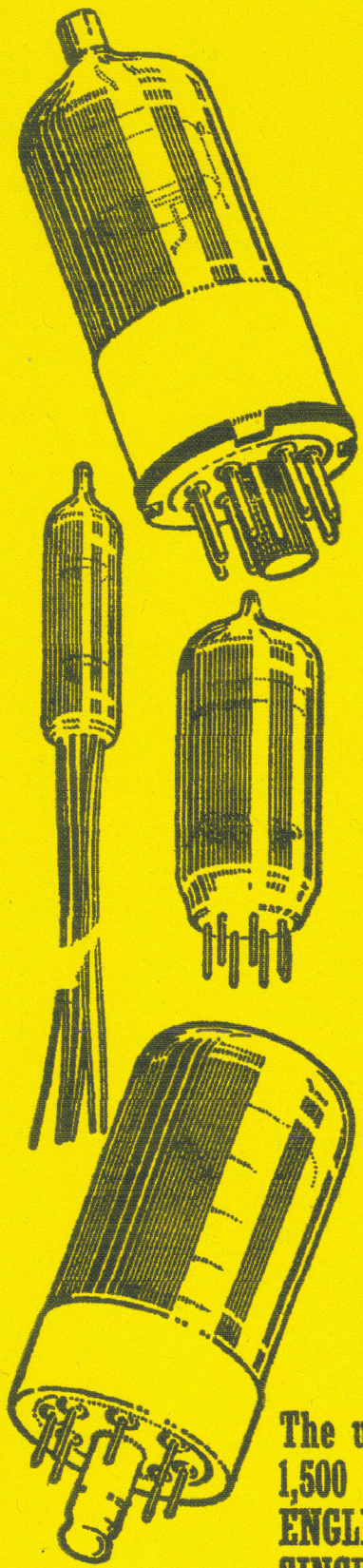

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BY

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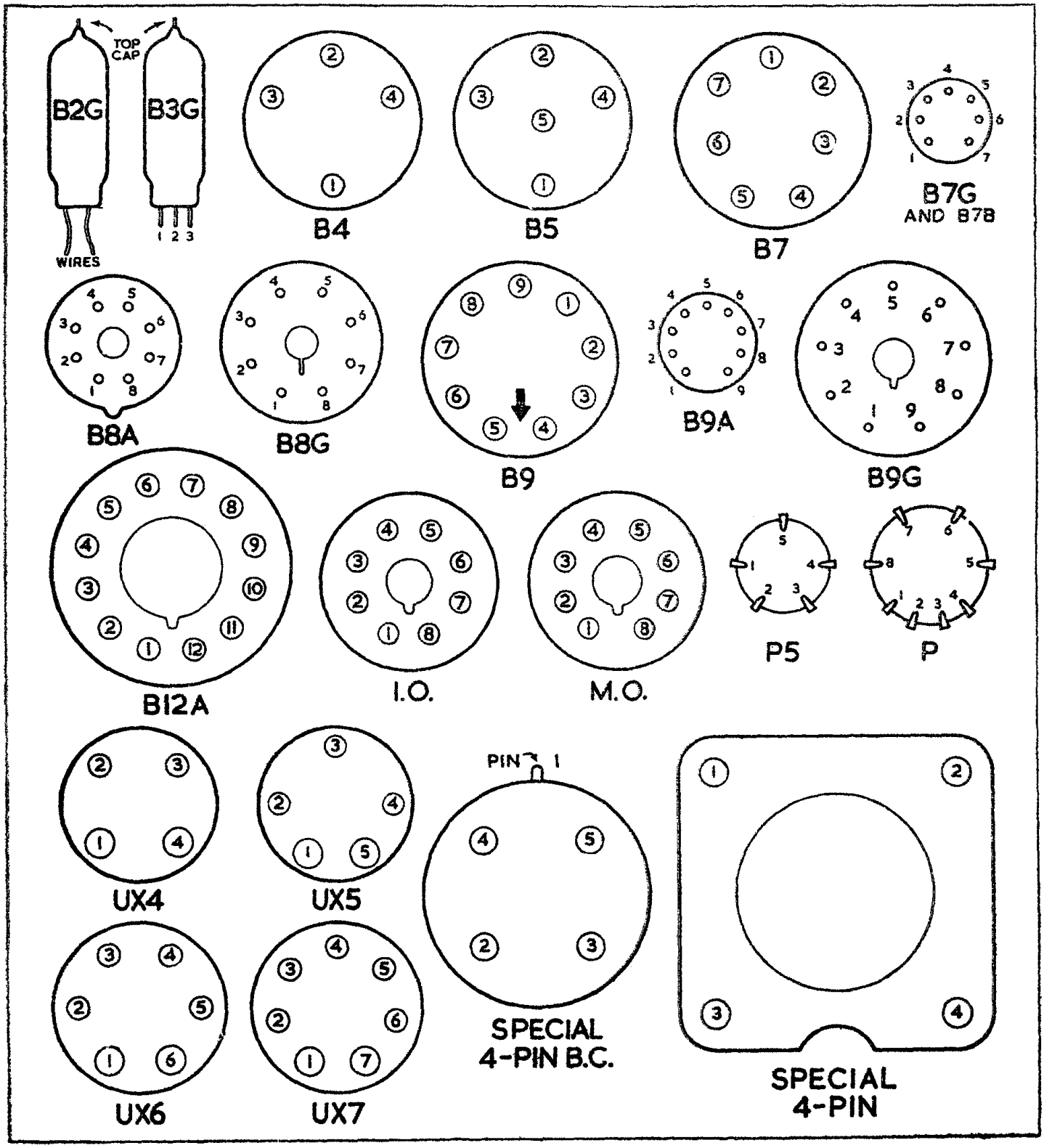


INTRODUCTION

The information contained in the main tables refers to the electrical characteristics of the valves, together with a diagram of the electrode structure showing the base pin connections. All the requisite information concerning any particular valve is obtained without reference to any other page or table. The valves are listed in sections under 12 headings according to their function, and they are grouped in each section in base order. All B7 types, for example, will be found in one group. For easy reference each base type is listed in numerical/alphabetical order.

The name of the manufacturer has been included in all cases and, as far as possible, abbreviations have been avoided. The exceptions are (a) duplicate valves made by Mullard and British Tungsram which are listed as Mul.-Tung; (b) valves of American design also made by English manufacturers which are listed as Am.-Brit. (American valves not duplicated in this country are listed as U.S.A.); (c) valves marketed by Marconi and Osram as M.O.V.; and (d) The English Electric Co. Ltd. as Eng.-Elec.

THE INDEX

A general index is provided which contains every valve shown in the tables. This index is in numerical/alphabetical order and gives the type of base and the page number on which the characteristics will be found. As a guide to the intending user, obsolete valves are printed in italics, replacement valves in a light type, and current production valves are in bold type. Obsolete valves are those no longer manufactured. and are included since it is felt that they are quite likely to be encountered and, by the comparison of characteristics, a suitable alternative may be found. Replacement valves are manufactured in quantities estimated to cover the present-day demand; they are not recommended for use by designers in new equipment. Current production valves include the latest types and are those being manufactured in quantities.

VALVE BASES

As far as possible all the valves have been given their standard designations. American types interchangeable with English types have been given the English designation, *e.g.*, the English B7G covers the American miniature 7-pin valves and the B9A the American Noval base. Types listed as B8G apply also to type B8B and to English and American Loctol and Lock-in bases. None of these is really identical; but the differences are so slight that all are interchangeable. Side contact bases are shown as P and P5, the former being the 8 contact base and the latter, of course, the 5 contact pattern. Three hearing aid types have been given arbitrary designations viz., M4, M5 and M6.

The drawing gives a representation of all the valves and C.R.T. bases with the exception of sub-miniature types which are not true bases. Full information concerning these types will be found in the appropriate section.

FREQUENCY CONVERTERS

The characteristics given are typical operating conditions, such as an engineer will expect to find in the frequency changer stage of the average receiver, though it is pointed out that all designers do not adhere to the typical operating conditions specified by the manufacturer. As there are so many different forms of frequency changer available, each valve has its particular form given to its type number, *e.g.* (t/hex) which identifies the valve as a triode-hexode.

TUNING INDICATORS

The information covers the normal operation of cathode ray tuning indicators. The figure in the grid volts column will serve as a guide to the sensitivity of the valve.

SCREENED TETRODES AND PENTODES

These valves are normally used for RF amplification and the characteristics shown are the typical operating conditions for Class A, recommended by the manufacturers. A number of valves listed, such as the EF37A and 8D5, find particular application in audio design as RC coupled amplifiers. It has not, however, been found possible to illustrate the valves under these conditions as so much depends on the circuit design. Valves with variable mu characteristics have this indicated by the abbreviation Var. μ.

REGULATOR VALVES

Both current and voltage regulators are given, the former, perhaps, being better known as barretters. In the " Used as " column will be found the letters CR or VR which identifies the valve as either a current or voltage regulator. The Stabilised Supply in " Amps " and " Voltage Drop " columns are used to give current regulator characteristics; the remainder is devoted to voltage regulators.

RECTIFIERS

The ratings given are the maximum permissible. In many cases a minimum series resistance value has been quoted. When used with a transformer this resistance is usually provided by the resistance and leakage reactance of the transformer windings; but where DC/AC technique is used a resistor must be provided to limit the peak current.

TRIODE AMPLIFIERS

Characteristics are given for single and twin triodes, those for the latter being for a single section. The conditions shown are the typical operating conditions for transformer-coupled AF

amplifiers in Class A. RC figures are not given since much is dependent upon circuit constants.

DIODES

All the relevant information on single, twin and triple diodes will be found in this section. Multiple valves containing diode elements are in the section dealing with the function of the main electrodes.

TELEVISION C.R. TUBES

All modern television tubes are shown, which are entirely magnetic in operation, with the exception of certain E.M.I. types using electrostatic focussing. Where possible, the focussing current in ampere-turns has been shown, which will be of help to engineers wishing to substitute one type of tube for another. Tubes are listed in numerical/alphabetical order. It was found impractical to follow the base order because of the various types of base used, some of which are used only by one manufacturer. Aluminised, Aquadag coated and Ion Trap tubes are all identified by footnotes. It should be noted that base type B4E is in fact 4 sockets mounted on the C.R.T. base, connection being made by means of plugs.

ENGLISH AND AMERICAN SUB-MINIATURE VALVES

Though base diagrams are shown for the English and a few American valves, it must be appreciated that these valves have no bases in the accepted sense and that the diagrams show the order of wires as they are brought out of the valve pinch. American valves with no base reference have the electrodes identified on the valves. The American valves are in numerical/alphabetical order whilst the English ones are in base order, B5A, B5B, etc.

PUSH-PULL DATA

A large number of valve types likely to be encountered in audio equipment have been included in this section. With the exception of the heater ratings, figures quoted are for a pair of valves. Under the " Class " column the mode of operation for which the figures are given is quoted, *i.e.*, A, AB1, AB2, B1 and B2. In class A the valves are conductive over the whole input cycle and the current consumption remains practically constant between zero signal and full drive conditions. When operated in class AB the valves may be individually cut off over a small part of the input cycle and the current consumption will be higher for maximum output than for zero signal conditions. In class B, each valve will be cut off for about half of the input cycle and the current consumption is subject to large variations between maximum output and zero signal conditions. The figures 1 and 2 following the class letters denote that operation is without or with grid current flowing, *i.e.*, class A.B.1, no grid current flows; class B2 permits grid current flow.

In the majority of cases current ratings are for maximum signal conditions; this should be borne in mind when measurements are taken.

OUTPUT VALVES

All types of output valves are included, with the exception of certain twin output valves (which have a section of their own). Some contain rectifier elements in addition to the main assembly for which ratings are quoted. Valves intended for television time base or video amplification are so indicated. The conditions given relate to the typical operating conditions, and, for battery types, fixed bias is assumed. For mains-operated valves auto-bias is more usual and, whilst no cathode resistor value is quoted, it may be easily derived from the available data. It is pointed out that the output with auto-bias may be up to 10 per cent. less than with a fixed source.

TWIN OUTPUT VALVES

This section is similar to the Push-Pull Data Section except that the valves are all of the twin type and operate mainly in Class B. The valves do not appear in any other section of the book; bases have been shown in the usual manner.

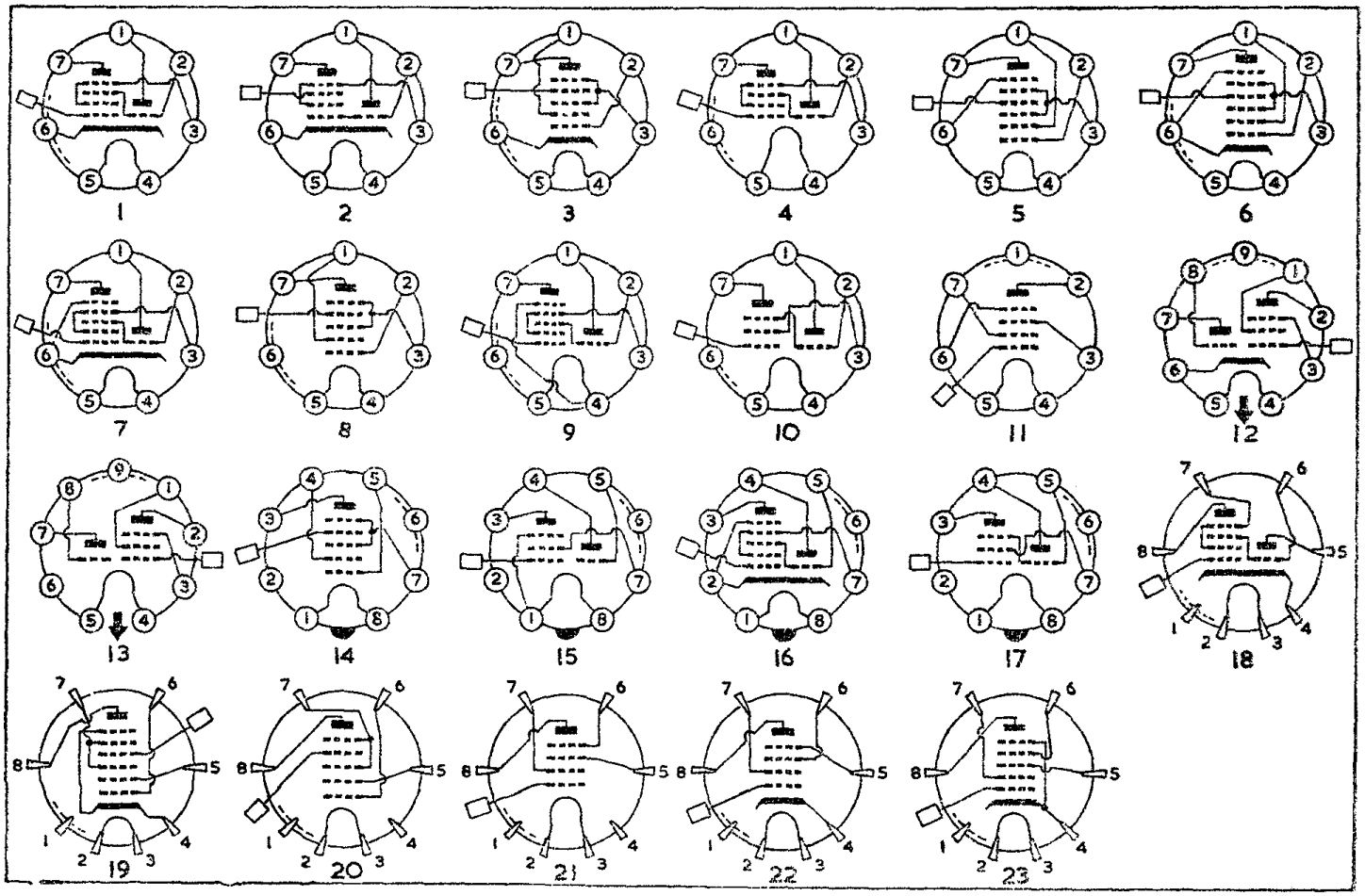
ABBREVIATIONS USED IN THE TABLES

A-A	Anode to anode	**hep**	Heptode	**M Ω**	Megohms
ACC	Accelerator	**hex**	Hexode	**Mul.-Tung.**	Mullard and Tungsram
Am.-Brit.	American and British	**I/A**	Current in amperes	**Oct**	Octode
CR	Current-regulator	**IC**	Internal connection	**ra**	Anode AC resistance
d/tri	Diode-triode	**I/mA**	Current in milli-amperes	**Rk**	Cathode resistor
Dia.	Diameter	**IμA**	Current in micro-amperes	**t/hep**	Triode-heptode
Dis. %	Distortion percentage	**K**	Cathode	**t/hex**	Triode-hexode
Eng.-Elec.	English Electric	**KS**	Cathode shield	**t/pen**	Triode-pentode
ES	Electro-static	**k Ω**	Kilo-ohms	**t/tet**	Triode-tetrode
Focus A.T.	Focus ampere-turns	**mA/V**	Milli-amps per volt	**Var. μ**	Variable mu
gc	Conversion conductance	**MOD**	Modulator grid	**VR**	Voltage-regulator
gm	Mutual conductance	**M.O.V.**	Marconi and Osram	**W**	Watts
		mW	Milli-watts	**Ω**	Ohms

FREQUENCY CONVERTERS

Type		FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	ra MΩ	gc mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref.	
4THA	(t/hex)	4·0	1·5	250	3·3	100	6·6	80	1·4	1·6	0·6	0·86	B7	1	Cossor
13PGA	(hep)	13·0	0·2	250	3·5	100	2·5	200	4·0	1·5	—	0·7		3	Cossor
15A2	(hep)	4·0	0·65	250	3·5	100	2·7	200	4·0	3·0	0·36	0·55		3	Brimar
15D1	(hep)	13·0	0·2	250	3·5	100	2·7	200	4·0	3·0	0·35	0·55		3	Brimar
15D2	(hep)	13·0	0·15	250	3·5	100	2·7	200	4·0	3·0	0·36	0·55		3	Brimar
20A1	(t/hex)	4·0	1·2	250	2·2	80	3·0	100	2·3	1·5	0·7	0·65		1	Brimar
20D2	(t/hex)	13·0	0·15	250	2·5	100	6·0	100	3·8	3·0	0·6	0·36		2	Brimar
41MPG	(hep)	4·0	1·0	250	3·3	100	6·6	100	—	1·5	0·6	0·86		3	Cossor
41STH	(t/hex)	4·0	1·15	250	3·0	100	4·0	100	2·0	1·5	—	0·6		1	Cossor
202MPG	(hep)	20·0	0·2	250	3·3	100	6·6	100	—	1·5	—	0·86		3	Cossor
202STH	(t/hex)	20·0	0·2	250	3·0	100	4·0	100	2·0	1·5	—	0·62		1	Cossor
203THA	(t/hex)	20·0	0·3	250	3·3	100	6·6	100	2·0	1·5	—	0·86		1	Cossor
210PG	(hep)	2·0	0·1	150	0·4	40	0·8	150	1·0	0	—	0·45		8	Cossor
210PGA	(hep)	2·0	0·1	150	0·4	40	0·8	150	1·0	0	—	0·45		8	Cossor
210SPG	(hep)	2·0	0·1	150	0·4	40	0·8	150	1·0	0	—	0·45		8	Cossor
220TH	(t/hep)	2·0	0·2	120	0·4	45	1·0	60	1·4	0	0·5	0·2		9	Cossor
302THA	(t/hex)	30·0	0·2	250	3·3	100	6·6	80	1·4	1·6	0·6	0·86		1	Cossor
A36A	(t/hex)	4·0	1·0	250	4·0	70	6·0	130	6·0	1·5	1·5	1·0		1	Ever Ready
A36B	(t/hex)	4·0	1·45	250	3·4	150	8·0	100	—	2·0	2·0	0·74		1	Ever Ready
A36C	(t/hep)	4·0	1·45	250	3·25	100	6·0	100	9·5	2·5	1·5	0·75		7	Ever Ready
A80A	(oct)	4·0	0·65	250	1·6	70	3·8	90	2·0	1·5	—	0·6		6	Ever Ready
AC/TH1	(t/hep)	4·0	1·3	250	3·8	100	7·5	80	5·0	2·5	1·2	0·87		7	Mazda
C36A	(t/hex)	21·0	0·2	250	4·0	70	6·0	130	6·0	1·5	1·5	1·0		1	Ever Ready
C36B	(t/hex)	29·0	0·2	250	3·4	150	8·0	100	—	2·0	2·0	0·74		1	Ever Ready
C36C	(t/hep)	29·0	0·2	250	3·25	100	6·0	100	9·5	2·5	1·5	0·75		7	Ever Ready
C80B	(oct)	13·0	0·2	200	1·6	70	3·8	90	2·0	1·5	—	0·6		6	Ever Ready
FC2	(oct)	2·0	0·1	135	0·95	70	0·75	135	3·0	0	—	0·2		5	Mullard
FC2A	(oct)	2·0	0·13	135	0·7	45	0·7	135	2·1	0·5	2·5	0·27		5	Mullard
FC4	(oct)	4·0	0·65	250	1·6	70	3·8	90	2·0	1·5	—	0·6		6	Mullard
FC13C	(oct)	13·0	0·2	200	1·6	70	3·8	90	2·0	1·5	—	0·6		6	Mullard
K80A	(oct)	2·0	0·1	150	0·95	70	0·75	135	3·0	0	—	0·2		5	Ever Ready
K80B	(oct)	2·0	0·13	135	0·7	45	0·7	135	2·1	0·5	2·5	0·27		5	Ever Ready
MH206	(hep)	2·0	0·6	135	1·2	67·5	2·5	135	2·5	3·0	0·4	0·28		3	Tungsram
MH4105	(hep)	4·0	1·0	250	3·5	100	2·2	200	3·5	3·0	0·36	0·52		3	Tungsram
MO465	(oct)	4·0	0·75	250	1·5	70	4·0	70	2·0	1·5	1·0	0·6		6	Tungsram
MX40	(hep)	4·0	1·0	250	2·5	80	1·0	150	2·0	3·0	0·3	0·5		3	M.O.V.
TH2	(t/hex)	2·0	0·23	135	0·95	60	1·6	100	4·0	1·5	0·6	0·43		4	Mullard
TH4	(t/hex)	4·0	1·0	250	4·0	70	6·0	130	6·0	1·5	1·5	1·0		1	Mullard
TH4A	(t/hex)	4·0	1·5	275	3·25	100	7·0	100	22·0	2·5	1·5	0·75		1	Mullard
TH4B	(t/hep)	4·0	1·45	250	3·25	100	6·0	100	9·5	2·5	1·5	0·75		7	Mullard
TH13C	(t/hex)	13·0	0·31	250	4·0	70	6·0	130	6·0	1·5	1·5	1·0		1	Mullard
TH21C	(t/hex)	21·0	0·2	250	4·0	70	6·0	130	6·0	1·5	1·5	1·0		7	Mullard
TH22C	(t/hex)	29·0	0·2	275	3·25	100	7·0	100	22·0	2·5	1·5	0·75		1	Mullard
TH29	(t/hep)	29·0	0·2	250	3·2	100	7·0	120	—	2·5	1·5	0·75		1	Tungsram
TH30	(t/hep)	30·0	0·2	250	3·2	100	7·0	120	—	2·5	1·5	0·75		1	Tungsram
TH30C	(t/hep)	29·0	0·2	250	3·25	100	6·0	100	9·5	2·5	1·5	0·75		7	Mullard
TH2320	(t/hep)	23·0	0·2	150	3·0	100	6·0	80	4·5	3·0	1·2	0·75		7	Mazda
TH2321	(t/hep)	23·0	0·2	150	3·0	100	6·0	80	4·5	3·0	1·0	0·65		7	Mazda
TH2620	(t/hex)	26·0	0·2	250	6·5	200	2·5	120	1·25	3·0	0·9	0·7		1	Mazda
TP23	(t/pen)	2·0	0·25	120	·055	60	0·95	80	2·5	1·5	0·16	0·25		10	Mazda
TX4	(t/hex)	4·0	1·0	300	5·5	80	6·0	150	4·0	1·5	1·0	1·0		1	Tungsram
TX21	(t/hex)	21·0	0·2	250	5·5	80	6·0	150	—	2·0	1·0	1·0		1	Tungsram
TX29	(t/hep)	29·0	0·2	250	3·2	100	7·0	150	—	2·5	1·5	0·75		7	Tungsram
VHT2	(hep)	2·0	0·1	120	—	70	—	120	—	—	—	0·25		8	Ferranti
VHT2A	(hep)	2·0	0·1	120	—	70	—	120	—	0	0·75	0·45		8	Ferranti
VHT4	(hep)	4·0	1·0	250	2·6	100	5·1	100	1·2	3·0	0·5	0·65		3	Ferranti
VHTA	(hep)	13·0	0·2	250	3·2	100	5·6	120	1·3	1·5	0·5	0·65		3	Ferranti
VHTS	(hep)	13·0	0·3	200	2·5	100	5·0	120	1·2	3·0	0·5	0·65		3	Ferranti
VO2	(oct)	2·0	0·13	135	0·75	45	0·6	—	—	1·0	2·5	0·27		5	Tungsram
VO4	(oct)	4·0	0·65	250	1·6	70	3·8	90	2·0	1·5	1·0	0·6		6	Tungsram
VO13	(oct)	13·0	0·2	250	1·6	70	3·8	90	2·0	1·5	1·0	0·6		6	Tungsram
VX2	(hex)	2·0	0·13	135	1·0	60	1·1	—	—	1·0	1·0	0·47		11	Tungsram
X21	(hep)	2·0	0·1	150	—	70	—	150	—	0	1·5	0·24		8	M.O.V.
X22	(hep)	2 0	0·15	120	1·1	70	—	110	—	0	0·65	0·35		8	M.O.V.
X23	(t/hex)	2·0	0·3	150	—	60	—	150	—	1·5	—	0·25		4	M.O.V.
X24	(t/hex)	2·0	0·2	150	0·7	60	1·7	150	2·1	1·5	—	0·25		4	M.O.V.
X30	(hep)	13·0	0·3	250	4·0	100	2·1	150	3·0	3·0	0·2	0·8		3	M.O.V.
X31	(t/hex)	13·0	0·3	250	1·5	80	4·0	150	2·0	1·5	0·75	0·64		1	M.O.V.
X32	(hep)	13·0	0·3	250	4·0	100	2·1	150	3·0	3·0	0·2	0·8		3	M.O.V.
X41	(t/hex)	4·0	1·2	250	2·0	100	3·5	150	2·1	1·5	0·75	0·49		1	M.O.V.
X42	(hep)	4·0	0·6	250	3·5	80	2·5	150	3·6	3·0	0·3	0·5		3	M.O.V.

