB			93	50	1800	2100		150		30	50			
SBT-7	COU	BET			72	20	340	380		80	0.12	40	50			
SBT-8	COU	AAB			75	20	1100	1700		150		30	30			

GROUP XXI, COUNTERS

TYPE NUMBER	KIND	RADIATION	QUENCHING	CATHODE	DIMENSIONS		PLATEAU		MAXIMUM			TEMP		CAP	MIN R _i	FIG
					DIAM mm	LENGTH mm	MIN V	MAX V	RATE 10 ³ /min	PLATEAU		MIN (-)°C	MAX (+)°C			
										WIDTH V	SCOPE % V					
SGS-5	COU	GAM			60	8	340	440		80	0.20	50	50			
SGS-6	COU	GAM			90	8	340	440		80	0.15	40	80			
SI-1BG	COU	BAG	SQ	NI	60	15	375	410				40	50	5	/1	11
SI-1G	COU	BET	SQ	FE	94	16	280	320	60	80	1.25	40	50	10	5	8
SI-2B	COU	RET	SQ	SN	90	70	1350	1750	8	150	0.5	30	50	10	7	13
SI-2BG	COU	BAG	SQ	NI	60	15	375	410				40	50	5	3	12
SI-3B	COU	BET	SQ	CU	90	40	1650		10	150	0.3	20	40	10	7	6
SI-4G	COU	GAM	SQ	W	367	33	720	800	25	200	1.0	40	150	25	8	1
SNM-3	COU				135	18	700	1000		100	0.05	0	30			
SNM-5	COU				300	35	1200	1800		100	0.05	20	30			
SNM-7	COU				650	35	1800	2500		100	0.05	0	30			
SNM-8	COU				16H	35	1300	1700		150	0.05	0	30			
SNM-9	COU				133	20	1000	1600		400	0.05	0	30			
STS-2	COU	RET	SQ	FE	180	24	285	335	40	80	1.25	40	50	10	5	9
STS-3	COU	BET	SQ	FE	265	23	285	335	30	80	1.25	40	50	10	5	8
STS-5	COU	RET	SQ	FE	113	12	280	330	100	80	1.25	40	50	10	5	9
STS-6	COU	RET	SQ	FE	200	22	285	335	60	80	1.25	40	50	10	5	10
STS-8	COU	RET	SQ	FE	220	23	285	335	40	80	1.25	40	50	10	5	8
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	0.75	40	50	25	8	1
VS-6	COU	GAM	SQ	W	266	23	720	800	25	200	0.75	40	50	25	8	1
VS-8	COU	GAM	SQ	W	185	16	720	800	25	150	1.0	40	50	25	30	1
VS-9	COU	GAM	SQ	W	367	33	720	800	25	250	0.75	40	50	25	8	1
VS-11	COU	GAM	SQ	W	185	33	720	800	25	200	0.75	40	50	25	8	1
VS-13	COU	GAM	SQ	W	100	23	720	800	25	150	1.0	40	50	25	8	2
VS-14	COU	GAM	SQ	W	160	23	720	800	25	200	0.75	40	50	25	8	2
VS-16	COU	GAM	SQ	W	250	23	720	800	25	200	0.75	40	50	25	8	2

GROUP XXII, DISCHARGE DIODES

TYPE NUMBER	DIMEN		GAS	CATH		FIRING		PULSE		MIN INTER RES	MAX CAP	AMB TEMP	
	LTH	DIAM		TYPE	KIND	MIN	MAX	I-amp J-joule	TIME			MIN	MAX
	mm	mm				V	V		s			(-)°C	(+)°C
R-2	17	16.5		C		1300	2K		600	20		50	80
R-3	70	21.5		C	BAO		600	140 12U	300	100	1	60	70
R-4				C	BAO		75						
R-5	41	22		C	BAO	160	250			100			
R-6	110	55				800			200 M	100			
R-7	45	18	HK	C	BAO	270	330		2	20	10	60	100
R-8	50	20	HK	C	BAO	450	550		2	20	10	60	100
R-9	55	20	HK	C	BAO	900	1100		2	20	10	60	100
R-10	55	20	HK	C	BAO	1375	1725		2	20	40	60	100
R-11	132	35		C	NI	2250	2750	2HU					
R-12	30	12	AR	C	K	145	175	20 1U		1000			
R-54						7200	9800						
R-350	62	20	AR	C	BA	310	390	3 2	0.002	5K	10	50	50
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 15U	50	100	/1	60	70
RB-3	41	22		C	BA	220	235	30 1HU	7	100		60	70
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				

