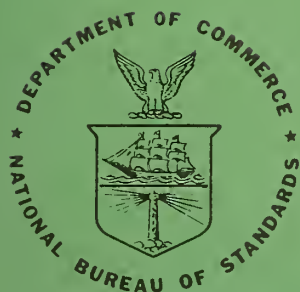




TECHNICAL NOTE

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

² Located at Boulder, Colorado 80302.

³ Located at 5285 Port Royal Road, Springfield, Virginia 22151.



TECHNICAL NOTE 441

ISSUED JULY 1968

(Supersedes Technical Note 265)

TABULATION OF PUBLISHED DATA ON SOVIET ELECTRON DEVICES THROUGH OCTOBER 1967

Charles P. Marsden

**Electronic Instrumentation Division
Institute for Applied Technology
National Bureau of Standards
Washington, D. C. 20234**

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:

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

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

POSTFIX

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

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
BA	Barium (metal) cathode	DSC	{ With diode, e.g., triode-diode Disc shape
BAG	Beta and gamma radiation	DUO	Double, e.g., double diode with separate cathodes
BAL	Ballast or current regulator	DWD	{ Duo diode (single cathode) With duodiode, e.g., triode duodiode
BAO	Barium oxide cathode	E	Common emitter operation
BEA	{ Beam pentode With beam pentode, e.g., triode-beam pentode	EL	Electrometer tube
BET	Beta radiation	ELM	Electromagnetic focus or deflection
BIS	Bismuth sulphide	ELS	Electrostatic focus or deflection
BL	Blue luminescence	F	Filamentary type cathode
BWT	Backward Wave Tube	FE	Iron cathode; counter tube
C	{ Circular dynode arrangement Common collector operation Cold cathode 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 Compensation of temperature thermistors	GAS	Gallium Arsenide
CON	{ Control Switch Temperature control	GDN	Germanium diffused junction, n-type
COU	Counter tube	GDP	Germanium diffused junction, p-type
CP	Cap, external in tabulation of bases	GE	Germanium
CS	Cesium photo surface	GEA	Germanium alloy junction
CSB	Cesium antimony photo surface	GEP	Germanium point-contact
CU	Copper cathode; counter tube	GPP	Germanium point-contact, p-type
CYL	Cylindrical shape (Thermistors)	GR	{ Green luminescence Graphite cathode; counter tube

GS	Gas-filled	MX	} Mixer
GSP	Germanium surface-barrier, p-type	MIX	
		MO	Molybdenum cathode
GTB	Gated beam pentode	MOD	Modulator
H	} Heater type cathode Hecto (10^2)	N	} Nano (10^{-9}) n-type construction S/C
HE		Helium 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
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
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
		VR	Voltage regulator
SH	Short persistence screen		{ Change of units to watts
SI	Silicon	W	{ Tungsten cathode
SIA	Silicon alloy junction		{ 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	**	{ The meaning of these symbols indicated in the column heading
SWI	Switching diode	#	
T	Thoriated tungsten cathode	/	Less than (before digits)
TET	Tetrode	*	Obsolete type
THM	Thermocouple tube		
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		
T0S-M	TMS	CON	XIX		
0.24812-1A	BAL	SIN	VI		
0.3817-35	BAL	SIN	VI		
0.3865-135	BAL	SIN	VI		
0.425855-12	BAL	SIN	VI		
0.6P2b	PND	SIN	II	CK505AX	
0.6Z+66	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		
0G-S1	MIX		XIV		
0G-TS1	REC		XI	02G+	
DK-I1	MIX		XIV		
DK-S1	MIX		XIV		
DK-V1	DET		XIV		
DL-S1	MIX		XIV		
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/A	DIO	SIN	IV		
GG1-0.5/5	DIO	SIN	IV	V61.5/5000+	
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		
GRI-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+, 829B\$	
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.
TG1-3.2/1.3	TRI	THY	VII		
TG1-6.4/1.3	TRI	THY	VII		
TG1-12.5/1.3	TRI	THY	VII		
TGI-0.1/0.3	TRI	THY	VII		
TGI-1B	TRI	THY	VII		
TGI-1-3/1	TET	THY	VII		
TGI-1-10/1	TRI	THY	VII		
TGI-1-35/3	TRI	THY	VII	3C45S	
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		
TKHI	TRI	THY	VII	313C	
TKH1B	TRI	THY	VII		
TKHI-16	PND	VII			
TM-1	TRI	SIN		6550+, 2C40S	
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		
TSG-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		
VSTS-1	PHO	XVI		F-3+	
VT-1	TRI	THY		TG-2.5/5+	
1A1P	PTG	SIN	II	1R5S, DK91, DK192	770A-55
1A2P	PTG	SIN	II	DK96=, 1R5S	9836-61
1B1P	PND	DIO	II	1S5S, DAF91=, DAF191	800A-56
1B2P	PND	DIO	II	DAF96=, 1S5S	9837-61
185-9	BAL	SIN	VI		
1810-17	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	1T4S, DF91=	7707-55
1K2P	PND	SIN	II	DF96=, 1T4S	9946-62
1K12B	PND	SIN	II		
1N1	*TRI	TWN		1N3S=	
1N3S	TRI	TWN	II	1N1+, 1G6-6T\$	
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		1T51S+, 1VD1+	
1TS1S	DIO	SIN	II	1TS1+, 1VD1+	
1TS7S	DIO	SIN	II	DY30=, 1B3/8016\$	8359-57
1TS11P	DIO	SIN	II		
1TS21P	DIO	SIN	II		
1V3/8016	*DIO	SIN		1T57S+, 1B3/8016\$	
1V01	*DIO	SIN		1TS1, 1TS1S+	
1V02	*DIO	SIN		1T57S+, 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	GOST SPEC. NO.
D2YE	*REC	XI		DG-TS4**	
D2ZH	*REC	XI		DG-TS5**	
DG-S2	MIX	XIV			
DG-TS2	REC	XI		D2D+	
DI-2-10	*DIO	SIN		2D1S+	
DK-I2	MIX	XIV			
DK-S2	MIX	XIV			
DK-V2	DET	XIV			
DL-S2	MIX				
DSn2-10	*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	BEA SIN	II			
GUZH-2	BEA SIN			6807+, 807\$	
GZH2	*PND SIN			6413+	
I-2-50/1.5	TRI IGN	IV			
IN-2	DEC	XXIII			
KF-2	BEA TWN			GU-32+, 832-A5	
KS-2	TRI SIN			GU-4+	
KZH-2	BEA SIN			G-807+, 807\$	
MTI-2	TRI THY			TGI-200+	
OG-2	DEC	XXIII			
P2A	X				
P2t	X			OC821=	
PI-2	TRI THY			TG-213*	
R-2		XXII			
RB-2		XXII			
S24	X				
S23	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	GOST SPEC. NO.
ST2S	BAL TWN	VI			
STS-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			
TO-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		DI-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			2VDRA+, 2TS2S+, 2X2\$	
2N1	TRI DUO	II		1J6GT\$, 2N1M*, SB243, S0243	
2N1M	*TRI DUO			2N1+, SB243+, S0243+	
2N-2	DEC	XXIII			
2P1	BEA SIN	II		SB244+, S0244+	
2P1M	*BEA SIN			2P1P+, SB244	
2P1P	BEA SIN	II		DL94=, 2P1M, 3S4\$	8005-56
2P2	*BEA SIN	II		3S4\$	
2P2P	BEA SIN	II		DL96=, 3S4\$	
2P3	BEA SIN	II		SB258+, S0258+, 2P2M+	
2P5H	PND SIN	II			
2P9	*BEA SIN			2P9M+, 2P9S	
2P9M	*BEA SIN	II		2P9+, 2P9S, 6AK7	
2P9S	BEA SIN			2P9M+, 2P9	
2P19B	PND SIN	II			
2P21S	BEA 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		6S85+, 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	5B245+	
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-53	MIX		XIV		
D6-TS3	REC		XI		
DK-53	MIX		XIV		
DK-V3	DET		XIV		
DL-53	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		
SBT-3	COU		XXI		
S63P	REG		V		
S63S	DIO	SIN	V	0C3\$	
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		TR1-5/2**	
3A4S	PND	SIN	II		
3B4S	BEA	SIN	II		
3E29	*BEA	TWN		6I-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-54	MIX		XIV		
D6-TS4	REC		XI	D2YE**	
DK-54	MIX		XIV		
DK-V4	DET		XIV		
DL-54	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-4B	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		
S4C			X		
S4V			X		
SBS-4	COU		XXI		
SG4S	DID	SIN	V	0D3\$	
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		XVI		
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	5B259+, 5D259+	
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	UR110+	
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		5D124+	
4ZH5	*TET	SIN	II	4ZH5S+	
4ZH5S	PND	SIN	II		
DG-T55	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-K5	PHC		XV		
G-5	TRI	SIN		M39+	
G-5A	TRI	SIN		GUSA+	
G-5RA	TRI	SIN		GU-5B+	
GI-5B	TRI	SIN	III		
GK5A	TRI	SIN	III		
GMI-5	TET	SIN	III		
GS-5R	TRI	SIN		6433A+	
GSH-5	NOI		IX		
GUSA	TRI	SIN	III		
GU5B	TRI	SIN	III		
GU0-5	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	5U4G\$	8360-57
5TS4	DID	DUD		5TS4S+, 5Z4G\$	
5TS4M	DID	DUD	II		
5TS4S	DID	DUD	II	5Z4\$	8079-56
5TS6S	DWD	SIN	II		8361-57
5TS9S	DWD	SIN	II	1502+	8362-57
5TS9SE	DWD	SIN	II		
5TS12P	DID	SIN	II		
5VKH1	*DWD	SIN		5Z4G\$	
5VKH2	*DWD	SIN	II	5U4G\$	
5VKH3	*DWD	SIN	II	5Y3G\$	
D6	REG		XIII		
DG-T56	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	GOST SPEC. NO.
P6A		X			
P6B		X		0C821=	
P6D		X		0C812=	
P66		X			
P6V		X		0C814=	
R6		XXII			
S66S	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	DIOSIN	II			
6D20P	DIO	SIN	II		
6E5P	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	6SQ7\$	8370-57
6G2P-K	TRI	DWD	II		
6G2S	*TRI	DWD		6SQ7G\$	

GROUP I, NUMERICAL

TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	GOST 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\$, 6A57\$	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+, 6L66\$	
6P3B	BEA	SIN		6P35+, 6L66\$	
6P3S	BEA	SIN II		6L66\$	8376-57
6P3S-YF	BEA	SIN		6P35, E7121+	
6P4	*PND	SIN II		6666\$	
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**+, 6R66GA\$	
6P7S	BEA	SIN II		6P7**+, 6R66GA\$	
6P8P	TRI	SIN		6S1P+, 9002\$	
6P8S	*PND	SIN II		6666\$	
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\$	8081-56
6S3B	TRI	SIN II		6K44\$	
6S3P	TRI	SIN II			
6S4	*TRI	SIN		6F5\$	
6S4B	TRI	SIN II		6F5\$	
6S4P	TRI	SIN II			
6S4S	TRI	SIN II		684-G\$	8373-57
6S5	TRI	SIN II		6S55+, 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\$	8528-57
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		6YE55+	
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+	
6ZH12B	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		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	Z62=	
6ZH7	PND	SIN	II	6J7	8365-57
6ZH7A	*PND	SIN		6W7G\$	
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=E	PND	SIN		6ZH11P+, E7115+	
6ZH12B	*PND	SIN		6SG7\$	
6ZH13	PND	SIN		6ZH13L+	
6ZH13L	PND	SIN	II	6ZH13	
6ZH20P	BEA	DIO	II		
6ZH21P	8EA	DIO	II		
6ZH22P	DIO	BEA	II		
6ZH23P	PND	SIN	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-A5	
LD-7	TRI	SIN		6I-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		7711-55
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		
SG6S	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		
TG8/3	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	3DP1\$	
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		
G59B	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	GOST SPEC. NO.
R-9			XXII		
SG9S	DIO	SIN	V		
GNM-9	COU		XXI		
T9	TMS		XIX		
TVR-9	THM		XVIII		
VS-9	COU		XXI		
D10	REC		XI		
D10A	REC		XI		
D10B	REC		XI		
DGT510	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		
DK-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	GOST SPEC. NO.
D12	REC		XI		
D12A	REC		XI		
DGT512	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	12SQ7\$	
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+, 12SQ7\$	
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		
DGT513	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		
13L01B	*		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+	
G00-15	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		G61-0.5/5+	
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		XVII		
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		
18LK1E	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	
18L01P	*		VIII	7BP7As	
18L040B	TV		VIII	7JP4s, LK740+	
18L047A	OD		VIII		
18L047V	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+	
M020	TRI	SIN	III		
P20			X		
QV20-P18	*TET	SIN		GM1-83=	

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	96P7\$	
23LM34V	OS		VIII		
23L01P	OS			96P7\$	
23L051A	OS		VIII		
DGTS24	REC		XI	D7G+	
FEU-24	PHM		XVI		
GI-24A	TRI	SIN	III		
GU24A			III		
DGTS25	REC		XI	D7D+	
FFU-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		

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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		
GDO-30	TRI	SIN		65-3B+	
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*	807A-56
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		
31L01P	OS		VIII	120P7\$	
31L033	OS		VIII	126P7\$	
31L033V	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		8815-5A
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	COST SPEC. NO.
T-408FL	COU		XXI		
V40/100	DIO	SIN		V1-0.1/40+	
40LK1B	TV		VIII	16AP4S	
K-41	KLO		IX		
P41			X		
P41A			X		
FEU-42	NSP		XVI		
K-42	KLO		IX		
P42A			X		
P42B			X		
42LM2YE			VIII		
FFU-43	NSP		XVI		
43LK2B	TV		VIII		
43LK3B	TV		VIII		
43LK6B	TV		VIII		
43LK7B	TV		VIII		
43LK8B	TV		VIII		
43LK9B	TV		VIII		
FEU-44	NSP		XVI		
FEU-45	NSP		XVI		
45LM1B			VIII		
FEU-46	NSP		XVI		
G46	TRI	SIN	III		
FFU-47	NSP		XVI		
G47	TRI	SIN	III		
SB-47	PND	SIN	II		
47LK1B	TV		VIII		
47LK2B	ELS		VIII		
FEU-48	NSP		XVI		
K-48	KLO		IX		
FEU-49	PHM		XVI		
G-49	TRI	SIN		6S-4+	
GD-50	TRI	SIN		G-46+	
GUS0	PND	SIN	III	L5S0=	
I-50/1.5	TRI	IGN	IV		
I-50/1500	DIO	IGN	IV		
IFK50			XX		
LS50	*PND	SIN		GUS0=	
M50	TRI	SIN	III		
T-50RFL	COU		XXI		
TKP-50A	TMS	POW	XIX		
TKP-50B	TMS	POW	XIX		
V6-50	POW		XII		
VK-50	POW		XII		
VKU-50-0.25	SCR	SI4	XII-A		
VKU-50-0.5	SCR	SI4	XII-A		
VKU-50-0.75	SCR	SI4	XII-A		
VKU-50-1.0	SCR	SI4	XII-A		
VKU-50-1.5	SCR	SI4	XII-A		
VKU-50-2.0	SCR	SI4	XII-A		
VKU-50-2.5	SCR	SI4	XII-A		
VKU-50-3.0	SCR	SI4	XII-A		
GMS1A	TRI	SIN	III		
MI-51	MAG		IX		
SB-51	PND	SIN	II		
STSV51	PHO		XVI		
FEU-52	PHM		XVI		
MI-52	MAG		IX		
FEU-53	PHM		XVI		
M53	TRI	SIN	III		
MI-53	MAG		IX		
53LK2B	TV		VIII		
53LK3B	TV		VIII		
53LK4TS	TV		VIII		
53LK5B	TV		VIII		
53LK6B	TV		VIII		
G-54	TRI	SIN		6S-6+	
MI-54	MAG		IX		
R-54			XXII		
G-56	TRI	SIN		629+	