Type		FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	r_a MΩ	g_c mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref.	
AC/TP	(t/pen)	4·0	1·25	250	6·5	200	2·5	150	1·5	5·0	0·9	0·7	B9	12	Mazda
TP4	(t/pen)	4·0	1·2	250	3·0	150	0·8	150	—	5·5	—	0·65		12	Mullard
TP4	(t/pen)	4·0	1·25	250	6·5	200	2·5	150	—	5·0	—	0·65		12	Tungsram
TP22	(t/pen)	2·0	0·25	120	1·15	60	0·4	100	0·8	1·5	1·6	0·5		13	Mazda
TP1340	(t/pen)	13·0	0·4	250	6·5	200	2·5	150	1·5	5·0	0·9	0·7		12	Mazda
TP2620	(t/pen)	26·0	0·2	250	6·5	200	2·5	150	1·5	5·0	0·9	0·7		12	Mazda
AC/TH1A	(t/hep)	4·0	1·3	250	3·0	100	6·0	80	4·5	3·0	1·6	0·75	M.O.	16	Mazda
FC141	(hep)	1·4	0·05	82	0·55	45	0·6	75	1·2	0	0·6	0·25		14	Mazda
TH41	(t/hep)	4·0	1·3	250	3·0	100	6·05	80	5·0	3·0	1·6	0·75		16	Mazda
TH233	(t/hep)	23·0	0·2	175	2·6	100	5·6	80	4·5	3·0	1·3	0·64		16	Mazda
TP25	(t/pen)	2·0	0·2	120	0·58	60	0·92	80	2·5	1·5	1·3	0·26		17	Mazda
TP26	(t/pen)	2·0	0·2	103	1·2	65	0·3	60	0·9	1·5	1·4	0·55		15	Mazda
DK1	(hep)	1·4	0·05	90	0·55	45	0·6	90	1·2	0	0·6	0·25	P	20	Mullard
ECH2	(t/hep)	6·3	0·95	250	3·25	100	6·0	100	9·5	2·5	1·5	0·75		18	Mullard
ECH3	(t/hex)	6·3	0·2	250	3·0	100	3·0	100	3·3	2·0	1·3	0·65		18	Mul.-Tung.
EH2	(hep)	6·3	0·2	250	4·0	100	3·0	—	—	3·0	2·0	0·4		23	Tungsram
EK2	(oct)	6·3	0·2	250	1·0	50	0·8	200	2·5	2·0	2·0	0·55		19	Mul.-Tung.
EK3	(oct)	6·3	0·7	250	2·5	100	6·0	100	6·0	2·5	2·0	0·65		19	Mul.-Tung.
FC13	(oct)	13·0	0·2	200	1·6	70	3·8	90	2·0	1·5	—	0·6		19	Mullard
VO2s	(oct)	2·0	0·13	135	0·75	45	0·6	135	1·3	1·0	2·5	0·27		20	Tungsram
VO4s	(oct)	4·0	0·65	250	1·6	70	3·8	90	2·0	1·5	—	0·6		19	Tungsram
VO13s	(oct)	13·0	0·2	250	1·6	70	3·8	90	2·0	1·5	1·0	0·6		19	Tungsram
VX2s	(hex)	2·0	0·13	135	1·0	60	1·1	—	—	1·0	1·0	0·47		21	Tungsram
VX4s	(hex)	4·0	0·65	250	1·8	80	1·5	—	—	2·0	2·0	0·55		22	Tungsram
VX13s	(hex)	13·0	0·2	250	1·8	80	1·5	—	—	2·0	2·0	0·55		22	Tungsram

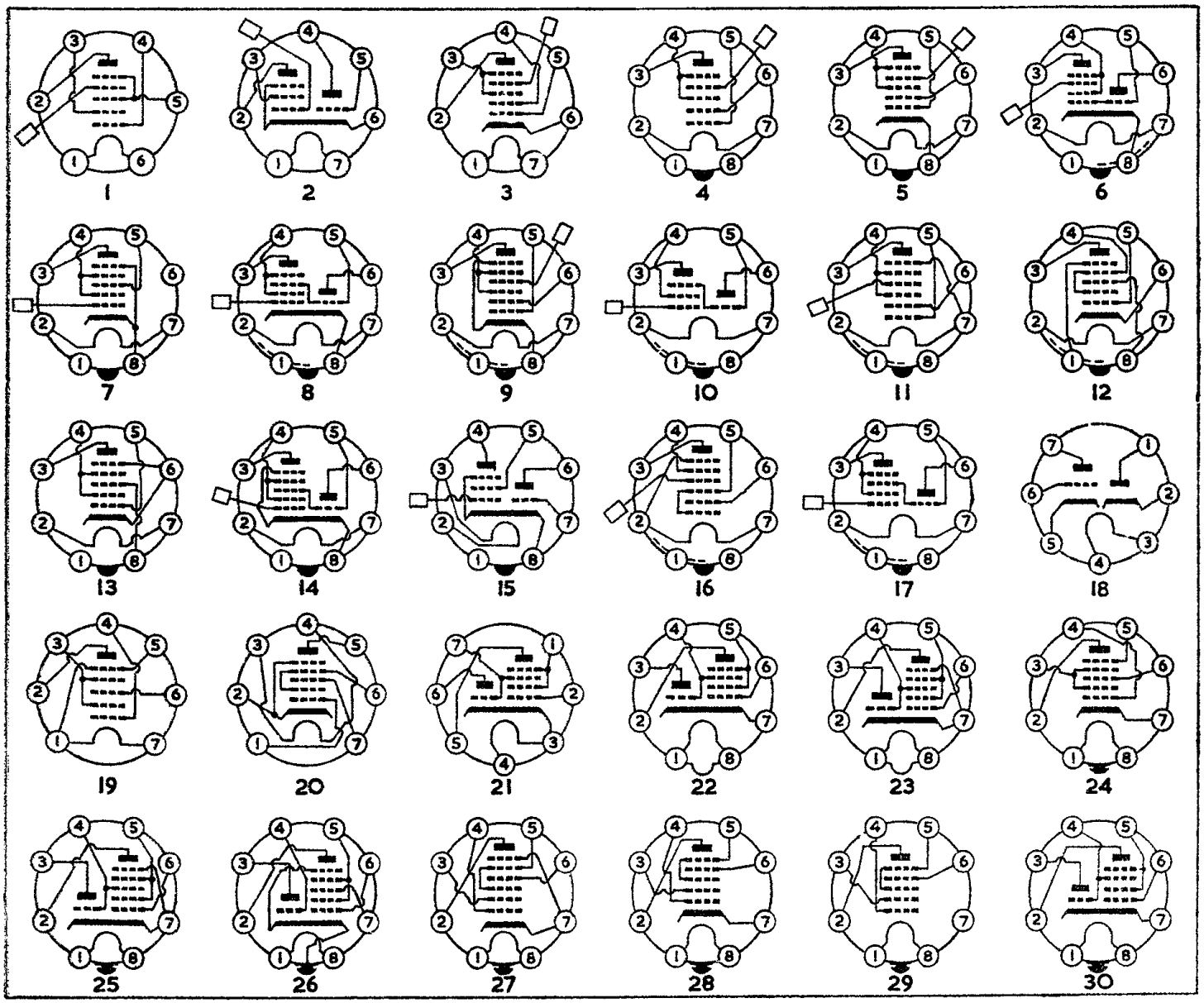


FREQUENCY CONVERTERS—*Contd.*

Type		FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	ra MΩ	gc mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref.	
1A6	(hep)	2·0	0·06	180	1·3	120	2·4	130	2·3	3·0	—	—	UX6	1	U.S.A.
1C6	(hep)	2·0	0·12	180	1·3	120	2·4	130	2·3	3·0	—	—		1	U.S.A.
2A7	(hep)	2·5	0·8	250	3·5	100	2·7	200	4·0	3·0	0·36	0·55	UX7	3	Am.-Brit.
2F7	(t/pen)	2·5	0·8	250	2·8	100	0·6	100	4·0	3·0	2·0	0·3		2	U.S.A.
6A7–S	(hep)	6·3	0·3	250	3·5	100	2·7	200	4·0	3·0	0·36	0·55		3	Am.-Brit.
6F7–E/B	(t/pen)	6·3	0·3	250	2·8	100	0·6	100	4·0	3·0	2·0	0·3		2	Am.-Brit.
1A7GT/G	(hep)	1·4	0·05	90	0·55	45	0·6	90	1·2	0	0·6	0·25	I.O.	4	Am.-Brit.
1B7	(hep)	1·4	0·1	90	1·5	45	1·3	90	1·6	0	0·35	0·35		4	U.S.A.
1C7	(hep)	2·0	0·12	180	1·5	67·5	2·0	180	4·0	3·0	0·7	0·35		4	U.S.A.
1D7	(hep)	2·0	0·06	180	1·3	67·5	2·4	180	2·3	3·0	0·5	0·3		4	U.S.A.
6A8–GT/G	(hep)	6·3	0·3	250	3·5	100	2·7	200	4·0	3·0	0·36	0·55		5	Am.-Brit.
6C31	(t/hep)	6·3	0·83	250	3·0	100	6·05	80	5·0	3·0	1·6	0·75		14	Mazda
6D8	(hep)	6·3	0·2	250	3·5	100	2·7	250	4·0	3·0	0·36	0·55		5	U.S.A.
6E8G	(t/hex)	6·3	0·3	250	2·3	100	—	150	—	2·0	1·25	0·65		8	Am.-Brit.
6J8G	(t/hep)	6·3	0·3	250	1·3	100	3 5	100	5·8	3·0	4·0	0·29		14	Am.-Brit.
6K8-GT/G	(t/hex)	6 3	0·3	250	2·5	100	6·0	100	3 8	3·0	0 6	0·36		6	Am.-Brit.
6L7–G	(hep)	6·3	0·3	250	3·3	150	9·2	—	—	6·0	1·0	0·35		7	Am.-Brit.
6P7G	(t/pen)	6·3	0·3	250	2·8	100	0 6	100	4·0	3·0	2·0	0·3		15	U.S.A.
6P8G	(t/hex)	6·3	0·8	250	2·2	75	3·0	100	2·2	2·0	0·7	0·65		8	Am.-Brit.
6SA7	(hep)	6·3	0·3	250	3·5	100	8·5	—	—	2·0	1·0	0·45		12	U.S.A.
6SA7GT	(hep)	6·3	0·3	250	3·5	100	8·5	—	—	2·0	1·0	0·45		13	Am.-Brit.
6SB7Y	(hep)	6·3	0·3	250	3·8	100	10·0	—	—	1·0	1·0	0·95		12	U.S.A.
6TH8	(t/hex)	6·3	0·6	300	5·5	80	6·0	150	4·0	1·5	1·0	1·0		8	Tungsram
12A8	(hep)	12·6	0·15	250	3·5	100	2·7	200	4·0	3·0	0·36	0·55		5	U.S.A.
12K8–GT	(t/hex)	12·6	0·15	250	2·5	100	6·0	100	3·8	3·0	0·6	0·36		6	Am.-Brit.
12SA7	(hep)	12·6	0·15	250	3·5	100	8·5	—	—	2·0	1·0	0·45		12	Am.-Brit.
12SA7GT	(hep)	12·6	0·15	250	3·5	100	8·5	—	—	2·0	1·0	0·45		13	Am.-Brit.
20J8GM	(t/hep)	20·0	0·15	250	1·5	100	3·4	100	1·5	3·0	—	0·29		14	U.S.A.
AG8	(oct)	6·3	0·2	250	1·0	50	0·8	200	2·5	2·0	2·0	0·55		9	Cossor
CCH35	(t/hex)	7·0	0·2	200	3·0	100	3·0	100	3·3	2·0	0·9	0·65		8	Mul.-Tung.
DCH31	(t/hex)	1·4	0·15	120	1·0	60	1·5	60	0·2	0	0·5	0·45		17	Mullard
DK31	(oct)	1·4	0·05	120	1·5	90	0·25	60	2·4	0	1·5	0·5		16	Mullard
DK32	(hep)	1·4	0·05	90	0·6	45	0·7	90	1·2	0	0·6	0·25		4	Mullard
ECH33	(t/hex)	6·3	0·2	250	3·0	100	3·0	100	3·3	2·0	1·3	0·65		8	Mullard
ECH35	(t/hex)	6·3	0·3	250	3·0	100	3·0	100	3·3	2·0	1·3	0·65		8	Mul.-Tung.
EK32	(oct)	6·3	0·2	250	1·0	50	0·8	200	2·5	2·0	2·0	0·55		9	Mullard
KCF30	(t/pen)	2·0	0·2	120	0·5	60	1·0	75	2·3	0·3	1·3	0·26		10	Mullard
KK32	(oct)	2·0	0·13	135	0·7	45	0·7	135	2·1	0·5	2·5	0·27		11	Mullard
OM8	(oct)	6·3	0·2	250	1·0	50	0·8	200	2·5	2·0	2·0	0·55		9	Cossor
OM10	(t/hex)	6·3	0·2	250	2·7	100	3·8	70	3·0	2·0	0·62	0·7		8	Cossor
X14	(hep)	1·4	0·05	90	0·6	45	0·7	90	1·2	0	0·6	0·25		4	M.O.V.
X61M	(t/hex)	6·3	0·3	250	2·0	100	3·0	100	5·0	3·0	—	0·62		8	M.O.V.
X62	(t/hex)	6·3	1·27	250	4·0	120	7·7	150	5·5	1·5	0·33	1·75		8	M.O.V.
X63	(hep)	6·3	0·3	250	3·5	100	2·7	100	3·5	3·0	0·3	0·49		5	M.O.V.
X64	(hep)	6·3	0·3	250	3·3	150	9·2	—	—	6·0	1·0	0·31		7	M.O.V.
X65	(t/hex)	6·3	0·3	250	1·75	100	—	100	4·75	3·0	2·5	0·22		8	M.O.V.
X66	(t/hex)	6·3	0·34	250	1·75	100	—	100	4·75	3·0	2·5	0·22		8	M.O.V.
X71M	(t/hex)	13·0	0·16	250	4·0	100	2·2	100	3·5	3·0	0·7	0·63		8	M.O.V.
X73	(hep)	6·0	0·16	250	2·3	80	1·4	250*	4·0	3·0	0·4	0·5		5	M.O.V.
X75	(t/hex)	15·0	0·16	250	1·7	100	4·5	250*	4·7	3·0	2·5	0·22		8	M.O.V.
X76M	(t/hex)	13·0	0·16	175	4·0	70	3·5	175*	7·0	3·0	—	0·62		8	M.O.V.
X147	(t/hex)	6·3	0·3	250	3·0	100	3·0	—	—	2·0	—	0·65		8	Marconi
1C1	(hep)	1·4	0·05	90	1·6	67·5	3·2	—	—	0	0·6	0·3	B7G	19	Mazda
1R5	(hep)	1·4	0·05	90	1·6	67·5	3·2	—	—	0	0·6	0·3		19	Am.-Brit.
6BE6	(hep)	6·3	0·3	250	3·0	100	7·1	—	—	1·5	1·0	0·47		20	Am.-Brit.
12BE6	(hep)	12·6	0·15	250	3·0	100	7·1	—	—	1·5	1·0	0·47		20	Am.-Brit.
26D6	(hep)	26·5	0·07	250	3·0	100	7·8	—	—	1·5	1·0	0·47		20	U.S.A.
DK91	(hep)	1·4	0·05	90	1·6	67·5	3·2	—	—	0	0·6	0·3		19	Mullard
EAC91	(d/tri)	6·3	0·3	200	7·5	—	—	—	—	2·8	—	—		18	Mullard
X17	(hep)	1·4	0·05	90	1·6	67·5	3·2	—	—	0	0·75	0·25		19	M.O.V.
X77	(hep)	6·3	0·3	250	3·0	100	7·1	—	—	1·5	1·0	0·47		20	M.O.V.
X78	(t/hex)	6·3	0·3	250	4·5	75	3·4	100	4·5	0	0·7	0·78		21	M.O.V.
X108	(t/hex)	19·0	0·1	250	4·5	75	3·4	100	4·5	0	0·7	0·78		21	M.O.V.
6C9	(t/hep)	6·3	0·45	250	3·0	100	6·0	80	5·0	2·5	3·0	0·65	B8A	23	Mazda
10C1	(t/hep)	28·0	0·1	175	3·0	100	6·0	80	5·0	2·5	2·2	0·65		23	Mazda
ECH41	(t/hex)	6·3	0·225	250	3·0	105	2·2	100	4·9	2·0	2·0	0·5		22	Mullard
ECH42	(t/hex)	6·3	0·3	250	3·0	85	3·0	100	4·8	2·0	1·0	0·75		22	Mullard
UCH41	(t/hex)	14·0	0·1	200	3·0	105	2·2	100	4·6	2·2	1·2	0·5		22	Mullard
UCH42	(t/hex)	14·0	0·1	200	3·2	84	3·4	100	4·2	2·0	1·25	0·69		22	Mullard
X142	(t/hex)	14·0	0·1	200	3·2	84	3·35	100	4·2	2·0	1·25	0·69		22	Marconi
X145	(t/hep)	28·0	0·1	175	2·5	100	6·0	80	5·0	2·5	2·2	0·65		23	Marconi
X150	(t/hex)	6·3	0·225	250	3·6	100	3·75	100	5·0	2·5	1·03	0·71		22	Marconi

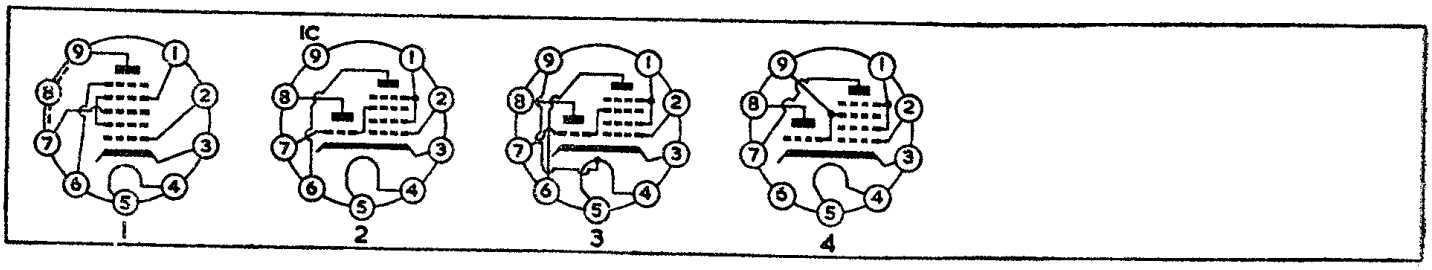
* Fed through series resistor.

Type		FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	MΩ	gc mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref.	
1LA6-E	(hep)	1·4	0·05	90	0·55	45	0·6	90	1·2	0	0·6	0·25	B8G	29	Am.-Brit.
1LC6	(hep)	1·4	0·05	90	0·75	35	0·7	45	1·4	0	0·65	0·27		29	U.S.A.
7A8	(oct)	6·3	0·15	250	3·0	100	2·8	250	4·5	3·0	0·7	0·6		27	Am.-Brit.
7B8	(hep)	6·3	0·3	250	3·5	100	2·7	250	4·0	3·0	0·36	0·55		28	Am.-Brit.
7I7	(t/hep)	6·3	0·3	250	1·3	100	2·9	100	5·8	3·0	4·0	0·29		25	U.S.A.
7Q7	(hep)	6·3	0·3	250	3·5	100	8·5	—	—	2·0	1·0	0·45		24	Am.-Brit.
7S7	(t/hep)	6·3	0·3	250	1·8	100	3·0	150	5·0	2·0	1·25	0·53		25	Am.-Brit
14B8	(hep)	12·6	0·15	250	3·5	100	2·7	250	4·0	3·0	0·36	0·55		28	U.S.A.
14I7	(t/hep)	12·6	0·15	250	1·3	100	2·9	100	5·8	3·0	4·0	0·29		25	U.S.A.
14Q7	(hep)	12·6	0·15	250	3·5	100	8·5	—	—	2·0	1·0	0·45		24	U.S.A.
14S7	(t/hep)	12·6	0·15	250	1·8	100	3·0	150	5·0	2·0	1·25	0·53		25	Am.-Brit.
ECH21	(t/hep)	6·3	0·33	250	3·0	100	6·2	100	4·5	2·0	1·4	0·75		26	Mullard
UCH21	(t/hep)	20·0	0·1	200	3·5	100	6·5	100	4·1	2·0	1·0	0·75		26	Mullard
X81	(t/hex)	6·3	0·3	250	3·0	100	2·4	100	3·6	2·0	1·0	0·65		30	M.O.V.
X101	(t/hex)	19·0	0·1	250	3·0	100	2·4	100	3·6	2·0	1·0	0·65		30	M.O.V.
X143	(t/hep)	6·3	0·33	250	3·0	100	6·2	150	4·5	2·0	—	0·75		26	Marconi
X148	(t/hep)	6·3	0·3	250	1·7	100	2·2	—	—	2·0	1·25	0·52		25	Marconi

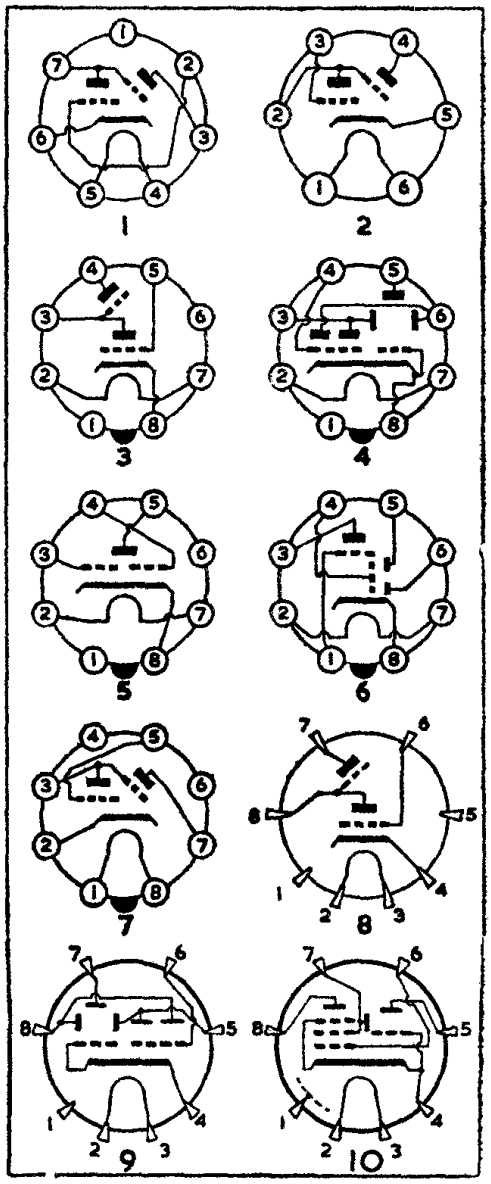


FREQUENCY CONVERTERS—*Contd.*

Type		FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	ra MΩ	gc mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref.	
6AN7	(t/hex)	6·3	0·23	250	3·0	85	3·0	—	—	2·0	—	0·75	B9A	4	U.S.A.
6BA7	(hep)	6·3	0·3	250	3·8	100	10·0	—	—	1·0	1·0	0·95		1	U.S.A.
12BA7	(hep)	12·6	0·15	250	3·8	100	10·0	—	—	1·0	1·0	0·95		1	U.S.A.
20D3	(t/hex)	6·3 / 12·6	0·3 / 0·15	250	3·2	100	6·0	100	4·7	3·0	1·4	0·66		3	Brimar
X79	(t/hex)	6·3	0·3	250	4·5	75	3·4	100	4·5	0	0·7	0·78		2	M.O.V.
X109	(t/hex)	19·0	0·1	175	4·3	75	3·6	100	4·5	0	0·7	0·71		2	M.O.V.



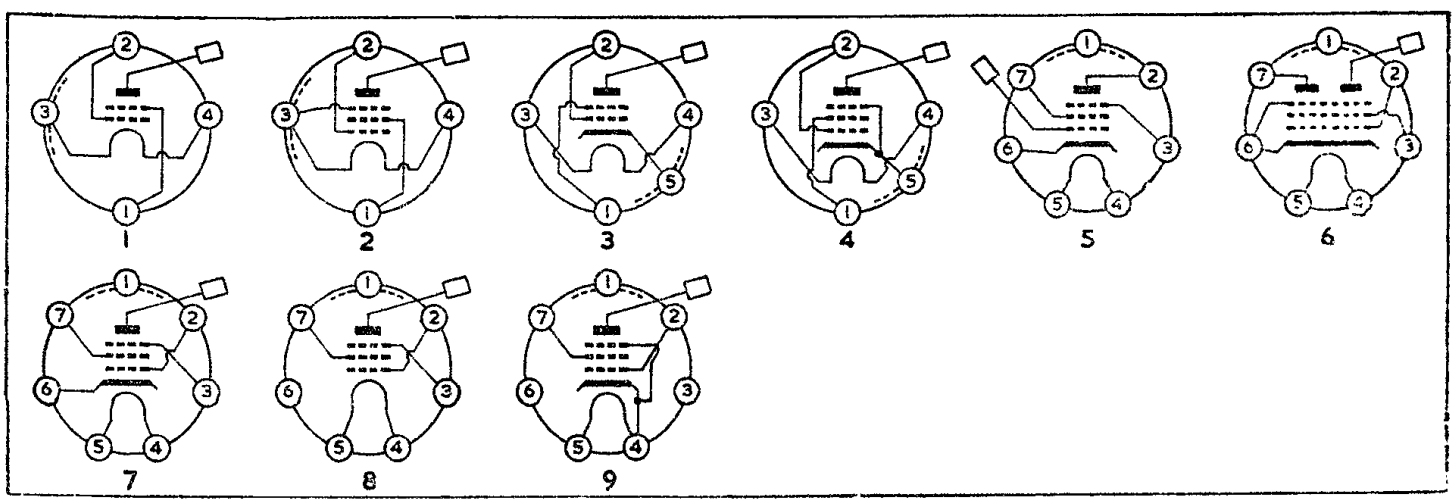
Type	HEATER		TARGET		Neg. Grid Volts	BASE		Maker
	Volts	Amps	Volts	I/mA		Type	Ref.	
AC/ME	4·0	0·5	250	1·5	22·0	B7	1	Mazda
ME920	9·0	0·2	175	2·6	19·0		1	Mazda
VME4	4·0	0·5	200	1·5	18·0		1	Tungsram
ME41	4·0	0·5	250	1·16	22·5	M.O.	7	Mazda
ME91	9·0	0·2	175	2·7	19·0		7	Mazda
A39A	4·0	0·3	250	—	—	P	8	Ever Ready
EFM1	6·3	0·2	250	0·75	20·0		10	Mul.-Tung.
EM1	6·3	0·2	250	0·13	5·0		8	Mul.-Tung.
EM3	6·3	0·2	250	0·3	21·0		8	Mullard
EM4	6·3	0·2	250	0·75	16·0		9	Mul.-Tung.
ME4s	4·0	0·3	250	2·0	5·0		8	Tungsram
ME6s	6·3	0·2	200	2·0	5·0		8	Tungsram
TV4	4·0	0·3	250	0·13	5·0		8	Mullard
TV4A	4·0	0·3	250	0·3	21·0		8	Mullard
TV6	6·3	0·2	250	0·13	5·0		8	Mullard
6AD6G	6·3	0·15	150	3·0	50·0	I.O.	5	U.S.A.
6AF6G	6·3	0·15	250	2·2	160·0		5	U.S.A.
6AF7G	6·3	0·3	200	2·5	4·5		4	U.S.A.
6AL7GT	6·3	0·15	315	—	6·0		6	U.S.A.
6G5G	6·3	0·3	250	4·0	22·0		3	Brimar
			100	1·0	8·0		3	Brimar
6M1	6·3	0·3	250	1·16	22·5		3	Mazda
6U5G	6·3	0·3	250	4·0	22·0		3	Brimar
			100	1·0	8·0		3	Tungsram
6X6G	6·3	0·3	250	2·0	8·0		3	U.S.A.
12U5G	12·6	0·15	250	4·0	22·0		3	Brimar
			100	1·0	8·0		3	Brimar
63ME	6·3	0·3	250	4·2	22·0		3	Cossor
64ME	6·3	0·2	250	0·8	16·0		4	Cossor
1629	12·6	0·15	250	4·0	8·0		3	Am.-Brit.
EM31	6·3	0·3	250	0·13	5·0		3	Mullard
EM34	6·3	0·2	250	0·75	16·0		4	Mullard
EM35	6·3	0·3	250	4·0	22·0		3	Mullard
FT4	4·0	0·5	250	0·5	6·0		3	Ferranti
UM34	12·6	0·1	250	0·75	16·0		4	Mullard
VFT4	4·0	0·5	250	0·5	20·0		3	Ferranti
VFT6	6·3	0·3	200	4·5	22·0		3	Ferranti
Y61/3	6·3	0·3	180/250	4·5	22·0		3	M.O.V.
Y62/4	6·3	0·3	80/250	4·5	22·0		3	M.O.V.
Y65	6·3	0·3	180/250	4·5	11·0		3	M.O.V.
Y73	6·0	0·16	180	4·5	21·0		3	M.O.V.
2E5	2·5	0·8	250	2·0	7·5	UX6	2	U.S.A.
2G5	2·5	0·8	250	4·0	8·0		2	U.S.A.
6AB5/6N5	6·3	0·15	135	1·9	15·5		2	Am.-Brit.
6E5	6·3	0·3	250	2·0	7·5		2	U.S.A.
6H5	6·3	0·3	250	4·0	22·0		2	U.S.A.
6T5	6·3	0·3	250	4·0	12·0		2	U.S.A.
6U5/6G5	6·3	0·3	250	4·0	22·0		2	Am.-Brit.