GROUP XXIII, DECATRONS

TYPE NUMBER	KIND	VOLTAGES						TYP I _b mA	PULSE		DIMEN	
		MAXIMUM				TYPICAL			TYP	MAX	LTH	DIA
		E _b V	FIRING V	BIAS V	DRP V	OPER V	K ₁ K ₂ V ₂					
IN-1	DEC	250						2.5			65	30
OG-1	DEC	450	300	150	15	150	50	1.3	40	8	77	34
TNI-1.5	DEC	160				90		1.5			35	10
	IN-2	DEC	250	200				2.0			35	19
OG-2	DEC	450	300	150	15	150	50	1.3	60	3	77	34
OG-3	DEC	460	420	120	15	190	40	0.7	18	20	83	34
OG-4	DEC	450	375	200		125					76	30
OG-5	DEC	400	350	120	20	175	60	1.3	35	10	74	34

GROUP XXIV, LIGHT AMPLIFIERS

TYPE NUMBER	KIND	K	SCRN COLOR	MAX DIMEN			AMP μ	TYP E _b V	RESOL	
				K	SCREEN				10 ⁻³	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

BASE NO.	SECTION 1										SECTION 2					SEC. 4		DEFLECTION 1					DEFLECTION 2						
	H	H	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	g ₁	g ₂	g ₃	A	A ₃	K	A	A ₅	D ₁	D ₂	D ₃	D ₄	D ₁	D ₂	D ₃	D ₄
A4	2	4	3	1					CP																				
A7	1	7	6	5					2									3 CP											
A8	2	8	7	5					3									CP											
A9	2	7	6	4					CP																				
A12	1	12	2	3					8									4											
A14	1	14	2	3					9																				
A20	1	20	3	5	16				11									5 CP											
A25	1	25	2	24	6				23									CP											
B7	3	4	2	5	7				6									11											
B77	1	7	4	2	3				CP									CP											
B8	1	8	3	6					CP																				
B9	3	9	1	8					6																				
B12	1	12	11	2	10				6																				
B14	1	14	2	3					9									CP											
C8	1	8	7	2	6				4									5 CP											
C14	1	14	13	12	CP				CP																				
D8	2	8	6	4					CP																				
D10	1	5							2																				
D12	1	3	2						CP																				
D13			2						6																				
D14	1	14	2	3	4				5									CP											
DS1	4	5	5						CP																				
DS2	2	7	2						CP																				
DS3	1	5							CP																				
DS4	2	7							4																				
DS5	1	2	1						CP																				
DS6	2	5																											
DS7	1	3							1																				
DS8	7	8	3						CP																				
DS9	1	2	CP																										
DW1	2	8							4																				
DW2	1	2	3						4																				
DW3	1	8	3						2																				
DW4	2	8	8						4																				
DW5	2	6	3						1																				

GROUP XXV, BASES

BASE NO.	SECTION 1										SECTION 2					SEC. 4		DEFLECTION 1				DEFLECTION 2			
	H	H	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	g ₁	g ₂	g ₃	A	A ₃	K	A	A ₅	D ₁	D ₂	D ₃	D ₄
DW6	3	4	5						7								1								
DW7	2	7	8						3								5								
DW8	1	3	2						4								5								
DW9	3	4	1						7								5								
F8	1	8	7		3				5								2								
G8	1	8		6					CP																
ID1	4	5	2	1					7								3								
ID2	4	5	3	1					7								2								
ID3	4	5	7	8					1								3								
P1S	4	5	3	2	9	1			7	1				6											
P3S	1	7	8	6	3	4			2	5															
P4S	1	7		4	6	1			CP																
P5S	1	8		2	3	5			6	7															
P6S	1	2		3	4	6			CP																
P7S	1	7		4	3	5			6																
P8S	4	5		3	1	6			7																
P9S	4	8	1	2	3	5			6	7															
P10	2	7	8	CP	3	1			CP																
P11	1	2		3	CP	6			CP																
P12	1	6		4	3	5			CP																
P13	1	7		4	3	5			CP																
P14	2	7		5	3	4			CP																
P15	1	6	7	CP	3	5			CP																
P17	4	5	3	9	1	8			6																
P18	8	9	3	5	2	4			1																
P19	2	7		4	5	3			CP																
P20	4	5	1	2	8	9			7																
P21	4	5	3	1	6	3			CP																
P22	2	6	1	7	3	8			4																
P23	2	7	3	5	8	3			1																
P24	4	9	1	7	2	1			10																
P26	4	9	1	10	6	1			3																
P27	2	6	3	4	5	3			1																
P28	2	4	6	7	1	6			3																
P29	3	4	6	7	2	5			1																