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TYPE NUMBER	KIND	TYPE	TABLE NO.	SIMILAR TYPES	COST SPEC. NO.
GMS7	TRI	SIN	III	M550**, M457+, UB180=	
M57	TRI	SIN	III		
50-57	PND	SIN	II		
G-58	TRI	SIN		6K-3000+	
59LK1B	TV		VIII		
59LK2B	ELS		VIII		
GM60	TRI	SIN	III	M600+	
GS-60	COU		XXI		
T-60BFL	COU		XXI		
G61	TRI	SIN	III		
G62	TRI	SIN	III		
M62	MAG		IX		
G-64	TRI	SIN		6S-3B+	
G65	TRI	SIN	III		
G68	TRI	SIN	III		
GI-70A	TRI	SIN	III	LD-70	
GM-70	TRI	SIN	III		
GM70B	TRI	SIN	III		
ISP70			XX		
LD70	TRI	SIN		GI-70B+	
V70/1000	DIO	SIN		V1-0.3/70+	
GK71	PND	SIN	III	G471+, 471A*	
GU72	PND	SIN	III		
M74	TRI	SIN	III		
7555-30	*DIO	SIN		5G25+, 0A3S	
GI-76B	TRI	SIN	III		
GU80	PND	SIN	III	05450=, P800**	
M80	TRI	SIN	III		
T-80RFL	COU		XXI		
GU81	PND	SIN	III		
GMI-83	TET	SIN	III	QV20=P18=	
G88	TRI	SIN	III		
VO-88	DIO	TWN		4VKH1+	
GMI-89	TET	SIN	III	G-489**	
GU89A	TRI	SIN	III	889AS	
GU89B	TRI	SIN	III	889R-A\$	
M89	TRI	SIN	III		
GMI-90	TET	SIN	III	G-490**	
GS90B	TRI	SIN	III	LD-90	
LD-90	TRI	SIN		GS-90B+	
MTKH90	TRI	THY	VII		
RB-90			XXII		
TGI-90/8	TRI	THY		TGI-1-90/8+	
G91	TRI	SIN	III		
G-92	TRI	SIN		6K-2000+	
K-92A	KLO		IX		
K-92B	KLO		IX		
K-92G	KLO		IX		
K-92V	KLO		IX		
MI-95	MAG		IX		
L-99	PT6	SIN		6A2P+, 6BE6\$	
G-100	TRI	SIN		G-29+	
G-100A	TRI	SIN		6K-3A+	
G0-100	TRI	SIN		G-47+	
GKE100	*TET	SIN	III	GE-1=	
GM100	TRI	SIN	III		
I-100/1.0	TRI	IGN	IV		
I-100/5.0	TRI	IGN	IV		
I-100/1000	*DIO	IGN	IV		
I-100/5000	*DIO	IGN	IV		
ISSH100-1			XX		
ISSH100-3			XX		
L100	*PND	DIO		6B2P*	
VG-100	POW		XII		
VK-100	POW		XII		
VKU100-0.25	SCR	SI4	XII-A		
VKU100-0.5	SCR	SI4	XII-A		
VKU100-0.75	SCR	SI4	XII-A		
VKU100-1.0	SCR	SI4	XII-A		
VKU100-1.5	SCR	SI4	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	RFC	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	*REA	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+	
VGv200	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		
P202			X	2N685	
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		
P216E			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		
G226	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		
G227	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		
V0-230	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		
V0-239	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+	
V6-252	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+	
RR-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		
S6301S	DIO	SIN	V		9103-59
D302	REC		XI		
P302			X		
S6302S	DIO	SIN	V		9103-59
D303	REC		XI		
P303			X		
P303A			X		
S6303S	DIO	SIN	V		9103-59
D304	REC		XI		
KU304	KLA		IX		
KU304A	KLA		IX		
P304			X		
S6304S	DIO	SIN	V		
D305	REC		XI		
S6305K	REG		V		
P306			X		
P306A			X		
S6306K	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		
S6311S	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		
GD-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		
VGV500	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		

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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	SI	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
L0751	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			6U-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			6U-27B+, 827R\$	
G-829	TET TWN			6U-29+, 829-B\$	
G-832	BEA TWN			6U-32+, 832A\$	
G837	*PND SIN	III		0512/500=, 837\$	
G-880	TRI TWN			6U-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-1B+	
PI-3000	*PND SIN			GI-8**	
GI-3100	TRI SIN	III			
IFP4000		XX			
4671	*TRI SIN			6S1ZH+	
G-5000	TRI TWN			6S-3B+	
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			
																							I _b mA
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						5CL
1A1P	PTG	SIN	T6		F	1.2	60	100		0.3	90	45	0	/1	1.7	.3	500K						7AT
1A2P	PTG	SIN	T6		F	1.2	30	90		0.3	90	45	0	/1	1.1	.2							7AT
1B1P	PND	DIO	T6		F	1.2	60	100	4	0.2	67	67	0	2	0.3	.6	1M						6AU
1B2P	PND	DIO	T6		F	1.2	30	90	2	0.1	60	45	0	900U	0.2	.5	1M						6AU
1E1P	TET	SIN	T5	EL	F	1.0	46				6	4	3	100U	0.4	/1	1						TE2
1E3P	TRI	SIN			F	1.3	24				8		3	300U		/1	2						
1F2B	TRI	PND			F	1.2	60				45		0	1		0.4							
1F2B	PND	TRI			F	1.2	60				45	45	0	/1	0.2	0.3	600K						
1I2P	TRI	HEX			F	1.2	60	90	2	0.2	60	45	0	1	0.3	1.0	25						PT1
1I2P	HEX	TRI			F	1.2	60	90	2	0.2	60	45	0	1	0.3	.2	650K						PT1
1K1P	PND	SIN	T6		F	1.2	60	100		0.6	90	67	0	3	1.2	.9	1M						6AR
1K2P	PND	SIN	T6		F	1.2	30	90	3	0.3	60	45	0	1	0.3	.7	1M						6AR
1K12B	PND	SIN	T3		F	1.2	60	120	6		60	40	0	2	0.7	1.0	30K						
1N3S	TRI	DUO	T10		F	1.2	120	150		1.0	120	5	/3			1.8	11						7AB
1P2B	PND	SIN	T3F	AF	F	1.3	50	50			45	45	2	1	0.5	.4	50K						5CL
1P3B	PND	SIN	T3F	AF	F	1.3	28	50			45	45	2	1	0.3	.3	50K						5CL
1P4B	PND	SIN	T3F	AF	F	1.3	20	50	/2	5.0	45	45	2	1	0.3	.3	200K						5CL
1P5B	PND	SIN	T3B		F	1.2	120	150	18	1.7	90	90	/5	12	1.0	1.9	60K						
1P22B	PND	SIN	T3B		F	1.2	115	180	17	2.0	90	90	/5	13	1.0	2.8	60K						
1P24B	PND	SIN	T3B		F	1.2	250	300	25	2.5	150	125	14	17	3.0	2.8							
1P32B	PND	SIN	T3B		F	1.2	215	200	20	3.0	150	150	14	12	1.5	2.3							
1S12P	TRI	SIN			F	1.2	30	90	/3	0.2	60	60	1	1		.9	19K						TS1
1S38A	TRI	SIN			F	0.9	85				70	0	2		0.9	2.4							
1TS1S	DIO	SIN	T10		F	0.7	185	15K	5				/1										8HC
1TS7S	DIO	SIN	T10		F	1.3	200	30K	17				2										8HC
1TS11P	DIO	SIN	T6		F	1.2	200	20K	2				300U										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										T10
1ZH1ZH	PND	SIN	ACO		F	1.2	50	145			135	68	3	/2	0.4	.6	800K						
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						
1ZH18A	PND	SIN	T3B		F	1.2	60	90	5	0.3	60	40	0	1	20.2	1.0	60K						
1ZH24B	PND	SIN	T3B		F	1.2	12	120	/2		60	45	0	1	0.2	0.9	40K						

GROUP II, RECEIVING TUBES

TYPE NUMBER	KIND	TYPE	BULB	USE	CATHODE	E _i V	I _i 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 _{g2} mA	S _m mmho	μ	R _p Ω	IN pF		OUT pF	f _{max} MHz
1Z426A	PND	SIN			F	1.4	130		135	70	/1	4	0.5	1.2								
1Z429A	PND	SIN	T3B		F	1.2	60	1.2	60	45	0	5	0.2	2.5					35K	4.9	3.3	
1Z430B	PND	SIN	T3		F	1.2	15	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	/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	60	
6U1-2	BEA	SIN	S18		H	6.3	900	750	30.0	250	250			10.0				150K	9.6	11.4	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									DW3	
2D1S	DIO	SIN	LIT		H	2.3	400	100	/0.1			1									D12	
2D2S	DIO	SIN	F10		F	1.5	1500	200	40	5.0		40									3G	
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	750K	4.0		TE3	
2K1	PND				F	2.0	120	120	120	70	1	/4	1.2	1.6								
2K1M	PND	SIN			F	2.0	120		150	70	1	3	1.1	1.4				1M			5Y	
2K2M	PND	SIN	T9		F	2.0	60	160	0.5	120	70	/1	2	0.5	.9			1M	5.4	8.1	5Y	
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	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	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	0.3	90		4	12	1.2	3.3				7.1	4.7	100	
2P9M	BEA	SIN	T10		F	2.0	1000	300	8.0	250	150	5	35	1.5	2.5			40K	8.5	8.5	6X	
2P19B	PND	SIN	T3B		F	2.2	70	200	1.0	120	90	5	8	3.5	1.7				4.5	7.0	PS6	
2P29L	PND	SIN	T9		F	2.2	120	200	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	1.0	120	45	0	/2	0.4	1.2			100K	4.9	2.0	120	
2S1	TRI	SIN			F	2.0	110	120	2.0	80		0	/6	1.5			14	9K	3.6	3.0	PS8	
2S2	TRI	SIN	T8		F	2.0	120	160	0.6	120		1		1.3			22	17K	2.8	2.7	5S	
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	E _f V	I _f mA	MAXIMUM			TYPICAL					CAPACITY		f _{max} MHz	BASE		
								E _b V	I _b mA	P _p W	E _{g1} V	E _{g2} V	E _b V	I _{g2} mA	S _m mmho	μ	R _p Ω			IN pF	OUT pF
2S14B	TRI	SIN	T3F		F	2.2	60	250	5	0.7	90	3	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	15	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	7	1.5	1.8						PS8
2ZH2M	PND	SIN	T9		F	2.0	60	160		0.5	120	7	14	0.5	.9	1M	5.4	8.1		5Y	
2ZH4 *	PND	SIN			F	2.0	275			1.2	200	100	7	2.4	1.8	110K				PS8	
2ZH14A	PND	SIN	T3B		F	2.2	30	90	5	0.5	90	45	0	0.8	1.2		4.5	6.0		PS6	
2ZH15A	PND	SIN	T3B		F	2.2	14	200	5	1.0	60	45	0	0.7	0.7		4.0	5.0		P4S	
2ZH27L	PND	SIN	F10		F	2.2	57	200	5	1.0	120	45	0	0.5	1.2	700K	5.3	4.9	60	PS3	
2ZH27P	PND	SIN	T5		F	2.2	57	200	5	1.0	120	45	0	0.5	1.0	/2M	4.5	2.0		PS4	
2ZH28L	PND	SIN			F	2.2	28			1.0	120	45	0	0.5	1.2	/2M	5.4	4.8		PS3	
EM-3	TET	SIN	T16		F	3.0	120				6	4	3	0.4	0.1	1	5.0				
GU-3	BEA	SIN	S18		H	12.6	450	750	120	30.0	250	250	0	2.2	10.0						
3A4S	PND	SIN			F	3.2	100			150	90	90	0	13	1.9						P7S
3B4S	BEA	SIN	T5		F	3.2	150			180	150	20	30	2.5	2.4						P8S
3S1	TRI	SIN			F	2.5	1A			220	220	4	8	2.2	2.2	10K					
3S2	TRI	SIN			F	2.5	1A			220	220	10	15	2.4	11	4K	5.0	2.5		4F	
3S9	TRI	SIN			F	2.5	1000			6.0	220	10	17	2.4	11						4AC
3TS16S	DIO	SIN	T10		H	3.2	220	25K	80				1								
3TS18P	DIO	SIN	T6		H	3.2	210	25K	15				8								300 DS3
EM4	TRI	SIN	T6		F	1.3	24			8		3	300U	/0.1	2		3.5				
4D5S	DIO	SIN	T4		H	4.0	240			10		5									D12
4D17P	DIO	SIN			F	4.0	1750	60	16	1.0	60	80	0	3	.8	350	8.0	6.3		D10	
4E1	TET	SIN			F	4.0	75	200		2.0	160	80	0	3	1.8	400	10.5	8.0		TES	
4E2	TET	SIN			F	4.0	150	200		2.0	160	80	0	8	3.0	200K	6.5	4.5		TES	
4E3	TET	SIN			H	4.0	1000	250			160	60	1	1.5	3.0						
4F6S	BEA	SIN		PA	H	4.0	1100			10.0	250	16	34	6.0	2.5	200	80K				
4N1	TRI	DUO			F	4.0	2A			6.0	120	0	30	3.2							
4P1 *	PND	SIN			F	4.0	1A			240	140	11	22	6.0	2.1						
4P1L	PND	SIN	T10		F	4.2	325	250	50	7.5	200	150	20	50	10.0	6.0	30K	8.5	9.4	100	PS2
4P10S	PND	SIN			F	4.0	1750			315	210	7	63	1.4	8.5						
4S1	TRI	SIN			F	4.0	70			120	120	0	8	1.3	11	8K					
4S2	TRI	SIN			F	4.0	70			160	160	0	4	1.3	25	18K					
4S3	TRI	SIN			F	4.0	155	200		3.0	160	6	15	2.1	9		3.8	2.4			