SCREENED TETRODES and PENTODES

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
210SPT		2·0	0·1	150	1·2	60	0·35	1·5	600	1·3	B4	2	Cossor
210VPA	Var. μ	2·0	0·1	150	2·0	70	0·7	1·5	1500	0·88		2	Cossor
210VPT	Var. μ	2·0	0·1	150	1·5	80	—	0	—	1·1		2	Cossor
215SG		2·0	0·15	150	0·7	60	—	1·5	300	1·1		1	Cossor
220SG		2·0	0·2	120	1·4	60	—	1·0	200	1·6		1	Cossor
220VS	Var. μ	2·0	0·2	120	1·0	60	—	2·5	400	1·6		2	Cossor
220VSG	Var. μ	2·0	0·2	120	2·3	60	—	2·5	110	1·6		1	Cossor
HP210NC		2·0	0·12	150	1·9	150	0·7	1·0	2500	1·9		2	Tungsra
HP211c	Var. μ	2·0	0·12	150	2·6	150	0·6	1·0	2000	1·7		2	Tungsra
K40B		2·0	0·18	135	2·0	75	—	0	330	1·5		1	Ever Re
K40N	Var. μ	2·0	0·18	150	2·5	90	—	0	—	1·4		1	Ever Re
PM12		2·0	0·15	135	4·0	75	1·0	0	180	1·1		1	Mullard
PM12A		2·0	0·18	135	2·0	75	—	0	330	1·5		1	Mullard
PM12M	Var. μ	2·0	0·18	150	2·5	90	0·5	0	—	1·4		1	Mullard
PM12V		2·0	0·15	150	—	90	—	0	—	0·75		1	Mullard
S21		2·0	0·1	120	3·6	70	3·2	0	200	1·1		1	M.O.V.
S22		2·0	0·2	120	4·0	75	2·6	0	200	1·75		1	M.O.V.
S23		2·0	0·1	150	2·8	70	0·7	0	300	1·1		1	M.O.V.
S24		2·0	0·15	150	3·3	70	0·7	0	300	1·4		1	M.O.V.
S215A		2·0	0·15	150	2·0	60	0·3	0	1300	1·1		1	Mazda
S215B		2·0	0·15	150	1·5	60	0·3	1·0	900	1·2		1	Mazda
S215VM	Var. μ	2·0	0·15	150	1·0	60	0·15	1·4	1400	0·8		1	Mazda
S220		2·0	0·15	135	4·0	75	1·0	—	180	1·1		1	Tungsra
SE211	Var. μ	2·0	0·12	150	1·0	75	0·1	1·0	1500	1·3		2	Tungsra
SE211c	Var. μ	2·0	0·12	150	1·0	75	0·1	1·0	1500	1·5		1	Tungsra
SG215		2·0	0·15	150	1·5	60	0·25	1·5	1500	0·85		1	Mazda
SP2D		2·0	0·1	120	1·45	120	0·35	1·0	900	1·7		2	Tungsra
SPT2		2·0	0·1	120	2·8	120	0·9	0	2000	1·5		2	Ferranti
SS210		2·0	0·12	150	1·5	75	0·3	1·0	1500	1·4		1	Tungsra
VP210	Var. μ	2·0	0·1	120	1·1	60	0·38	1·5	1450	0·82		2	Mazda
VPT2	Var. μ	2·0	0·1	120	1·5	60	0·7	1·5	600	1·1		2	Ferranti
VS2	Var. μ	2·0	0·15	120	2·7	60	—	0	500	1·4		1	Ferranti
VS24	Var. μ	2·0	0·15	150	4·5	75	0·5	0	250	1·5		2	M.O.V.
W21	Var. μ	2·0	0·1	120	3·6	120	1·2	0	—	1·4		2	M.O.V.
8A1		4·0	1·0	200	3·5	80	0·7	1·5	600	4·0	B5	4	Brimar
41MSG		4·0	1·0	200	—	80	—	1·5	400	2·5		3	Cossor
41MVSG	Var. μ	4·0	1·0	200	3·0	100	—	1·5	350	1·95		3	Cossor
A50A		4·0	1·0	200	3·0	100	—	2·0	2200	2·3		4	Ever Re
A50M	Var. μ	4·0	1·0	200	4·5	100	—	2·0	1000	2·3		4	Ever Re
A50N	Var. μ	4·0	1·2	200	4·25	100	—	2·0	1400	2·5		4	Ever Re
AC/S1VM	Var. μ	4·0	1·0	200	5·6	75	1·5	1·5	550	1·1		4	Mazda
AC/S2		4·0	1·0	200	7·0	80	0·8	1·5	600	4·3		3	Mazda
AC/SG		4·0	1·0	200	4·5	60	0 8	1·5	900	1·9		3	Mazda
AC/SGVM	Var. μ	4·0	1·0	200	5·8	60	0·9	2·0	720	1 8		3	Mazda
AS494		4·0	1·0	200	15·0	100	—	—	666	1·5		3	Tungsra
AS495		4·0	1·0	200	1·0	100	—	2·0	480	3·4		3	Tungsra
AS4100		4·0	1·0	200	4·0	100	—	6·0	180	1·4		3	Tungsra
AS4120		4·0	1·2	200	3·0	100	0·85	2·0	400	2·2		3	Tungsra
AS4125	Var. μ	4·0	1·2	200	3·0	100	0·85	2·0	350	2·0		3	Tungsra
DC2/SG		20·0	0·1	200	10·5	100	—	1·6	—	2·2		1	Mazda
DC2/SGVM	Var. μ	20·0	0·1	200	8·1	100	—	4·0	—	1·65		1	Mazda
DS		16·0	0·25	200	2·8	70	0·3	1·5	500	1·1		3	M.O.V.
DSB		16·0	0·25	200	3·5	80	1·2	1·0	350	3·2		3	M.O.V.
DVSG	Var. μ	16·0	0·25	200	7·5	80	—	1·5	—	2·5		3	Cossor
DVS/PEN	Var. μ	16·0	0·25	200	5·0	100	1·6	1·5	—	2·0		4	Cossor
HP2018		20·0	0·18	200	4·0	100	1·2	2·0	1000	3·5		4	Tungsra
HP2118	Var. μ	20·0	0·18	200	5·0	100	1·1	2·0	1000	3·5		4	Tungsra
HP4100		4·0	1·0	200	3·0	100	0·6	2·0	2000	3·5		4	Tungsra
HP4101		4·0	1·0	200	3·5	100	0·6	2·0	2000	3·5		4	Tungsra
HP4101c		4·0	1·0	200	3·5	100	0·6	2·0	2000	2·8		4	Tungsra
HP4105	Var. μ	4·0	1·0	250	4·5	100	1·2	2·0	1400	3·0		4	Tungsra
HP4106	Var. μ	4·0	1·0	250	4·5	100	1·2	2·0	1400	3·0		4	Tungsra
HP4106c	Var. μ	4·0	1·0	250	5·0	100	2·0	2·0	1200	3·5		4	Tungsra
HP4115	Var. μ	4·0	1·1	200	4·25	100	1·8	2·0	1400	2·5		4	Tungsra
HP4115c	Var. μ	4·0	1·0	250	4·5	100	1·5	2·0	1400	3·2		4	Tungsra
MM4V	Var. μ	4·0	1·0	200	8·5	100	1·0	1·5	—	—		3	Mullard
MM20	Var. μ	20·0	0·18	200	6·0	110	—	0	—	2·5		3	Mullard
MS4		4·0	1·0	200	2·4	70	0·3	1·5	500	1·1		3	M.O.V.
MS4B		4·0	1·0	200	3·4	80	1·2	1·0	350	3·2		3	M.O.V.
MSG/HA		4·0	1·0	150	2·1	80	—	1·5	500	2·0		3	Cossor
MSG/LA		4·0	1·0	150	5·2	80	—	1·5	200	3·7		3	Cossor
MSP4		4·0	1·0	250	3·3	100	1·0	1·75	1000	2·4		4	M.O.V.

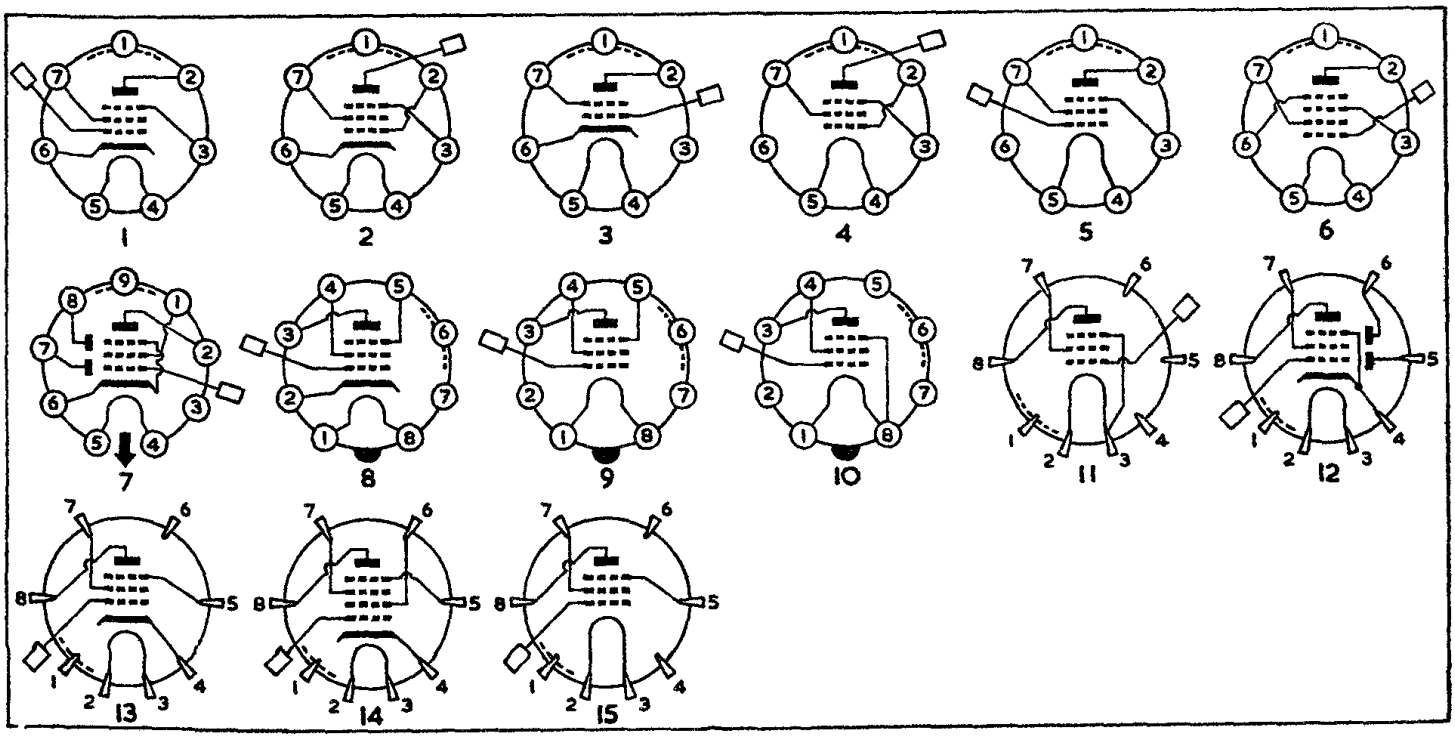
Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
MSP41		4·0	1·0	250	8·5	240	3·2	4·0	—	3·2		4	M.O.V.
MS/Pen		4·0	1·0	250	5·4	125	1·7	2·0	600	2·8		4	Cossor
MVSG	Var. μ	4·0	1·0	200	7·8	80	—	1·5	200	2·5	B5	3	Cossor
MVS/Pen	Var. μ	4·0	1·0	250	5·1	125	1·2	2·0	625	2·3		4	Cossor
S4V		4·0	1·0	200	1·5	75	0·4	1·0	—	1·15		4	Mullard
S4VA		4·0	1·0	200	2·8	100	0·7	—	550	2·0		4	Mullard
S4VB		4·0	1·0	200	4·6	110	1·05	1·5	300	2·5		3	Mullard
S2018		20·0	0·18	200	4·0	60	1·2	3·0	300	1·2		3	Tungsram
SE2018		20·0	0·18	200	4·0	60	1·2	3·0	300	1·2		3	Tungsram
SE2118		20·0	0·18	200	3·0	100	0·8	—	350	3·0		3	Tungsram
SGA1		4·0	1·0	200	6·2	100	1·5	—	550	2·1		3	Brimar
SP4		4·0	1·0	200	3·0	100	1·1	2·0	2200	2·3		4	Mullard
SS2018		20·0	0·18	200	3·0	100	1·0	3·0	500	3·0		3	Tungsram
VDSB	Var. μ	16·0	0·25	200	5·0	80	0·5	1·0	250	3·0		3	M.O.V.
VMP4	Var. μ	4·0	1·0	200	5·0	100	1·0	1·0	1000	3·5		4	M.O.V.
VMS4	Var. μ	4·0	1·0	200	14·0	80	3·0	0	250	2·4		3	M.O.V.
VMS4B	Var. μ	4·0	1·0	200	8·0	80	1·5	0	250	2·9		3	M.O.V.
VP4A	Var. μ	4·0	1·2	200	4·25	100	1·8	2·0	1400	2·5		4	Mullard
VP20	Var. μ	20·0	0·18	200	4·0	100	1·7	2·0	1100	2·2		4	Mullard
VPT4	Var. μ	4·0	1·0	250	5·5	100	3·0	3·0	1000	2·3		4	Ferranti
4TPB		4·0	1·0	200	12·0	150	—	3·0	—	8·0	B7	5	Cossor
4TSA		4·0	1·0	250	—	100	Synch.	Separator		—		6	Cossor
4TSP		4·0	1·0	250	12·0	150	—	3·0	—	8·0		7	Cossor
8A1		4·0	1·0	200	3·5	80	0·7	1·5	600	4·0		7	Brimar
8D2		13·0	0·2	250	2·0	100	0·5	3·0	1000	1·25		5	Brimar
9A1	Var. μ	4·0	1·0	200	5·0	80	1·0	1·5	600	4·2		7	Brimar
9A3	Var. μ	4·0	0·65	200	10·0	125	3·0	2·0	600	1·8		5	Brimar
9D2	Var. μ	13·0	0·2	250	10·5	125	2·6	3·0	600	1·65		5	Brimar
13SPA		13·0	0·2	200	2·3	100	0·7	3·0	1000	1·25		5	Cossor
13VPA	Var. μ	13·0	0·2	200	7·0	100	1·7	0	800	1·8		5	Cossor
41MPT		4·0	1·0	250	12·0	100	2·0	1·5	200	4·8		7	Cossor
41MTS†		4·0	1·0	250	5·0	100	—	0	—	1·6		6	Cossor
42MPT		4·0	2·0	200	34·0	200	6·0	3·0	100	8·5		7	Cossor
42PTB		4·0	2·0	200	34·0	200	6·0	3·0	100	8·5		5	Cossor
42SPT		4·0	2·0	250	27·0	250	—	15·0	—	11·0		7	Cossor
202SPB		20·0	0·2	250	4·8	100	—	1·5	800	2·8		5	Cossor
202VP	Var. μ	20·0	0·2	250	4·3	100	—	1·5	600	2·2		7	Cossor
202VPB	Var. μ	20·0	0·2	250	4·3	100	—	1·5	600	2·2		5	Cossor
210SPT		2·0	0·1	150	1·2	60	0·35	1·5	600	1·3		8	Cossor
210VPA	Var. μ	2·0	0·1	150	2·0	70	0·7	1·5	1500	0·88		8	Cossor
210VPT	Var. μ	2·0	0·1	150	1·5	80	—	0	—	1·1		8	Cossor
22CIPT		2·0	0·2	120	2·2	60	0·5	1·5	400	1·0		9	Cossor
A50B		4·0	0·65	250	4·0	250	—	2·4	2000	3·4		5	Ever Ready
A50P	Var. μ	4·0	0·65	250	11·5	250	—	3·0	—	2·0		5	Ever Ready
AC/S2Pen		4·0	1·0	250	8·0	100	2·7	1·5	700	4·6		7	Mazda
AC/SP1		4·0	1·0	200	4·9	200	4·1	3·0	120	2·65		7	Mazda
AC/SP3		4·0	1·0	250	7·9	100	2·5	1·7	550	7·0		5	Mazda
AC/VP1	Var. μ	4·0	0·65	250	7·4	200	1·85	2·8	1000	2·0		7	Mazda
AC/VP2	Var. μ	4·0	0·65	250	7·4	200	1·85	2·8	1000	2·0		5	Mazda
C50B		13·0	0·2	200	2·5	200	—	2·2	2500	2·8		5	Ever Ready
C50N	Var. μ	13·0	0·2	200	9·0	200	—	2·0	—	2·2		5	Ever Ready



SCREENED TETRODES and PENTODES—*Contd.*

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Make
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
HP13	Var. μ	13·0	0·2	200	8·0	100	2·9	3·0	1000	3·5	B7	1	Tungsr
HP210c		2·0	0·12	150	1·9	150	0·7	1·5	2500	1·9		4	Tungsr
HP210DC		2·0	0·12	150	1·9	150	0·7	1·0	2500	1·9		4	Tungsr
HP211	Var. μ	2·0	0·12	150	2·6	150	0·6	0·9	2000	1·7		4	Tungsr
HP211c	Var. μ	2·0	0·12	150	2·6	150	0·6	0·9	2000	1·7		4	Tungsr
HP2018		20·0	0·18	200	4·0	100	1·2	2·0	1000	3·5		2	Tungsr
HP2118	Var. μ	20·0	0·18	200	5·0	100	1·1	2·0	1000	3·5		2	Tungsr
HP4101c		4·0	1·0	200	3·5	100	0·6	2·0	2000	2·8		2	Tungsr
HP4105	Var. μ	4·0	1·0	250	4·5	100	1·2	2·0	1400	3·0		2	Tungsr
HP4106c	Var. μ	4·0	1·0	250	5·0	100	2·0	2·0	1200	3·5		2	Tungsr
HP4115c	Var. μ	4·0	1·0	250	4·5	100	1·5	2·0	1400	3·2		2	Tungsr
K50M	Var. μ	2·0	0·15	135	3·0	135	—	0	400	1·5		4	Ever R
K50N	Var. μ	2·0	0·14	135	2·0	60	—	1·5	1300	1·4		5	Ever R
KTZ41		4·0	1·5	250	18·0	250	5·25	1·5	1000	12·0		3	M.O.V.
MSP4		4·0	1·0	250	3·3	100	1·0	1·75	1000	2·4		2	M.O.V.
MSP41		4·0	1·0	250	8·5	240	3·2	4·0	—	3·2		2	M.O.V.
MS/Pen		4·0	1·0	250	5·4	125	1·7	2·0	600	2·8		2	Cossor
MS/PenA		4·0	1·0	200	9·0	150	5·0	2·5	—	4·0		2	Cossor
MS/PenB		4·0	1·0	250	5·4	125	1·7	2·0	600	2·8		1	Cossor
MVS/Pen	Var. μ	4·0	1·0	250	5·1	125	1·2	2·0	625	2·3		2	Cossor
MVS/PenB	Var. μ	4·0	1·0	250	5·1	125	1·2	2·0	625	2·3		1	Cossor
SP2		2·0	0·18	135	3·0	135	1·0	0	700	1·8		4	Mullar
SP2B		2·0	0·06	135	2·6	135	1·0	0·5	1300	0·8		5	Tungsr
SP2D		2·0	0·1	120	1·45	120	0·35	1·0	900	1·7		5	Tungsr
SP4		4·0	1·0	200	3·0	100	1·1	2·0	2200	2 3		1	Mullar
SP4A		4·0	0·65	250	3·0	100	1·2	2·0	—	2 4		2	Tungsr
SP4B		4·0	0·65	250	4·0	250	1·5	2·4	2000	3·4		1	Mullar
SP4B		4·0	0·65	250	2·9	250	0·8	2·0	2000	4·0		1	Tungsr
SP13		13·0	0·2	200	3·3	100	—	2·0	1300	2·2		1	Tungsr
SP13B		13·0	0·2	250	3·5	250	1·5	1·5	1500	3·5		1	Tungsr
SP13C		13·0	0·2	200	2 5	200	0·9	2·2	2500	2·8		1	Mullar
SP210		2·0	0·1	120	1 1	120	3·3	1·0	2000	1·2		4	Mazda
SP215		2·0	0·15	150	2 1	80	0·7	1 5	800	1 6		4	Mazda
SP1320		13·0	0·2	250	4 4	100	0·9	1 5	—	2·05		1	Mazda
SP2220		22·0	0 2	250	4·9	200	4·1	3·0	120	2·65		2	Mazda
SPT4A		4·0	1 0	250	8·0	100	2·7	1 5	700	4·6		2	Ferran
SPTS		13·0	0 3	250	2·0	100	1·0	1·5	—	3·0		2	Ferran
TSP4		4·0	1·3	200	8·0	200	1·5	2·5	—	4·73		1	Mullar
VMP4	Var. μ	4·0	1·0	250	3·0	100	1·0	2·0	—	3·5		2	M.O.V
VMP4G	Var. μ	4·0	1·0	250	8·0	100	5·0	2·0	—	2·7		2	M.O.V
VP2	Var. μ	2·0	0·13	135	3·0	135	1·25	0	400	1·5		4	Mullar
VP2B (as pentode)	Var. μ	2·0	0·14	135	2·0	60	0·95	1·5	1300	1·4		6	Mullar
VP2B (as tetrode)	Var. μ	2·0	0·14	135	2 1	60	0·7	1·5	700	1·5		6	Mullar
VP2B	Var. μ	2·0	0·05	135	2·5	135	0·8	0·5	2000	0·65		4	Tungsr
VP2D	Var. μ	2·0	0·1	150	1·3	75	0·6	1·5	900	2·0		5	Tungsr
VP4	Var. μ	4·0	1·0	200	4·5	100	1·9	2·0	1000	2·3		1	Mullar
VP4	Var. μ	4·0	0·65	250	8·0	100	2·5	3·0	1200	1·8		2	Tungsr
VP4A	Var. μ	4·0	1·2	200	4·25	100	1·8	2·0	1400	2·5		2	Mullar
VP4B	Var. μ	4·0	0·65	250	11·5	250	4·25	3·0	2500	2·0		1	Mullar
VP4B	Var. μ	4·0	0·65	250	10·0	250	2·5	1·0	1000	4·0		1	Tungsr
VP4C	Var. μ	4·0	0·65	250	10·0	250	2·5	1·0	1000	4·0		2	Tungsr
VP6	Var. μ	6·3	0·2	250	7·5	100	2·5	3·0	1250	1·7		1	Tungsr
VP13–K	Var. μ	13·0	0·2	200	8·0	100	2·5	3·0	1000	2·8		1	Tungsr
VP13B	Var. μ	13·0	0·2	250	10·0	200	3 5	1·0	2000	3·5		1	Tungsr
VP13C	Var. μ	13·0	0·2	200	9·0	200	3 6	2·0	—	2·2		1	Mullar
VP21	Var. μ	2·0	0·1	150	2·8	60	0·7	0	1000	1·1		4	M.O.V
VP210	Var. μ	2·0	0·1	120	1·1	60	0·38	1·5	1450	0·82		4	Mazda
VP215	Var. μ	2·0	0·15	120	1·1	60	0·38	1·5	900	0·82		4	Mazda
VP1320	Var. μ	13·0	0·2	250	5·0	100	1·1	1·7	2000	2·0		2	Mazda
VP1321	Var. μ	13·0	0·2	250	7·4	200	1·85	2·8	1000	2·0		2	Mazda
VP1322	Var. μ	13·0	0·2	250	7·4	200	1·85	2·8	1000	2·0		1	Mazda
VPT2	Var. μ	2·0	0·1	120	1·5	60	0·7	1·5	600	1·1		4	Ferran
VPT4B	Var. μ	4·0	1·0	250	6·0	100	3·0	3·0	1000	3·2		2	Ferran
VPTA		13·0	0·2	250	4·2	100	2·0	2·0	1000	2·0		2	Ferran
VPTS		13·0	0·3	200	5·5	100	2·0	3·0	1000	2·6		2	Ferran
W21	Var. μ	2·0	0·1	150	3·6	120	1·2	0	—	1·4		4	M.O.V
W30	Var. μ	13·0	0·3	250	12·0	250	6·0	1·0	1000	3·9		2	M.O.V
W31	Var. μ	13·0	0·3	250	8·4	100	5·0	2·5	—	2·8		2	M.O.V
W42	Var. μ	4·0	0·6	250	7·6	100	1·9	3·0	—	1·5		1	M.O.V
Z22		2·0	0·1	150	2·5	120	0·7	0	—	1·4		4	M.O.V
WD30		13·0	0·3	250	7·6	100	4·8	1·0	1000	2·6	B9	7	M.O.V
WD40		4·0	1·0	250	7·6	100	4·8	1·0	1000	2·6		7	M.O.V