GROUP XXV, BASES

BASE NO.	SECTION 1										SECTION 2					SEC. 4		DEFLECTION 1				DEFLECTION 2			
	SECTION 1										SECTION 2					SEC. 4		DEFLECTION 1				DEFLECTION 2			
	H	H	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	g ₁	g ₂	g ₃	A	A ₃	K	A	A ₅	D ₁	D ₂	D ₃	D ₄
P30	3	6	4	1	7	4			5																
P31	4	5	7	1	2	8			6																
P32	4	5	9	6	7	1			3																
P34	4	5	6	7	3	8	2		1																
P36	4	9	1	10	6	7			3																
P37	4	5	6	8	1	7	3	2	9																
P38	4	5	7	2	1				CP																
PD3	4	5	1	2	9	7			6																
PD5	2	7	1	5	4	1			3																
PD6	2	7	8	CP	6	1			3																
PD7	4	5	2	1	7	2			6																
PD8	6	8	3	1	2	3			CP																
PD9	4	5	6	7	3	6			1																
PS1	1	8	6	7	5	2			3	4															
PS2	1	7		6	3	4			2																
PS3	1	8		7	5	4			3	2															
PS4	4	5		3	7	1			CP	2															
PS5	4	5	6	7	3	2			1																
PS6	1	7		4	6	2			CP																
PS7	2	7	8	5	4	8			CP																
PS8	2	7		4	5				CP																
PS9	4	5	3	7	2	3			1																
PT1	3	5		2	1	6			4																
PT2	7	8	6	CP	3	6			2																
PT3	2	7	8	1	4	8			6																
PT4	4	5	7	8	9	7			6	7															
PT5	4	5	2	3	7	2			6	2															
PT6	4	5	8	9	7	8			6																
T1E	4	5	1	2	9				7	8															
T1S	1	4		3					CP																
T2S	4	5	1	2					7																
T3S	1	4	5	3					2																
T10	2	6		5					7																
T11	1	7	2	4					CP																
T12	3	7	4	2					1																

CP

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CP
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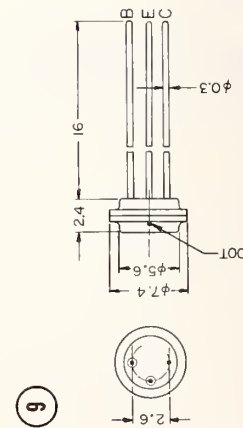
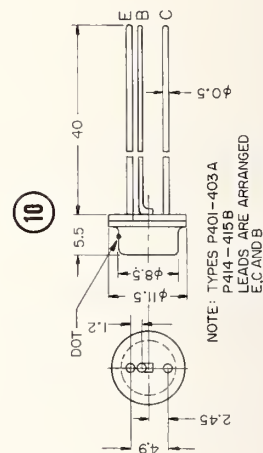
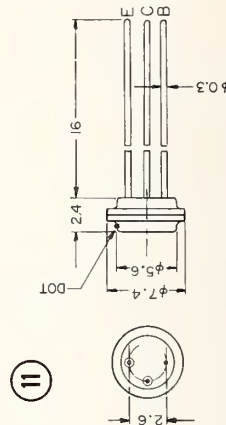
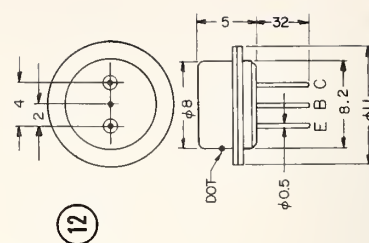
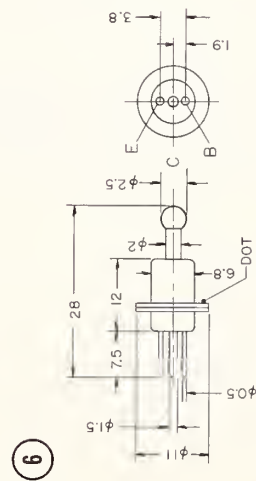
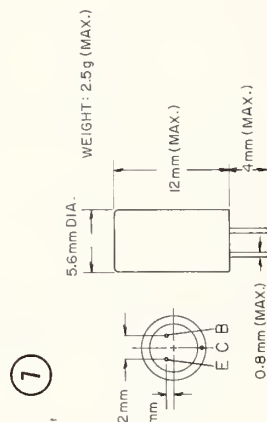
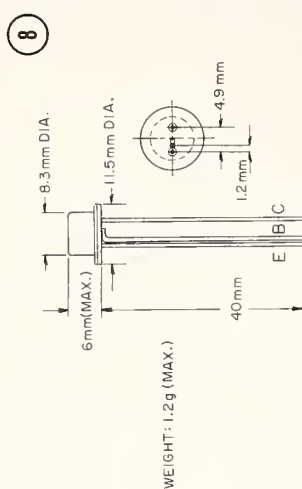
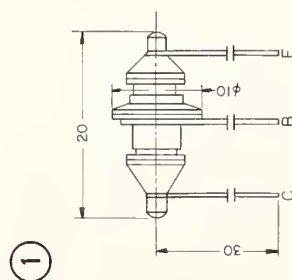
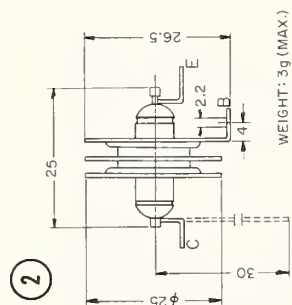
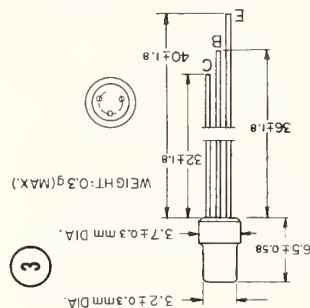
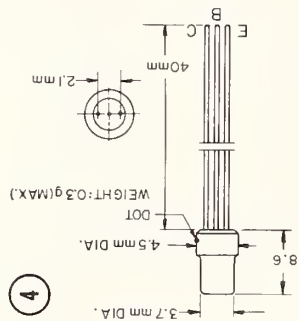
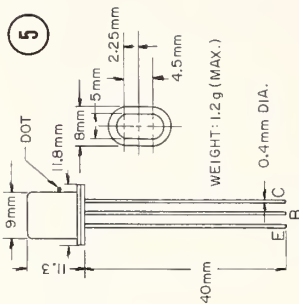
GROUP XXV, BASES