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 _{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	
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				DS4		
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									
4VD1	DIO	SIN			F	4.0	700				350		50									
4VKH1	DIO	TWN			F	4.0	2300	1K	560													
4VKH2	DIO	SIN			H	4.0	2000	/2K	1200													
4ZH1L	PND	SIN	F10		H	4.2	225	250	11	0.5	150	75	0	7	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	770K	14.0	4.5				
4ZH5S	PND	SIN		RF	H	4.0	1000				160	60		5	3.5		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			H	5.0	2000	14H	375													
5VKH3	DWD	SIN			H	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	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	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	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	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	700K	4.2	4.1		PS5		
6B2P	PND	DIO	T7	RF	H	6.3	300			2.1	250	100	1	6	1.6	700K	4.2	4.1		PS5		
6B8S	PND	DWD	S12	RF	H	6.3	300	275		2.5	250	125	3	10	2.4	600K	4.0	9.0		8E		
6D3D	DIO	SIN	LIT		H	6.3	770	200	150				27							36		
6D4ZH	DIO	SIN	ACO		H	6.3	150	365	30		165		5				0.9			46		
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 _{q1} V	E _{q2} V	I _b mA	I _{q2} mA	S _m mmho	μ		R _p Ω
6D8D	DIO	SIN	PEN		H	6.3	450	450	180U	0.0.1	100							5G	
6D10D	DIO	SIN	PEN		H	6.3	750	100	30								3.5		
6D13D	DIO	SIN	PEN		F	6.3	200	450		1.0	150							48H	
6D14P	DIO	SIN	T7		H	6.3	1100	56H	600	20								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								98D	
6E5P	TET	SIN	T6		H	6.3	600	150	70	8.3	150	150	2	45	14.0	27.0		TE1	
6E6P	TET	SIN		CN	H	6.3	600			8.4	150	150		44	10.0	30.5		9EQ	
6E6P-YF	TET	SIN	T7		H	6.3	600	250	100	8.3	150	150		44	10.0	30.5		TE1E	
6E7P	TET	SIN		CN	H	6.3	750			10.0	5K	25	2	2	1.6			TE9	
6E12N	TET	SIN	NUV	CN	H	6.3	130	250	20	2.2	125	50		10	3.6	10.0		TE8	
6F1P	TRI	PND	T7		H	6.3	430	250	14	1.5	100		2	13	5.0			9AE	
6F1P	PND	TRI	T7		H	6.3	430	250	14	2.5	250	170		10	4.0			9AE	
6F3P	TRI	PND	T7		H	6.3	850	250	15	1.0	170		1	2	2.5			PT5	
6F3P	PND	TRI	T7		H	6.3	850	275	60	8.0	170	170	11	41	14.0			PT5	
6F4P	TRI	PND	T9		H	6.3	720	250	12	1.0	200			3	4.0			PT4	
6F4P	PND	TRI	T9		H	6.3	720	250	40	4.5	170	170		18	7.0	11.0		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		PT6	
6F5P	PND	TRI	T7		H	6.3	900	300		9.0	185	185		41	2.7	7.5		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		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			PT2	
6G1	TRI	DWD	M10		H	6.3	300	275		2.7	250		9	9	1.9	16	8500	8Q	
6G2	TRI	DWD	M10		H	6.3	300	330		0.9	250		2	1	1.1	100	3.2	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	TT1
6G7	TRI	DWD			H	6.3	300	330		1.0	250		3	1	1.3	70	54K	5.0	TD3
6I1P	TRI	PTG	T6		H	6.3	300	250	12	0.8	100		0	11	4.0	23	6K	2.6	9CA
6I1P	PTG	TRI	T6		H	6.3	300	300	6	1.7	250	100	2	7	3.5	.8	1M	5.1	9CA
6I3P	TRI	PTG	T6		H	6.3	300	250	10	1.0	100		2	7	2.7	20		2.6	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 _b V	E _{q2} V	E _{q1} V	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω		IN pF
6I3P	PTG	TRI T6	H	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	H	6.3	300	250	12	0.8	100		11			4.0	6K	2.6	2.0	9CA
6I14P	PTG	TRI T6	H	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	H	6.3	200	150	15	1.2	120	120	8	4.0	4.8			5.1	3.8	9CA
6K1L	PND	SIN F11	H	H	6.3	150	75		1.0	150	75	2	3	0.9	1.3	700K	3.8	4.2	PS1
6K1P	PND	SIN T5	H	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	H	6.3	150	275		1.8	250	100	3	7	2.7	1.8	400K	3.0	3.0	7CM
6K3	PND	SIN M8	H	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	H	6.3	300	330		3.3	250	125	1	12	4.4	4.7	900K	8.5	7.0	8BK
6K4P	PND	SIN T6	H	H	6.3	300	300	20	3.0	250	100	1	11	3.7	4.4	800K	6.5	5.5	7BD
6K6A	PND	SIN T2B	H	H	6.3	127	150	15	1.3	120	100	9	4.0	4.5			2.8	2.5	7BD
6K7	PND	SIN M10	H	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	H	6.3	300	30	15	0.5	25	12	/4	4.2	1.0			6.7	4.1	7BD
6K9P	PND	SIN M10	H	H	6.3	300	330		0.5	13	3	900U	0.2	1.1			6.7	4.1	6CC
6K9S	PND	SIN T3B	H	H	6.3	200	150	15	4.4	250	100	3	9	2.5	2.0	800K	4.8	11.0	7R
6K11B-K	PND	SIN T7	H	H	6.3	300	250	20	1.2	120	120	8	4.0	4.8			3.9	2.8	P29
6K13P	PND	SIN T7	H	H	6.3	300	250	20	2.5	200	90	12	4.5	12.5			11.7	3.9	P20
6K14B	PND	SIN T3	H	H	6.3	120	150	10	0.5	50	50	1	6	1.5	5.0		6.1	2.1	P26
6K14B-V	PND	SIN T3	H	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	H	6.3	300	450	90	0.5	150		10					3.8		6BT
6KH6B	DIO	TWN T9	H	H	6.3	300	100	4											DW9
6KH6S	DIO	TWN T9	H	H	6.3	300	465	50		165		9					4.0		8AN
6KH7B	DIO	TWN T3B	H	H	6.3	300	450	10	0.2	165		8					5.8		DW5
6L1P	HPT	SIN T6	H	H	6.3	320	300		3.0	150	150	/10					3.5	2.6	P37
6L7	PTG	SIN M11	H	H	6.3	300	330		1.5	250	100	3	5	6.6	1.1	1M	7.5	11.0	7T
6N1P	TRI	TWN T6	H	H	6.3	600	300	25	2.2	250		4	8		4.3	35	3.1	1.8	9AJ
6N2P	TRI	TWN T6	H	H	6.3	340	300	10	1.0	250		1	2	2.1	2.1	47K	2.4	3.0	9AJ
6N3P	TRI	TWN T6	H	H	6.3	350	300	18	1.5	150		2	8	5.9	37	6K	2.7	1.4	8CJ
6N4P	TRI	TWN T6	H	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	H	6.3	600	300	25	2.2	200		5	8	4.2	27	6500	3.0	1.7	9AJ
6N5S	TRI	TWN S16	H	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	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	H	6.3	800	300		1.0	250		7	2.0	32	16K				8B
6N7S	TRI	DUO T9	H	H	6.3	810	300		4.2	250		6	7	3.2	35	11K	1.6	3.2	8B
6N8S	TRI	TWN T10	H	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 _r V	I _r 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	
6N9S	TRI	TWN	T10		H	6.3	300	275	1.1	250	2	2	1.6	70	44K	3.0	2.8	88D	
6N10S	TRI	DUO	T11		H	6.3	300	275	11.0	250	2	2	1.3	70	54K	1.4	0.2	85	
6N12S	TRI	TWN	T11		H	6.3	900	300	4.2	180	7	23	6.4	17	2700			88D	
6N13S	TRI	TWN	S16		H	6.3	2500	250	13.0	90	30	80	5.0	2	460	7.0	9.0	88D	
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	78F	
6N16B	TRI	TWN	T3B		H	6.3	400	200	0.9	100	2	6	5.0	25	5K	2.5	1.6	TD1	
6N17B	TRI	TWN	T3B		H	6.3	400	250	0.9	200	1	3	3.8	75	20K	2.8	1.5	TD1	
6N18B	TRI	TWN	T3B		H	6.3	330	200	0.9	100	6	6	5.0	25	325K	2.6	1.5	TD1	
6N19P	TET	TWN	T7		H	6.3	650	250	2.0	150	14	14	13.5	25K	25K	3.8	1.2		
6N21B	TRI	TWN	T3		H	6.3	395	250	1.0	200	/4	9	3.8	82		2.8	0.6	T21	
6N23P	TRI	TWN	T7		H	6.3	300	300	1.8	120	15	15	12.7	32		3.6	2.1	9AJ	
6N24P	TRI	TWN	T7		H	6.3	300	300	1.8	90	9	15	12.5	33		6.3	3.2	90D	
6N25G	TET	TWN	T4B		H	6.3	350	200	1.2	75	/10	14	1.5	18		1.1	0.7	T20	
6N26P	TRI	TWN	T6		H	6.3	600	250	2.6	150	14	14	9.5	48	5K	4.0	2.2	8CJ	
6N27P	TRI	TWN	T6B		H	6.3	330	30	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	0.9	50	1	7	6.7	24		2.6	1.8	T19	
6P1P	BEA	SIN	T7		H	6.3	500	250	12.0	250	12	44	4.9	50K		7.8	5.7	PS9	
6P2P	PND	SIN			H	6.3	450			120	5	35	12.0	8.0				6CC	
6P3S	BEA	SIN	T14		H	6.3	900	400	20.0	250	14	72	8.0	6.0	22K	11.0	8.2	7S	
6P4	PND	SIN			H	6.3	300			180	9	15	2.3			5.5	7.0		
6P6B	PND	SIN			H	6.3	700	375		250	16	34	1.5			6.0	12.0	7S	
6P6S	BEA	SIN	T9	PA	H	6.3	450	350	13.2	250	12	75	4.5	4.1	52K	9.5	9.5	7S	
6P7S	BEA	SIN	T16		H	6.3	900	6K	20.0	250	14	72	8.0	5.9	32K	11.5	6.0	58T	
6PRAS	PND	SIN	T11		H	6.3	300			180	9	15	2.4					7S	
6P9	BEA	SIN	M10	PA	H	6.3	650	330	9.0	300	150	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	30	5.8	11.2	100K			8Y	
6P13S	BEA	SIN	T10		H	6.3	1300	450	14.0	200	200	19	8.0	9.5	25K	14.0	18.0	58T	
6P14P	BEA	SIN	T6		H	6.3	760	300	12.0	250	250	6	48	7.0	20K	11.0	7.0	9CV	
6P15P	BEA	SIN	T6		H	6.3	760	330	12.0	300	150	2	30	4.5	100K	14.0	7.0	P1S	
6P17S	BEA	SIN			H	6.3	900	500	20.0	250	250	14	72	8.0	32K	11.5	6.0	9CV	
6P18P	BEA	SIN	T6		H	6.3	760	250	12.0	170	170	6	53	8.0	23K	11.5	6.0	58T	
6P20S	BEA	SIN	T16		H	6.3	2500	700	27.0	175	175	30	90	6.0	7K	24.0	10.0		

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 _{b2} V	E _{b1} V	I _{b2} mA	I _{b1} mA	I _{g2} mA	S _m mmno	μ	R _p Ω			IN pF	OUT pF
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	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	20.0	4500	36.0	21.0		P21	
6R2P	BEA	DUO			H	6.3	600			6.5	200	200	16	20	2.5	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		1.4	1.1		78S	
6S1ZH	TRI	SIN	ACO		H	6.3	150	275		1.8	250		7	6	2.2	2.2		1.0	0.6	600	T3S	
6S2B	TRI	SIN	T3B		H	6.3	250	250		2.5	150		11	11	11.0	11.0		6.5	4.4		T12	
6S2P	TRI	SIN	T5		H	6.3	400	165		2.5	150		1	14	11.5	11.5	48	4200	5.3	4.2	780	
6S2S	TRI	SIN	T9		H	6.3	300	330	20	2.7	250		8	9	2.5	2.5	20	8000	3.0	4.5	60	
6S3B	TRI	SIN	T3F		H	6.3	150	300	12	2.5	270		8	8	2.2	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	20.0	50	2600	6.5	1.5	TS4	
6S4B	TRI	SIN	M9		H	6.3	300			0.4	250		1	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	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	2.0		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	36	68Y	
6S5S	TRI	SIN	T10		H	6.3	300	350		2.7	250		6	8	2.2	2.0	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			
6S8S	TRI	SIN	T10		H	6.3	300	500		3.6	300		10	11	3.0	20	6700	2.2	0.6		TS5	
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			2	20	6.5	17	2500	2.5	0.1	36	68Y	
6S11D	TRI	SIN	PEN		H	6.0	176	120	30	3.6	110		4	21	5.2	32	6200	2.7	/0.1	18H		
6S13D	TRI	SIN	ROC		H	6.3	770	350	35	9.0	300		4	21	4.5	52		10.5	1.5	36H	T2S	
6S15P	TRI	SIN	T6		H	6.3	440	160		7.5	150		40	40								
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		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	I _{in} 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	2	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	0	40	21.0	17	800K	7.0	1.5			
6S31B	TRI	SIN			H	6.3	220			2.5	50		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						
6S47S	TRI	SIN			H	6.3	3100			70			2500	45.0			3.0	/0.1	TS6		
6S48D	TRI	SIN			H	6.3	95			3.0	50	0	/3	3.5	40		4.7	2.2	800		
6S51N	TRI	SIN	NUV		H	6.3	130	110	15	1.0	75		10	11.2	32		4.7	2.4	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				75						DW7		
6TS5S	DWD	SIN	T10		H	6.3	600	11H	300	400			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	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		
6TS17S	D10	SIN	T10	H	H	6.3	1800	4K	1200															DS8
6TS19P	D10	SIN		H	H	6.3	1100	/5K	450	700														9BD
6V1P	PND	SIN	T6	SM	H	6.3	400			4.5	250	250	2	26	2.7	29.0						9.0	4.6	PS5
6V2P	PND	SIN	T7	SM	H	6.3	1800	600	1500	3.0	600	300				H2.2								PD9
6V3S	PND	SIN	T7	SM	H	6.3	900	700	1500	5.0	700	400			1200	8H								P34
6VKH1	DWD	SIN		H	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		4	3										ID2
6YE5S	TRI	SIN	T11	ID	H	6.3	300	250			250		4	5	1.2	24								8B
6ZH1B	PND	SIN	T3F	RF	H	6.3	200	150	14	1.2	120	120	/8	3.5	4.8					200K		4.8	3.8	PS1
6ZH1L	PND	SIN	F10	H	H	6.3	200	150		2.0	150	75	2	2	0.2	1.5				1M		4.0	4.2	200
6ZH1P	PND	SIN	T6	UF	H	6.3	170	200	20	1.8	120	120	2	7	3.0	5.2				300K		4.3	2.4	7BD
6ZH1ZH	PND	SIN	ACO	H	H	6.3	150	250		0.5	250	100	3	2	0.7	1.6				1M		3.5	3.0	7CM
6ZH2B	PND	SIN	T3F	RF	H	6.3	200	150	14	0.9	120	120	2	/6	6.0	3.2				500K		4.9	4.1	8N
6ZH2M	PND	SIN	T6	RF	H	2.0	60			0.5	120	70	/1	2	0.5	.9						5.4	8.1	7BD
6ZH2P	PND	SIN	T6	RF	H	6.3	170	200	20	1.8	120	120	0	6	5.0	3.9				100K		4.5	2.4	8N
6ZH3	PND	SIN	M8	RF	H	6.3	300	330		3.3	250	150	1	11	4.0	4.9				900K		8.5	7.0	8BK
6ZH3M	PND	SIN		H	H	6.3	450	300		3.0	300	200		10	2.5	5.0				700K		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				800K		6.5	1.5	7BD
6ZH4	PND	SIN	M10	H	H	6.3	450	330		3.3	300	150	0	10	2.2	9.0				900K		11.0	5.0	8N
6ZH4E	PND	SIN	M10	H	H	6.3	450	330		2.5	300	150	0	9	2.2	8.5								8N
6ZH4P	PND	SIN	T5	H	H	6.3	300	300	20	3.5	250	150	1	11	4.3	5.7				900K		6.3	6.3	7BK
6ZH5A *	PND	SIN		H	H	6.3	450				250	100		10	2.5	9.0								7BK
6ZH5B	PND	SIN	T3F	H	H	6.3	250	150	28	2.6	120	120	2	15	6.0	10.0				100K		6.0	4.0	7BK
6ZH5P	BEA	SIN	T6	H	H	6.3	450	300	20	3.6	300	150	2	10	2.0	9.0				350K		8.5	2.2	7BK
6ZH6S	PND	SIN	M10	H	H	6.3	300	250	20	2.5	250	100	2	10	2.5	7.5				2M		9.5	6.2	7R
6ZH7	PND	SIN	M10	RF	H	6.3	300	330		0.8	250	100	3	2	0.6	1.2				1M		7.0	12.0	7R
6ZH8	PND	SIN	S11	RF	H	6.3	300	330		2.8	250	100	3	3	0.8	1.6				2M		6.0	7.0	8N
6ZH8S	PND	SIN		H	H	6.3	300			100	100		3	3	0.9	1.6								8Y
6ZH9B	PND	SIN	T4F	H	H	6.3	310	150	26	2.4	120	120		15	5.5	17.0						7.5	3.3	9E0
6ZH9P	PND	SIN	T6	H	H	6.3	300	250	35	3.0	150	150	1	15	5.0	17.5				100K		8.5	3.3	9E0
6ZH10R	PND	SIN	T3F	H	H	6.3	250	150	28	0.8	120	120	1	/11	9.0	5.0				100K		6.5	4.5	9E0
6ZH10P	PND	SIN	T6	H	H	6.3	300	250	35	3.0	200	100	1	6	5.5	9.5				100K		8.9	3.9	9E0
6ZH11P	PND	SIN	T6	H	H	6.3	440	150	40	4.9	150	150	/2	25	5.0	28.0				30K		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 _{b1} V	E _{b2} V	E _{g1} V	I _b mA	I _{g2} mA	S _m mmho	μ	R _p Ω	
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	1	16	4.0	17.5			600K	8.5	2.5	P31
6ZH21P	PND	SCG	T7	H	6.3	350	3.0	150	1	17	4.0	17.0			60K	5.0	1.8	P32
6ZH22P	PND	SCG	T7	H	6.3	500	5.5	150	1	30	7.0	30.0			60K	8.5	2.4	P32
6ZH23P	PND	DBA	T7	H	6.3	440	2.4	150	2	14	7.5	14.0				14.0	3.5	PD3
6ZH31BK	PND	SIN	T3F	H	6.3	200	1.3	120	120	14	3.5	5.0				4.8	3.8	
6ZH32B	PND	SIN	T3B	H	6.3	165	1.2	120	120	10	1.4	6.0				5.4	2.3	P24
6ZH32P	PND	SIN	T6	H	6.3	200	1.0	250	140	6	1.0	1.8			3M	4.0	5.5	P17
6ZH33AV	PND	SIN	T2B	H	6.3	127	1.3	120	100	15	4.0	4.5			120K	3.6	3.3	P28
6ZH35BV	PND	SIN	T3	H	6.3	127	0.9	120	110	15	6.5	3.1				4.6	3.5	P55
6ZH38P	PND	SIN	T6	H	6.3	180	2.5	120	120	25	2.3	9.0			200K	5.8	2.4	7BK
6ZH40P	PND	SIN	T6	H	6.3	300	0.5	25	25	15	3.3	3.8				6.7	4.1	7CM
6ZH43P	PND	DIO		H	6.3	470	3.1	150	150	16	15	14.5				13.5	3.0	PD3
6ZH45RV	PND	SIN	T3B	H	6.3	125	0.5	50	50	1	6	5.4				6.1	2.1	P26
6ZH46BY	PND	SIN	T3B	H	6.3	125	0.5	50	50	1	6	4.5				6.1	2.1	P36
FM7	TRI	SIN	T3B	F	1.0	18				2	200U	7.1	/2					
7P12S	PND	SIN	S12	H	7.3	850	8.0	135	135	15	31	7.0	2.8		500K	7.7	9.5	5F
7Z12S	PND	SIN	S12	H	7.3	425	1.9	250	135	3	5	1.1	1.8			6.1	15.0	6F
10P12S	PND	SIN	S12	H	10.0	640	8.0	180	135	15	31	7.0	2.1		20M	7.7	9.7	5F
10ZH1L	PND	SIN	F10	H	10.0	93	2.0	150	75	2	7	0.5	1.6		1M	4.0	4.2	200
10ZH3L	PND	SIN	F10	H	10.0	93	2.0	150	75	2	7	0.5	1.6		1300	4.0	4.2	200
10ZH12S	PND	SIN	S12	H	10.0	320	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
12R2M	PND	DWD		H	12.5	150		25	25	1	1	0.3	.8		150K			PD6
12G1	TRI	DWD		H	12.6	150	2.7	250		9	9	1.9	16	8500		3.6	2.8	8Q
12G2	TRI	DWD		H	12.6	150	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	4.4	250	100	1	9	2.5	2.0	800K		6.0	7.0	8N
12K4	PND	SIN		H	12.6	150	3.3	250	125	1	11	4.4	4.7	900K		3.3	8.5	8N
12KH3S	DWD	SIN	F10	H	12.6	73	0.1	25	25	1	1	0.3	1.9	7500		0.5		1G DW8
12M1M	PND	TRI		H	12.5	225		25	25	1	1	0.3	1.8	40	22K	1.6	1.6	PT3
12N4P	TRI	TWN		H	12.6	150	1.5	250		4	3	1.8	1.6					9AJ
12N10S	TRI	DUO	T11	H	12.6	150	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	I _b mA	I _{q2} mA	S _m mmho	μ	R _p Ω	IN pF	OUT pF	
12P14S	BEA	SIN			H	12.6	150	7.5	250	12	30	3.0				9.0	9.0	7S	
12P17L	PND	SIN	F11		H	12.6	325	7.5	150	20	35	7.0				10.0	8.5	P3S	
12S2	TRI	SIN			H	12.6	150	250		8	9	2.0				3.4	3.6	8T3	
12S3S	TRI	SIN			H	12.6	100	5.0	100	4	27	3.0				1.5	0.6	11H	
12S42S	TRI	SIN			H	12.6	4900	120		1000		60.0				40.0	15.0	T17	
12ZH1L	PND	SIN	F10		H	12.6	75	2.0	150	75	2	1.6				4.0	4.2	200	
12ZH1M	PND	SIN			H	12.5	225	25		/2	2	1.4						7R	
12ZH3L	PND	SIN	F10		H	12.6	75	2.0	150	75	2	1.6				4.0	4.2	PS1	
12ZH8	PND	SIN	F10		H	12.6	150	2.8	250	100	3	1.6				6.0	7.0	8N	
13P1S	BEA	SIN		PA	H	13.0	765	6.0	110	80	2	7.5				15.5	10.5		
13ZH41S	PND	SIN		RF	H	3.3	295	80		2	/2	3.8				500K	11.0	P27	
15A6S	PND	SIN			H	15.0	300	180	135		4A	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	7.0	110	110	7	12.0				9K	19.0	7S	
30TS1M	DIO	SIN			H	30.0	300	110		250	90	10.0				2500		5AA	
30TS6S	DIO	TWN			H	30.0	300	500		60								8AN	
30VD1	DIO	SIN			H	25.0	300	500		500								4BQ	
30VKH1	DIO	TWN			H	30.0	300	500		500								8AN	
SB-47	PND	SIN			H	4.0	150	160	120	1	5	1.6				250K			
SB-51	PND	SIN			H	4.0	80	240	80	1	3	1.0				600K			
SO-57	PND	SIN			H	4.0	1A	240	100	1	3	0.8				500K			
SB-112	PND	SIN			H	4.0	80	160	80	1	2	0.6				500K			
SO-124	PND	SIN			H	4.0	1A	160	60	2	5	3.5							
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				200K			
SB-152	TRI	SIN			F	2.0	120	100		/2	/5	1.5				14	10K		
UB-152	TRI	SIN			F	2.0	120	120		4	6	3.0				14	5K		
UB-153	TRI	SIN			F	2.0	200	100		6	8	2.5				10	4K		
SB-154	PND	SIN			F	2.0	90	160	60	1	3	1.2				290K			
UB-155	BEA	SIN			F	2.0	230	0.2	100	60	2	1.5				100K			
UB-178	TRI	SIN			F	2.0	120	100		/1	2	1.1				33	30K		
SO-182	PND	SIN			H	4.0	1100	240	100	1	7	2.0				800K			