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
6F32		6·3	0·63	200	5·1	200	3·45	4·5	—	3·0	M.O.	8	Mazda
SP22		2·0	0·1	120	1·1	120	0·38	1·0	1350	1·2		9	Mazda
SP41		4·0	0·95	200	10·9	200	2·7	1·5	700	8·5		8	Mazda
SP42		4·0	0·95	200	20·0	115	5·0	1·25	—	8·4		8	Mazda
SP61		6·3	0·6	200	10·9	200	2·7	1·5	700	8·5		8	Mazda
SP62		6·3	0·6	200	20·0	115	5·0	1·25	—	8 4		8	Mazda
SP141		1·4	0·05	83	1·3	83	0·5	0	600	0·75		10	Mazda
SP181		18·0	0·2	200	10·9	200	2·7	1·5	700	8·5		8	Mazda
VP22	Var. μ	2·0	0·1	120	1·2	60	0·32	1·5	1300	0·8		9	Mazda
VP23	Var. μ	2·0	0·05	120	1·45	60	0·5	1·5	1450	1·08		9	Mazda
VP41	Var. μ	4·0	0·65	250	7·7	200	2·0	2·7	1300	2·0		8	Mazda
VP133	Var. μ	13·0	0·2	150	8·0	150	2·2	2·7	700	2·1		8	Mazda
DF1		1·4	0·05	90	1·2	90	0·3	0	1500	0·75	P	11	Mullard
EBF1		6·3	0·3	250	9·0	125	2·3	3·0	650	1·1		12	Tungsram
EBF2	Var. μ	6·3	0·2	250	5·0	100	2·0	2·0	1500	1·8		12	Mul.-Tung.
EF1		6·3	0·4	250	3·0	100	0·9	2·0	1700	2·3		13	Tungsram
EF2	Var. μ	6·3	0·4	250	4·5	100	1·4	2·0	1400	2·2		13	Tungsram
EF5	Var. μ	6·3	0·2	250	8·0	100	2·6	3·0	1200	1·7		13	Mul.-Tung.
EF6		6·3	0·2	250	3·0	100	0·8	2·0	2500	1·8		13	Mul.-Tung.
EF8		6·3	0·2	250	8·0	250	0·2	2·5	450	1·8		14	Mul.-Tung.
EF9	Var. μ	6·3	0·2	250	6·0	100	1·7	2·5	1250	2·2		13	Mul.-Tung.
EF25		6·3	0·2	240	5·0	100	1·8	2·0	1250	1·85		13	Tungsram
HP13s	Var. μ	13·0	0·2	250	8·0	100	2·9	1·0	1000	3·8		13	Tungsram
SP2Bs		2·0	0·06	135	2·6	135	1·0	0·5	1300	0·8		15	Tungsram
SP4s		4·0	0·65	250	3·0	100	1·2	2·0	2000	2·4		13	Tungsram
SP13		13·0	0·2	200	3·3	100	1·0	2·0	1300	2·2		13	Mullard
SP13s		13·0	0·2	250	3·0	100	1·2	2·0	2000	2·4		13	Tungsram
VP2Bs	Var. μ	2·0	0·05	135	2·5	135	0·8	0·5	2000	0·65		15	Tungsram
VP4s	Var. μ	4·0	0·65	250	8·0	100	2·5	3·0	1200	1·8		13	Tungsram
VP6s	Var. μ	6·3	0·2	250	7·5	100	2·5	3·0	1250	1·75		13	Tungsram
VP13A	Var. μ	13·0	0·2	200	4·0	100	1·4	2·0	1000	2·2		13	Mullard
VP13s	Var. μ	13·0	0·2	200	8·0	100	2·6	3 0	900	2·8		13	Tungsram

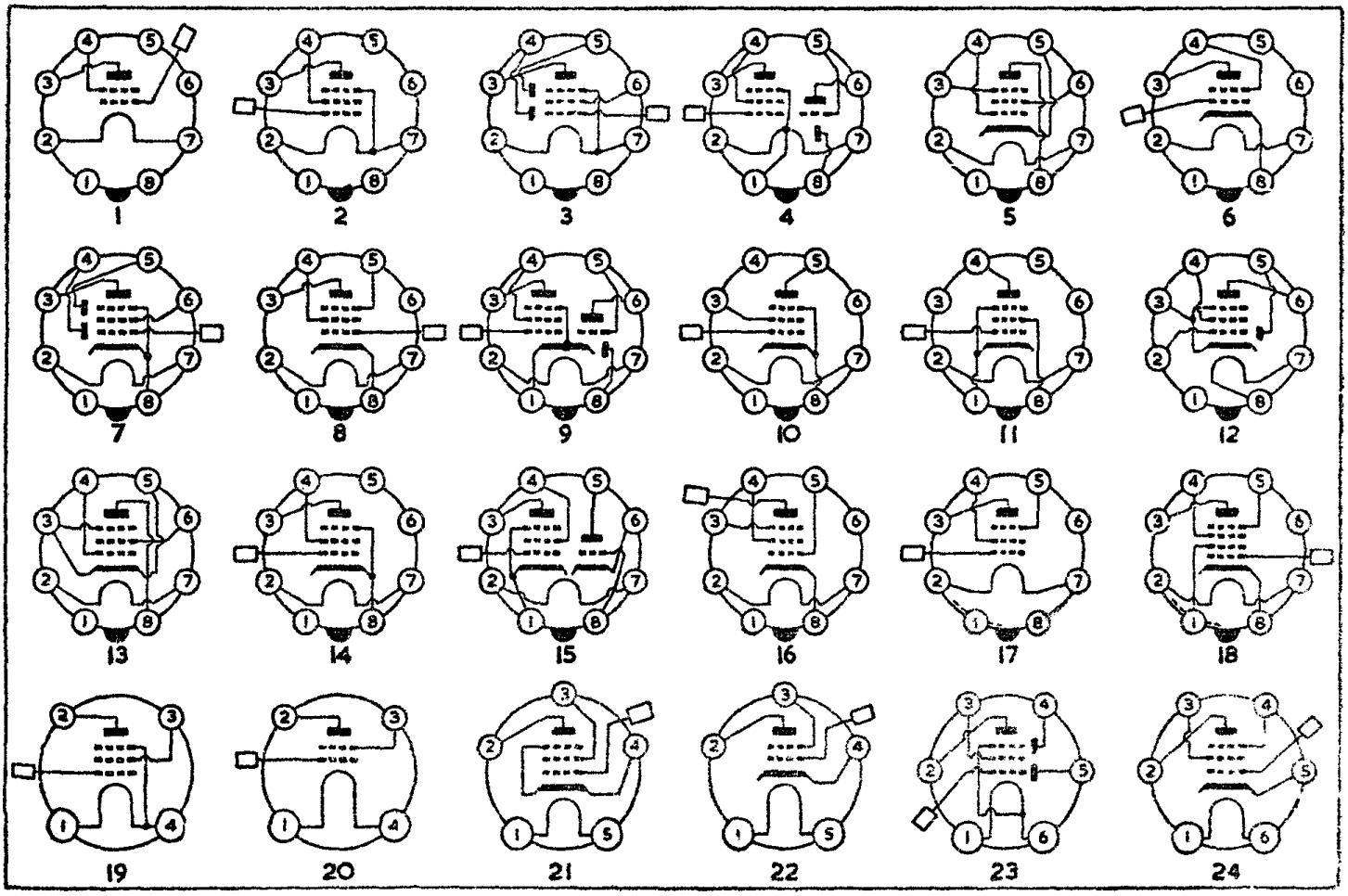


SCREENED TETRODES and PENTODES—*Contd.*

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	g_m mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
1D5GP	Var. μ	2·0	0·06	180	2·3	67·5	0·8	3·0	1000	0·75	I.O.	2	U.S.A.
1D5GT	Var. μ	2·0	0·06	180	2·2	67·5	0·7	3·0	600	0·65		1	U.S.A.
1E5GP		2·0	0·06	180	1·7	67·5	0·6	3·0	1500	0·65		2	U.S.A.
1F7G		2·0	0·06	180	2·0	67·5	0·6	1·5	1000	0·65		3	U.S.A.
1N5GT/G		1·4	0·05	90	1·2	90	0·3	0	1500	0·75		2	Am.-Brit.
1P5GT		1·4	0·05	90	2·3	90	0·7	0	900	0·8		2	U.S.A.
2K2		2·0	0·06	100	2·5	100	0·6	+1·8	810	0·87		1	U.S.A.
3A8GT		2·8	0·05	90	1·5	90	0·5	0	800	0·75		4	U.S.A.
6AB7/1853		6·3	0·45	300	12·5	200	3·2	3·0	700	5·0		5	U.S.A.
6AC7/1852		6·3	0·45	300	10·0	150	2·5	160·0*	1000	9·0		5	Am.-Brit.
6AJ7		6·3	0·45	300	10·0	300	2·5	160·0*	1000	9·0		5	Am.-Brit.
6B8-GT/G		6·3	0·3	250	9·0	125	2·3	3·0	650	1·1		7	Am.-Brit.
6H8		6·3	0·3	250	8·5	100	—	2·0	650	2·4		7	U.S.A.
6J7-GT/G		6·3	0·3	250	2·0	100	0·5	3·0	1500	1·2		8	Am.-Brit.
6K7-GT/G	Var. μ	6·3	0·3	250	10·5	125	2·6	3·0	600	1·6		8	Am.-Brit.
6M7		6·3	0·3	250	10·5	125	2·8	2·5	900	3·4		8	U.S.A.
6M8		6·3	0·6	100	8·5	100	—	3·0	200	1·9		9	U.S.A.
6R6		6·3	0·3	250	7·0	100	1·7	3·0	—	1·4		10	U.S.A.
6S6		6·3	0·45	250	13·0	100	3·0	2·0	350	4·0		11	U.S.A.
6S7-G	Var. μ	6·3	0·15	250	8·5	100	2·0	3·0	1000	1·75		8	Am.-Brit.
6SD7	Var. μ	6·3	0·3	250	6·0	100	1·9	2·0	1000	3·6		5	U.S.A.
6SE7		6·3	0·3	250	4·5	100	1·5	1·5	1100	3·4		5	U.S.A.
6SF7	Var. μ	6·3	0·3	250	12·4	100	3·3	1·0	700	2·0		12	Am.-Brit.
6SG7	Var. μ	6·3	0·3	250	9·2	150	3·4	2·5	1000+	4·0		13	Am.-Brit.
6SH7		6·3	0·3	250	10·8	150	4·1	1·0	900	4·9		13	Am.-Brit.
6SJ7-GT		6·3	0·3	250	3·0	100	0·8	3·0	1000+	1·6		5	Am.-Brit.
6SK7-GT	Var. μ	6·3	0·3	250	9·2	100	2·6	3·0	800	2·0		5	Am.-Brit.
6SS7	Var. μ	6·3	0·15	250	9·0	100	2·0	3·0	1000	1·8		5	Am.-Brit.
6SV7		6·3	0·3	250	7·5	150	2·8	1·0	800	3·4		12	U.S.A.
6T6		6·3	0·45	250	10·0	100	2·0	1·0	1000	5·5		14	U.S.A.
6U7G	Var. μ	6·3	0·3	250	8·2	100	2·0	3·0	800	1·6		8	Am.-Brit.
6W7G		6·3	0·15	250	2·0	100	0·5	3·0	1500	1·2		8	U.S.A.
8D4		6·3	0·2	250	2·9	100	0·85	2·0	2400	1·85		8	Brimar
12B8-GT		12·6	0·3	90	7·0	90	2·0	3·0	200	1·8		15	U.S.A.
12C8		12·6	0·15	90	9·0	125	2·3	3·0	650	1·1		7	Am.-Brit.
12J7-GT		12·6	0·15	250	2·0	100	0·5	3·0	1500	1·2		8	Am.-Brit.
12K7-GT	Var. μ	12·6	0·15	250	10·5	125	2·6	3·0	600	1·6		8	Am.-Brit.
12SF7	Var. μ	12·6	0·15	250	12·4	100	3·3	1·0	700	2·0		12	U.S.A.
12SG7	Var. μ	12·6	0·15	250	9·2	150	3·4	2·5	1000+	4·0		13	Am.-Brit.
12SH7		12·6	0·15	250	10·8	150	4·1	1·0	900	4·9		13	Am.-Brit.
12SJ7-GT		12·6	0·15	250	3·0	100	0·8	3·0	1000+	1·6		5	Am.-Brit.
12SK7-GT	Var. μ	12·6	0·15	250	9·2	100	2·6	3·0	800	2·0		5	Am.-Brit.
25B8GT		25·0	0·15	100	7·6	100	2·0	3·0	185	2·0		15	U.S.A.
25D8		25·0	0·15	100	8·5	100	2·7	3·0	200	1·9		9	U.S.A.
61SPT		6·3	1·27	250	64·0	250	15·0	10·5	—	11·0		16	Cossor
717A		6·3	0·175	120	7·5	120	2·5	2·0	390	4·0		13	U.S.A.
1851		6·3	0·45	300	10·0	150	2·5	2·0	750	9·0		8	U.S.A.
DF31		1·4	0·025	120	1·2	90	0·25	0	2500	0·7		17	Mullard
DF32	Var. μ	1·4	0·05	120	1·4	90	0·3	1·5	2500	1·1		17	Mullard
DF33		1·4	0·05	90	1·2	90	0·3	0	1500	0·75		2	Mullard
EBF32		6·3	0·2	250	5·0	100	2·0	2·0	1500	1·8		7	Mullard
EF36		6·3	0·2	250	3·0	100	0·8	2·0	2500	1·8		8	Mullard
EF37		6·3	0·2	EF37 = Non-microphonic EF36									
EF37A				EF37A = EF37 with low hum level heater								8	Mullard
EF38		6·3	0·2	250	8·0	250	0·2	2·2	450	1·8		18	Mullard
EF39	Var. μ	6·3	0·2	250	6·0	100	1·7	2·5	1250	2·2		8	Mul.-Tung
KF35	Var. μ	2·0	0·05	120	1·45	60	0·5	1·5	—	1·08		17	Mullard
KTW61-M	Var. μ	6·3	0·3	250	8·0	80	2·3	3·0	450	2·9		8	M.O.V.
KTW62	Var. μ	6·3	0·3	250	8·0	100	2·5	—	—	2·8		8	M.O.V.
KTW63	Var. μ	6·3	0·3	250	7·6	100	1·5	3·0	—	1·5		6	M.O.V.
KTW73/M	Var. μ	5·8	0·16	250	6·5	100	1·3	3·0	750	1·7		8	M.O.V.
KTW74/M	Var. μ	13·0	0·16	250	7·6	100	1·5	3·0	700	1·5		8	M.O.V.
KTZ63		6·3	0·3	250	1·0	100	0·25	2·0	1500	1·2		6	M.O.V.
KTZ63/6J7		6·3	0·3	= KTZ63 with suppressor plates								8	M.O.V.
KTZ73/M		5·8	0·16	250	2·0	100	0·25	3·0	1500	1·5		8	M.O.V.
OM5		6·3	0·2	250	3·0	100	0·8	2·0	2500	1·8		8	Cossor
OM5A		6·3	0·2	OM5A = Non-microphonic OM5									
OM5B		6·3	0·2	= OM5B = OM5A with low hum level heater									Cossor
OM6	Var. μ	6·3	0·2	250	6·0	100	1·7	2·5	1250	2·2		8	Cossor
OM7	Var. μ	6·3	0·2	= Non-microphonic OM6									Cossor
VP12C	Var. μ	12·6	0·15	250	9·0	125	2·3	3·0	600	1·1		7	Ferranti
W61	Var. μ	6·3	0·3	250	8·5	80	2·8	3·0	600	2·9		8	M.O.V.
W63	Var. μ	6·3	0·3	250	7·6	100	1·9	3·0	—	1·5		8	M.O.V.

* Bias resistor

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
W76	Var. μ	13·0	0·16	175	8·5	100	1·7	2·3	500	1·5	LO.	8	M.O.V.
W147	Var. μ	6·3	0·2	250	6·0	100	1·7	2·5	1250	2·2		8	Marconi
Z14		1·4	0·05	90	1·2	90	0·3	0	1500	0·75		2	M.O.V
Z67		6·3	0·45	300	10·0	150	2·3	2·0	750	7·5		8	M.O.V.
Z63		6·3	0·3	250	1·0	100	0·25	2·0	1500	1·2		8	M.O.V.
Z66		6·3	0·63	200	8·0	200	2·0	1 85	1500	8·5		8	M.O.V.
1A4P	Var. μ	2 0	0·06	180	2·3	67·5	0·8	3·0	1000	0·75	UX4	19	Am.-Brit.
1A4T	Var. μ	2 0	0 06	180	2·3	67·5	0·7	3·0	960	0·75		20	U.S.A.
1B4P/951		2·0	0·06	180	1·7	67·5	0·6	3·0	1500	0·65		19	U.S.A.
1B4T		2·0	0·06	180	1·75	67·5	0·16	3·0	1400	0·65		20	U.S.A.
32–E		2·0	0·06	180	1·7	67·5	0·4	3 0	1200	0·65		20	Am.-Brit.
15		2 0	0·22	135	1·85	67·5	0·3	1·5	800	0·75	UX5	21	Am.-Brit.
24–A/E		2 5	1 75	250	4·0	90	1·7	3·0	600	1·05		22	Am.-Brit.
35/51	Var. μ	2·5	1·75	250	6·5	90	2·5	3 0	400	1 05		22	Am Brit.
36		6·3	0·3	250	3·2	90	1·7	3·0	550	1·08		22	Am.-Brit.
39/44	Var. μ	6·3	0·3	250	5·8	90	1·4	3·0	1000	1·05		21	Am.-Brit.
64-A		6·3	0·4	180	3·1	90	1·5	3·0	500	1·05		22	U.S.A.
65-A		6·3	0·4	180	4·5	90	1·3	3·0	750	1·0		22	U.S.A.
1F6		2·0	0·06	180	2·0	67·5	0·6	1·5	1000	0·65	UX6	23	U.S.A.
6C6		6·3	0·3	250	2·0	100	0·5	3·0	1000+	1·2		24	Am.-Brit.
6D6	Var. μ	6·3	0·3	250	8·2	100	2·0	3·0	800	1·6		24	Am.-Brit.
57		2·5	1·0	250	2·0	100	0·5	3·0	1500	1·2		24	Am.-Brit.
58	Var. μ	2·5	1·0	250	8·2	100	2·0	3·0	800	1 6		24	Am.-Brit.
77-E		6·3	0·3	250	2·3	100	0·5	3·0	1000+	1·25		24	Am.-Brit.
78-E	Var. μ	6·3	0·3	250	10·5	125	2·6	3·0	600	1·65		24	Am.-Brit.