BASE NO.	SECTION I										SECTION 2					SEC. 4		DEFLECTION I				DEFLECTION 2			
	H	H	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	g ₁	g ₂	g ₃	A	A ₃	K	A	A ₅	D ₁	D ₂	D ₃	D ₄
T13	2	7	1	8					5																
T14	5	10	1	3					7																
T15	4	5	1	9					CP																
T16	1	7	3	5					4																
T17	1	6	3	7					2																
T19	3	8	2	4					5					9			6								
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									CP																
TD1	4	8	6	7					1					3			5								
TD3	2	7	8	CP					3								4								
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								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	1					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															
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4AJ									5																

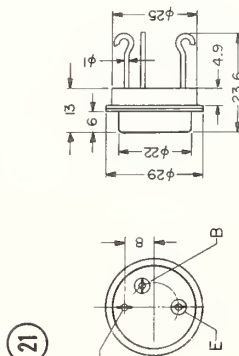
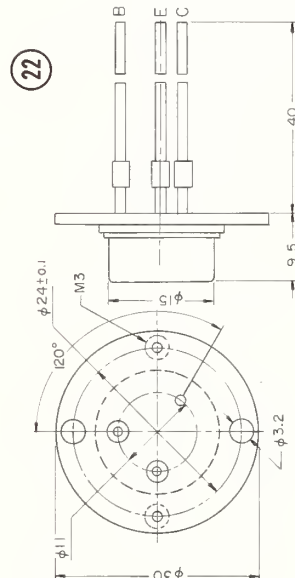
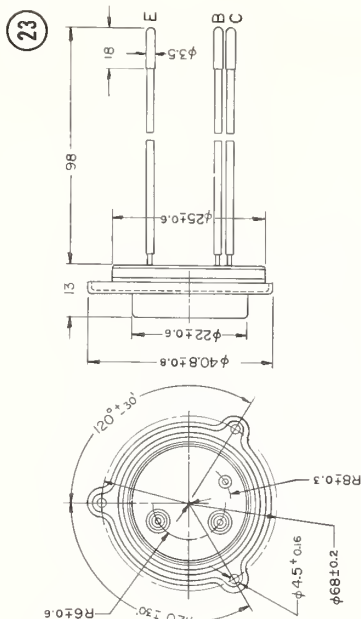
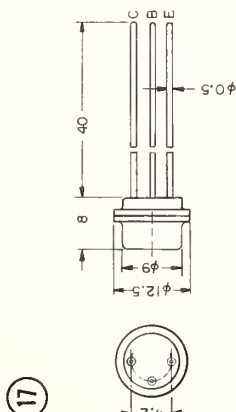
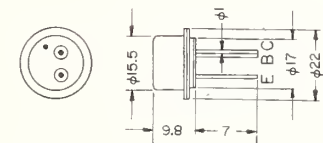
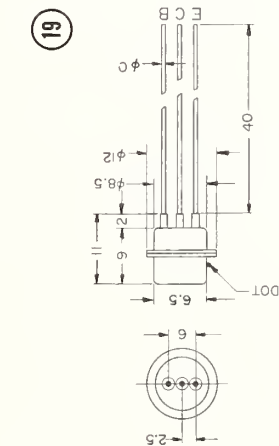
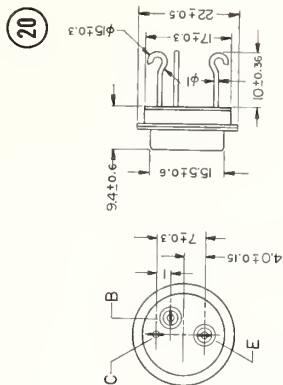
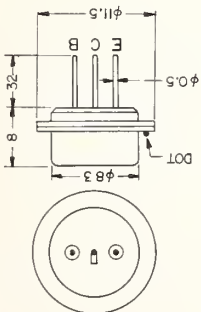
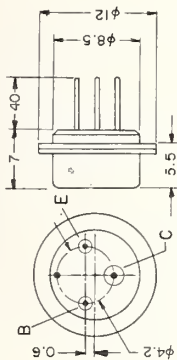
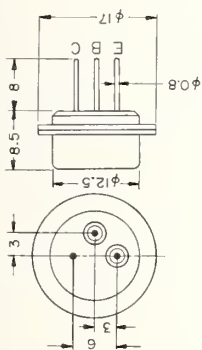
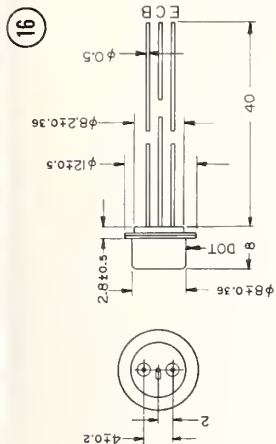
GROUP XXV, BASES