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 _{b2} V	E _{g1} V	I _b mA	I _{g2} 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			4F		
191P		TET SIN T6	EL	H	1.0	46			6	3	4	100	50.0					TE2		
UB-240		TRI SIN		F	2.0	120			0.6	120		3	1.5	22	14K	2.8	2.8	5S		
SO-242		PTG SIN S9	CN	H	2.0	160	300		14	1.0	120	70	0	.1		7.0	8.6	7Z		
SO-243	*	TRI TWN		F	2.0	240			1.5	120		3	2.1	32	16K	2.8	3.4	7AB		
SO-244		PND SIN		F	2.0	185			1.5	120		4	1.8	270	150K	55.0	7.0	6X		
SO-257	*	PND SIN S10		F	2.0	300			200	100	7	18	1.3					P19		
SO-258	*	PND SIN		F	1.8	320			1.3	160	120	6	2	2.0	160	80K	5.4	7.5	6X	
M-457	*	TRI SIN		F	4.0	2100			50.0	1K	72	70	7.0	8	1K					
1504		TRI SIN LIT		H	6.3	770	300		25	6.5	250		25	4.7	42	9K	2.3	0.5	36	
1506		BEA TWN T19		H	12.6	1120	500		15.0	400		110						78P		
1509		BEA TWN T19		H	12.6	800	500		15.0	500		72						78P		
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						68T		
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								
																					2A			2H.K	8K	8A	45	20
GE-1	TET	SIN		F	11.0	2A	80.0	15H	250	100	2.5	15.5	10.0	20	GK1A	W46	F	11.0	2A	80.0	2H.K	8K	8A	45	2H	1H	22	1G
GK1A	TRI	SIN		W	31.5	580A	10K	10K	100	80.0	2H	1H	22															
GM1A	TRI	SIN		T	10.5	195A	6K	30.K	8A	20.0																		
GM1-1B	TRI	SIN		T	9.0	26A	H3.2	22K	5.0																			
GS-1B	TRI	SIN	A	H	12.6	3200	2K	1.K	2K	1	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	A70	H	25.0	7500	32K	90A	H9.0	140	17.0	11.0	20	TE7	
GMI-2B	TRI	SIN		H	12.6	3200	2K	2K	1	30.0																		
GS-2B	TRI	TWN		H	20.0	450	750	20.0	2.5	30																		
2TM-20	TRI	TWN		H	20.0	2200	1K	70.0	2.5	28																		
2TM-100	TRI	TWN		H	12.6	3200	2K	1.K	2K	1	30.0			1G														
GI-3	TRI	SIN	T11	H	6.3	1100	25H	15A	10.0	400	15	16	2.6	1.1	GK3A	W43	H	17.0	430A	12K	50A	1H.K	6A	2H	1H	300	48R	
GK3A	TRI	SIN		W	17.0	430A	12K	50A	1H.K	5K	15	6A	1H	65.0														
GMI-3	TET	SIN	T32	H	26.0	4750	28K	4500	80.0																			
GS-3R	TET	SIN	A30	H	1H	865	2K	2.K	2K	500																		
GI-4A	TRI	SIN	W	T	10.0	215A	35K	220A	20.K	3K		4A	40.0	35.0	GMI-4B	A	H	6.3	14A	18K	15A	1.H	2H	40.0	300	25		
GMI-4B	TRI	SIN		H	6.3	14A	18K	15A	1.H	1	30	2.6	1.1															
GS-4	TRI	SIN	C8	H	6.3	610	250	15.0	200																			
GS4D	TRI	SIN		H	22.0	105A		10.K	15K																			
GU4	TRI	SIN		T	7.0	1800		107	35.0	700		55	1.4	12	GU4A	W25	T	8.3	145A	6K	30A	20.K	3K	40.0	35.0	100		
GU4A	TRI	SIN		T	8.3	145A	6K	30A	20.K	3K		4A	40.0	35.0														
GI-5B	TRI	SIN		PA	6.3	425	27K	250A	5.K	1K		1A	25.0	200														
GK5A	TRI	SIN	W44	T	17.0	580A	10K	300A	K2.5			1A	14.0	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	GU5B	A14	T	12.6	23A	5K	7A	2.K	3K	19.0	16.0	110		
GU5B	TRI	SIN		T	12.6	23A	5K	7A	2.K	3K		600	15.0	80														
GI-6B	TRI	SIN	C11	H	12.6	2100	9K	20A	H3.5	1K		150	22.0	200														
GK6A	TRI	SIN	W30	H	12.6	2100	9K	20A	H3.5	1K		150	22.0	200														
GMI-6	BEA	TWN	T16	H	6.3	2200	4K	8A	15.0																			
GS6	TRI	SIN		H	17.0	8500		5.H	3K																			
GI-7B	TRI	SIN	C11	H	12.6	2100	9K	20A	H3.5	1K		150	22.0	200	3.5	95	11.4	4.8	2G									
S66S	REG	TRI	T12		6.3	825	25K	300U	20K			150	100U	5.5	GMI-7	T40	H	26.0	6300	22K	52A	H1.2	200	30.0	25.0	P11		
GMI-7	TET	SIN		H	26.0	6300	22K	52A	H1.2			150	100U															
GS-7A	TRI	SIN	W22	H	12.6	3100	/3K	2.K	2K	1	400	1	400	1G														
GS-7B	TRI	SIN	A22	H	12.6	3100	/3K	H1.5	2K	1	400	1	400	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	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	
6S-8B	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										
6S9B	TRI	SIN	C11	H	12.6	1100	3.0	1K	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	15A	10.0K	2K	3A	20.0	40.0	34.0	25								
GU10B	TRI	SIN	A21	T	7.0	75A	15A	7.0K	2K	2500	20.0	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	1A	8.0	400	15	11.0	2.6	3G									
GU11A	TRI	SIN	W27	W	12.7	240A	20A	20.0K	5K	3A	20.0	55.0	45.0	25								
GU11R	TRI	SIN	C8	H	12.6	815	1A	80.0	400	15	11.0	2.6	3G									
GI-12B	TRI	SIN	C8	H	12.6	815	1A	80.0	400	15	10.0	2.6	3G									
GU12A	TRI	SIN	W25	W	12.6	315A	30A	20.0K	4K	3A	23.0	35.0	24.0	50								
G-13	TRI	SIN	T11	H	6.3	1100	1.0			16	2.2	1.1										
GI-13	TRI	SIN	C9	H	12.6	650	4A	80.0														
GI-13R	TRI	SIN	C8	H	12.6	650	80.0															
GM13	TET	SIN	T34	H	26.0	4750	45A	80.0	28K	70	4.0	16.2	14.0	30								
GU13	BEA	SIN	T20	T	10.0	5A	1.0	2K	400	35	35.0	7.0	2.0	3K								
GI-14B	TRI	SIN			12.6	3400	5.0	2K	300	240	16.0	10.5	12.5	60								
GS-15B	TET	SIN	C12	H	6.3	2300	H1.6	13H	300	14	7.5	4.7										
GU15	BEA	SIN	F12	F	4.4	680	85	15.0	220	200	14	10.5	12.5	60								
GI-16B	TET	SIN	A60	W	8.3	115A	H8.0															
GU16B	TRI	SIN	A23	W	13.5	200A	15A	10.0K	5K	1500	25.0	55.0	42.0	25								
G-17B	TRI	SIN	C11	H	12.6	2A	3.0	1K		150	22.0	11.3	4.8									
GI-17	TRI	SIN	A16	H	6.3	750	1.0	2K		10A	45.0	11.0	8.0	500								
GU-17	BEA	TWN	T7	H	6.3	800	100	6.0	300	200	16	6.5	2.7	250								
GI-18B	TRI	SIN	A50	T	12.5	190A	150A	6.0K	10K	1A	25.0	75.0	50.0	7.0								
GU-18	TET	TWN	T13	H	6.3	1200	130	20.0	250	200	6.0	7.0	2.6	600								
GI-19B	TRI	SIN	W33	H	7.3	20A	100A	1.0K	1K	500	20.0	50.0	12.0	150								
GU-19	BEA	TWN	T16	H	6.3	2000	280	40.0	350	250	17	10.0	3.5	500								
GK20	TRI	SIN			5.6	850	200	20.0	750	4.5	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	4A	H1.1	600	75	26.0	55.0	45.0	36								
GU21B	TRI	SIN	A30	T	8.3	150A	30A	10.0K	9K	3700	30.0	48										
GI-22	TRI	SIN	C8	H	6.3	640	2A	10.0	200	30	18.0											
GU22A	TRI	SIN	W25	T	8.3	150A	30A	20.0K	10K	2730	27.0	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	H11.0	65.0	26						
GU-23B	TRI	SIN	A		W	12.0	210A	11K	50.K	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	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	12.K			30.0	48			26						
GU26A	TRI	SIN	W		H	30.0	17A	6K	10.K	10.K			20.0				330						
GU26B	TRI	SIN	W13		T	12.0	210A	12K	60A	50.K													
GU27A	TET	SIN	A24		T	7.5	25A	4K	5A	2.K	1K	300	6.0	16	25.0	17.0	110						
GU27B	TET	SIN	A24		T	7.5	25A	3K	5A	8.H	3K	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	10.K	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	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	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	W			11.0	3500		30.0	1K		200	1.4	10	7K								
GU-39A	TET	SIN	W		W	6.3	98A	10K	8.K	2K	2K		22.0				100						
GU-39B	TET	SIN	A		W	6.3	98A	10K	6.K	2K	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	3600		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	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	E _f		I _f	MAXIMUM				TYPICAL					CAPACITY		f _{max} MHz	BASE		
						V	V		E _b	I _b	P _p	E _b	E _{g₁}	I _b	I _{g₂}	S _m	μ	R _p	IN			OUT	
						V	V	mA	V	mA	W	V	V	mA	mA	mmho		Ω	pF	pF			
GM51A	TRI	SIN	W19		W	22.0	102A	10A	15.0K	5K				2A	10.0	.7						12	
M53	TRI	SIN				11.0	6300		H1.5	3K				375		1.4							
GM57	TRI	SIN				4.0	2100			750						5.0							
M57	TRI	SIN				16.0	10A		4.0H	10K				1200		2.9							
GM60	TRI	SIN	T32		W	17.0	8A	550	6.0H	1K				100	2.2	1.6							
G61	TRI	SIN				16.5	52A		11A	10.0K													
G62	TRI	SIN				16.5	51A			10.0K				10A		7.0							
G65	TRI	SIN				5.2	1300			12.0				60		1.0							
G68	TRI	SIN				17.0	18A		1.0K	10K				2A		5.0							
GI-70B	TRI	SIN	C11		H	12.6	2100	20A		9K				150		22.0							
GM-70	TRI	SIN	T21		T	20.0	3A	800	1.0H	600				200		6.0							
GM-70B	TRI	SIN	T21		T	20.0	3A	800	1.0H	600				200		6.0							
GK71	PND	SIN	T21		T	20.0	3A	1K	H1.2	600	400			200	62.0	4.2							
GU72	PND	SIN	T25		T	20.0	3A	1K	H1.5	750	400			150		4.2							
M74	TRI	SIN								450						.1							
GI-76B	TRI	SIN	C		T	12.6	2100	9K		1K				150		22.0							
GU80	PND	SIN	T30		T	12.6	10A	3K	4.0H	2K	600	140		200		5.5							
M80	TRI	SIN				11.0	3500		260	80.0	1K					1.4							
GU81	PND	SIN	T38		F	12.6	10A	3K	H4.5	2K	600					5.5							
GMI-83	TET	SIN	T20		H	25.0	2000	20K	15A	65.0	15K	1K											
G88	TRI	SIN				6.0	4A			600				120		.9							
GMI-89	TET	SIN	T32		H	25.0	4000	25K	20A	1.0H	25K	1K				22.0							
GU89A	TRI	SIN	W24		W	11.0	124A	8K	9A	5.0K	1K			3A		10.0							
GU89B	TRI	SIN	A24		W	11.0	124A	8K	9A	5.0K	1K			3A		10.0							
M89	TRI	SIN				11.0	6300		H4.5	1K						5.0							
GMI-90	TET	SIN	T46		H	25.0	7800	33K	40A	1.0H	33K					4.0							
GS90B	TRI	SIN	C12		H	12.6	1100	2K	4500	15.0	1K			175		19.5							
G91	TRI	SIN				11.0	6200			600				400		.9							
GKE100	* TET	SIN	T20		H	11.0	2A	/2K	500	1.0H	15K	250	2	500	6.5	2.8							
GM100	TRI	SIN	T60		W	17.0	18A	5K	1600	1.0K	1K			600		6.5							
G120	TRI	SIN				16.5	52A		11A	5.0K	4K			700		14							
GI-150	TRI	SIN	C8		H	12.6	815	800	/5A	20.0	400			15		10.0							
GKE150	* TET	SIN			H	11.0	6300		420	1.0H	3K	500				2.0							
GU150	TRI	SIN				11.0	10A		710	H1.5	2K					2.2							
M150	TRI	SIN				11.0	6300		420	H1.5	3K					1.4							

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	TRI	SIN				17.0	18A	750	4H 3K	500																					
M400	TRI	SIN				16.0	10A	2300	4H 1K																						
M401	TRI	SIN				10.0	450	1200	4H 10K																						
G410	TRI	SIN				10.0	450	10.0	400																						
G411	PND	SIN				10.0	600	400	20.0	400	200	55	112	5.0	5.5																
G412	PND	SIN				20.0	220	750	20.0	750	250	40	57	11.0	3.0																
G413	PND	SIN				20.0	500	750	40.0	750	250	55	90	15.0	4.5																
G414	PND	SIN				20.0	1400	1K	1.1H	1K	250	50	65	10.0	6.0																
G417	TRI	SIN				5.0	1150	20.0	400																						
G418	PND	SIN			F	5.0	900	400	20.0	400	225	50	85	20.0	4.0																
G422	PND	SIN				20.0	3250	1K	1.1H	750	300	60	180	40.0	3.0																
G424	PND	SIN				20.0	4600	1K	2.H	1K	400	140	300	80.0	5.0																
G425	PND	SIN				20.0	22A	4K	H7.5	4K	1K	100	350	70.0	4.0																
G430	TRI	SIN				22.0	51A	12K	10.K																						
G431	TRI	SIN	W16			22.0	102A	15K	20.K	5K		3A	12.0	50																	
G431A	TRI	SIN	W			22.0	102A	15K	12A	20.K	5K	3A	12.0	50																	
G433	TRI	SIN	T46			33.0	210A	15K	60.K	6K		5A	32.0	45																	
G433A	TRI	SIN				33.0	210A	15K	50A	60.K	6K	5A	32.0	45																	
M435	TRI	SIN				20.0	24A		1.K	5K		9	6.0																		
G441	TRI	SIN				11.0	51A		K2.5	7K																					
G-450	TRI	SIN	W38			16.0	51A	10K	10.K	5K		4A	7.0	44																	
G-452	TRI	SIN	W40			22.0	102A	15K	20.K	5K		4A	12.5	44																	
G-454	TRI	SIN	W38			22.5	71A	10K	20.K	5K		4A	10.0	45																	
G472	TRI	SIN				2.5	14A		1.H		18K		2.5	140																	
G484	TRI	SIN	A30			22.0	60A	9K	5.K	3K		1A	9																		
GK750	TRI	SIN				5.0	10A		H2.5	3K			6.6	37																	
M800	TRI	SIN				17.0	8A		8.H	10K			2.2	16																	
G807	BEA	SIN	S16		H	6.3	900	750	120	30.0	600	275	90	100	6.5																
G811	TRI	SIN				6.3	400		50.0	1K			160																		
G837	*	PND	SIN			12.6	700		200	500	200	85	30.0	3.4																	
G889	TRI	SIN				11.0	125A		5.K	7K			21																		
G891	TRI	SIN				11.0	60A		K3.5	8K		8																			
GKE1000	TET	SIN				17.0	18A		H7.5	4K	500		3.0	150																	
G1625	BEA	SIN				12.6	450		25.0	600			6.0																		
GK2000	TRI	SIN				16.0	51A		1A	10.K	8K		7.0																		
GK3000	TRI	SIN				17.0	18A		1600	1.K	10K		5.2	200																	
G1-3100	TRI	SIN				6.3	1100		10.0	2K			2.2	16																	
G40011	TRI	SIN				15.0	70A		3.H	4K			4.0	150																	