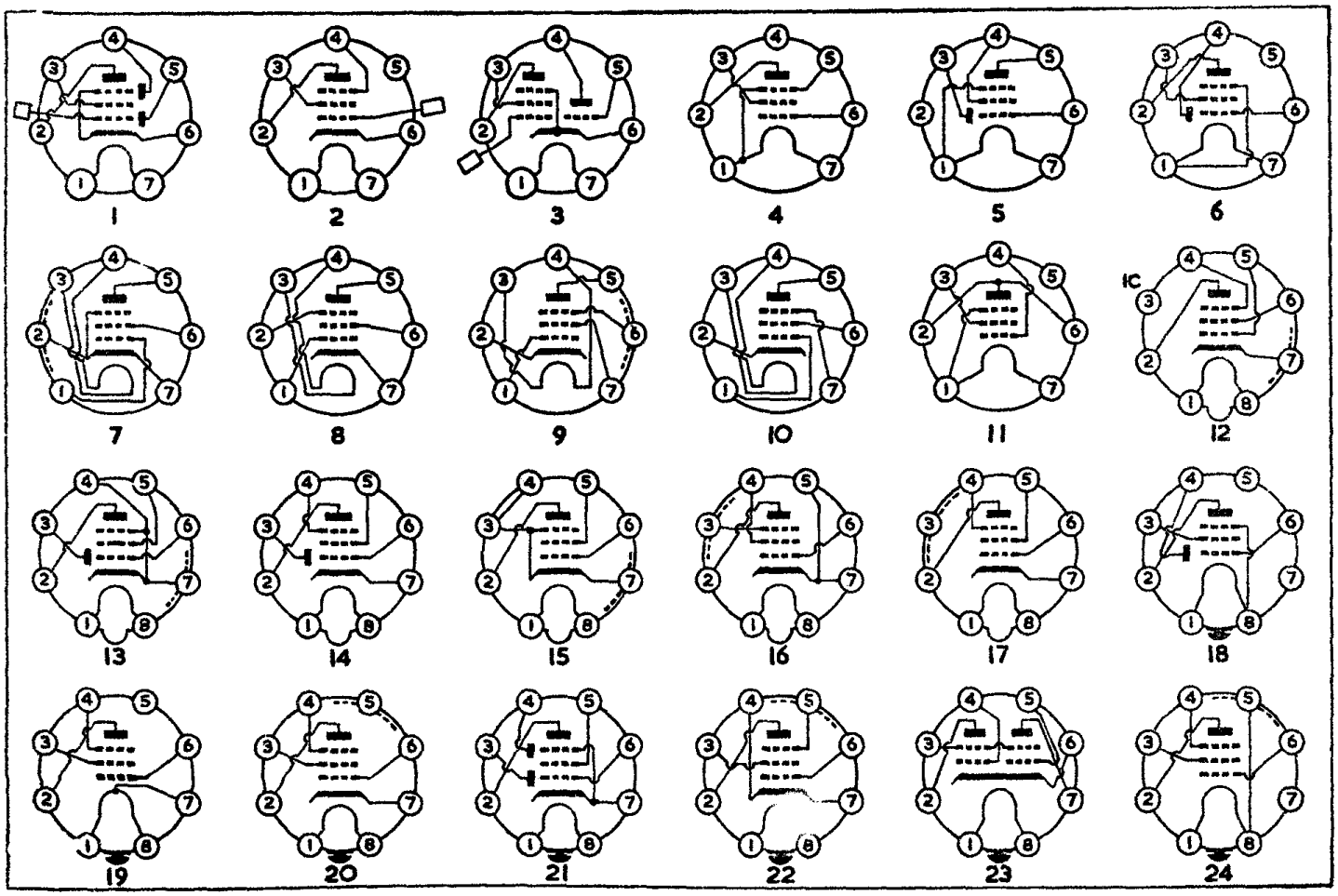


SCREENED TETRODES and PENTODES—*Contd.*

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
2B7		2·5	0·8	250	9·0	125	2·3	3·0	600	1·1	UX7	1	Am.-Brit.
6B7–E		6·3	0·3	250	9·0	125	2·3	3·0	600	1·1		1	Am.-Brit.
6D7		6·3	0·3	250	2·0	100	0·5	3·0	1600	1·2		2	U.S.A.
6E7	Var. μ	6·3	0·3	250	8·2	100	2·0	3·0	800	1·6		2	U.S.A.
6F7–E/B		6·3	0·3	250	6·5	100	1·5	3·0	850	1·1		3	Am.-Brit.
4B6		1·4	0·05	90	1·5	67·5	0·8	1·5	800	0·75	B7G	11	U.S.A.
1F2		1·4	0·05	90	2·9	67·5	1·2	0	600	0·92		4	Mazda
1F3	Var. μ	1·4	0·05	90	1·8	45	0·65	0	800	0·75		4	Mazda
1FD9		1·4	0·05	67·5	1·6	67·5	0·4	0	600	0·63		5	Mazda
1L4		1·4	0·05	90	4·5	90	2·0	0	350	1·03		4	Am.-Brit.
1S5		1·4	0·05	67·5	1·6	67·5	0·4	0	600	0·6		5	Am.-Brit.
1T4	Var. μ	1·4	0·05	90	3·5	67·5	1·4	0	500	0·9		4	Am.-Brit.
1U4		1·4	0·05	90	1·6	90	0·5	0	1500	0·9		4	U.S.A.
1U5		1·4	0·05	67·5	1·6	67·5	0·4	0	600	0·6		6	Am.-Brit.
6AG5		6·3	0·3	250	7·0	150	2·0	200*	800	5·0		7	Am.-Brit.
6AH6		6·3	0·45	300	10·0	150	2·5	160*	500	9·0		8	U.S.A.
6AJ5		6·3	0·175	180	3·0	75	1·5	7·5	—	2·75		7	U.S.A.
6AK5		6·3	0·175	150	7·0	140	2·2	330*	420	4·3		7	Am.-Brit.
6AM6		6·3	0·3	250	10·0	250	2·5	2·0	1000	7·5		9	Am.-Brit.
6AS6		6·3	0·175	120	5·5	120	3·5	2·0	—	3·5		10	U.S.A.
6AU6		6·3	0·3	250	10·8	150	4·3	1·0	1000	5·2		8	Am.-Brit.
6BA6	Var. μ	6·3	0·3	250	11·0	100	4·2	68*	1500	4·4		8	Am.-Brit.
6BD6	Var. μ	6·3	0·3	250	9·0	100	3·5	3·0	700	2·0		8	U.S.A.
6BH6		6·3	0·15	250	7·4	150	2·9	1·0	1400	4·6		10	Am.-Brit.
6BJ6	Var. μ	6·3	0·15	250	9·2	100	3·3	1·0	1300	3·8		10	Am.-Brit.
6F12		6·3	0·3	250	10·0	250	2·5	2·0	900	7·5		9	Mazda
6F33		6·3	0·35	200	5·75	200	3·1	4·0	—	3·55		9	Mazda
8D3		6·3	0·3	250	10·0	250	2·5	2·0	1000	7·5		9	Brimar
9D6	Var. μ	6·3	0·2	250	8·0	200	2·1	2·5	1000	2·5		9	Brimar
12AU6		12·6	0·15	250	10·8	150	4·3	1·0	1000	5·2		8	Am.-Brit.
12AW6		12·6	0·15	250	7·0	150	2·0	—	800	5·0		10	U.S.A.
12AW7		12·6	0·15	250	7·0	150	2·0	—	800	5·0		10	U.S.A.
12BA6	Var. μ	12·6	0·15	250	11·0	100	4·2	—	1500	4·4		8	Am.-Brit.
12BD6	Var. μ	12·6	0·15	250	9·0	100	3·5	3·0	700	2·0		8	U.S.A.
26A6G	Var. μ	26·5	0·07	250	10·5	100	4·0	125*	1000	4·0		8	Am.-Brit
5590		6·3	0·15	90	3·9	90	1·4	820*	300	2·0		7	U.S.A.
5591		6·3	0·15	180	1·7	120	2·4	200*	690	5·1		7	U.S.A.
9001		6·3	0·15	250	2·0	100	0·7	3·0	1000+	1·4		7	U.S.A.
9003	Var. μ	6·3	0·15	250	6·7	100	2·7	3·0	700	1·8		7	U.S.A.
DAF91		1·4	0·05	67·5	1·6	67·5	0·4	0	600	0·62		5	Mullard
DF91	Var. μ	1·4	0·05	90	3·5	67·5	1·4	0	500	0·9		4	Mullard
DF92		1·4	0·05	90	3·7	67·5	1·4	0	500	1·0		4	Mullard
DP61		6·3	0·175	150	7·0	140	2·2	330*	420	4·3		7	Ferranti
EF91		6·3	0·3	250	10·0	250	2·5	2·0	1000	7·6		9	Mullard
EF92	Var. μ	6·3	0·2	250	8·0	200	2·1	2·5	—	2·1		9	Mullard
HP6		6·3	0·3	250	10·0	250	2·1	2·0	1000	7·6		9	Tungsrar
SP6		6·3	0·3	250	10·0	250	2·5	2·0	1000	7·6		9	Cossor
VP6		6·3	0·2	250	8·0	200	2·1	2·5	—	2·1		9	Cossor
W17	Var. μ	1·4	0·05	90	3·5	67·5	1·4	0	500	0·9		4	M.O.V.
W77	Var. μ	6·3	0·2	200	8·0	200	2·1	2·5	500	2·5		9	M.O.V.
W107	Var. μ	12·6	0·1	200	8·0	200	2·0	2·5	500	2·5		9	M.O.V.
Z77		6·3	0·3	250	10·0	250	2·5	2·0	300	7·6		9	M.O.V.
ZL17		1·4	0·05	67·5	1·6	67·5	—	0	600	0·6		5	M.O.V.
6F1		6·3	0·35	200	10·0	200	2·6	1·8	2800	9·0	B8A	16	Mazda
6F11		6·3	0·2	250	4·4	100	1·35	1·8	2800	2·2		17	Mazda
6F13		6·3	0·35	200	10·0	200	2·6	1·8	900	9·0		17	Mazda
6F14		6·3	0·35	140	28·0	140	7·0	1·25	125	10·6		17	Mazda
6F15	Var. μ	6·3	0·2	250	7·0	100	2·0	2·5	1700	2·3		17	Mazda
10F1		22·0	0·1	200	10·0	200	2·6	1·8	900	9·0		16	Mazda
10F3		22·0	0·1	200	6·0	200	1·6	2·35	—	6·5		17	Mazda
10F9	Var. μ	13·0	0·1	175	7·0	100	2·0	2·5	1000	2·3		17	Mazda
20F2		11·0	0·2	135	—	140	6·5	1·3	—	10·6		17	Mazda
EAF41	Var. μ	6·3	0·2	250	5·0	125	1·6	2·0	1200	1·8		13	Mullard
EAF42	Var. μ	6·3	0·2	250	5·0	85	1·5	2·0	1400	2·0		14	Mullard
EF40		6·3	0·2	250	3·0	140	0·55	2·0	2500	1·8		12	Mullard
EF41	Var. μ	6·3	0·2	250	6·0	125	1·7	2·5	1000	2·2		15	Mullard
EF42		6·3	0·33	250	10·0	250	2·3	2·0	440	9·5		17	Mullard
UAF41	Var. μ	12·6	0·1	250	5·0	125	1·6	2·0	1200	1·8		13	Mullard
UAF42	Var. μ	12·6	0·1	250	5·0	85	1·4	2·0	1000	2·0		14	Mullard
UF41	Var. μ	12·6	0·1	200	7·2	150	2·1	3·0	1000	2·3		15	Mullard
UF42		21·0	0·1	170	10·0	170	2·8	2·0	200	8·5		17	Mullard
W145	Var. μ	13·0	0·1	175	7·0	100	2·0	2·5	—	2·4		17	Marconi
W150	Var. μ	6·3	0·2	250	6·0	125	1·7	2·5	1000	2·2		15	Marconi

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
	Volts	Amps	Volts	Im/A	Volts	Im/A				Type	Ref.	
WD142	13·0	0·1	170	5·0	85	1·4	2·0	—	2·1	B8A	14	Marconi
WD150	6·3	0·2	250	5·0	85	1·4	2·0	1000	2·0		14	Marconi
Z142	21·0	0·1	170	10·0	170	2 8	2·0	200	8·5		17	Marconi
Z150	6·3	0·33	250	10·0	250	2·3	2·0	440	9·5		17	Marconi
1LC5	1·4	0·05	90	1·15	45	0·2	0	1500	0·77	B8G	24	U.S.A.
1LD5	1·4	0·05	90	0·6	45	0·1	0	950	0·6		18	Am.-Brit.
1LG5	1·4	0·05	90	1·7	45	0·4	0	1000	0·8		24	U.S.A.
1LN5 Var. μ	1·4	0·05	90	1·2	90	0·3	0	1500	0·75		24	Am.-Brit.
3E6	2·8	0·05	90	3·8	90	1·3	0	300	2·1		19	U.S.A.
7A7 Var. μ	6·3	0·3	250	8·6	100	2·0	3·0	800	2·0		20	Am.-Brit.
7AD7	6·3	0·6	300	28·0	150	7·0	68*	300	9·5		20	U.S.A.
7AG7	6·3	0·15	250	6·0	250	2·0	250*	750	4·2		20	U.S.A.
7AH7	6·3	0·15	250	6·8	250	1·9	250*	1000	3·3		20	U.S.A.
7AK7	6·3	0·8	150	—	90	—	0	—	6·5		20	U.S.A.
7B7 Var. μ	6·3	0·15	250	8·5	100	1·7	3·0	700	1·7		20	Am.-Brit.
7C7	6·3	0·15	250	2·0	100	0·5	3·0	2000	1·3		20	Am.-Brit.
7E7	6·3	0·3	250	7·5	100	1·6	3·0	700	1·3		21	U.S.A.
7G7	6·3	0·45	250	6·0	100	2·0	2·0	800	4·5		20	U.S.A.
7G8	6·3	0·3	250	4·5	100	0·8	2·5	225	2·1		23	U.S.A.
7H6	6·3	0·3	250	9·3	150	4·0	2·5	820	3·7		20	U.S.A.
7H7 Var. μ	6·3	0·3	250	9·5	150	3·5	2·5	800	4·2		20	Am.-Brit.
7L7	6·3	0·3	250	4·5	100	1·5	1·5	100	3·1		20	U.S.A.
7R7	6·3	0·3	250	6·2	100	1·6	1·0	1000	3·4		21	Am.-Brit.
7T7	6·3	0·3	250	10·8	150	4·1	1·0	900	4·9		20	U.S.A.
7V7	6·3	0·45	300	10·0	150	3·9	160*	300	5·8		20	U.S.A.
7W7	6·3	0·45	300	10·0	150	3·9	2·2	300	5·8		22	U.S.A.
12B7-ML	12·6	0·15	250	9·2	100	2·6	3·0	800	2·0		20	U.S.A.
14A7/12B7	12·6	0·15	250	9·2	100	2·6	3·0	800	2·0		20	U.S.A.
14C7	12·6	0·15	250	2·2	100	0·7	3·0	1000	1·57		20	U.S.A.
14E7	12·6	0·15	250	7·5	100	1·6	3·0	700	1·3		21	U.S.A

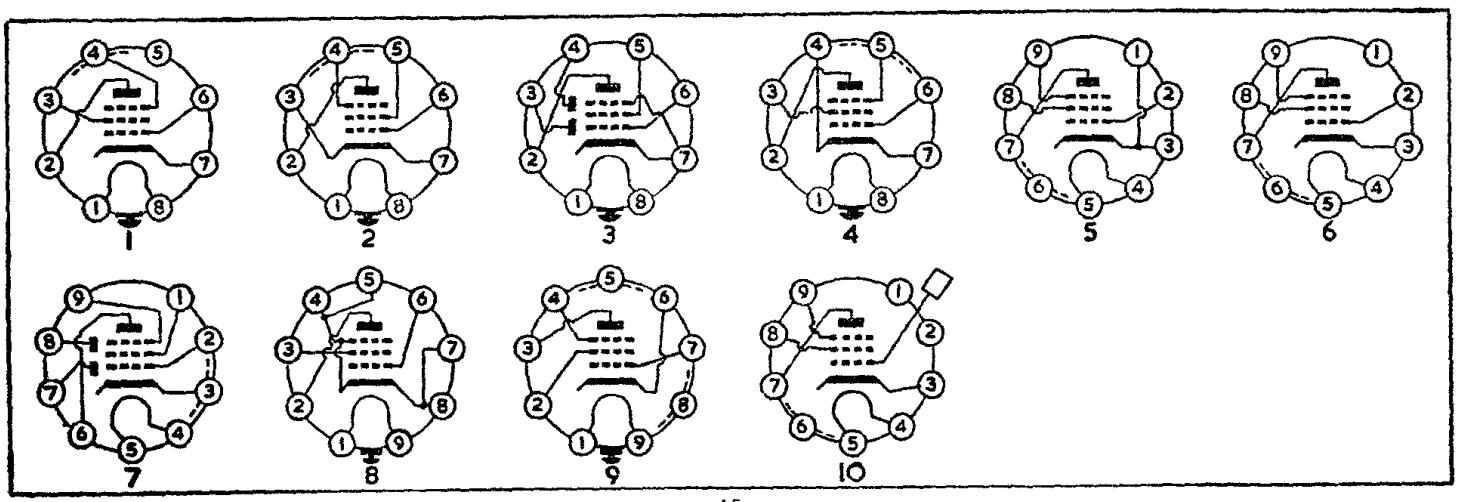
* **Bias resistor**



SCREENED TETRODES and PENTODES—*Contd.*

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
14H7	Var. μ	12·6	0·15	250	9·5	150	3·5	2·5	800	4·2	B8G	1	Am.-Brit.
14R7		12·6	0·15	250	6·2	100	1·6	1·0	1000	3·4		3	Am.-Brit.
14V7		12·6	0·22	300	9·6	150	3·9	2·0	300	5·8		1	U.S.A.
14W7		12·6	0·22	300	10·0	150	3·9	2·2	300	5·8		4	U.S.A.
1231		6·3	0·45	300	10·0	150	2·5	200*	700	5·5		1	U.S.A.
1273		6·3	0·3	250	2·2	100	0·7	3·0	1000	1·57		1	U.S.A.
EF22		6·3	0·2	250	6·0	100	1·7	2·5	1200	2·2		1	Mullard
EF51		6·3	0·35	250	14·0	250	2·6	2·0	500	9·5		2	Mullard
EF52		6·3	0·35	250	10·0	250	—	2·0	700	10·0		2	Mullard
W81/M	Var. μ	6·3	0·3	250	9·6	100	3·6	3·6	—	2·8		1	M.O.V.
W101/M	Var. μ	19·0	0·1	250	10·0	100	3·2	3·6	—	2·8		1	M.O.V.
W143	Var. μ	6·3	0·2	250	6·0	100	1·7	2·5	1200	2·2		1	Marconi
W148	Var. μ	6·3	0·3	250	9·5	150	3·5	2·5	800	3·8		1	Marconi
W149	Var. μ	6·3	0·15	250	8·5	100	1·7	3·0	—	1·75		1	Marconi
6BR7		6·3	0·15	250	2·0	100	0·5	3·0	2300	1·25	B9A	6	Am.-Brit.
		6·3	0·15	100	2·0	100	0·5	3·0	1500	1·1		6	Am.-Brit.
6BS7		6·3	0·15	250	2·0	100	0·5	3·0	2300	1·25		10	Am.-Brit.
		6·3	0·15	100	2·0	100	0·5	3·0	1500	1·1		10	Am.-Brit.
6BX6		6·3	0·3	170	10·0	170	2·5	2·0	400	7·2		5	U.S.A.
6N8	Var. μ	6·3	0·3	250	5·0	85	1·75	2·0	1600	2·2		7	U.S.A.
8D5		6·3	0·15	250	2·0	100	0·5	3·0	2300	1·25		6	Brimar
		6·3	0·15	100	2·0	100	0·5	3·0	1500	1·1		6	Brimar
8D6		6·3	0·3	180	10·0	180	3·8	1·5	—	9·0		5	Brimar
8D7		6·3	0·15	250	2·0	100	0·5	3·0	2300	1·25		10	Brimar
		6·3	0·15	100	2·0	100	0·5	3·0	1500	1·1		10	Brimar
EBF80	Var. μ	6·3	0·3	250	5·0	85	1·75	2·0	1500	2·2		7	Mullard
EF80		6·3	0·3	170	10·0	170	2·5	2·0	400	7·4		5	Mullard
UBF80	Var. μ	17·0	0·1	170	5·0	85	1·75	2·0	900	2·2		7	Mullard
63SPT		6·3	0·3	250	10·0	250	3·0	2·0	1000	6·5	B9G	9	Cossor
EF50		6·3	0·3	250	10·0	250	3·0	2·0	1000	6·5		9	Mullard
EF54		6·3	0·3	250	10·0	250	1·45	1·7	500	7·7		8	Mullard
EF55		6·3	1·0	250	40·0	250	5·5	4·5	55	12·0		9	Mullard
Z90		6·3	0·3	250	10·0	250	3·0	2·0	1000	6·3		9	M.O.V.

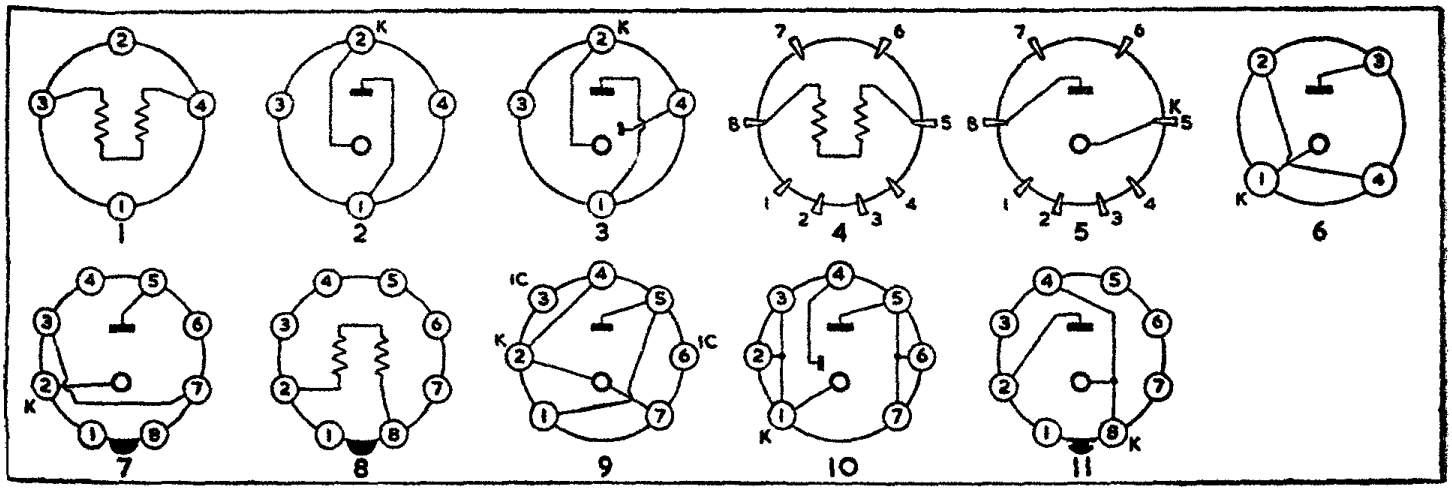
* Bias resistor



Type	Used as	STABILISED SUPPLY		STRIKING VOLTS	VOLTAGE DROP	TUBE CURRENT mA		BASE		Maker
		Volts	Amps			Minimum	Maximum	Type	Ref.	
150A4	CR	—	0·2	—	100-200	—	—	B4	1	Atlas
202	CR	—	0·2	—	—	—	—		1	G.E.C.
251	CR	—	0·25	—	100-180	—	—		1	G.E.C.
4687A	VR	90-110	—	130	—	10	40		2	Mullard
7475	VR	90-110	—	140	—	1	8		2	Mullard
13201A	VR	90-110	—	160	—	15	200		2	Mullard
BR201	CR	—	0·2	—	100-200	—	—		1	Tungsram
BR202	CR	—	0·2	—	40-100	—	—		1	Tungsram
C1C	CR	—	0·2	—	80-200	—	—		1	Philips
C2C	CR	—	0·2	—	35-100	—	—		1	Philips
S130	VR	120	—	160	—	10	75		2	G.E.C.
S130	VR	115-120	—	160	—	10	75		2	Cossor
S130P	VR	120	—	135¶	—	10	75		3	Cossor
ST11	VR	100	—	140	—	1	8		2	G.E.C.
150AC	CR	—	0·2	—	100-200	—	—	P	4	Atlas
4687	VR	90-110	—	130	—	10	40		5	Mullard
BR201s	CR	—	0·2	—	100-200	—	—		4	Tungsram
BR202s	CR	—	0·2	—	40-100	—	—		4	Tungsram
C1	CR	—	0·2	—	80-200	—	—		4	Philips
C2	CR	—	0·2	—	35-100	—	—		4	Philips
C3	CR	—	0·2	—	120-200	—	—		4	Philips
C9	CR	—	0·2	—	35-110	—	—		4	Philips
1265	VR	90	—	130	—	5	30	I.O.	7	Mullard
1266	VR	70	—	—	—	5	40		7	Mullard
D15	CR	—	0·15	—	90-140	—	—		8	Brimar
OA3/VR75	VR	75	—	105	—	5	40		7	Am.-Brit.
OB3/VR90	VR	90	—	125	—	5	40		7	U.S.A.
OC3/VR105	VR	105	—	135	—	5	40		7	Am.-Brit.
OD3/VR150	VR	150	—	185	—	5	40		7	Am.-Brit.
874	VR	90	—	125	—	10	50	UX4	6	U.S.A.
1B47	VR	82	—	225	—	1	2	B7G	9	U.S.A.
85A2	VR	85	—	125	—	1	10		9*	Mullard
OA2	VR	150	—	185	—	5	30		9	U.S.A.
OB2	VR	108	—	133	—	5	30		9	U.S.A.
85A1	VR	85 5	—	125	—	1	8	B8G	11	Mullard
BR300	CR	—	0.3	—	95-165	—	—	Edison	Screw	Tungsram
161	CR	—	0·16	—	100-180	—	—	,,	,,	G.E.C.
171	—	—	0·17	—	100-180	—	—	,,	,,	G.E.C.
301	CR	—	0·3	—	138-221	—	—	,,	,,	G.E.C.
302	CR	—	0·3	—	112-195	—	—	,,	,,	G.E.C.
303	CR	—	0·3	—	86-129	—	—	,,	,,	G.E.C.
304	CR	—	0·3	—	95-165	—	—	,,	,,	G.E.C.
BR3000E	CR	—	3·0	—	7-18	—	—	,,	,,	Tungsram
KD60	VR	61	—	85	—	0·1	2·5	End	Caps	Ferranti
991	VR	55-60	—	87	—	—	2	Bayonet		U.S.A.

¶ With primer taken to 190 V through 50 kΩ

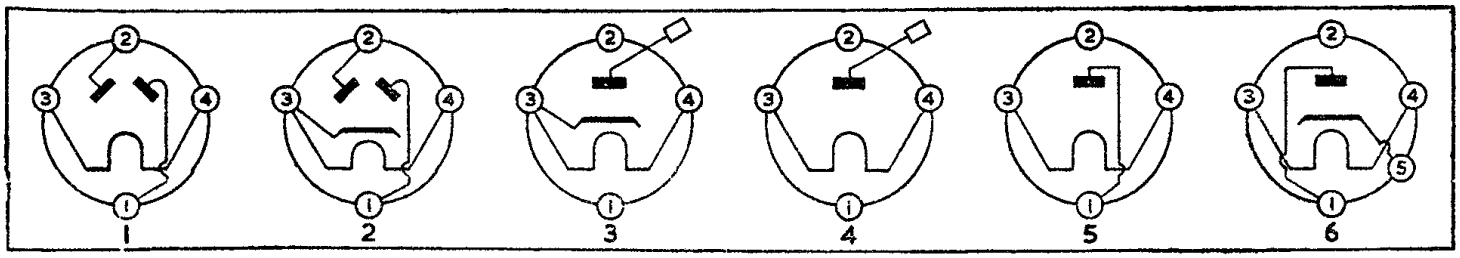
*Pin 3 is strapped to pins 1 and 5



RECTIFIERS

Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Make
	Volts	Amps						Type	Ref.	
4/1008U	4·0	2·5	500	200	—	16	75	B4	1	Cossor
43IU	4·0	2·5	500	150	—	16	75		2	Cossor
44IU	4·0	2·5	500	150	—	16	75		2	Cossor
44SU	4·0	0·4	250	30	—	—	—		5	Cossor
45IU	4·0	3·5	500	250	—	16	75		2	Cossor
405BU	4·0	0·5	1500	20	—	4	—		1	Cossor
408BU	4·0	1·0	250	30	—	—	—		1	Cossor
412BU	4·0	1·0	250	70	—	—	—		1	Cossor
412SU	4·0	1·0	250	70	—	—	—		5	Cossor
442BU	4·0	2·5	350	120	—	16	100		1	Cossor
460BU	4·0	2·5	500	120	—	16	100		1	Cossor
506BU	4·0	1·0	300	75	—	16	100		1	Cossor
825BU	7·5	2·1	500	120	—	16	75		1	Cossor
A11B	4·0	2·0	350	120	—	—	—		2	Ever Re
A11C	4·0	2·4	500	120	—	—	—		2	Ever Re
A11D	4·0	2·0	350	120	—	—	—		2	Ever Re
APV4	4·0	2·0	400	120	—	—	—		2	Tungsra
APV4100	4·0	2·0	500	120	—	—	—		1	Tungsra
APV4200	4·0	1·9	300	120	—	—	—		2	Tungsra
AX50	4·0	3·75	500	250	—	16	100		1	Mullard
DU1	4·0	0·6	250	30	—	—	—		5	Mullard
DU2	4·0	1·0	250	75	—	—	—		1	Mullard
DU3	4·0	0·6	500	30	—	—	—		1	Mullard
DU4	4·0	1·0	500	60	—	—	—		1	Mullard
DU5	4·0	1·0	300	75	—	—	—		1	Mullard
DU10	4·0	1·0	250	75	—	—	—		5	Mullard
DW1	4·0	0·6	250	30	—	—	—		1	Mullard
DW2	4·0	1·0	250	60	—	16	—		1	Mullard
DW2X	4·0	1·0	250	75	—	—	—		1	Mullard
DW3	4·0	2·0	350	120	—	16	—		1	Mullard
DW4	4·0	2·0	500	120	—	16	200		1	Mullard
DW4/350	4·0	2·0	350	120	—	16	—		1	Mullard
DW4/500	4·0	2·0	500	120	—	16	200		1	Mullard
DW5	4·0	1·2	800	100	—	—	—		5	Mullard
DW7X	4·0	1·0	500	60	—	—	—		1	Mullard
DW8	5·0	1·0	425	60	—	—	—		1	Mullard
DW30	7·5	2·4	500	120	—	—	—		1	Mullard
FW4/500	4·0	3·0	500	250	—	16	200		1	Mullard
FW4/800	4·0	3·0	850	125	—	4	150		1	Mullard
GR4 Mercury	4·0	3·0	350	350	—	—	—		1	Ferrant
GU1 Mercury	4·0	3·0	1000	250	—	—	—		5	M.O.V.
GU5 Mercury	4·0	3·0	1500	250	—	—	—		4	M.O.V.
GU50 Mercury	4·0	3·0	1500	250	5200	—	—		4	M.O.V.
HVR1	2·0	0·29	6000	5	15000	0·5	—		3	Mullard
HVR2	4·0	0·65	6000	3	20000	0·2	—		3	Mullard
HVR2A	2·0	1·5	6000	3	20000	0·2	—		3	Mullard
IW2	4·0	1·2	250	60	—	—	—		2	Mullard
IW3	4·0	2·4	350	120	—	12	—		2	Mullard
IW4	4·0	2·4	500	120	—	12	—		2	Mullard
IW4/350	4·0	2·0	350	120	—	12	—		2	Mullard
IW4/500	4·0	2·5	500	120	—	16	150		2	Mullard
MU2 Mercury	2·0	3·1	4500	5	12500	0·5	10000		4	Mazda
MU12	4·0	2·5	350	120	—	—	—		2	M.O.V.
MU12/14	4·0	2·5	500	120	—	—	—		2	M.O.V.
MU14	4·0	2·5	500	120	—	32	100		2	M.O.V.
PV4	4·0	2·0	350	120	—	—	—		1	Tungsr
PV75/1000	4·0	2·25	1000	75	—	—	—		1	Tungsr
PV100/2000	4·0	2·25	2000	100	—	—	—		1	Tungsr
PV200/600	4·0	3·4	600	200	—	—	—		1	Tungsr
PV400	4·0	1·0	225	40	—	—	—		5	Tungsr
PV430	4·0	0·3	250	25	—	—	—		1	Tungsr
PV475	4·0	0·8	250	45	—	—	—		1	Tungsr
PV480	4·0	1·0	225	40	—	—	—		5	Tungsr
PV495	4·0	1·1	300	70	—	—	—		1	Tungsr
PV4100	4·0	1·0	500	60	—	—	—		1	Tungsr
PV4200	4·0	2·0	600	180	—	—	—		1	Tungsr
PV4201	4·0	2·0	600	180	—	—	—		1	Tungsr
PV4300	4·0	2·0	500	120	—	—	—		1	Tungsr
R1	4·0	1·0	250	60	—	8	110		2	Brimar
R2	4·0	2·5	350	120	—	16	30		2	Brimar
R3	4·0	2·5	500	120	—	16	150		2	Brimar

Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref.	
R4	4·0	2·5	350	120	—	32	100	B4	1	Ferranti
R4A	4·0	2·5	500	120	—	32	100		1	Ferranti
R4B	4·0	1·0	400	65	—	—	—		5	Ferranti
R11	4·0	1·1	5000	50	14000	1·0	4000		3	Brimar
R41	4·0	2·0	325	125	—	—	—		1	Ecko
R42	4·0	2·5	350	125	—	32	100		2	Ferranti
RG250/1000 Mercury	4·0	3·0	1000	250	—	4	—		4	Tungsram
RV120/250	4·0	1·0	250	120	—	—	50		1	Tungsram
RV120/350	4·0	2·0	350	120	—	—	50		1	Tungsram
RV120/500	4·0	2·0	500	120	—	—	—		1	Tungsram
RV200/600	4·0	2·8	600	200	—	—	—		1	Tungsram
S11A	4·0	1·0	250	60	—	—	—		2	Ever Ready
S11D	4·0	2·0	350	120	—	—	—		2	Ever Ready
SU2150	2·0	1·15	8000	2	—	—	—		3	Cossor
SU2150A	2·0	1·5	5000	10	—	—	—		3	Cossor
U8	7·5	2·4	500	120	—	—	—		1	M.O.V.
U9	4·0	1·0	250	75	—	—	—		1	M.O.V.
U10	4·0	1·0	250	60	—	—	—		1	M.O.V.
U12	4·0	2·5	350	120	—	—	—		1	M.O.V.
U12/14	4·0	2·5	500	120	—	—	—		1	M.O.V.
U14	4·0	2·5	500	120	—	32	100		1	M.O.V.
U16	2·0	1·0	5000	5	14400	0·25	70000		4	M.O.V.
U17	4·0	1·0	2500	30	7100	1	—		4	M.O.V.
U18	4·0	3·4	500	250	—	—	—		1	M.O.V.
U18/20	4·0	3·75	500	250	—	16	—		1	M.O.V.
U19	4·0	3·3	2500	250	7100	4	100		4	M.O.V.
U20	4·0	3·75	500	250	—	—	—		1	M.O.V.
U21	2·0	1·85	4500	5	—	—	—		3	Mazda
U23	4·0	3·3	1750	250	4950	—	—		4	M.O.V.
U29	2·0	2·75	10000	20	30000	0·015	35000		4	M.O.V.
U33	2·0	0·15	6300	3	18000	0·25	—		4	M.O.V.
U75/300	4·0	2·0	300	75	—	—	—		5	Mazda
UU2	4·0	1·0	250	60	—	—	—		2	Mazda
UU3	4·0	2·0	250	60	—	—	—		2	Mazda
UU4	4·0	2·2	350	120	—	8	—		2	Mazda
UU5	4·0	2·3	500	120	1600	8	—		2	Mazda
UU10	4·0	2·3	500	180	1600	8	—		2	Mazda
UU30/250	4·0	1·0	250	30	—	—	—		2	Mazda
UU60/250	4·0	2·0	250	60	—	—	—		2	Mazda
UU120/350	4·0	2·5	350	120	—	—	—		1	Mazda
UU120/500	4·0	2·5	500	120	—	—	—		1	Mazda
VLS61	2·0	1·2	5000	3	15000	—	—		4	Brimar
1D5	40·0	0·2	250	100	—	16	50	B5	6	Brimar
40SUA	40·0	0·2	250	75	—	32	50		6	Cossor
RS	13·0	0·3	260	70	—	16	—		6	Ferranti
RZ	20·0	0·2	250	75	—	16	—		6	Ferranti
U4020	40·0	0·2	250	120	—	16	50		6	Mazda
UR1C	20·0	0·2	250	75	—	32	—		6	Mullard
V20	20·0	0·2	250	80	—	—	—		6	Tungsram
V30	30·0	0·2	275	120	—	—	—		6	Tungsram
V2018	20·0	0·18	250	60	—	—	—		6	Tungsram
V2118	20·0	0·18	250	80	—	—	—		6	Tungsram



RECTIFIERS—*Contd.*

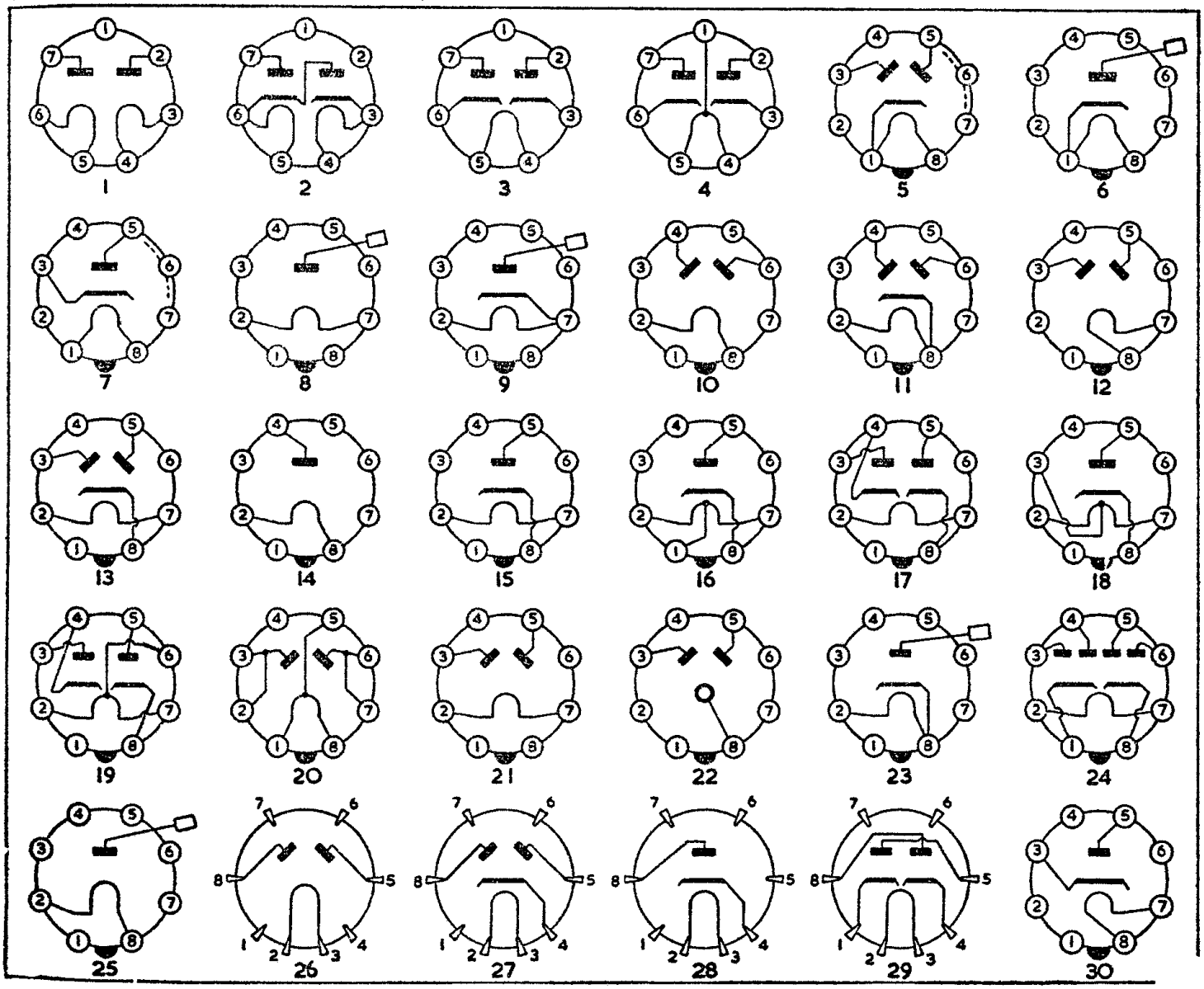
Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref.	
225DU	2·0	0·5+0·5	750	20	—	2	—	B7	1	Cossor
PV25	25·0	0·3	250	120	—	—	—		3	Tungsram
PV29	30·0	0·2	125	120	—	—	—		3	Tungsram
PV30	30·0	0·2	275	60	—	—	—		3	Tungsram
U30	26·0	0·3	250	120	—	—	—		4	M.O.V.
UD41	4·0	1·15	550	35	—	2	—		2	Mazda
UR3C	30·0	0·2	250	120	—	32	125		3	Mullard
U22	2·0	2·0	5200	1·0	14500	0·1	—	M.O.	6	Mazda
U403	40·0	0·2	250	120	—	16	50		7	Mazda
UU6	4·0	1·4	350	120	—	16	—		5	Mazda
UU7	4·0	2·3	400	120	—	16	—		5	Mazda
UU8	4·0	2·8	350	250	—	16	—		5	Mazda
AZ1	4·0	1·1	500	60	—	60	—	P	26	Mul.-Tung.
AZ2	4·0	2·0	500	120	—	—	—		26	Mul.-Tung.
AZ3	4·0	2·0	350	120	—	12	—		27	Mullard
AZ4	4·0	2·4	500	120	—	—	—		26	Tungsram
AZ50	4·0	3·0	500	250	—	16	—		26	Mullard
CY1	20·0	0·2	250	75	—	32	—		28	Mul.-Tung.
EZ2	6·3	0·4	350	60	—	16	600		27	Mul.-Tung.
EZ3	6·3	0·65	400	100	—	—	—		27	Tungsram
EZ4	6·3	0·9	400	175	—	—	—		27	Mul.-Tung.
PV29s	29·0	0·2	125	120	—	—	—		29	Tungsram
PV30s	30·0	0·2	275	120	—	—	—		29	Tungsram
RV120/350s	4·0	2·0	350	120	—	—	—		26	Tungsram
RV120/500s	4·0	2·0	500	120	—	—	—		26	Tungsram
183GT/8016	1·25	0·2	—	2·0	40000	—	—	I.O.	8	U.S.A.
2V3G	2·5	5·0	—	2·0	16500	—	—		8	U.S.A.
2W3	2·5	1·5	350	55	—	—	—		14	U.S.A.
5AZ4	5·0	2·0	500	125	1400	40*	—		10	U.S.A.
5R4-GY	5·0	2·0	1000	150	2800	4*	—		10	Am.-Brit.
5T4	5·0	2·8	450	225	1550	40*	150		10	Am.-Brit.
5U4G	5·0	3·0	450	225	1550	40*	75		10	Am.-Brit.
5V4G	5·0	2·0	375	175	1400	40*	100		11	Am.-Brit.
5W4-GT/G	5·0	1·5	350	100	1400	4	50		10	Am.-Brit.
5X4-G	5·0	3·0	450	225	1550	40*	75		12	Am.-Brit.
5Y3GT/G	5·0	2·0	350	125	1400	40*	50		10	Am.-Brit.
5Y4G	5·0	2·0	350	125	1400	40*	50		12	Am.-Brit.
5Z4-G	5·0	2·0	350	125	1400	40*	50		11	Am.-Brit.
6U4GT	6·3	1·2	Television Damper Diode						30	Am.-Brit.
6W5-G	6·3	0·9	350	100	1250	—	—		13	U.S.A.
6X5-GT/G	6·3	0·6	325	70	1250	—	150		13	Am.-Brit.
6Y3G	6·3	0·7	5000	7·5	—	—	—		9	U.S.A.
6ZY5G	6·3	0·3	325	40	1250	40*	225		13	Am.-Brit.
15X6	25·0	0·15	125	60	—	—	—		17	U.S.A.
25U4GT	25·0	0·3	Television Damper Diode						30	Am.-Brit.
25X4G	25·0	0·3	250	120	—	32	—		15	Tungsram
25Y4GT	25·0	0·15	125	75	—	—	—		15	U.S.A.
25Z4G ¶	25·0	0·3	250	100	—	—	—		15	Am.-Brit.
25Z6-GT/G	25·0	0·3	2×235	75	700	16*	100		17	Am.-Brit.
27SU	26·5	0·45	250	250	700	60	21		16	Cossor
35Z4GT	35·0	0·15	235	100	700	40*	100		15	Am.-Brit.
35Z5GT/G	35·0	0·15	235	100	700	40*	100		18	Am.-Brit.
35Z6G	35·0	0·3	125	110	—	—	—		17	U.S.A.
40Z5GT	40·0	0·15	125	100	—	—	—		18	U.S.A.
45Z5GT	45·0	0·15	235	100	—	—	100		18	U.S.A.
50Y6GT	50·0	0·15	2×235	75	—	16	100		17	Am.-Brit.
50Y7GT	50·0	0·15	2×117	65	—	—	—		19	U.S.A.
50Z6G	50·0	0·3	2×125	150	700	—	—		17	U.S.A.
50Z7G	50·0	0·15	2×235	65	—	—	100		19	U.S.A.
52KU	5·0	2·0	500	150	—	16*	50		11	Cossor
53KU	5·0	2·8	500	250	—	16*	50		11	Cossor
54KU	5·0	2·0	350	250	—	16*	50		11	Cossor
117Z4GT	117·0	0·04	117	90	330	—	—		15	U.S.A.
117Z6GT	117·0	0·075	235	60	700	40	100		17	Am.-Brit.
AZ21	4·0	1·0	500	70	—	—	—		20	Mullard
AZ31	4·0	1·1	500	60	—	60	100		10	Mul.-Tung.
AZ32	4·0	2·0	500	120	—	—	—		10	Mul.-Tung.
AZ33	4·0	2·0	350	120	—	12	—		21	Mullard
CY31	20·0	0·2	250	120	—	32	125		15	Mul.-Tung.
CY32	30·0	0·2	250	120	—	32	125		17	Mullard
EZ35	6·3	0·6	325	70	—	16	350		13	Mul.-Tung.
GZ32	5·0	2·0	350	250	—	60	150		11	Mullard

* If this value is increased, the series resistance must be increased.

¶ The Brimar 25Z4G has the anode connected to pins 3 and 5

Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref.	
HR6	4·0	1·25	5000	60	14000	2	80000	I.O.	23	Ferranti
HR7	4·0	1·25	7000	40	—	1	14000		23	Ferranti
OM1	30·0	0·2	250	120	700	16	50		15	Cossor
OZ4	—	—	300	75	—	—	—		22	Am.-Brit.
PY31	17·0	0·3	250	125	1000	60	175		15	Mullard
PZ30	52·0	0·3	240	200	—	50	50		19	Mullard
R14	52·0	0·3	240	200	†	50	50		19	Brimar
R18	17·5	0·3	250	100	—	32	100		15	Ferranti
R52	5·0	2·0	350	125	1400	32	30		11	Ferranti
5U25	2·0	0·5	8000	1	25000	0·1	—		9	Cossor
U24	2·0	0·15	7800	0·5	20000	0·1	100000		9	Mazda
U31	26·0	0·3	250	120	—	32	—		15	M.O.V.
U35	1·4	0·12	3500	2	10000	—	—		25	M.O.V.
U50	5·0	2·0	350	120	1000	—	—		10	M.O.V.
U52	5·0	2·25	500	250	1430	—	—		10	M.O.V.
U70	6·3	0·6	325	70	—	—	—		13	Marconi
U74	30·0	0·16	250	75	700	—	100		15	M.O.V.
U76	30·0	0·16	250	100	700	—	—		15	M.O.V.
U134	13·0	1·5	350	100	—	—	—		17	Marconi
U143	4·0	1·1	500	60	—	—	—		10	Marconi
U147	6·3	0·6	325	70	—	—	—		13	Marconi
U201	20·0	0·2	250	90	750	16	50		15	Mazda
U281	28·0	0·2	250	120	750	16	50		15	Mazda
U801	80·0	0·2	250	350	750	80	47		24	Mazda
UY31	50·0	0·1	250	125	—	60	175		15	Mullard

† Section 1 pins 5–8 PI = 1500 v. Section 2 pins 3–4 PI = 1000 v.

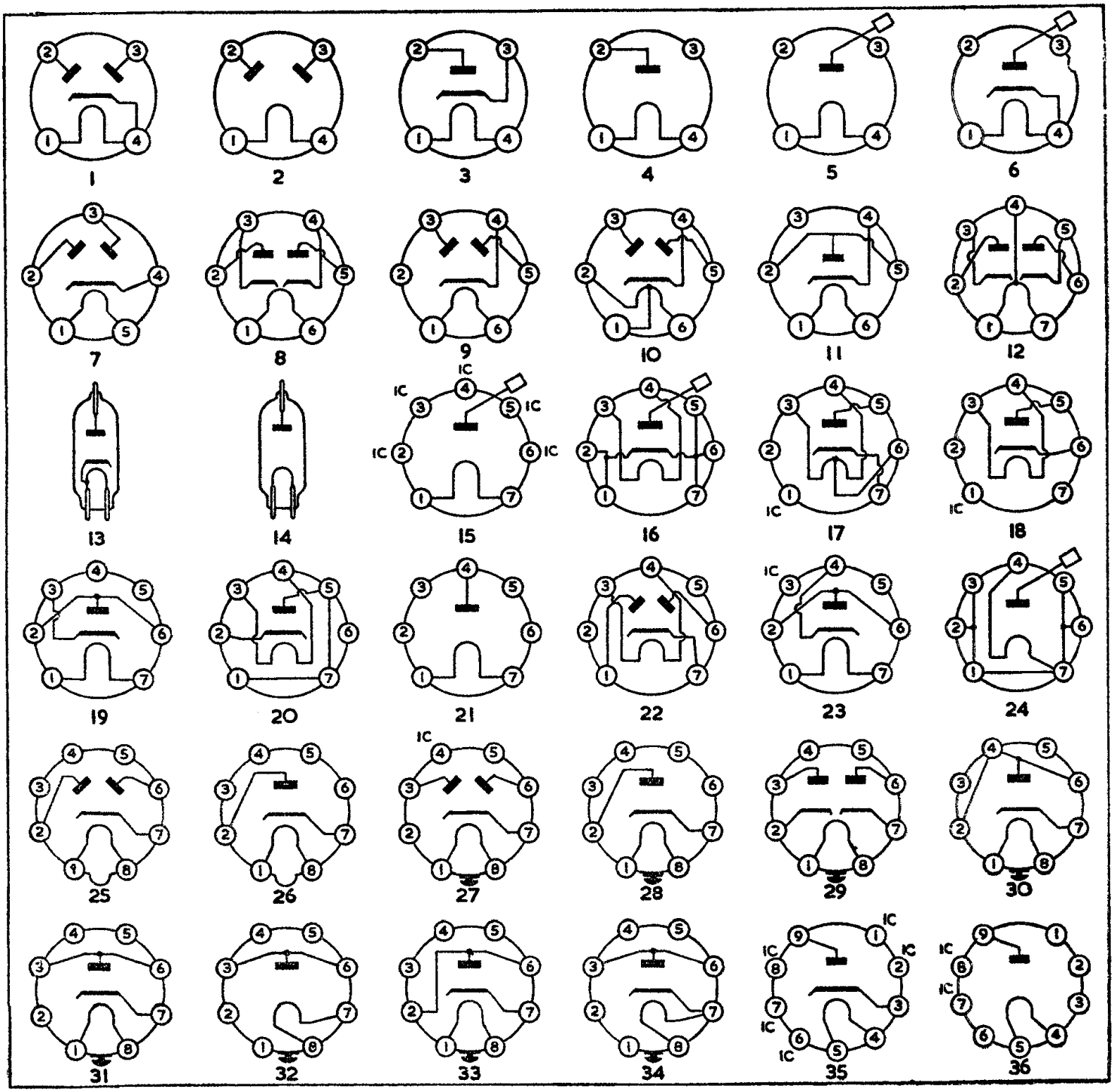


RECTIFIERS—*Contd.*

Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref.	
1V	6·3	0·3	325	45	1000	40*	75	UX4	3	U.S.A.
2X2–A	2·5	1·75	5500	7·5	12500	0·1	300000		6	U.S.A.
2Y2	2·5	1·75	4400	5	—	—	—		6	U.S.A.
2Z2/G84	2·5	1·5	350	50	—	—	—		4	U.S.A.
3B25 Gas	2·5	5·0	—	500	4500	—	—		5	U.S.A.
3B27	2·5	5·0	3000	250	8500	—	—		4	U.S.A.
5X3	5·0	2·0	1275	30	—	—	—		2	U.S.A.
5Z3	5·0	3·0	450	225	1550	40*	75		2	Am.-Bri
6Z3	6·3	0·3	350	50	—	—	—		2	U.S.A.
12Z3	12·6	0·3	235	55	700	40*	75		3	Am.-Br
14Z3	12·6	0·3	250	60	—	—	—		3	Am.-Bri
25Z3	25·0	0·3	250	50	—	—	—		3	Am.-Bri
72	2·5	3·0	—	30	20000	—	—		5	Am.-Bri
80	5·0	2·0	350	125	1400	40*	50		2	Am.-Bri
80A	5·0	2·0	400	125	—	—	—		1	Tungsra
80s	5·0	2·0	350	120	—	—	—		1	Brimar
81	7·5	1·25	700	85	2000	—	—		4	Am.-Bri
82 Mercury	2·5	3·0	450	115	1550	—	50		2	U.S.A.
83 Mercury	5·0	3·0	450	225	1550	—	50		2	Am.-Bri
83v	5·0	2·0	375	175	1400	40*	100		1	U.S.A.
879	2·5	1·75	2650	7·5	7500	—	—		6	U.S.A.
84/6Z4	6·3	0·5	325	60	1250	40*	65	UX5	7	Am.-Bri
1D6	25·0	0·3	250	100	—	16	50	UX6	11	Brimar
6Y5	6·3	0·8	350	50	—	—	—		9	U.S.A.
6Z5	12·6	0·4	230	60	—	—	—		10	U.S.A.
25RE	25·0	0·3	250	80	—	—	—		8	Am.-Bri
25Y5	25·0	0·3	2 × 235	75	700	—	0		8	Am.-Bri
25Z5	25·0	0·3	2 × 235	75	700	16	100		8	Am.-Bri
12Z5	12·6	0·3	225	60	—	—	—	UX7	12	U.S.A.
1T2	1·4	0·14	—	2	15000	—	—	B2A	14	Am.-Bri
EY51	6·3	0·09	5000	3	17000	0·1	100000		13	Mullard
R12	6·3	0·08	—	0·5	15000	—	100000		13	Brimar
R16	1·4	0·14	—	2	15000	—	—		14	Brimar
SU61	6·3	0·08	—	0·5	15000	0·1	100000		13	Cossor
U25	2·0	0·2	7800	0·5	20000	0·1	100000		13	Mazda
U37	1·4	0·14	—	2	15000	—	—		14	M.O.V.
1Z2	1·5	0·3	7800	2	20000	—	—	B7G	15	U.S.A.
2B25	1·4	0·11	1000	1·5	—	—	—		21	U.S.A.
6X4	6·3	0·6	325	70	—	—	150		22	Am.-Br
19G6	4·0	0·5	2500	30	6000	1·0	5400		16	Mazda
35W4	35·0	0·15	125	100	330	40	15		17	Am.-Br
35W4	35·0	0·15	250	100	330	40	15		17	Brimar
45Z3	45·0	0·075	117	65	350	—	15		23	U.S.A.
117Z3	117·0	0·04	117	90	330	40	15		18	Am.-Br
EY91	6·3	0·42	250	75	—	32	100		20	Mullard
HR1	0·65	0·055	5000	0·05	14000	0·002	2000000		24	Ferrant
HR2	4·0	0·5	5500	5	14000	0·25	50000		16	Ferrant
HR3	4·0	0·5	5000	15	14000	1	30000		16	Ferrant
HR4	4·0	0·5	2500	30	7000	—	5400		16	Ferrant
HR5	4·0	0·5	5000	30	14000	—	—		16	Ferrant
R10	4·0	0·5	5500	5	—	0·25	62000		16	Brimar
SU45	4·0	0·5	2500	30	—	1	—		16	Cossor
U78	6·3	0·7	350	70	1250	—	—		22	M.O.V.
U107	40·0	0·1	250	90	700	12	75		19	M.O.V.
EZ40	6·3	0·6	350	90	—	50	300	B8A	25	Mullard
EZ41	6·3	0·4	250	60	—	50	325		25	Mullard
U142	31·0	0·1	250	90	—	—	—		26	Marcon
U145	40·0	0·1	250	90	—	—	—		26	Marcon
U150	6·3	0·6	350	90	—	—	—		25	Marcon
U404	40·0	0·1	250	90	—	16	50		26	Mazda
UU9	6·3	0·63	350	90	1100	16	—		25	Mazda
UY41	31·0	0·1	250	90	—	50	160		26	Mul.-Ti
7Y4	6·3	0·5	350	70	1250	40*	150	B8G	27	Am.-Br
7Z4	6·3	0·9	325	100	1250	—	—		27	Am.-Br
14Y4	12·6	0·3	325	70	1250	—	—		27	U.S.A.
28Z5	28·0	0·24	325	100	—	—	—		27	U.S.A.
35Z3	32·0	0·15	235	100	700	40*	100		28	Am.-Br
50X6	50·0	0·15	117	75	700	—	—		29	U.S.A.
U81	6·3	1·6	500	150	1400	16	100		34	M.O.V.
U82	6·3	0·6	325	75	1250	4	150		27	M.O.V

* If this value is increased, the series resistance must be increased.