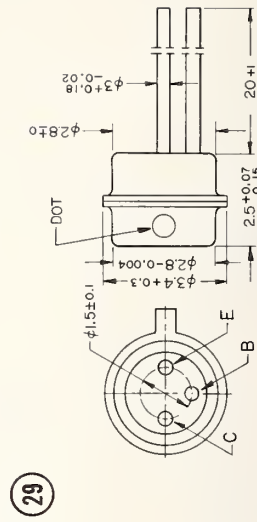
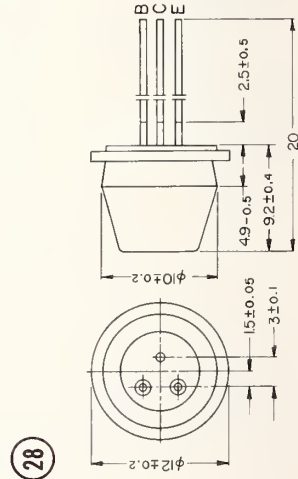
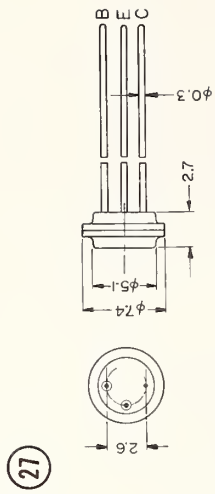
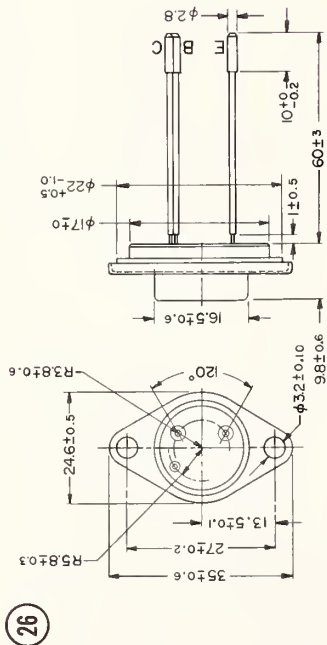
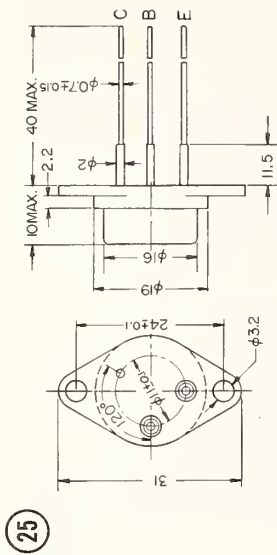
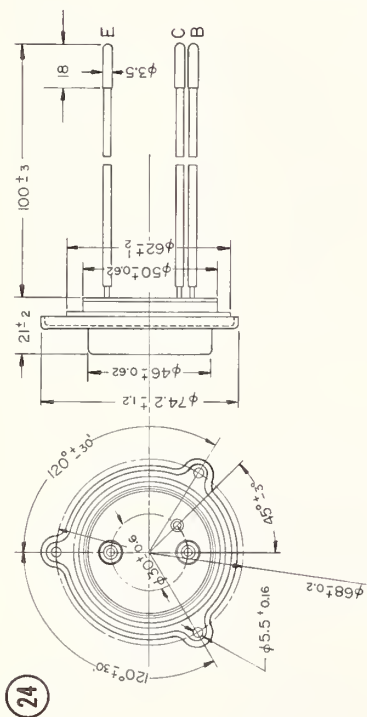
BASE NO.	SECTION 1										SECTION 2					SEC. 4			DEFLECTION 1				DEFLECTION 2			
	H	H	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	g ₁	g ₂	g ₃	A	A ₃	A	K	A	A ₅	D ₁	D ₂	D ₃	D ₄
4BB	2	7	8	CP					CP																	
4BQ	2	7	8						3																	
4D	1	4		3					2																	
4F	1	3		4					2																	
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																	
6RT	3	4	5						2																	
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																	
6X	2	7		5	4	7			3																	
7AB	2	7		4	3	6			3																	