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			F	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			F	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			F	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	
			mm		V	V	mA	mA	mm	mm	
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			MAXIMUM GRID			BASE					
		SHAPE	LTH mm	DIAM mm	GAS	E _f V	I _f mA	WARM-UP MIN. S	PIV V	E _f V	FIRING TUBE DROP V	I _b mA	BIAS RES kΩ	INPUT RES kΩ	IGN. V		PULSE		TIME μS	τ _r nS	pps 10 ³
																	MAXIMUM	GRID			
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				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					
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		20	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	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/A	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	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	1K		150	3HA	200				/	1	1	
TG1-1-400/3.5	TRI S		280	85	HY H	5.0	18A	180	3500	1K			4HA	300	2				200	20	

GROUP VII, THYRATRONS

TYPE NUMBER	KIND	BULB		CAS	CATHODE		MAXIMUM ANODE				AVG		BIAS			MAXIMUM GRID			BASE
		LTH mm	DIAM mm		E _c V	I _c mA	WARM-UP MIN.	PIV V	E _r V	FIRING V	TUBE DROP V	PULSE I _b mA	I _b mA	INPUT RES kΩ	IGN. V	TIME μs	PULSE		
																	t _r ns	t _f 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	
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	2	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		
TGI-2-260/12	TRI	T	285	90	HY	H	6.3	12A		12K					400			/5	
TGI-2-325/16	TRI				HY	F	6.3	8500		16K					3HA	200			
TGI-2-400/35	TRI				HY	F	5.0	18A		3500					4HA	300			
TKH3B	TET	T	40	10	NA	C					190	110	5	2	85	20M	67	15	1
TG3-0.1/1.3	TET	T	57	19	KX	H	6.3	600		1300	650	30	11	500	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	T	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	270	110	1/1	1/1	150				
TKH-5B	TRI	T	25	7	NE	C				270	225	110	1/2	1/1	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					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				
TG-235	TRI					F	5.0	12A					6A	1A	16				

GROUP VIII, CATHODE RAY TUBES

TYPE NUMBER	METH. OF		DIMENSIONS		CATHODE	TYPICAL							MAXIMUM		SCREEN		DEFL ANGLE degree	BASE		
	FOCUS	DEFL	DIAM	LENGTH		USE	HEATER		E _{Foc}	E _{A1}	E _{A2}	E _{A3}	E _{A4}	E _{C1}	I _K	DEFL SENS			COL	PERS
							V	I												
LI-1	ELM	ELM	4	17	IC H	6.3	510	400	1.2					50				F8		
LI-3	ELM	ELM	1	17	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	ELM	15	15	IC H	13.6	300	800	1.2					5	50					
LI-201	ELM	ELM	15	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	11	OS	4.0	700	112	0.8					16	160		GR MD			
LO-248	FLS	ELS	11	11	OS	4.0	700	600	3.0					50			GR MD			
LO-249	FLS	ELS	11	11	OS	4.0	700	600	3.0					50			GR MD			
LO-709A	FLS	ELS	11	11	OS	2.5	21H	450	2.0					50			GR MD			
PIM-3			6	6	IC				18.0								VB			
PIM-4			13	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 FOCUS		DIMENSIONS		CATHODE	HEATER			TYPICAL						MAXIMUM		SCREEN COL	DEFL ANGLE degree	BASE
	DEFL	ELM	DIAM	LENGTH		USE	E	I	E _{Foc}	E _{A1}	E _{A2}	E _{A3}	E _{A4}	E _{C1}	I _K	DEFL SENS			
13LK1B	ELM	ELM	12	37	TV	H	6.3	550	7.0					76		WH	MD	D8	
13LK2B	ELM	ELM	S	8	31	TV	H	6.3	500					25		WH	SH	A9	
13LM4V	ELM	ELM	13	29	OS	H	6.3	600	0.4	12.0				50		WH	LO	A8	
13LM31M	ELM	ELM	11	28	OS	H	6.3	600	6.0					70		YO	LO	A8	
13LM31V	ELM	ELM	13	29	OS	H	6.3	600	0.2	4.0				50		WH	LO	A8	
13LM56I	ELS	ELM	13	29	OS	H	6.3	600	0.7	4.0				50		GR	MD	A8	
13LM57	ELM	ELM	11	28	OS	H	6.3	600	250	6.0				71		GR	LO	A8	
13LM57D	ELS	ELM	13	29	OS	H	6.3	600	0.7	4.0				50		PB	LO	A8	
13LM58K	ELS	ELM	13	29	OS	H	6.3	600	0.7	4.0				50		RD	LO	A8	
13LO1B	ELS	ELS	13				2.5	2A	425	2.0				40		GR	MD		
13LO2B	ELS	ELS	13				6.3	600	500	1.8	3.0			50		GR	MD	14J	
13LO3I	ELS	ELS	14	43	OS	H	6.3	600	410	1.5	1.5	3.0		50	0.45	GR	MD	A14	
13LO4I	ELS	ELS	14	43	OS	H	6.3	600	425	1.5	1.5	5.0	8.0	50	0.25	YO	MD	A14	
13LO5P	ELS	ELS	13				6.3	600	500	1.8	3.0			50		YO	LO	14J	
13LO6P	ELM	ELM	13				6.3	600	250	6.0				45		YO	LO	A8	
13LO36	ELS	ELS	13	42	OS	H	6.3	600	690	2.0	4.0			60	100	0.34	YO	LO	14J
13LO36V	ELS	ELS	14	43	OS	H	6.3	600	525	1.1	2.0	4.0		60		0.29	WH	LO	14J
13LO37A	ELS	ELS	14	43	OS	H	6.3	600	400	1.1	1.5	3.0		50	100	0.43	BL	SH	14J
13LO37I	ELS	ELS	14	43	OS	H	6.3	600	400	1.1	1.5	3.0		50		0.43	GR	MD	14J
13LO37M	ELS	ELS	14	43	OS	H	6.3	600	400	1.1	1.5	3.0		50		0.43	PB	SH	14J
13LO48A	ELS	ELS	14	41	OD	H	6.3	600	400	1.2	1.5			60		0.25	BL	SH	A14
13LO48I	ELS	ELS	14	41	OD	H	6.3	600	400	1.2	1.5			60		0.25	GR	MD	A14
13LO48M	ELS	ELS	14	41	OD	H	6.3	600	400	1.2	1.5			60		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	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	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	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	ELM	ELM	17	35	TV	H	6.3	600	700	.4	.8	1.2	1.8	100		0.22	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				60		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				35		WH	SH	B8	

GROUP VIII, CATHODE RAY TUBES

TYPE NUMBER	METH. OF DIMENSIONS			CATHODE	TYPICAL							MAXIMUM		SCREEN COL PERS	DEFL ANGLE degree	BASE			
	FOCUS	DEFL	DIAM		LENGTH	USE	HEATER		E _{Foc}	E _{A1}	E _{A2}	E _{A3}	E _{A4}				E _{C1}	I _k	DEFL SENS
							V	mA											
18LK14T	ELS	ELM	17	42	TV	6.3	550			25.0			140			GR	SH	40	B8
18LK15	ELM	ELM	17	34	TV	6.3	550		5.0				38	100		WH	MD		B8
18LM35	FLM	ELM	15	34	OS	6.3	600	250		6.0			48			YO	LO		A8
18LM35V	ELM	ELM	18	35	OS	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	6.3	600		2.0				120			WH	MD		14G
18LO47A	ELS	ELS	18	45	OD	6.3	600		1.0	2.0	6.0		100	0.23		BL	SH		A25
18LO47V	ELS	ELS	18	45	OD	6.3	600		1.0	2.0	6.0		100			WH	LO		A25
19LK4B	ELM	ELM	17		TV	6.3	600		6.0				60						
20LM1YE	ELS	ELM	20	46		6.3	12H	750					60			GR	LO		
23LK1B	ELM	ELM	19	38	TV	6.3	550		8.0				50			WH	MD		D8
23LK2B	ELM	ELM	22	47	TV	6.3	550			10.0			18	100		WH	SH		D8
23LK7B	ELM	ELM	S18	40	TV	6.3	520		8.0				55			WH	SH		D8
23LK8B	ELM	ELM	S16	49	TV	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	6.3	600	250		6.0			48			YO	LO		A8
23LM34V	ELM	ELM	23	46	OS	6.3	600		4.0				50			WH	LO		A20
23LO51A	ELS	ELS	23	57	OS	6.3	600		6.6	20.0			200	0.03		BL	SH		D8
30LK1B	FLM	ELM	30	45	TV	6.3	600		10.0				75			WH	MD		D8
31LK1B	ELM	ELM	31		TV	6.3	550		10.0				52	150		WH	MD		D8
31LK2B	ELM	ELM	30	47	TV	6.3	600			10.0			30	150		WH	SH		B8
31LM32	ELM	ELM	25	51	OS	6.3	600	250	6.0				48			YO	LO		A8
31LM32V	ELM	ELM	31	54	OS	6.3	600			4.0			50			WH	LO		A8
31LO1P	ELM	ELM	31					250	1.8				50			GR	MD		A8
31LO33	ELS	ELS	25	56	OS	6.3	600	1K	4.3	5.5			150			YO	LO		
31LO33V	ELS	ELS	31	57	OS	6.3	600		1.1	4.3	5.5		140			WH	LO		14J
35LK2B	ELM	ELM	35	46	TV	6.3	600	300	0.5	12.0			60	150		WH	SH		C8
40LK1B	ELM	ELM	40	49	TV	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	6.3	600		0.3	0.3	14.0		60	100		WH	SH	70	B12
43LK3R	ELS	ELM	S43	51	TV	6.3	600		0.5	14.0			60	150		WH	SH		B12
43LK6B	ELS	ELM	S45	30	TV	6.3	600		0.3	0.5	14.0		25			WH	SH	110	A7
43LK7B	ELS	ELM	S45	50	TV	6.3	600		0.3	0.3	14.0		60	35		WH	SH	68	B12
43LK8B	ELS	ELM	S45	50	TV	6.3	600		0.3	0.5	14.0		50	100		WH	SH		B7
43LK9B	ELS	ELM	S37	33	TV	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	6.3	300	400	0.4	16.0			55	120		WH	SH	110	C8
47LK2B	ELS	ELM	S47		TV	6.3	600	400	16				80	300		WH	MD	110	
53LK2B	ELS	ELM	S53	61	TV	6.3	600		0.5	16.0			60	150		WH	SH		B12
53LK3B			S50	58	TV	6.3	600	300	0.4	16.0			140						B7
53LK4TS	ELS	ELM	S47	65		6.3	18H	3K	0.8	20.0			300	500		3C			
53LK5B	ELS	ELM	S45	38	TV	6.3	600	300	0.5	16.0			25	100		WH	SH		110B7
53LK6B	ELS	ELM	S48	385	TV	6.3	600	425	0.3	0.5	16.0		90	30		WH	SH	110	A7
59LK1B	ELS	ELM	S59	37	TV	6.3	300	425	0.4	16.0			55			WH	SH		110C8
59LK2B	ELS	ELM	S59		TV	6.3		400	0.4	16.0			80	300		WH	MD		110C

GROUP IX, MICROWAVE TUBES

TYPE NUMBER	KIND	FREQ		DUTY CYL %	OPERATION	CATHODE		MAXIMUM									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	HIGH WIDTH MHz		MAG FIELD GAUSS
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	900	180	70	1/1	600	12	500	18	8	1.6		WG 388	17	83
UV-5	TWT	3.4	4.4			6.3			60					18						
GSH-6	NOI	25.4	52.0			4.0	950	500	4	30	1300	30	11H	30	1.6			WG 388	17	95
UV-6	TWT	3.4	4.4			6.3	850	1400	35	3W	1500	80		26	1.6			WG 397	17	100
UV-7	TWT	3.4	4.4																	
GSH-10	NOI	2.6	8.4			6.3			150					18						
GSH-11	NOI	8.4	11.6			6.3			150					18						
K-12	KLO	2.5	3.6		C	6.3		250	40	100										
KIU12	KLA	2.8			P	9.5		280K	40	20				40						
MI-12	MAG	3.0	3.1		P			15K	18A	100K										
UV-13	TWT	3.4	4.4			2.4		600	350U	5				20	9					
MI-14	MAG	2.9	3.0		P			15K	18A	100K										
UV-14	TWT	3.4	4.4			4.5		1300	5	100				30	25					
K-15	KLO	3.1	5.6		C	6.3		250	50	50										
KIU15	KLA	1.8			P	12.0		280K	30	30				35						
MI-15	MAG	2.9	2.9		P			15K	18A	100K										
MI-16	MAG	2.8	2.8		P			15K	18A	100K										
K-26	KLO	0.5	0.7		C	6.3		250	60	100										
GSH-28	NOI	64.0	76.0			6.3			100											
GSH-29	NOI	52.0	65.0			6.3			100											
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										
K-31	KLO	7.0	8.1		C	6.3		320	50	20										
K-32	KLO	5.6	7.1		C	6.3		320	50	20										
K-33	KLO	14.3	16.7		C	6.3		400	45	10										
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										
K-41	KLO	1.4	2.5		C	6.3		250	60	80										
K-42	KLO	0.9	1.5		C	6.3		250	60	80										
K-48	KLO	3.4	4.4		C	6.3		180	70	100										