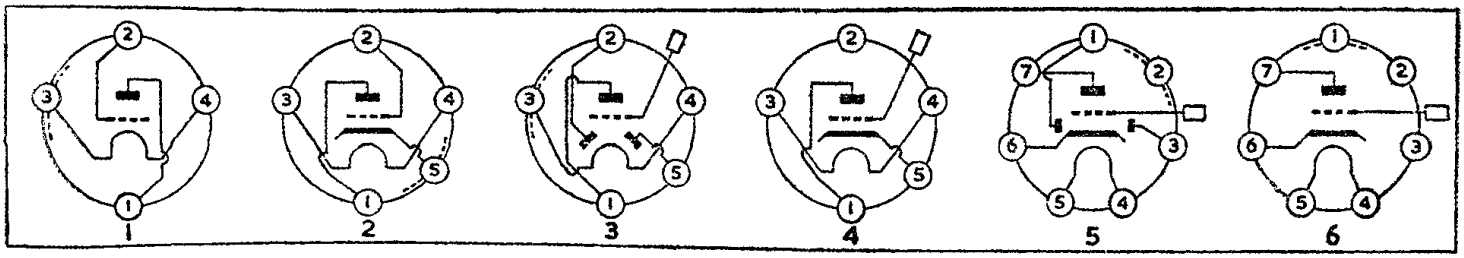
Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref.	
U84	4·0	1·0	250	75	700	16	100	B8G	32	M.O.V.
U101	50·0	0·1	250	100	700	32	100		33	M.O.V.
U149	6·3	0·5	325	70	—	—	—		27	Marconi
UY21	50·0	0·1	250	140	—	60	175		30	Mullard
1V2	0·065	0·3	—	0·5	7500	—	—	B9A	36	U.S.A.
19W3	19·0	0·3	240	180	—	100	50		35	U.S.A.
PY80	19·0	0·3	—	180	4000	Booster diode	—		35	Mullard
PY82	19·0	0·3	250	180	700	60	100		35	Mullard



TRIODE AMPLIFIERS

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
210 Det	2·0	0·1	125	4·5	1·5	13·0	1·15	15	—	B4	1	Cossor
210 HF	2·0	0·1	150	1·6	3·0	15·8	1·5	24	—		1	Cossor
210 HL	2·0	0·1	150	1·6	3·0	22·0	1·1	24	—		1	Cossor
210 LF	2·0	0·1	150	4·5	1·5	10·0	1·4	15	—		1	Cossor
210 RC	2·0	0·1	125	0·45	1·5	50·0	0·8	40	—		1	Cossor
H2	2·0	0·1	150	0·8	1·5	60·0	0·85	50	—		1	Mazda
H2	2·0	0·1	150	1·6	1·5	35·0	1·0	35	—		1	M.O.V.
H12	2·0	0·06	100	0·6	1·5	21·6	1·2	26	—		1	M.O.V.
H210	2·0	0·1	150	2·4	0	50·0	0·7	35	—		1	M.O.V.
HL2	2·0	0·1	120	4·5	3·0	10·0	1·4	14	—		1	Ferranti
HL2	2·0	0·1	150	2·0	2·0	20·0	1·35	32	—		1	Mazda
HL2-/K	2·0	0·1	150	1·75	3·0	18·0	1·5	27	—		1	M.O.V.
HL2	2·0	0·13	135	1·2	1·5	20·0	1·5	30	—		1	Tungsram
HL21	2·0	0·1	150	1·75	3·0	18·0	1·5	27	—		1	M.O.V.
HL210	2·0	0·1	150	0·8	4·5	20·0	1·2	24	—		1	M.O.V.
HLB1	2·0	0·1	150	2·1	3·0	16·0	1·5	24	—		1	Brimar
HR2	2·0	0·65	135	1·2	1·5	40·0	0·6	25	—		1	Tungsram
HR210	2·0	0·1	135	1·2	1·5	23·0	1·3	30	—		1	Tungsram
K30B	2·0	0·1	150	4·0	7·5	12·0	0·9	11	—		1	Ever Read
K30C	2·0	0·1	150	2·0	1·5	20·0	1·4	28	—		1	Ever Read
K30D	2·0	0·1	150	4·0	3·0	12·0	1·5	18	—		1	Ever Read
K30E	2·0	0·1	135	2·0	4·5	12·0	1·5	18	—		1	Ever Read
K30K	2·0	0·1	135	2·2	1·5	21·5	1·4	30	—		1	Ever Read
L2	2·0	0·2	150	10·0	4·5	41·1	3·6	15	—		1	Ferranti
L2	2·0	0·1	150	1·4	3·8	12·5	1·5	19	—		1	Mazda
L11	1·0	0·1	100	2·8	12·0	7·7	0·57	4·3	—		1	M.O.V.
L12	2·0	0·06	45	1·9	4·5	6·0	0·8	4·8	—		1	M.O.V.
L21	2·0	0·1	150	2·2	6·0	8·9	1·8	16	—		1	M.O.V.
L210	2·0	0·1	150	2·5	7·5	12·0	0·9	11	—		1	M.O.V.
LD210	2·0	0·1	150	3·0	4·5	14·0	1·3	18	—		1	Tungsram
LL2	2·0	0·2	135	3·0	2·5	11·0	2·6	30	—		1	Tungsram
LP2	2·0	0·2	150	10·0	4·5	4·17	3·6	15	—		1	M.O.V.
P2	2·0	0·2	150	19·0	10·5	2·15	3·5	7·5	—		1	M.O.V.
PM1A	2·0	0·1	100	1·0	0	41·6	1·2	50	—		1	Mullard
PM1HF	2·0	0·1	135	1·5	3·0	23·0	0·8	19	—		1	Mullard
PM1HL	2·0	0·1	135	2·3	1·5	23·4	1·2	28	—		1	Mullard
PM1LF	2·0	0·1	150	4·0	7·5	12·0	0·9	11	—		1	Mullard
PM2DL	2·0	0·1	135	2·0	4·5	12·0	1·5	18	—		1	Mullard
PM2DX	2·0	0·1	135	2·0	4·5	18·0	1·0	18	—		1	Mullard
PM2HL	2·0	0·1	135	2·2	1·5	21·5	1·4	30	—		1	Mullard
41FP	4·0	1·0	250	18·0	18·0	3·6	2·8	10	1000	B5	2	Cossor
41MH	4·0	1·0	200	3·2	1·5	18·0	4·0	72	500		2	Cossor
41MHF	4·0	1·0	150	2·5	2·0	14·5	2·8	41	800		2	Cossor
41MHL	4·0	1·0	200	4·0	3·0	11·5	4·5	52	750		2	Cossor
41MLF	4·0	1·0	160	7·5	4·5	7·9	1·9	15	600		2	Cossor
41MRC	4·0	1·0	150	2·5	1·0	19·5	2·6	50	400		2	Cossor
41MTA	4·0	1·0	100	4·9	0	18·0	4·0	72	—		2	Cossor
41MTB	4·0	1·0	100	3·6	0	—	2·6	—	—		2	Cossor
41MTL	4·0	1·0	210	1·9	4·0	21·5	2·1	45	2100		2	Cossor
104V	4·0	1·0	200	17·0	12·0	3·0	4·0	12	700		2	Mullard
144V	4·0	1·0	200	6·0	8·0	11·5	1·4	16	1300		2	Mullard
154V	4·0	0·65	200	9·0	6·0	7·5	2·0	15	700		2	Mullard
164V	4·0	0·65	200	6·0	—	4·7	—	—	1800		2	Mullard
210DDT	2·0	0·1	85	0·35	1·5	58·5	0·48	28	—		3	Cossor
244V	4·0	0·65	200	5·5	5·5	9·25	2·75	25	1000		2	Mullard
354V	4·0	0·65	250	6·5	4·5	11·5	3·5	40	700		2	Mullard
904V	4·0	0·65	200	2·0	2·0	36·0	2·0	72	1000		2	Mullard
994V	4·0	0·65	100	—	0	35·0	3·6	125	—		2	Mullard
A30B	4·0	0·65	200	2·2	2·0	20·6	3·5	72	1000		2	Ever Read
A30D	4·0	0·65	250	6·5	4·5	11·5	3·5	40	700		2	Ever Read
AC104	4·0	1·0	150	8·5	10·0	2·85	3·5	10	1150		2	Mullard
AC/2HL	4·0	1·0	200	4·9	1·75	15·0	5·0	75	400		2	Mazda
AC/HL	4·0	1·0	200	5·0	3·5	12·5	2·8	35	600		2	Mazda
AC/P	4·0	1·0	200	17·0	13·5	3·7	2·7	10	750		2	Mazda
D4	4·0	0·5	250	30·0	21·0	2·5	2·8	7	700		2	Ferranti
DC/3HL	25·0	0·1	200	4·8	3·5	11·6	3·0	36	710		2	Mazda
DDT2	2·0	0·1	135	10·0	3·0	21·0	1·4	30	—		3	Tungsram
DDT2B	2·0	0·1	135	2·5	4·5	16·0	1·0	16	—		3	Tungsram
DHL	16·0	0·25	150	3·8	1·5	13·0	4·5	58	390		2	M.O.V.
DL	16·0	0·25	200	25·0	8·0	2·7	4·5	12	330		2	M.O.V.
H20	20·0	0·18	200	0·2	1·6	100·0	1·0	100	8000		2	Mullard

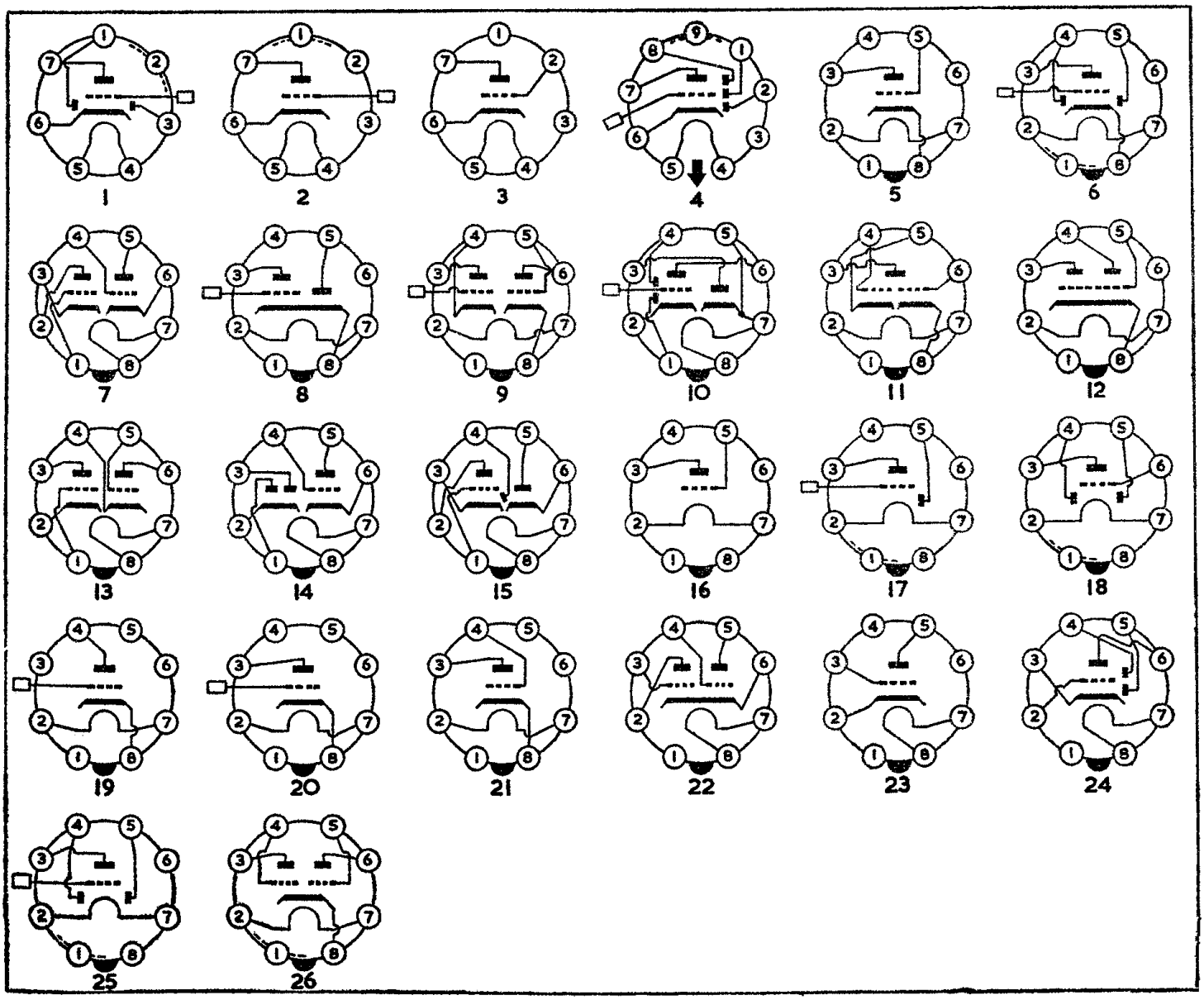
Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
HD21	2·0	0·2	150	1·8	1·5	18·0	1·5	27	—	B5	3	M.O.V.
HD22	2·0	0·2	150	1·8	3·0	18·0	1·5	27	—		3	M.O.V.
HD23	2·0	0·15	150	1·7	1·5	28·6	1·4	40	—		3	M.O.V.
HD24	2·0	0·1	150	1·7	1·5	28·6	1·4	40	—		3	M.O.V.
HL4	4·0	1·0	200	4·0	3·0	11·6	3·5	40	750		2	Tungsram
HL4+	4·0	0·65	250	5·0	4·5	11·0	3·5	38	900		2	Tungsram
HL21DD	2·0	0·15	150	2·0	2·0	25·0	1·3	33	—		3	Mazda
HLA1	4·0	1·0	200	5·0	1·0	10·5	6·0	63	200		2	Brimar
HLA2	4·0	1·0	200	6·0	2·0	9·0	5·5	50	400		2	Brimar
K23A	2·0	0·1	150	2·5	5·5	12·0	1·4	17	—		3	Ever Ready
K23B	2·0	0·12	135	2·0	1·5	25·0	1·2	30	—		3	Ever Ready
K30A	2·0	0·1	130	1·5	3·0	23·0	0·8	19	—		3	Ever Ready
L2DD	2·0	0·1	150	2·0	6·0	9·7	1·6	15	—		3	Mazda
L21DD	2·0	0·1	150	4·0	4·2	12·0	1·55	19	—		3	Mazda
MH4	4·0	1·0	250	5·0	4·0	11·0	3·6	40	750		2	M.O.V.
MH40	4·0	1·0	200	2·7	3·0	18·75	2·4	45	1100		2	M.O.V.
MH41	4·0	1·0	200	5·0	1·5	13·2	6·0	80	300		2	M.O.V.
MHL4	4·0	1·0	250	8·0	8·0	8·0	2·5	20	1000		2	M.O.V.
ML4	4·0	1·0	250	14·0	16·0	2·86	4·2	12	1000		2	M.O.V.
ML6	6·0	0·7	250	14·0	16·0	2·86	3·8	12	1000		2	M.O.V.
ML40	4·0	1·0	200	—	3·0	4·0	3·0	12	—		2	M.O.V.
TDD2	2·0	0·1	150	2·5	5·5	12·0	1·4	17	—		3	Mullard
TDD2A	2·0	0·12	135	1·95	1·5	25·0	1·2	30	—		3	Mullard
TT4	4·0	1·0	250	20·0	16·0	3·8	3·2	10	800		2	Mullard
TT4A	4·0	1·0	250	20·0	9·0	4·4	4·1	18	450		2	Mullard
V312	4·0	0·65	250	6·0	4·8	13·0	2·3	30	—		4	Mazda
4D1	13·0	0·2	200	10·0	3·0	10·0	4·0	40	300	B7	6	Brimar
11A2	4·0	1·0	200	3·0	2·0	18·0	2·8	50	600		5	Brimar
11D3	13·0	0·2	250	0·4	2·0	90·0	1·1	100	5000		5	Brimar
11D5	13·0	0·15	250	3·8	3·0	26·7	1·5	40	750		5	Brimar
13DHA	13·0	0·2	250	1·0	1·5	83·3	1·5	125	1500		5	Cossor
202DDT	20·0	0·2	200	3·5	3·0	17·0	2·4	41	870		5	Cossor
A23A	4·0	0·65	250	4·0	7·0	13·5	2·0	27	1800		5	Ever Ready
AC/HL/DD	4·0	1·0	200	4·3	3·0	14·5	2·5	36	700		5	Mazda
C23B	13·0	0·2	200	4·0	5·0	13·5	2·0	27	1250		5	Ever Ready
C30B	13·0	0·2	200	5·0	3·7	12·0	3·3	40	700		6	Ever Ready
DA	13·0	0·2	200	1·8	2·0	10·0	3·0	30	1100		6	Ferranti
DC/2HL/DD	25·0	0·1	200	3·8	3·0	15·0	2·0	30	710		5	Mazda
DDT	4·0	1·0	200	3·4	3·0	17·0	2·4	41	850		5	Cossor
DDT	4·0	1·0	200	4·2	3·0	13·8	2·6	36	700		5	Mullard
DDT	4·0	1·0	250	4·5	3·0	17·0	2·4	41	850		5	Tungsram
DDT4	4·0	0·65	250	4·0	5·0	11·0	3·6	40	1250		5	Tungsram
DDT6	6·3	0·2	250	5·0	5·4	14·5	2·0	29	1000		5	Tungsram
DDT13	13·0	0·2	250	4·0	5·0	11·0	3·6	40	1250		5	Tungsram
DDT16	16·0	0·25	200	2·5	3·0	16·0	2·5	40	1200		5	Cossor
DH30	13·0	0·3	200	3·0	2·0	18·0	4·5	80	700		5	M.O.V.
DH42	4·0	0·6	250	1·1	3·0	58·0	1·2	70	2700		5	M.O.V.
DHD	16·0	0·25	200	3·0	3·0	18·2	2·2	40	1000		5	M.O.V.
DS	13·0	0·3	200	4·0	3·0	17·2	2·5	43	720		6	Ferranti
H4D	4·0	1·0	200	5·0	2·5	14·5	2·7	39	2000		5	Ferranti
H30	13·0	0·3	250	5·5	1·7	13·3	6·0	80	220		6	M.O.V.
H42	4·0	0·6	250	1·0	2·0	60·0	1·7	100	2000		6	M.O.V.
HAD	13·0	0·2	200	2·0	2·5	15·0	2·0	30	1250		5	Ferranti
HL4g	4·0	0·65	250	5·0	4·5	10·0	3·5	33	900		6	Tungsram
HL13	13·0	0·2	200	6·0	3·0	12·0	3·5	40	500		6	Tungsram
HL13C	13·0	0·2	200	5·0	3·7	12·0	3·3	40	740		6	Mullard
HL1320	13·0	0·2	200	6·0	3·3	10·0	3·0	30	450		6	Mazda
HLDD1320	13·0	0·2	200	4·3	3·0	16·0	1·9	30	700		5	Mazda
HSD	13·0	0·3	200	4·5	3·0	15·0	2·5	38	700		5	Ferranti



TRIODE AMPLIFIERS—*Contd.*

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
L30	13·0	0·3	200	25·0	8·0	2·86	4·2	12	700	B7	3	M.O.V.
MHD4	4·0	1·0	200	3·8	3·0	18·2	2·2	40	800		1	M.O.V.
TDD4	4·0	0·65	250	4·0	7·0	13·5	2·0	27	1500		1	Mullard
TDD13C	13·0	0·2	200	4·0	5·0	13·5	2·0	27	1250		1	Mullard
V339	4·0	0·58	250	—	—	43·0	1·7	73	—		2	Mazda
AC/HL/DDD	4·0	1·0	200	5·0	3·0	13·5	2·6	34	600	B9	4	Mazda
1E4G	1·4	0·05	90	1·5	3·0	17·0	0·8	14	—	I.O.	16	U.S.A.
1G4GT	1·4	0·05	90	2·3	6·0	10·7	0·83	8·8	—		16	Am.-Brit
1H4G	2·0	0·06	135	3·0	9·0	10·3	0·9	9·3	—		16	U.S.A.
1H5–GT/G	1·4	0·05	90	0·15	—	240·0	0·27	65	—		17	Am.-Brit
1H6G	2·0	0·06	135	0·8	3·0	35·0	0·57	20	—		18	U.S.A.
6AD5G	6·3	0·3	250	0·9	2·0	66·0	1·5	100	2200		5	U.S.A.
6AE5G	6·3	0·3	95	7·0	15·0	3·5	1·2	4·2	2200		5	U.S.A.
6AE6GT	6·3	0·15	250	6·5	1·5	25·0	1·0	25	220		12	U.S.A.
6AE7GT	6·3	0·5	250	5·0	13·5	9·3	1·5	14	2700		11	U.S.A.
6AF5G	6·3	0·3	180	7·0	18·0	4·95	1·5	7·4	2700		5	U.S.A.
6AH7GT	6·3	0·3	250	12·0	9·0	6·6	2·4	16	750		13	U.S.A.
6AQ7GT	6·3	0·3	250	2·3	2·0	44·0	1·6	70	900		14	U.S.A.
6AR7GT	6·3	0·3	250	1·3	2·0	65·5	1·0	70	1500		15	U.S.A.
6B6G	6·3	0·3	250	0·9	2·0	91·0	1·1	100	2300		6	Am.-Brit
6C5–GT/G	6·3	0·3	250	8·0	8·0	10·0	2·0	20	1000		5	Am.-Brit
6C8G	6·3	0·3	250	3·2	4·5	22·5	1·6	36	1400		9	Am.-Brit
6F5	6·3	0·3	250	0·9	2·0	66·0	1·5	100	2200		19	Am.-Brit
6F8G	6·3	0·6	250	9·0	8·0	7·7	2·6	20	890		9	Am.-Brit
6J5-GT/G	6·3	0·3	250	9·0	8·0	7·7	2·6	20	890		5	Am.-Brit
6K5GT	6·3	0·3	250	1·1	3·0	50·0	1·4	70	2700		20	Am.-Brit
6L5G	6·0	0·15	250	8·0	9·0	9·0	1·9	17	1100		5	Am.-Brit
6N7–GT/G	6·3	0·8	250	3·0	5·0	22·6	1·6	35	—		26	Am.-Brit
6P5	6·3	0·3	250	0·9	2·0	91·0	1·1	100	2200		5	U.S.A.
6Q6	6·3	0·15	250	1·2	3·0	65·0	1·0	65	2500		8	U.S.A.
6Q7–GT/G	6·3	0·3	250	1·0	3·0	58·0	1·2	70	3000		6	Am.-Brit
6R7–G	6·3	0·3	250	9·5	9·0	8·5	1·9	16	950		6	Am.-Brit
6S8GT	6·3	0·3	250	0·9	2·0	91·0	1·1	100	2200		10	Am.-Brit
6SC5	6·3	0·3	250	7·5	4·0	19·0	2·7	51	600		21	Am.-Brit
6SC7	6·3	0·3	250	2·0	2·0	53·0	1·3	70	1000		22	Am.-Brit
6SF5	6·3	0·3	250	0·9	2·0	66·0	1·5	100	2200		23	Am.-Brit
6SL7GT	6·3	0·3	250	2·3	2·0	44·0	1·6	70	890		7	Am.-Brit
6SN7GT	6·3	0·6	250	9·0	8·0	7·7	2·6	20	890		7	Am.-Brit
6SQ7–GT	6·3	0·3	250	0·9	2·0	91·0	1·1	100	2200		24	Am.-Brit
6SR7	6·3	0·3	250	9·5	9·0	8·5	1·9	16	1000		24	Am.-Brit
6ST7	6·3	0·15	250	9·5	9·0	8·5	1·9	16	—		24	Am.-Brit
6SU7GTY	6·3	0·3	250	2·3	2·0	44·0	1·6	70	—		7	Am.-Brit
6SZ7	6·3	0·15	250	1·0	3·0	59·0	1·2	70	3000		24	Am.-Brit
6T7	6·3	0·15	250	1·2	3·0	62·0	1·1	65	2700		6	Am.-Brit
6V7	6·3	0·3	250	8·0	20·0	7·5	1·1	8·3	250		6	Am.-Brit
12AH7GT	12·6	0·15	180	7·6	6·5	8·4	1·9	16	890		13	Am.-Brit
12B6M	12·6	0·15	250	0·9	2·0	91·0	1·1	100	—		8	Am.-Brit
12E5GT	12·6	0·15	250	—	13·5	—	1·4	13·8	—		5	Am.-Brit
12F5GT	12·6	0·15	250	0·9	2·0	66·0	1·5	100	2200		19	Am.-Brit
12G7G	12·6	0·15	250	—	3·0	58·0	1·2	70	—		6	Am.-Brit
12J5GT	12·6	0·15	250	9·0	8·0	7·7	2·6	20	890		5	Am.-Brit
12Q7GT	12·6	0·15	250	1·0	3·0	58·0	1·2	70	3000		6	Am.-Brit
12S8	12·6	0·15	250	0·9	2·0	91·0	1·1	100	2200		10	U.S.A.
12SC7–GT	12·6	0·15	250	2·0	2·0	53·0	1·3	70	1000		22	Am.-Brit
12SF5	12·6	0·15	250	0·9	2·0	66·0	1·5	100	2200		23	U.S.A.
12SL7GT	12·6	0·15	250	2·3	2·0	44·0	1·6	70	890		7	Am.-Brit
12SN7GT	12·6	0·3	250	9·0	8·0	7·7	2·6	20	890		7	Am.-Brit
12SQ7–GT	12·6	0·15	250	0·9	2·0	91·0	1·1	100	2200		24	Am.-Brit
12SR7–GT	12·6	0·15	250	9·5	9·0	8·5	1·9	16	1000		24	Am.-Brit
12SW7	12·6	0·15	250	9·5	9·0	8·5	1·9	16	950		24	U.S.A.
12SX7	12·6	0·3	250	9·0	8·0	7·7	2·6	20	890		7	U.S.A.
25SN7GT	25·0	0·15	250	9·0	8·0	7·7	2·6	20	890		7	Brimar
B36	12·6	0·3	250	9·0	8·0	7·7	2·6	20	890		7	M.O.V.
B65	6·3	0·6	250	9·0	8·0	7·7	2·6	20	890		7	M.O.V.
BL63	6·3	1·3	100	7·0	6·0	2·86	4·2	12	—		9	M.O.V.
DAC31	1·4	0·025	90	0·45	0	130·0	0·3	40	—		17	Mullard
DAC32	1·4	0·05	90	0·15	0	240·0	0·27	65	—		17	Mullard
DBC31	1·4	0·05	90	1·4	0·5	30·0	0·85	25	—		25	Mullard
DH63	6·3	0·3	250	1·1	3·0	58·0	1·2	70	2000		6	M.O.V.
DH73M	5·8	0·16	250	5·0	3·0	22·0	2·0	44	800		6	M.O.V.
DH76	13·0	0·16	250	1·1	3·0	58·0	1·2	70	2000		6	M.O.V.
DH147	6·3	0·2	250	5·0	5·5	15·0	2·0	30	1100		6	Marconi