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																	
7BK	3	4	7	1	6	2			5																	
7BP	1	7	4	2	3	4			CP																	
7BQ	3	4	2	1					7																	
7BS	3	4	2	6					1																	
7CH	3	4	2	1	6	7			5																	
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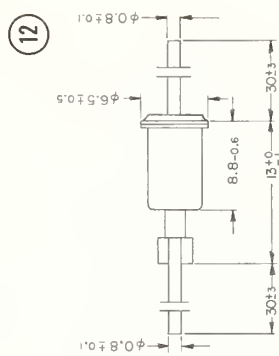
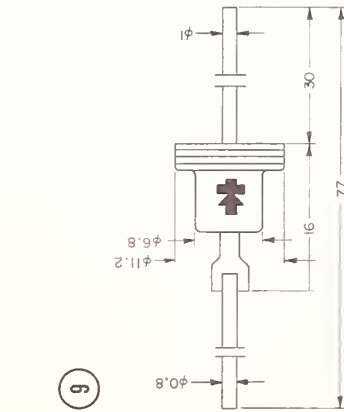
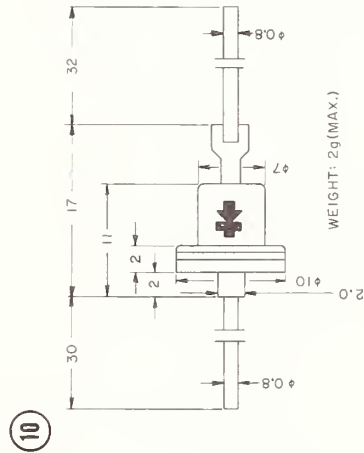
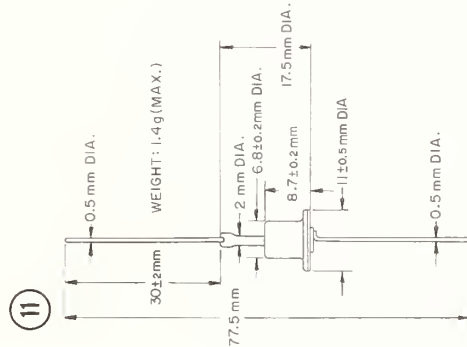
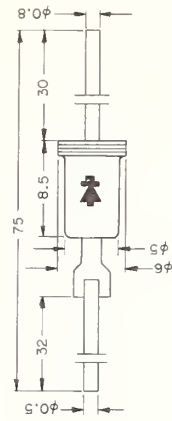
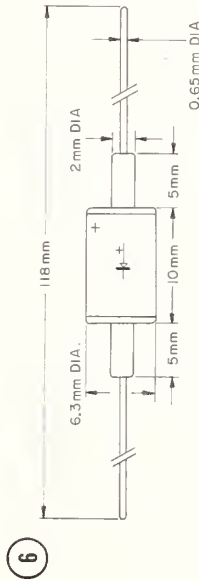
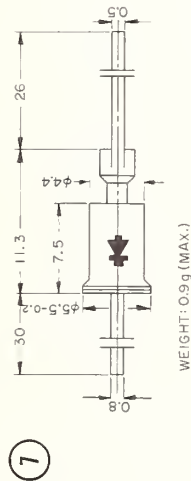
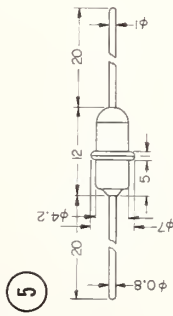
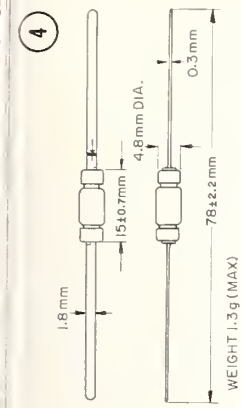
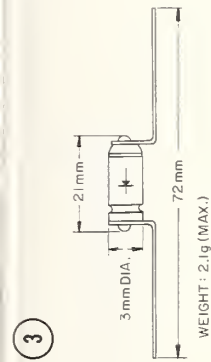
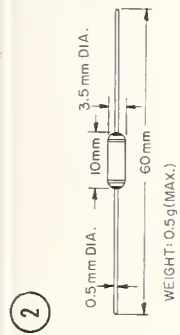
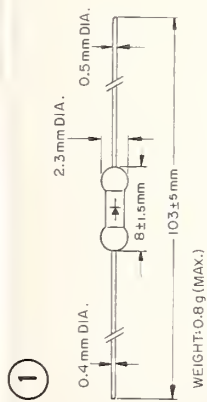
TRANSISTOR OUTLINE DRAWINGS
GROUP X