GROUP IX, MICROWAVE TUBES

TYPE NUMBER	KIND	FREQ		DUTY CYL %	CATHODE			MAXIMUM							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	BARB WIDTH MHz	MAG FIELD GAUSS	COUPLING	LTH mm	DIAM mm
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	6.3	850	90	1W	600								160	140	2K
K-92B	KLO	3.5	3.7	C	6.3	6.3	850	90	1W	600								160	140	2K
K-92G	KLO	4.0	4.3	C	6.3	6.3	850	90	1W	600								160	140	2K
K-92V	KLO	3.7	4.0	C	6.3	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	C			5K	7A	250K						13H					
MI-137	MAG	1.8	1.8	C			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 %	OPERATION	CATHODE			MAXIMUM						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	COUPLING
OV-613	BWT	52.6	81.0			5.0		1500	50	80	400							200	130	5K
OV-614	BWT	79.0	H1.2			6.3		2500	50	50	400							200	130	5K
OV-621	BWT	H1.8	H2.0			6.3		3000	50	15	500							240	140	95H
OV-622	BWT	H1.2	H1.8			6.3		4000	50	50	500							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										
723A/B	KLO	8.5	9.6		C	6.3	300	20	30	300				70						
725A	MAG		9.3		P			12K	10	44K										
726	KLO	2.9	3.2		C	6.3	300	20	170	300										
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}	C _{ob} pF
P1A	GAP	20	20	5	5	5	30	50	10	70	E	10	1	3.3	0.90	0.1	30	400	1	1			
P1B	GAP	20	20	5	5	5	30	50	10	70	E	10	1	2.0	0.93	0.1	33	600	1	1			
P1D	GAP	20	20	5	5	5	15	50	10	70	E	10	1	2.0	0.94	0.1	33	600	1	1			
P1G	GAP	20	20	5	5	5	30	50	10	70	E	10	1	2.0	0.96	0.1	37	600	1	1			
P1I	GAP	20	20	5	5	5	20	50	10	70	E	10	1	2.0	0.96	1.6	35	40	1	1			
P1V	GAP	20	20	5	5	5	15	50	10	70	E	10	1	1.0	0.93	0.1	35	400	1	1			
P1YE	GAP	20	20	5	5	5	30	50	10	70	E	10	1	2.0	0.95	0.5	35	60	1K	1			
P1ZH	GAP	20	20	5	5	5	20	50	10	70	E	10	1	3.3	0.95	0.1	35	45	1K	1			
1T303A	GDN	12	2	10	15	15	8	100	3	70	E	5	5	15	15				10	*1K	13		
1T303R	GDN	12	2	10	15	15	8	100	3	70	E	5	5	30	30				10	*1K	13		
1T303D	GDN	12	2	10	15	15	8	100	3	70	E	5	5	30	30				10	*1K	13		
1T303G	GDN	12	2	10	15	15	8	100	3	70	E	5	5	15	15				10	*1K	13		
1T303V	GDN	12	2	10	15	15	8	100	3	70	E	5	5	60	60				10	*1K	13		
1T303YE	GDN	12	2	10	15	15	8	100	3	70	E	5	5	60	60				10	*1K	13		
1T308A	GDP	20	3	15	50	50	1	150	85	E	1	10	25	30				15	8	*4H	12		
1T308R	GDP	20	3	15	50	50	1	150	85	E	1	10	50	50				30	8	*4H	12		
1T308G	GDP	20	3	15	50	50	1	150	85	E	1	10	50	50				50	8	*4H	12		
1T308V	GDP	20	3	15	50	50	1	150	85	E	1	10	80	80				50	8	*5H	12		
1T403A	GAP	45	20	30	12H	12H	50	70	85	C	5	100	20	20				20	8	*5H	12		
1T403R	GAP	45	20	30	12H	12H	50	70	85	C	5	100	50	50				20	8	*5H	12		
1T403D	GAP	60	30	45	12H	12H	50	70	85	C	5	100	50	50				50	8	*4H	12		
1T403G	GAP	60	20	45	12H	12H	50	70	85	C	5	100	50	50				50	8	*5H	12		
1T403I	GAP	80	20	60	12H	12H	70	70	85	C	5	100	50	50				50	8	*5H	12		
1T403V	GAP	60	20	45	12H	12H	50	80	85	C	5	100	20	20				20	8	*5H	12		
1T403YE	GAP	60	20	45	12H	12H	50	80	85	C	5	100	50	50				20	8	*5H	12		
1T403ZH	GAP	80	20	60	12H	12H	70	70	85	C	5	100	50	50				20	8	*5H	12		
P2A	GAP	100	50	25	10	10	200	250	10	60	C	50	5	0.90	0.90				17				
P2B	GAP	50	20	25	10	10	200	250	10	60	C	25	10	0.90	0.90				17				
2T301	SDN	20	3	20	10	10	40	150	2	120	E	10	3	3.0	20				30	10			
2T301A	SDN	20	3	20	10	10	40	150	2	120	E	10	3	3.0	40				30	10			
2T301R	SDN	30	3	30	10	10	40	150	2	120	E	10	3	3.0	10				30	10			
2T301D	SDN	20	3	30	10	10	40	150	2	120	E	10	3	3.0	20				60	10			
2T301G	SDN	20	3	30	10	10	40	150	2	120	E	10	3	3.0	10				60	10			
2T301V	SDN	30	3	30	10	10	40	150	2	120	E	10	3	3.0	20				30	10			
2T301YE	SDN	20	3	20	10	10	40	150	2	120	E	10	3	3.0	40				60	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 _i °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho	h ₂₁	f _α MHz	f _{MAX} MHz	NF dB	K _M dB	C _{ob} pF	r _b Ω	r _{1c} Ω	r _{2c} Ω	FIG
2T301ZH	SDN	20	3	20	40	10	150	2	120	E	10	3			3.0	80	60					10				27
P3A	GAP	50		50	500		3W	100	50	C	10	150			2.0	2.0	0.1			17					2	
P3H	GAP	50		50	250		3W	100	50	C	10	150			2.0	2.0	0.1			20					2	
P3V	GAP	50		50	250		3W	100	50	C	10	150			2.0	2.0	0.1			25					2	
P4	G	55			2A		10W																			
P4A	GAP	60	50	40	500		2W	500	90	C	10	2A			5.0	5.0	0.1			20			150	22	22	
P4B	GAP	70	60	50	400		3W	500	90	C	10	2A			15	15	0.1			23			150	22	22	
P4D	GAP	60	50	30	400		3W	500	90	C	10	2A			50	30	0.1			30			150	22	22	
P4G	GAP	60	50	40	400		3W	500	90	C	10	2A			15	15	0.1			27			150	22	22	
P4L	GAP	50			500		3W	500	50	C	10	2			20	20	0.1			30			150	22	22	
P4V	GAP	40	35	25	400		3W	500	90	C	10	2A			10	10	0.1			23			150	22	22	
P5A	* GAP	10	20	10	30	10	25	1	75	E	2	1	36	500	3.3	0.93	0.3	12		80		80			4	
P5R	* GAP	10	20	10	15	10	25	1	75	E	2	1	36	500	2.6	0.95	0.3	12		80		80			4	
P5D	* GAP	10	20	10	30	10	25	1	75	E	2	1	36	500	2.6	0.95	0.3	7		80		80			4	
P5G	* GAP	10	20	10	30	10	25	1	75	E	2	1	36	500	2.6	0.97	0.3	10		80		80			4	
P5V	* GAP	10	20	10	15	10	25	1	75	E	2	1	36	500	2.6	0.97	0.3	15		80		80			4	
P5YE	* GAP	10	20	10	15	10	25	1	75	E	2	1	36	500	2.6	0.96	0.3	18		80		80			4	
P6A	* GAP	30	30	10	30	10	150	2	100	E	5	1	32	500	3.3	0.90	0.1	30	30			50			10	
P6R	* GAP	30	30	15	15	10	150	2	100	E	5	1	32	60	2.0	0.90	0.5	30	34			50			10	
P6D	* GAP	30	30	15	15	10	150	2	100	E	5	1	32	60	2.0	0.90	0.5	12	34			50			10	
P6G	* GAP	30	30	10	15	10	150	2	100	E	5	1	32	60	3.3	0.97	1.0	30	37			50			10	
P6V	* GAP	30	30	15	15	10	150	2	100	E	5	1	32	60	2.0	0.94	0.5	30	34			50			10	
P7	GAP	13			30		45		50	E	2	1			0.97										4	
P8	GAN	15	15	25	30	10	150	5	85	E	5	1	34	500	2.5	10	1.0	15	32			65	150	10	10	
P8A	GAN																								10	
P9	GAN	20	20	15	15	10	150	2	100	E	5	1	32	60	2.0	10	0.5	12	32			60			10	
P9A	GAN	15	15	25	30	10	150	5	85	E	5	1	32	60	2.5	15	1.0	5	32			60	150	10	10	
P10	GAN	15	15	25	30	10	150	5	85	E	5	1	32	60	2.5	15	1.0	5	32			60	150	10	10	
P10A	GAN	30	30	30	100	20	150	5	85	E	5	1			2.5	25	1.0					60	150	10	10	
P10R	GAN	30	30	30	100	20	150	5	85	E	5	1			2.5	25	1.0					60	150	10	10	
P11	GAN	15	15	25	30	10	150	5	85	E	5	1	32	60	2.5	25	2.0	5	32			60	150	10	10	
P11A	GAN	15	15	25	30	10	150	5	85	E	5	1			2.5	45	2.0					60	150	10	10	
P12	GAP			6	5	5	30	2	85	E	6	1			2.0	0.95	5.0					20	150	17	17	
P12A	GAP	6	6	6	5	5	30	1	70	E	6	1			.2	20	0.5					20	150	17	17	
P13	GAP	15	15	15	15	10	150	3	100	E	5	1	500	3.3	12	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	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻³			h ₂₂ μmho	h ₂₁	f _α MHz	# f MAX	NF dB	K _M dB	C _{ob} pF	r _b Ω	r _{1c} Ω
P13A	GAP	30		15	10	10	15	150	2	100	E	5	1	60	2.0	2.0	0.97	0.5	33	33			50			10
P13R	GAP	15	15	15	20	10	15	150	3	100	E	5	1	60	3.3	3.3	20	0.5	12	12			50			10
P14	GAP	15	15	15	20	10	15	150	3	100	E	5	1	500	3.3	3.3	20	1.0	33	33			50	150	150	10
P14A	GAP	30	30	30	20	20	15	150	3	85	E	5	1	32	700	3.3	20	1.0					50	150	150	10
P14R	GAP	30	30	30	20	20	15	150	3	85	E	5	1	32	500	3.3	30	1.0					50	150	150	10
P15	GAP	15	15	15	20	10	15	150	3	100	E	5	1	500	3.3	3.3	30	2.0	33	33			50	150	150	10
P15A	GAP	15	15	15	20	10	15	150	3	85	E	5	1	32	500	3.3	50	2.0					50	150	150	10
P16	GAP	30	30	30	20	20	15	200	5	100				20			20	1.0					50	150	150	10
P16A	GAP	30	30	30	20	20	15	200	5	100				30			30	1.0					50	150	150	10
P16R	GAP	30	30	30	20	20	15	200	5	100				45			45	1.0					50	150	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	2.0	0.95	5.0	5	5			20	150	150	10
P20	GAP	50		30		1	50	150			C		25			50	1.0									10
P21	GAP	50		30		1	50	150	3	85	C	5	25			20	1.0									10
P21A	GAP	70		30		1	50	150	3	85	C	5	25			50	1.0									10
P21R	GAP	50		30			50	150	3	85	C	5	25			50	1.0									10
P22	GAP	40			400		25	100										1.0								10
P23	GAP	35			400		25	100										2.0								10
P25	GAP	40	60	60	400	6	150	200	5	75	E	20	/2	3.5	3.5	10	0.2					20	500	500	10	
P25A	GAP	40	60	60	400	6	150	200	5	75	E	20	/2	3.5	3.5	20	0.2					20	500	500	10	
P25H	GAP	40	60	60	400	6	150	200	5	75	E	20	/2	3.5	3.5	30	0.5					20	500	500	10	
P26	GAP	70	100	100	400	6	150	200	5	75	E	20	/2	3.5	3.5	10	0.2					20	500	500	10	
P26A	GAP	70	100	100	400	6	150	200	5	75	E	20	/2	3.5	3.5	20	0.2					20	500	500	10	
P26R	GAP	70	100	100	400	6	150	200	5	75	E	20	/2	3.5	3.5	30	0.5					20	500	500	10	
P27	GAP	5	5	5	6	6	3	30	1	70		5	/1	2.0	2.0	20	1.0	10	10			50	*6K	*6K	17	
P27A	GAP	5	5	5	6	6	3	30	1	70	E	5	/1	1.0	1.0	20	1.0	5	5			50	*6K	*6K	17	
P28	GAP	5	5	5	6	6	3	30	1	70	E	5	/1	1.0	1.0	20	5.0	5	5			50	*6K	*6K	17	
P29	GAP	12	12	10	100	100	4	30	1	70				25			5.0					20				17
P29A	GAP	12	12	10	100	100	4	30	1	70				45			5.0					20				17
P30	GAP	12	12	10	100	100	4	30	1	70				80			10.0					20				17

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM										TYPICAL				MINIMUM			TYP			MAXIMUM					
		V _{CBO} V	V _{EBO} V	V _{CEO} V	I _C mA	I _E mA	I _{CBO} μA	P _C mW	K _g mW/°C	T _J °C	NOMINAL	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho	h ₂₁	f _a MHz	f _{MAX} MHz	NF dB	K _M dB	C _{ob} pF	r _b Ω	r _{1c} Ω	r _{1c} Ω	f ₁₆	
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		150	25	200	5	70	C	1	10			30			1.0					17				
P42B	GAP	15	150		150	25	200	5	70	C	1	10			45			1.0					17				
P101	SAN	20	10	10	20	1	150	2	120	E	5	1	100	300	3.3	10		0.2	15	25		150	150	10			
P101A	SAN	10	10	10	20	1	150	2	120	E	5	1	100	300	3.3	10		0.2	18			150	150	10			
P101B	SAN	20	20	20	20	1	150	2	150	E	5	1	100	300	3.3	15		0.2	15			150	150	10			
P102	SAN	10	10	10	20	1	150	2	120	E	5	1	100	300	2.0	18		0.5	15			150	150	10			
P103	SAN	10	10	10	20	1	150	2	120	E	5	1	100	300	3.3	30		1.0	15			150	150	10			
P104	SAP	60	45	60	10	1	150	2	150	E	5	1	140		3.3	9.0		0.1				80	1K	10			
P105	SAP	30	45	30	10	1	150	2	150	E	5	1	140		3.3	9.0		0.1				80	1K	10			
P106	SAP	15	45	15	10	1	50	2	150	E	5	1	80		2.0	13.5		0.5				80	/2K	10			
P107	SAN	120				1	150				5	1			15			3.0									
GT108A	GAP	15	50		50	10	75	1	55	E	5	1			3.3	20		0.5				30	/3K	11			
GT108R	GAP	15	50		50	10	75	1	55	E	5	1			3.3	35		1.0				30	/3K	11			
GT108G	GAP	15	50		50	10	75	1	55	E	5	1			3.3	H1.1		1.0				30	/3K	11			
GT108V	GAP	15	50		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		150		100		5	1			60			0.5	12			50		10			
P201	GAP	45	45	30	15H	400	1W	300	100		5	1			20			0.1	25			25		25			
P201A	GAP	45	45	30	15H	400	1W	300	100		5	1			40			0.2	25			25		25			
P202	GAP	70	35	55	15H	400	1W	300	100		5	1			20			0.1	30			25		25			
P203	GAP	70	45	55	15H	400	1W	300	100		5	1			20			0.2	20			25		25			
P207	GAP	45	20	40	25A	16M	4W	70	85		5	1			15			0.2				24		24			
P207A	GAP	45	20	40	25A	16M	4W	70	85		5	1			15							24		24			
P208	GAP	65	30	60	25A	25M	4W	70	85		5	1			15							24		24			
P208A	GAP	65	30	60	25A	25M	4W	70	85		5	1			15							24		24			

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 _i °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵			h ₂₂ μmho	h ₂₁		f _α MHz	NF dB
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	1700	30	85	C		5	200		20	/0.2							25
P214V	GAP	60	10	55 5A	1500	1700	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	60	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
P303A	SAP	60	60	500 5H	100	2000	100	130	E		10	120		6	0.1							*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 ¹			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 _i °C	COMMON	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻³			h ₂₂ μmho	h ₂₁	f _α MHz	NF dB	K _M	C _{ob} pF
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		20	*3H	29			
GT310R	GDP	12	10	10	10	5	20	/1	55	E	5	1	3A		60	60		60	*3H	29			
GT310D	GDP	12	10	10	10	5	20	/1	55	E	5	1	3A		20	20		20	*3H	29			
GT310G	GDP	12	10	10	10	5	20	/1	55	E	5	1	3A		60	60		60	*3H	29			
GT310V	GDP	12	10	10	10	5	20	/1	55	E	5	1	3A		20	20		20	*5H	29			
GT310YE	GDP	12	10	10	10	5	20	/1	55	E	5	1	3A		60	60		60	*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	10	10		100		85						20	20	300		/3				
GT313B	GAP	12	15	10	10		100		85						20	20	450		2				
P314A	GAP	10	1	1	1		100		85						0.94	30	30		15				
P314B	GAP	10	1	1	1		100		85						0.94	60	60		10				
P314C	GAP	10	1	1	1		100		85						0.94	120	120		6				
P322	* GDP	8	8	15	15		50		85						5.0	400	400		4				
P401	GDP	20	20	10	10		50	2	85	E	5	5			5.0	30	30		15				10
P402	GDP	20	20	10	10		50	2	85	E	5	5			5.0	60	60		10				10
P403	GDP	20	20	10	10		50	2	85	E	5	5			5.0	*H1.2	*H1.2		10				10
P403A	GDP	20	20	10	10		50	2	85	E	5	5			5.0	*H1.2	*H1.2		10				10
P404	GSP	5	5	/5	5		10	/1	85	E	3	/1			7.0	10	10		5				5
P404A	GSP	5	5	/5	5		10	/1	85	E	3	/1			7.0	10	10		5				5
P405	GSP	5	5	/5	5		10	/1	85	E	3	/1			7.0	30	30		5				5
P405A	GSP	5	5	/5	5		10	/1	85	E	3	/1			7.0	30	30		5				5
P406	GAP	6	6	6	6		30	2	85		6	1			2.0	20	10		20	150	17		17
P407	GAP	6	6	6	6		30	2	85		6	1			2.0	20	20		20	150	17		17
P408	G P	20	20	6	6		30	1	90	E	5	1	3A		0.95	10	10		20	150	3		3
P409	G P	20	20	6	6		30	1	90	E	5	1	3A		0.95	20	20		20	150	3		3
P410	GNP	6	8	6	6		100	2	85	E	5	5	10	120	10.0	*H2.0	*H2.0		4				6
P410A	GDP	6	8	6	6		100	2	85	E	5	5	10	120	10.0	*H2.0	*H2.0		4				6