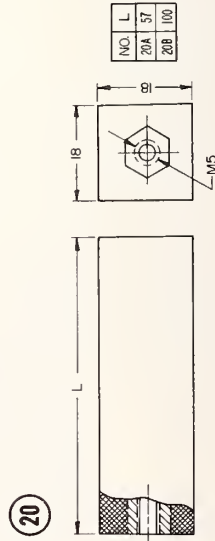
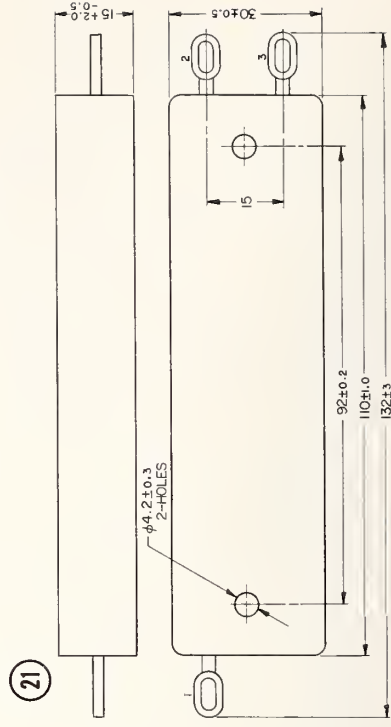
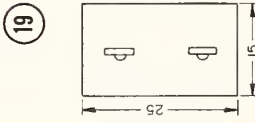
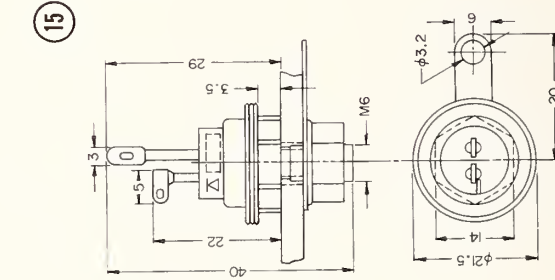
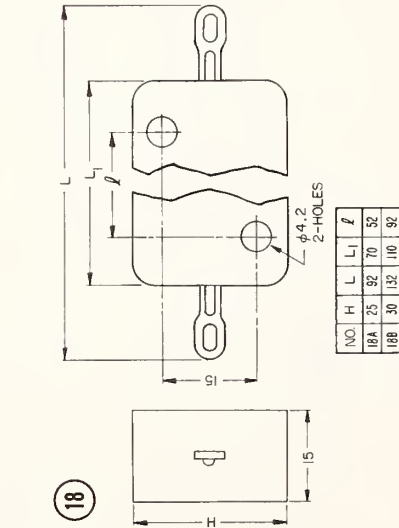
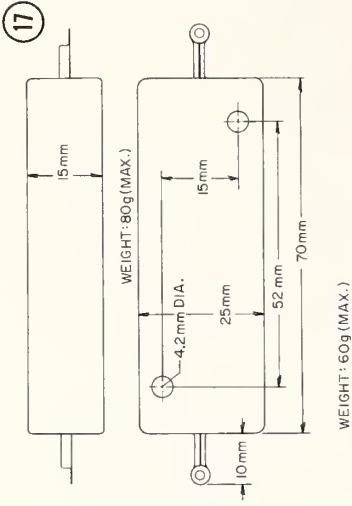
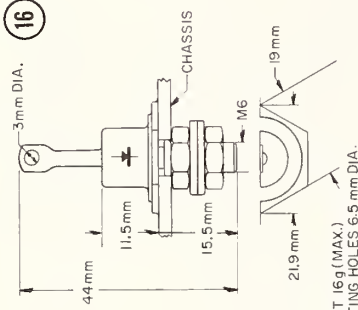
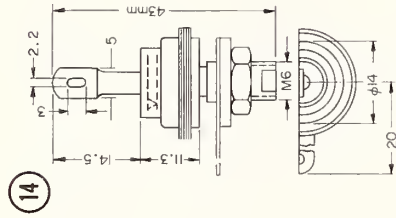
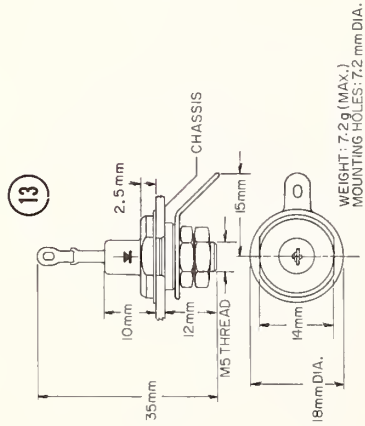
TRANSISTOR OUTLINE DRAWINGS (CON'T)