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM						TYPICAL			MINIMUM			TYP		MIN		MAXIMUM							
		V _{CB0}	V _{EB0}	V _{CE0}	I _C	I _E	I _{CB0}	P _C	K _θ	T _i	COMMON	V _C	I	h ₁₁	h ₁₂	h ₂₁	f _α	NF	K _M	C _{ob}	r _b	r _{1C}	r _{1C}	f ₁₆	
		V	V	V	mA	mA	μA	mW	mW/°C	°C		V	mA	Ω	10 ⁻⁵	μmho	MHz	dB	dB	pF	Ω	Ω	Ω	Ω	Ω
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	15	15	50		3	100	2	70	C	5	5		5.0	25		*H1.2		8	*5H				16
P416A	GDP	3	15	15			3	100	2	70	C	5	5		5.0	60		H1.2		8	*5H				16
P416R	GDP	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	50	2		C	5	5		24			200							
P417A	P		10				5	50	2		C	5	5		65			200							
P418	P		10				5	50	2		C	5	5		24			400							
P418A	P		10				5	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							10
P423A	GDP	40	12	25			5	100							5.0	15		*H1.2							10
P501	SDN	20	1	20			3	50	150		E	10	3		3.0	9		*10		10					19
P501A	SDN	20	1	20			3	50	150		E	10	3		3.0	19		*10		10					19
P502	SDN	20	1	20			3	50	150		E	10	3		3.0	9		*30		10					19
P502A	SDN	20	1	20			3	50	150		E	10	3		3.0	19		*30		10					19
P502B	SDN	20	1	20			3	50	150		E	10	3		3.0	9		*30		10					19
P502V	SDN	20	1	20			3	50	150		E	10	3		3.0	19		*30		10					19
P503	SDN	20	1	20			3	50	150		E	10	3		3.0	9		*10		10					19
P503A	SDN	20	1	20			3	50	150		E	10	3		3.0	19		*60		10					19
P504	SDN	30	2	30	10		2	150			E	10	5		2.0	10				7					14
P504A	SDN	30	2	30	10		2	150			E	10	5		2.0	25				7					14
P505	SDN	20	2	20	10		2	150			E	10	5		2.0	40				7					14

GROUP X, TRANSISTORS

TYPE NUMBER	KIND	MAXIMUM							TYPICAL			MAXIMUM			MINIMUM		TYP	MIN	MAXIMUM								
		V _{CB0} V	V _{EBO} V	V _{CEO} V	I _C mA	I _E mA	I _{CB0} μA	P _C mW	K _θ mW/°C	T _J °C	COMM	V _C V	I mA	h ₁₁ Ω	h ₁₂ 10 ⁻⁵	h ₂₂ μmho			h ₂₁	f _a # f MAX MHz	NF dB	K _M dB	C _{ob} pF	r _b Ω	r _{1c} Ω	r _c Ω	FIG
P505A	SDN	20	2	20	10	2	150	2	120	E	10	5			2.0	20						7	*1K	14			
P601	GDP	25	/1	25	1A	200	1W	500	C	10	500				20						10	200	*5H				
KT601A	SPN	100	2		30		500	150							16												
P601A	GDP	30	/1	30	1A	100	1W	500	C	10	500				40						10	200	*5H				
P601R	GDP	30	/1	25	1A	130	1W	500	C	10	500				80						10	200	*5H				
P601BI	GAP	30		25			3W	85							20												
P601I	GAP	25		20			3W	85							20												
P602	GDP	30	/1	30	1A	100	1W	500	C	10	500				40						10	200	*5H				
P602A	GDP	25	/1	25	1A	130	1W	500	C	10	500				80						10	200	*5H				
P602AI	GAP	30		25			3W	85							20												
P602I	GAP	25		20			3W	85							20												
P604	GAP	45	15	45	200		400	70							10												
P604A	GAP	45	15	45	200		400	70							20												
P604B	GAP	45	15	45	200		400	70							40												
P605	GDP	45	1	45	15H	2M	500	500	C	500	500				20							130	*5H	26			
P605A	GDP	45	1	35	15H	2M	500	500	C	500	500				50							130	*5H	26			
P606	GDP	45	1	45	15H	2M	500	500	C	500	500				20							130	*5H	26			
P606A	GDP	35	1	35	15H	2M	500	30	C	500	500				50							130	*5H	26			
P607	G P	15	1		200	10	0500	85	C	10	100				20							40	*2H	26			
P607A	G P	15	1		200	100	1500	85	C	10	100				60							40	*2H	26			
P608	G P	15	1		200	100	1500	85	C	10	100				20							30	*2H	26			
P608A	G P	15	1		200	100	1500	85	C	10	100				60							30	*2H	26			
P609	G P	15	1		200	100	1500	85	C	10	100				20							30	*2H	26			
P609A	G P	15	1		200	100	1500	85	C	10	100				60							30	*2H	26			
P701	SON	40		40	500	7H	100	1000	400	150					10												
P701A	SDN	60		60	500	7H	100	1000	400	150					10												
P702	SDN	70	3	60	2A	5000	4000	35	150	C	10	1A			25												
P702A	SDN	70	3	60	2A	2500	4000	35	150	C	10	1A			10												
KT801A	SDN			80	2A		5W	150							13												
KT801R	SDN			80	2A		5W	150							13												
KT802A	SPN	150	3	130	5A	60	50W		C	10	2A				15												
S1A	* GPP	40			10	10	100		E	20	/1				1.0												
S1H	* GPP	40			6	10	50		E	20	/1				1.2												
S1D	* GPP	40			6	10	50		E	20	/1				1.2												
S1G	* GPP	40			6	10	50		E	20	/1				1.2												

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 _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	r ₁ Ω	r _c Ω						
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	5.0			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	E _F V	I _F mA	I _R @ μA	E _r @ T°C V		
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 V	I _F mA	I _R @ μA	E _r @ V		
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 _{Opr} °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 _F @ 25 mA	T _{Opr} °C	I _S @ 25°C A	PIV V	E _F MIN V	E _F	I _F mA	I _R μA	E _r V		
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 _{Mox} MHz	FIG
		I _F @ 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		
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	I _F mA	I _R @ μA	E _r @ V		
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 pF	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 μs	ON μs	MIN (-)°C	MAX (+)°C	
D235A	CON	SI	40	2	20	100	2	1	4	120	5	35	60	125	15
D235B	CON	SI	100	2	20	100	2	1	4	120	5	35	60	125	15
D235G	CON	SI	100	2	20	100	2	1	4	120	5	35	60	125	15
D235V	CON	SI	40	2	20	100	2	1	4	120	5	35	60	125	15
D238A	CON	SI	50	2			10		20	330	10	35	50	100	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		TEMP		FIG
			VOLTS	I _R μA	MIN pF	MAX pF	TC	EXP (-)		MAX mw	MIN (-)°C	MAX (+)°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			
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					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	AN		
VK-10	POW	SI	200	20	0.9									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	AF	5M	
VK-25	POW	SI	200	50	0.9								X		X	X	X	X	X	X	X	X	AF	15M	X
VK-50	POW	SI	200	50	0.9								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	AF	15M	X
VK-100	POW	SI	200	100	0.9								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	AF	15M	X
VK-200	POW	SI	200	200	0.9								X		X	X	X	X	X	X	X	X	AF	15M	X
VKV200	POW	SI	200	200	0.9								X		X	X	X	X	X	X	X	X	W	4L	X
VKV200	POW	SI	200	500	0.9								X		X	X	X	X	X	X	X	X	W	4L	X
VKV1000	POW	SI	200	1000	0.9								X		X	X	X	X	X	X	X	X	W	4L	X

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	20	27
VKUV-100-0.5	SCR	SI4	15		60	100	100	40	2.5	20	2.0	20	20	20	27
VKUV-100-0.75	SCR	SI4	15		60	100	150	40	2.5	20	2.0	20	20	20	27

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 RAC	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 Z Ω	TC %/°C	K _θ mW/°C	FIG
			I _Z mA	T _{Opr} C	P _Z mW	E _Z V	ΔE _Z %	I _Z mA				
D6	REG	SI	18	150	125	6.5		5.0	10	.03		
D7	REG	SI	18	150	125	7.5		5.0	10	.06		
D8	REG	SI	14	150	125	8.5		5.0	10	.07		
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 Z Ω	TC %/°C	K _θ mW/°C	FIG
			I _Z mA	T _{Opr} °C	P _Z mW	E _Z V	ΔE _Z %	I _Z mA				
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	MAX	
								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
DG-S1	MIX	GE	9.8	400	8.5	3.0	3.0	80	250	0.1	3.0		60	70	28
DG-S2	MIX	GE	9.8	400	6.5	3.0	3.0	80	250	0.1	3.0		60	70	28
DG-S3	MIX	GE	3.2	400	8.5	3.0	3.5	80	250	0.1	3.0		60	70	28
DG-S4	MIX	GE	3.2	400	6.5	3.0	3.0	50	250	0.1	3.0		60	70	28
DK-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.	TEMP		WEIGHT g/m ²	K AREA mm ²	
		VOLTS V	CUR. μA	POWER mW	RESISTANCE mΩ	CURRENT μA	mA/cm	MAX μ	CUT OFF μ		TIME CONT. μs	MIN (-)°C			MAX (+)°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	20		
FDK-1	SI	20				3	3	0.9	1.3		10	0	20		
FD-2	GE	30		15		25	20	1.4	1.7		10	0	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	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	0.9		
FTG-1	GE	15		50		1000	20	1.4	1.7		40	40	1.2		

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	/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	/1	S13	20	1400	100	3	7	10	900	L		13	
FEU-17A	PHM		T	48	181	/1	S13	20	1400	100	3	7	10	900	L		13	
FEU-18	PHM		T	48	181	/1	S3	20	1400	100	3	7	10	900	L		13	
FEU-18A	PHM		T	48	181	/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	/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			RESISTANCE			TEMP.		POWER		SENS $\frac{\Omega}{mW}$
			DIAM mm	LTH mm	SHAPE	MIN Ω	MAX Ω	T.C. %	MIN (-) $^{\circ}C$	MAX (+) $^{\circ}C$	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		FLASH CONDITIONS					LIGHT OUTPUT			LIFE	
	SHAPE	DIAM mm	LTH mm	MIN DROP V	OPER V	FIRING V	AVG W	PEAK kW	RES Ω	DISCHG CAP pF	TIME μs	FLASH FREQ pps	ENERGY j	FLASH cd/s	AVG cd	PEAK cd	NO.OF FLSH	HRS	
IFB300	R	8	85	240	300	1500	40	36	2.5	65H	8K	0.13	300	500		60K	10K		
IFK15-1	T	29	60	300	300		3	90	1.5	800	400	0.1	36	36		9K	2K		
IFK20	T	4	10	130	700		2	100	1.6	25H	200	0.1	20	20		100K	10K		
IFK50	T	4	20	140	200	1K	5	125	0.3	25H	400	0.1	50	70		180K	10K		
IFK120	U	5	30	180	300	1K	12	120	0.8	25H	1K	0.1	120	250		250K	10K		
IFK500	P	30	45	400	500	3500	30	65	4.0	4K	8K	0.05	500	1000		130K	10K		
IFK2000	U	9	70	250	320	2K	300	200	4.5	8K	2K	0.7	400	1200		600K	40K		
IFK20000	G	85		2K	6K	20K	55H	10M	3.5	550	11H	0.55	10K	34K		30M	7K		
IFK80000	G	1H		3K	6K	20K	18K	13M	2.5	39H	5K	0.25	70K	240K		36M	5K		
IFP200	T	5	200	450	500	2K	27	140	2.0	16H	16H	0.13	200	400		250K	10K		
IFP500	T	5	350	450	500	3K	65	70	3.5	4K	7K	0.13	500	1000		140K	10K		
IFP1500	T	5	600	900	1K	4K	100	160	6.0	3K	9K	0.06	15H	4000		450K	10K		
IFP4000	T	6	800	1300	1400	5K	270	250	8.0	4K	16K	0.06	4K	12K		750K	10K		
IFP15000	T	9	600	1600	2400	5K	1250	3300	1.8	5K	45H	0.08	15K	50K		11M	10K		
ISK10	U	5	30	180	300	1000	10	3	0.8	1.0	15	200	70.1	7U	15	500		50	
ISK25	U	5	20	250	300	1000	20	130	0.4	450	150	1	20	40		30K		30	
ISP10	T	1	62	700	1000	3000	10	6	30	0.2	18	100	0.1	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		300K	1	5K	
IS-SH100-1	T	0.7	2	2200	3000	3500		4000		11	15		50	50		3M	1	2	
IS-SH100-3	T	2	5	2500	3500	6K	150	1000	0.5	0.5	2	50	3	2	100	600K		5	
IS-SH500	T	1.2	8	5K	9K	15K	500	1000	0.12	0.12	6	100	5	5	500	1M		1	
IST10	U	5	30	180	300	1000	10	50	0.8	220	200	1	10	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	PLATEAU		MIN	MAX			
										WIDTH	SCOPE					
					mm	mm	V	V	³ 10 ³ /min	V	% V	(-)°C	(+)°C			
AS-1	COU	RAG			132	18	830	940	80	0.2	0	35				
AS-2	COU	BAG		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	BET	SQ	CU	100	40	1600		10	150	0.5	30	50	10	7	6
MSTR-4	COU	BET	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	BET			335	26						50				
SBM-8	COU	BET			335	26						50				
SBS-1	COU	RAG			125		800	1200	150	0.03	50	50				
SBS-4	COU	BET		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	LENGTH	MIN	MAX	RATE	PLATEAU		MIN	MAX			
										mm	mm					
									V	% V			pF	MΩ		
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 MΩ	MAX CAP pF	AMB TEMP		
	LTH	DIAM		TYPE	KIND	MIN	MAX	I-amp J-joule	TIME s	OPERATING FREQUENCY pps			MIN	MAX	
	mm	mm				V	V						(-)°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 TIME μs	MAX RATE KHz	LTH mm	DIA mm	
		E _b V	FIRING V	BIAS V	DRP V	OPER V	K ₁ V						K ₂ V
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 ^{-X}	LINE PER 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 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	D ₁	D ₂	D ₃	D ₄	
A4	2	4	3	1					CP																					
A7	1	7	6	5					2																					
A8	2	8	7	5					3																					
A9	2	7	6	4					CP																					
A12	1	12	2	3					8																					
A14	1	14	2	3					9																					
A20	1	20	3	5	16				11																					
A25	1	25	2	24	6				23																					
B7	3	4	2	5	7				6																					
B77	1	7	4	2	3				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				9																					
CB	1	8	7	2	6				4																					
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																					
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	4																				
DW4	2	8	8						4																					
DW5	2	6	3						1	4																				

GROUP XXV, BASES

BASE NO.	SECTION I										SECTION 2					SEC. 4		DEFLECTION I				DEFLECTION 2										
	H	H	H	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	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	
DW6	3	4	4	5						7																						
DW7	2	7	8							3																						
DW8	1	3	2							4																						
DW9	3	4	1							7																						
F8	1	8	7		6	3				5																						
G8	1	8			6					CP																						
ID1	4	5	2	1						7																						
ID2	4	5	3	1						7																						
ID3	4	5	7	8						1																						
P1S	4	5	3	2	9	1				7	1																					
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																						
P10	2	7	8		CP	4	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	4	6	3	4	5	3				1																						
P28	2	4	6	7	1	6				3																						
P29	3	4	4	6	7	2	5			1																						

GROUP XXV, BASES

BASE NO.	SECTION I										SECTION 2										SEC. 4		DEFLECTION I				DEFLECTION 2					
	H	H	K	K	g ₁	g ₂	g ₃	g ₄	g ₅	A	Sh	H	H	K	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	
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																							
T20	3	9	1	2		4			5	6																						
T21	5	10	1	3		1			4	2																						
T22	3	4	2	5		1			6																							
T23	3	4	2	1					6																							
T24					1	4			CP																							
TD1	4	8	6	7																												
TD3	2	7	8	CP					3																							
TD6	3	8	2	4					1																							
TE1	1	6	4	8		5			2																							
TE2	1	7			2	CP			4																							
TF3	4	5			8	2			3																							
TE4	1	3			2	4			CP																							
TE5	1	3			4	2			CP																							
TE6	2	7			5	4			CP																							
TE7	1	7	7	3		6																										
TE8	1	2	5	6		9																										
TE9	4	5	1	9		8																										
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																						
TS9	2	7		CP					CP																							
TT1	4	5	7	8					9																							
4AC	2	7	7						CP																							
4AJ									5	3																						

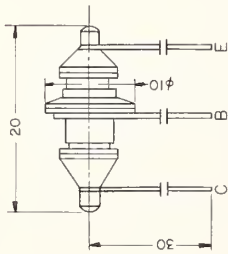
GROUP XXV, BASES

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	H	K	g ₁	g ₂	g ₃	A	A ₃	A	K	A	A ₅	D ₁	D ₂	D ₃	D ₄	D ₁	D ₂	D ₃	D ₄	
4BB	2	7	8	CP				CP																								
4BQ	2	7	8					3																								
4D	1	4		3																												
4F	1	3		4																												
4G	1	4	3																													
4T2	1	2		4																												
5AA	2	7	8																													
5AA	2	7	8																													
5AW	1	5	4	3	2	4																										
5BT	2	7	3	5	8	3																										
5CL	3	5	4	2	5																											
5F	1	5	4	CP	3	4																										
5M	2	7	8	CP																												
5S	2	7		5																												
5Y	2	7		CP	4	7																										
6AR	1	7		6	3	5																										
6AU	1	7		6	4	1																										
6RT	3	4	5																													
6BY	2	7	3	CP																												
6CC	3	4	2	1	6	2																										
6F	1	6	5	CP	3	4																										
6Q	2	7	8	5																												
6X	2	7		5	4	7																										
7AB	2	7		4																												
7AT	1	7		4	3	6	3	1	2																							
7AV	1	7		3	4	5																										
7BA	1	7		3	4	5																										
7BD	3	4	2	1	6	7																										
7BF	3	4	7	5																												
7BK	3	4	7	1	6	2																										
7BP	1	7	4	2	3	4																										
7BQ	3	4	2	1																												
7BS	3	4	2	6																												
7CH	3	4	2	1	6	7	6	2	5																							
7CM	3	4	2	1	6	7																										
7DF	3	4	1	2	5	6																										