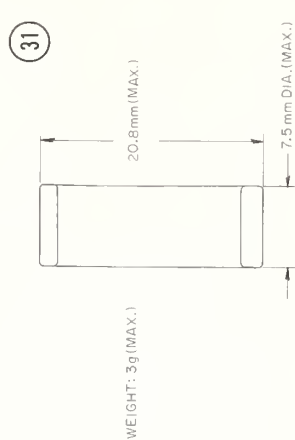
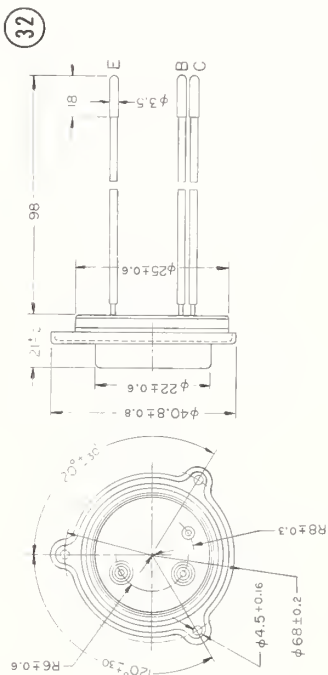
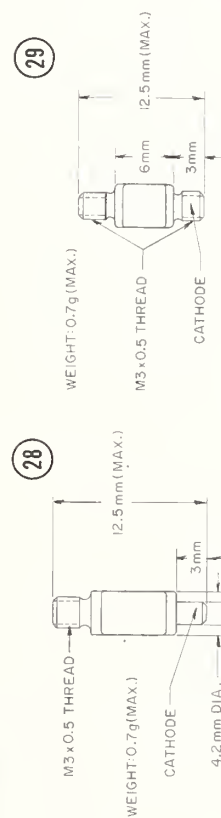
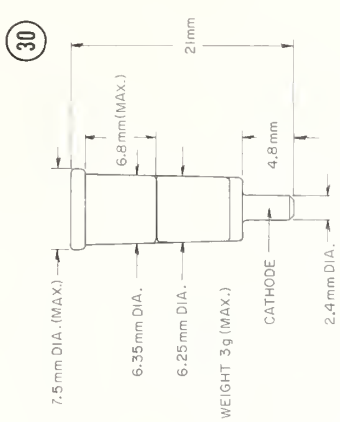




DIODE OUTLINE DRAWINGS GROUPS XI, XII, XIII & XIV



DIODE OUTLINE DRAWINGS (CON'T)



DIODE OUTLINE DRAWINGS



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PERIODICALS

NONPERIODICALS

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