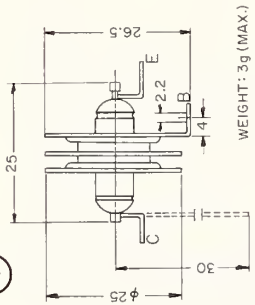
GROUP XXV, BASES

BASE NO.	SECTION 1										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	D ₁	D ₂	D ₃	D ₄		
	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		
7DN									1																						
7EM	3	4	2	1	5			6																							
7R	2	7	8	CP	4	5		3																							
7S	2	7	8	5	4	8		3																							
7T	2	7	8	CP	4	5	4	8	3																						
7Z	2	7	7	5	6	4	CP	4	3																						
8A	2	7	8	5	6	4	CP	4	3																						
8AN	2	7	4					3	1																						
8B	2	7	8	4				3																							
8RD	7	8	3	1				2																							
8RE	7	8	2	1				3																							
8BK	2	7	3	4	6	3		8																							
8CJ	1	9	2	3				4	5																						
8E	2	7	8	CP	6	8		3																							
8ES	2	7	7					3																							
8HC	2	7	7					CP																							
8N	2	7	5	4	6	3		8																							
8Q	7	8	3	2				6																							
8R	2	7	6	5	4	8	4	1	3																						
8S	7	8	6	3				2																							
8T1	3	4	2	1	5			7																							
8T2	2	7	8	5	6			3																							
8T3	2	7	8	5	6			3																							
8Y	2	7	5	4	6	1		8																							
9AE	4	5	7	2	3	7		6																							
9AJ	4	5	3	2				1	9																						
9RD	4	5	CP					2																							
9CA	4	5	3	2	1	7	1	3	6																						
9CB	4	5	CP					9																							
9CV	4	5	3	2	9	3		7																							
9DD	4	5	1	2				3																							
9EQ	4	5	1	2	9	8		7																							
10T	1	10	5	2	6			8																							
11L	1	11	2	10				7																							
14A	1	14	2	3				4																							
14G	1	14	2	3				9																							
14J	1	14	2	3				9																							

1

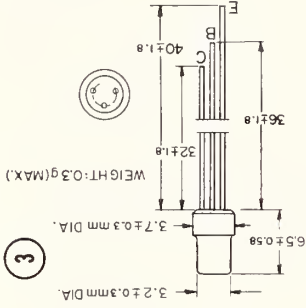


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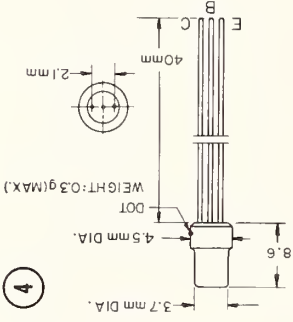
WEIGHT: 3g (MAX.)

3



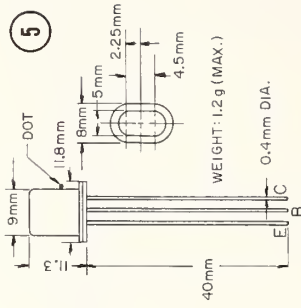
WEIGHT: 0.3g (MAX.)

4



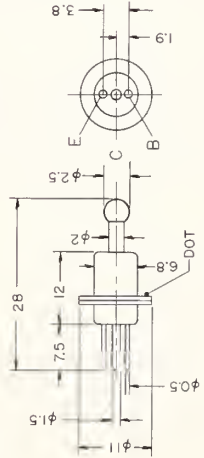
WEIGHT: 0.3g (MAX.)

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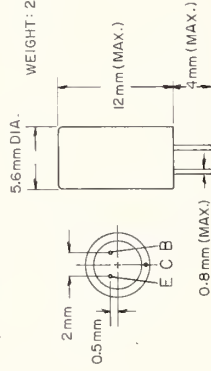


WEIGHT: 1.2g (MAX.)

6

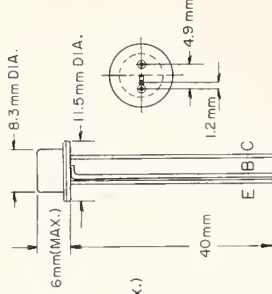


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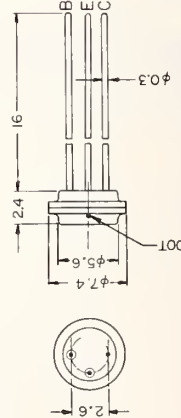
WEIGHT: 2.5g (MAX.)

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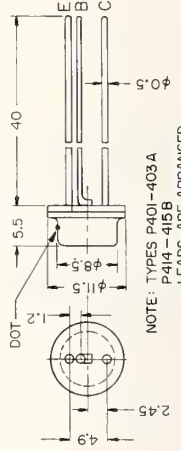


WEIGHT: 1.2g (MAX.)

9

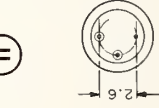


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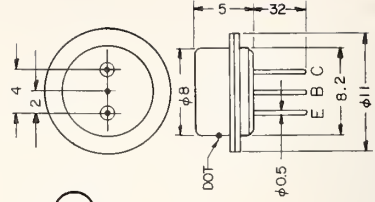


NOTE: TYPES P401-403 A
P414-415 B
LEADS ARE ARRANGED
E, C AND B

11

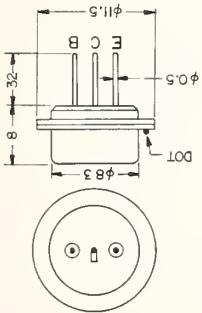


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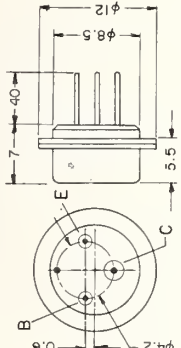


TRANSISTOR OUTLINE DRAWINGS GROUP X

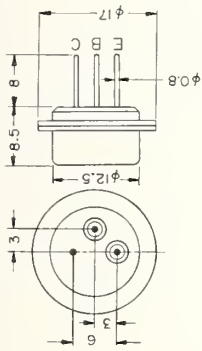
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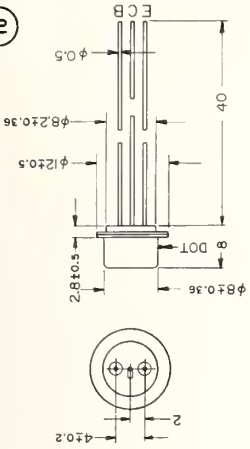
14



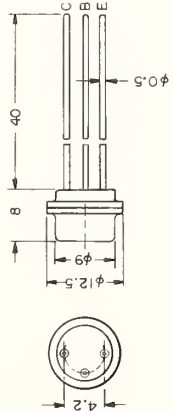
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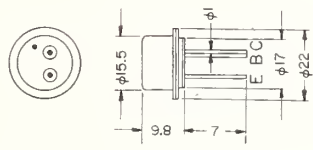
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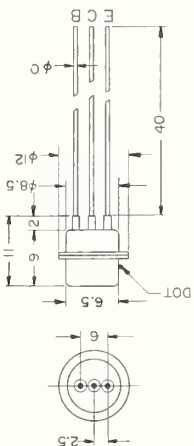
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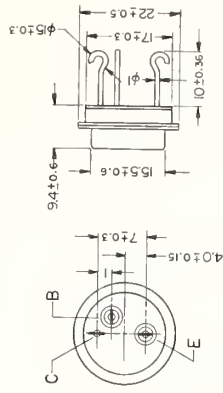
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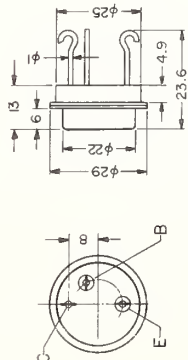
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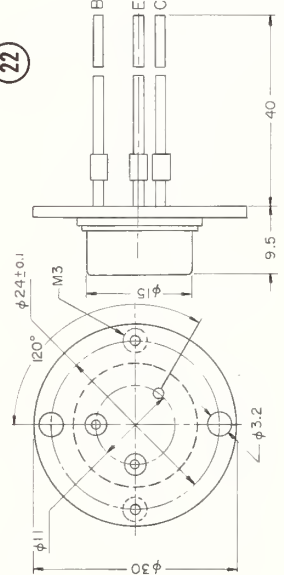
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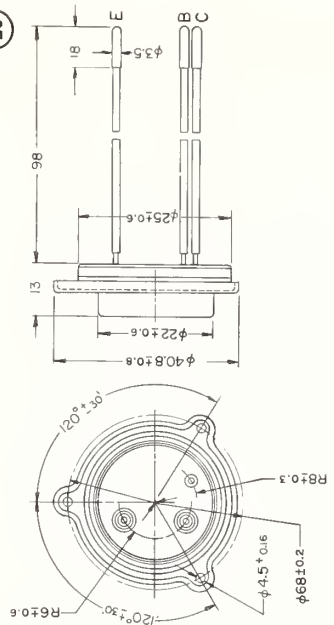
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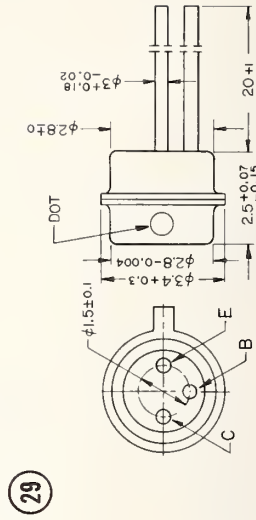
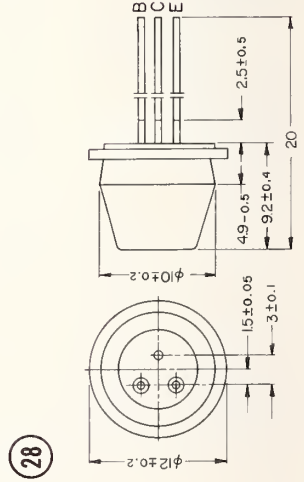
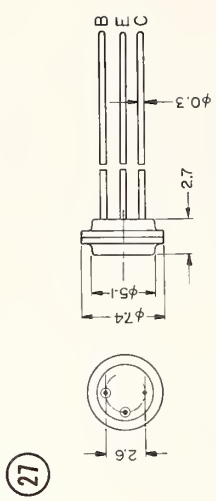
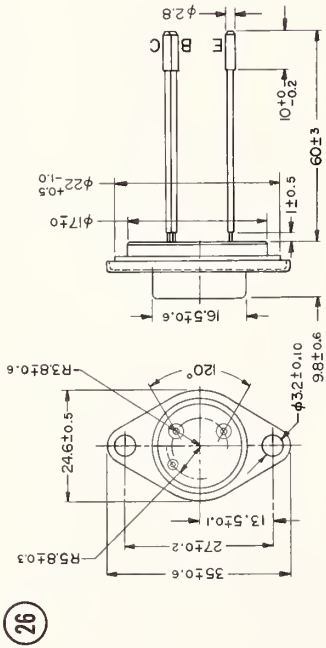
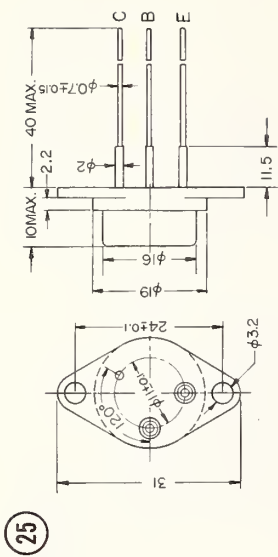
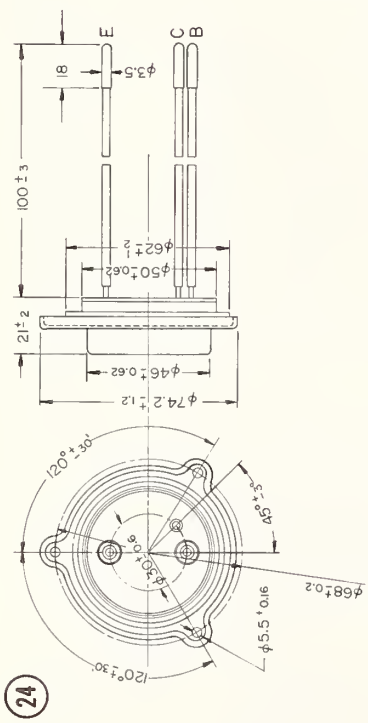
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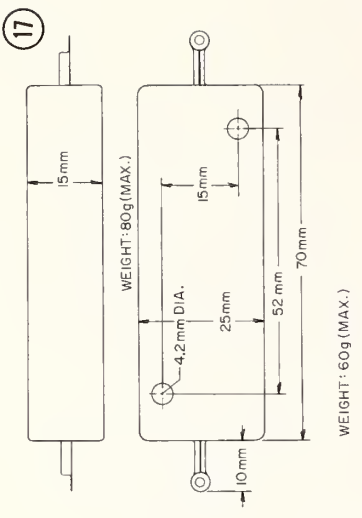
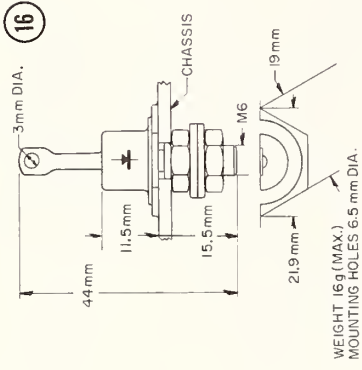
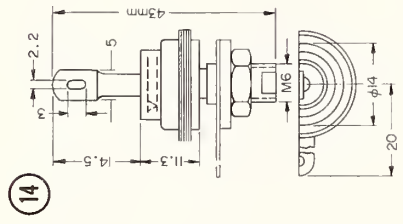
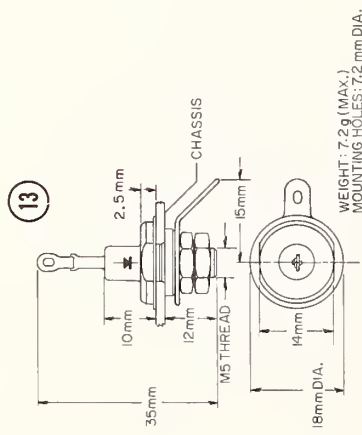


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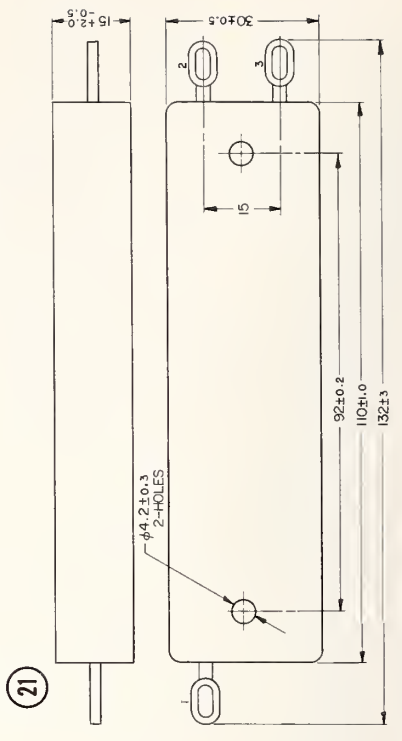
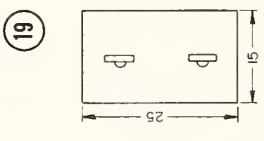
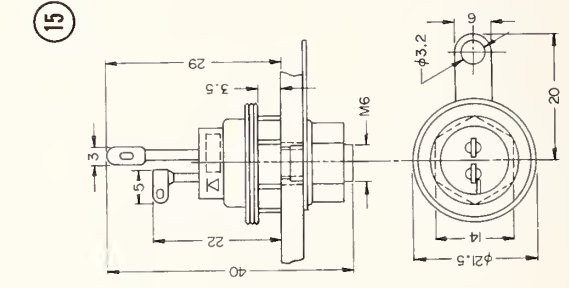
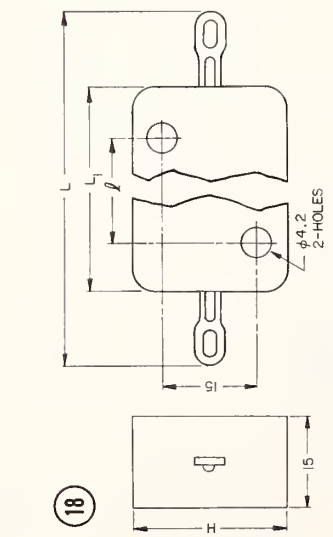
TRANSISTOR OUTLINE DRAWINGS
(CON'T)





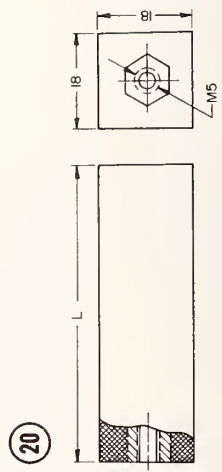
WEIGHT: 7.2g (MAX.)
MOUNTING HOLES: 7.2 mm DIA.

WEIGHT: 60g (MAX.)



NO.	H	L	l
18A	25	92	70
18B	30	132	110

NO.	L
20A	57
20B	100



DIODE OUTLINE DRAWINGS (CON'T)



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