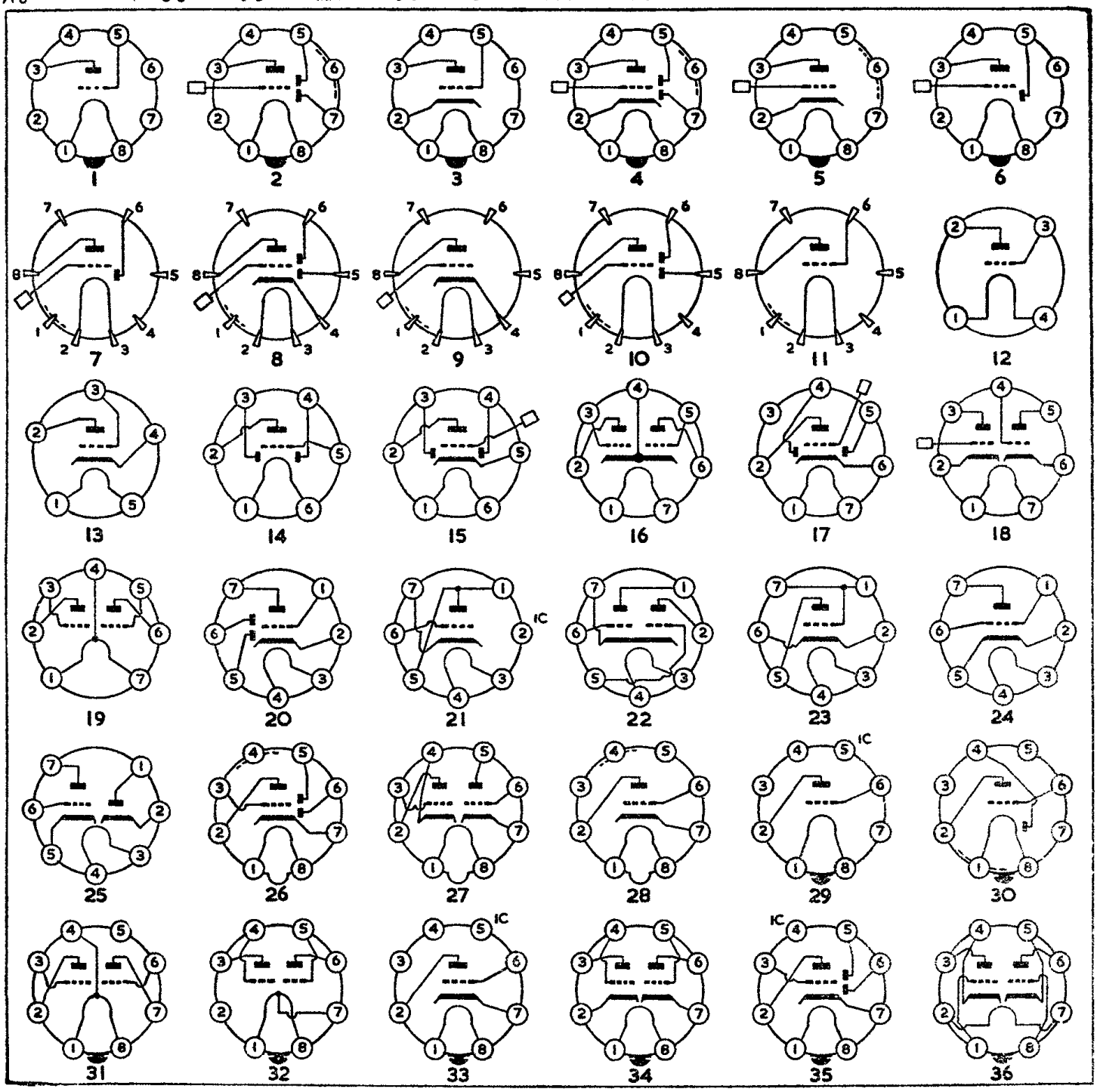
Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
DL63	6·3	0·3	250	5·0	3·0	22·5	1·65	37	800	I.O.	6	M.O.V.
DL74	13·0	0·16	250	5·0	3·0	22·4	1·65	37	—		6	M.O.V.
EBC33	6·3	0·2	250	5·0	5·5	15·0	2·0	30	1100		6	Mul.-Tung.
EC31	6·3	0·65	250	20·0	16·0	3·3	3·2	10·5	820		5	Mullard
ECC31	6·3	0·95	250	6·0	4·6	14·0	2·3	32	750		26	Mullard
ECC32	6·3	0·95	250	6·0	4·6	14·0	2·3	32	750		7	Mullard
ECC33	6·3	0·4	250	9·0	4·0	9·7	3·6	35	450		7	Mullard
ECC34	6·3	0·95	250	10·0	16·0	5·2	2·2	11·5	1600		7	Mullard
ECC35	6·3	0·4	250	2·3	2·5	34·0	2·0	68	1100		7	Mullard
H63	6·3	0·3	250	1·0	2·0	66·0	1·5	100	2000		19	M.O.V.
HD14	1·4	0·05	90	0·14	0	240·0	0·27	65	—		17	M.O.V.
KBC32	2·0	0·05	100	2·4	0	21·0	1·2	25	—		25	Mullard
L63	6·3	0·3	250	9·0	8·0	7·7	2·6	20	800		5	M.O.V.
MHLD6	6·3	0·65	200	3·8	3·0	18·2	2·2	40	800		6	M.O.V.
OM4	6·3	0·2	250	5·0	5·5	15·0	2·0	30	—		6	Cossor



TRIODE AMPLIFIERS—*Contd.*

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
H141D	1·4	0·05	90	0·1	0·6	260·0	0·25	65	—	M.O.	6	Mazda
HL22	2·0	0·1	150	2·0	2·0	25·0	1·3	32	—		1	Mazda
HL22DD	2·0	0·1	150	2·0	2·0	25·0	1·3	32	—		2	Mazda
HL23	2·0	0·05	150	1·5	2·4	27·0	1·2	32	—		1	Mazda
HL23DD	2·0	0·05	150	1·5	2·8	24·0	1·05	25	—		2	Mazda
HL41	4·0	0·65	250	7·0	4·5	11·5	3·1	36	620		3	Mazda
HL41DD	4·0	0·65	250	6·0	5·2	13·5	2·2	30	1250		4	Mazda
HL42DD Var. μ	4·0	0·65	260	2·8	1·25	12·5	1·85	23	420		4	Mazda
HL133	13·0	0·2	200	6·0	3·3	12·5	2·9	36	400		5	Mazda
HL133DD	13·0	0·2	250	6·0	5·4	14·0	2·3	32	700		4	Mazda
HL134DD Var μ	13·0	0·2	250	7·0	5·0	12·8	2·5	32	700		4	Mazda
L22DD	2·0	0·1	150	4·0	4·2	12·0	1·55	18·5	—		2	Mazda
P41	4·0	0·95	250	16·0	11·8	3·7	4·5	17	—		3	Mazda
P61	6·3	0·6	250	16·0	11·8	3·7	4·5	17	—		3	Mazda
DAC1	1·4	0·05	90	0·14	0	240·0	0·28	66	—	P	7	Mullard
DDT2Bs	2·0	0·1	135	2·5	45·0	16·0	1·0	16	—		10	Tungsram
DDT13s	13·0	0·2	200	4·0	5·0	11·0	3·6	40	1250		9	Tungsram
EBC3	6·3	0·2	250	5·0	5·5	15·0	2·0	30	1100		8	Mul.-Tung.
H13	13·0	0·2	200	6·0	4·0	12·0	2·5	30	650		9	Mullard
HL2s	2·0	0·13	135	1·2	1·5	20·0	1·5	30	—		11	Tungsram
HL13	13·0	0·2	200	5·0	3·7	12·0	3·3	40	740		9	Mullard
HL13s	13·0	0·2	200	6·0	3·5	12·0	3·5	40	600		9	Tungsram
HR2s	2·0	0·065	135	1·2	1·5	40·0	0·6	24	—		11	Tungsram
LL2s	2·0	0·2	135	3·0	2·5	11·0	2·6	30	—		11	Tungsram
30	2·0	0·06	135	3·0	9·0	10·3	0·9	9·3	—	UX4	12	Am.-Brit.
27	2·5	1·75	180	5·0	13·5	9·0	1·0	9	2700	UX5	13	Am.-Brit.
76	6·3	0·3	250	5·0	13·5	9·5	1·4	14	2700		13	Am.-Brit.
1B5	2·0	0·06	135	0·8	3·0	35·0	0·57	20	3900	UX6	14	U.S.A.
2A6	2·5	0·8	250	0·9	2·0	91·0	1·1	100	2200		15	Am.-Brit.
55	2·5	1·0	250	8·0	20·0	7·5	1·1	8	2500		15	U.S.A.
75	6·3	0·3	250	0·9	2·0	91·0	1·1	100	2200		15	Am.-Brit.
85	6·3	0·3	250	8·0	20·0	7·5	1·1	8	2500		15	Am.-Brit.
2C21	6·3	0·6	250	8·3	16·5	7·6	1·4	10	2000	UX7	18	U.S.A.
6A6	6·3	0·8	250	3·0	5·0	22·6	1·8	35	—		16	Am.-Brit.
6C7	6·3	0·3	250	4·5	9·0	16·0	1·3	20	2000		17	U.S.A.
3A5	2·8 / 1·4	0·11 / 0·22	90	3·7	2·5	8·3	1·8	15	—	B7G	19	U.S.A.
6AQ6	6·3	0·15	250	1·0	3·0	58·0	1·2	70	—		20	U.S.A.
6AT6	6·3	0·3	250	1·0	3·0	58·0	1·2	70	—		20	Am.-Brit.
6AV6	6·3	0·3	250	1·2	2·0	62·5	1·6	100	—		20	U.S.A.
6BF6	6·3	0·3	250	9·5	9·0	8·5	1·9	16	—		20	U.S.A.
6BK6	6·3	0·3	250	1·2	2·0	62·5	1·6	100	—		20	U.S.A.
6BT6	6·3	0·3	250	1·0	3·0	58·0	1·2	70	—		20	U.S.A.
6BU6	6·3	0·3	250	9·5	9·0	8·5	1·9	16	950		20	U.S.A.
6C4	6·3	0·15	250	10·5	8·5	7·7	2·2	17	—		21	Am.-Brit.
6J6	6·3	0·45	100	8·5	0·85	7·1	5·3	38	—		22	Am.-Brit.
6L34	6·3	0·3	250	10·0	1·5	11·1	9·0	100	—		24	U.S.A.
6N4	6·3	0·2	180	12·0	3·5	54·0	6·0	32	—		23	U.S.A.
12AT6	12·6	0·15	250	1·0	3·0	58·0	1·2	70	—		20	Am.-Brit.
12AV6	12·6	0·15	250	1·2	2·0	62·5	1·6	100	—		20	U.S.A.
12BF6	12·6	0·15	250	9·5	9·0	8·5	1·9	16	—		20	U.S.A.
12BK6	12·6	0·15	250	1·2	2·0	62·5	1·6	100	—		20	U.S.A.
12BT6	12·6	0·15	250	1·0	3·0	58·0	1·2	70	—		20	U.S.A.
12BU6	12·6	0·15	250	9·5	9·0	8·5	1·9	16	950		20	U.S.A.
19J6	18·9	0·15	100	8·5	0·85	7·1	5·3	38	—		22	U.S.A.
26BK6	26·5	0·07	250	1·2	2·0	62·5	1·6	100	—		20	U.S.A.
26C6	26·5	0·07	250	9·5	9·0	8·5	1·9	16	—		20	U.S.A.
DCC90	2·8 / 1·4	0·11 / 0·22	90	3·7	2·5	8·3	1·8	15	—		19	Mullard
DH77	6·3	0·3	250	1·0	3·0	58·0	1·2	70	—		20	M.O.V.
DH107	19·0	0·1	250	1·0	3·0	58·0	1·2	70	—		20	M.O.V.
EAC91	6·3	0·3	200	7·5	2·8	12·8	2·8	36	—		25	Mullard
EC91	6·3	0·3	250	10·0	1·5	12·0	8·5	100	—		24	Mullard
ECC91	6·3	0·45	100	8·5	0·85	7·1	5·3	38	—		22	Mullard
L77	6·3	0·15	250	10·5	8·5	7·7	2·2	17	—		21	M.O.V.
6L1	6·3	0·4	250	10·0	12·0	5·7	2·8	16	—	B8A	27	Mazda
6L18	6·3	0·3	250	12·0	13·3	3·0	5·5	16·5	—		28	Mazda
6L19	6·3	0·4	250	4·0	3·1	20·0	2·8	55	—		27	Mazda
6LD20	6·3	0·25	250	5·0	5·9	13·5	2·3	31	—		26	Mazda
10LD11	15·0	0·1	250	5·0	5·9	13·5	2·3	31	—		26	Mazda
20L1	12·6	0·2	250	10·0	12·0	5·7	2·8	16	—		27	Mazda
DH142	14·0	0·1	170	1·5	1·6	42·0	1·65	70	1000		26	Marconi

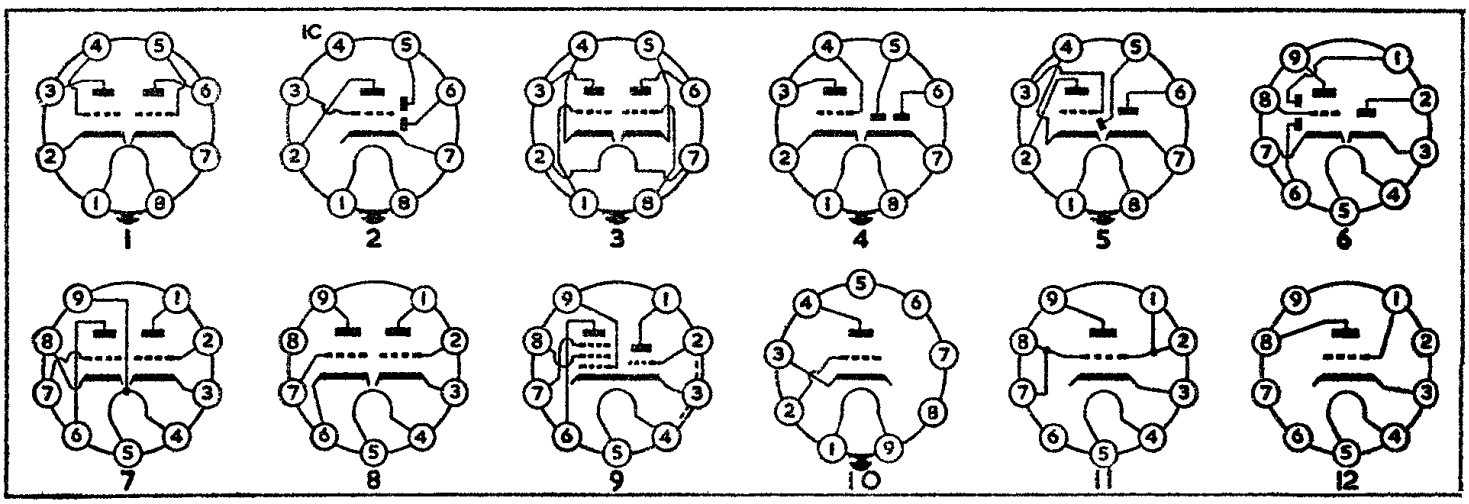
Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
DH150	6·3	0·225	250	1·0	3·0	54·0	1·3	70	—	B8A	26	Marconi
DL145	15·0	0·1	250	5·0	5·9	12·5	2·3	31	—		26	Marconi
EBC41	6·3	0·225	250	1·0	3·0	54·0	1·3	70	—		26	Mullard
ECC40	6·3	0·6	250	6·0	5·5	11·0	2·7	30	900		27	Mullard
UBC41	14·0	0·1	170	1·5	1·6	42·0	1·65	70	1000		26	Mullard
1LE3	1·4	0·05	90	4·5	0	11·2	1·3	14·5	—	B8G	29	U.S.A.
1LH4	1·4	0·05	90	0·15	0	240·0	0·27	65	—		30	Am.-Brit.
3B7	2·8	0·11	90	5·2	0	11·35	1·85	21	—		31	U.S.A.
3C6	2·8	0·05	90	4·5	0	11·2	1·3	14·5	—		32	U.S.A.
7A4	6·3	0·3	250	9·0	8·0	7·7	2·6	20	890		33	Am.-Brit.
7AF7	6·3	0·3	250	9·0	10·0	7·6	2·1	16	1100		34	U.S.A.
7B6	6·3	0·3	250	0·9	2·0	91·0	1·1	100	2200		35	Am.-Brit.
7C6	6·3	0·15	250	1·3	1·0	100·0	1·0	100	800		35	Am.-Brit.
7E6	6·3	0·3	250	9·5	9·0	8·5	1·9	16	950		35	U.S.A.
7F7	6·3	0·3	250	2·3	2·0	44·0	1·6	70	900		34	Am.-Brit.
7F8	6·3	0·3	250	6·0	3·0	14·5	3·3	48	500		36	U.S.A.



TRIODE AMPLIFIERS—*Contd.*

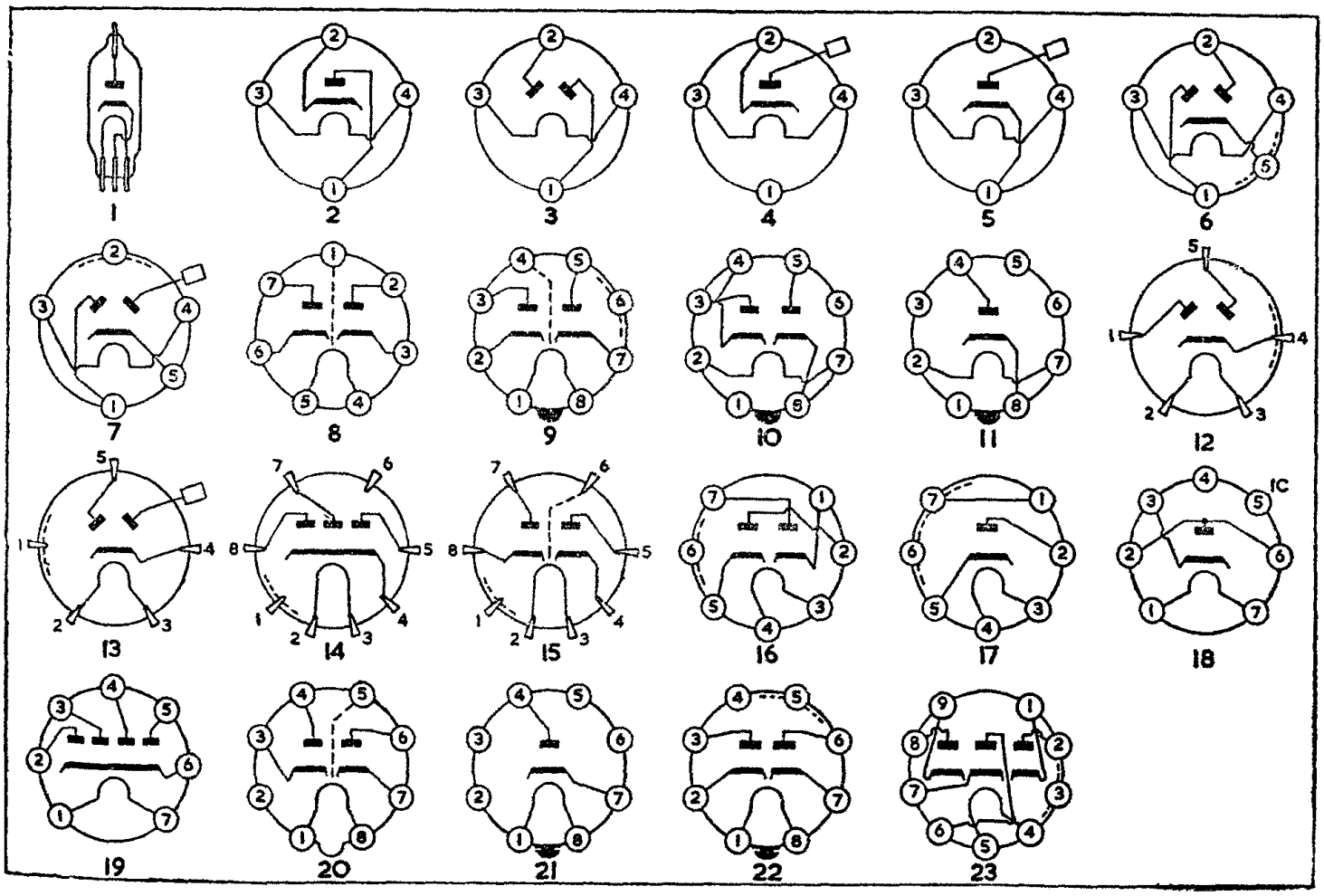
Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
7K7	6·3	0·3	250	2·3	2·0	44·0	1·6	70	—	B8G	4	Am.-Brit
7N7	6·3	0·6	250	9·0	8·0	7·7	2·6	20	—		1	U.S.A.
7X7	6·3	0·3	250	1·9	1·0	67·0	1·5	100	500		5	U.S.A.
14A4	12·6	0·15	250	9·0	8·0	7·7	2·6	20	890		33	U.S.A.
14AF7	12·6	0·15	250	9·0	10·0	7·6	2·1	1·6	1100		1	U.S.A.
14B6	12·6	0·15	250	0·9	2·0	91·0	1·1	100	2200		2	Am.-Brit
14E6	12·0	0·15	250	9·5	9·0	8·5	1·9	16	950		2	U.S.A.
14F7	12·6	0·15	250	2·3	2·0	44·0	1·6	70	900		1	U.S.A.
14F8	12·6	0·15	250	6·0	3·0	14·5	3·3	48	500		3	U.S.A.
14N7	12·6	0·3	250	9·0	8·0	7·7	2·6	20	—		1	U.S.A.
14X7	12·6	0·15	250	1·9	1·0	67·0	1·5	100	500		5	U.S.A.
DH81	6·3	0·3	250	1·0	0·68	58·0	1·2	70	680		2	M.O.V.
DH101	19·0	0·1	175	0·4	1·3	58·0	1·2	70	3300		2	M.O.V.
DH149	6·3	0·15	250	1·3	1·0	100·0	1·0	100	800		2	Marconi
DL82	6·3	0·3	200	10·0	3·0	17·0	1·4	24	300		2	M.O.V.
EBC21	6·3	0·2	250	5·0	5·5	15·0	2·0	30	1100		2	Mullard
6AB8 Triode	6·3	0·3	100	4·0	2·3	12·5	1·4	17	—	B9A	9	U.S.A.
6BN7	6·3	0·75	250†	24·0	15·0	2·2	5·5	12	—		8	U.S.A.
			120*	5·0	1·0	14·0	2·0	28	—		8	U.S.A.
6Q4	6·3	0·48	250	15·0	1·5	—	—	—	—		11	U.S.A.
6R4	6·3	0·2	150	30·0	2·0	3·0	5·5	16	—		12	U.S.A.
6R8	6·3	0·45	250	9 5	9·0	8·5	1·9	16	—		6	U.S.A.
6T8	6·3	0·45	250	1·0	3·0	58·0	1·2	70	—		6	Am.-Brit
12AT7	6·3	0·3	100	3·7	1·0	13·5	4·0	54	—		7	Am.-Brit
	12·6	0·15	180	11·0	1·0	9·4	6·6	62	—		7	Am.-Brit
			250	10·0	2·0	10·0	5·5	55	—		7	Am.-Brit
12AU7	6·3	0·3	100	11·8	0	6·2	3·1	19	—		7	Am.-Brit
	12·6	0·15	250	10·5	8·5	7·7	2·2	17	—		7	Am.-Brit
12AV7	6·3	0·45	100	9·0	9·0	6·1	6·1	37	120		7	U.S.A.
	12·6	0·225	150	18·0	12·0	4·8	8·5	41	56		7	U.S.A.
12AX7	6·3	0·3	100	0·5	1·0	80·0	1·25	100	—		7	Am.-Brit
	12·6	0·15	250	1·2	2·0	62·5	1·6	100	—		7	Am.-Brit
12AY7	6·3	0·3	150	2·0	2·5	26·5	1·55	40	—		7	U.S.A.
	12·6	0·15	250	3·0	4·0	23·5	1·7	40	—		7	U.S.A.
12BH7	6·3	0·6	85	20·0	0	3·3	6·2	21	—		7	Am.-Brit
	12·6	0·3	250	11·5	10·5	5·4	3·1	17	—		7	Am.-Brit
19C8	19·0	0·15	100	0·5	1·0	80·0	1·25	100	—		6	U.S.A.
19T8	19·0	0·15	100	0·8	1·0	54·0	1·3	70	—		6	Am.-Brit
			250	1·0	3·0	58·0	1·2	70	—		6	Am.-Brit
ECC81	6·3	0·3	170	7·0	1·5	12·0	4·8	57	—		7	Mullard
	12·6	0·15	200	10·0	1·5	10·0	5·5	57	—		7	Mullard
ECL80 Triode	6·3	0·3	100	4·0	2·3	12·5	1·4	17	—		9	Mullard
EC52	6·3	0·43	250	10·0	2·6	9·2	6·5	60	—	B9G	10	Mullard

† Section 1 pins 6.7.9. * Section 2 pins 1.2.3.



Type	FILAMENT or HEATER		Input Volts (RMS)	Max. I/mA	BASE		Maker
	Volts	Amps			Type	Ref.	
6D1	6·3	0·15	120	5·0	B3G	1	Mazda
D1	4·0	0·2	120	5·0		1	Mazda
EA50	6·3	0·15	50	5·0		1	Mullard
T4D	4·0	0·2	50	5·0		1	Mullard
D42	4·0	0·6	75	15·0	B4	2	M.O.V.
D43	4·0	0·6	—	15·0		5	M.O.V.
D418	4·0	0·18	200	5·0		4	Tungsram
DD207	2·0	0·075	—	—		3	Mazda
2D2	2·0	0·09	125	0·5	B5	6	Mullard
2D4A	4·0	0·65	200	0·8		6	Mullard
2D13C	13·0	0·2	200	0·8		6	Mullard
10D1	13·0	0·2	150	9·0		6	Brimar
220DD	2·0	0·2	100	0·8		6	Cossor
A208	4·0	0·65	200	0·8		6	Ever Ready
AC/DD	4·0	1·0	—	—		6	Mazda
C20C	13·0	0·2	200	0·8		6	Ever Ready
D41	4·0	0·3	—	—		6	M.O.V.
DD4	4·0	0·75	100	10·0		6	Cossor
DD13	13·0	0·2	200	0·8		6	Tungsram
DD465	4·0	0·65	—	—		7	Tungsram
DD620	6·0	0·2	—	1·0		6	Mazda
DD818	8·0	0·18	100	1·5		7	Tungsram
DDL4	4·0	0·75	100	10·0		6	Cossor
SD	4·0	0·5	—	5·0		6	Ferranti
V914	4·0	0·3	—	1·0		6	Mazda
ZD	6·0	0·2	—	1·0		6	Ferranti
2D4B	4·0	0·35	200	0·8	B7	8	Mullard
DD4D	4·0	0·5	100	4·0		8	Tungsram
DD41	4·0	0·5	175	5·0	M.O.	9	Mazda
DD101	10·0	0·2	175	5·0		9	Mazda
EAB1	6·3	0·2	200	0·8	P	14	Mul.-Tung.
EB4	6·3	0·2	200	0·8		15	Mul.-Tung.
DD6DS	6·3	0·2	200	0·8		15	Tungsram

Type	FILAMENT or HEATER		Input Volts (RMS)	Max. I/mA	BASE		Maker
	Volts	Amps			Type	Ref.	
2D13	13·0	0·2	200	0·8	P5	13	Mullard
2D13A	13·0	0·2	200	0·8		12	Mullard
DD4s	4·0	0·65	200	0·8		12	Tungsram
DD13s	13·0	0·2	200	0·8		12	Tungsram
6H4	6·3	0·15	100	4·0	I.O.	11	U.S.A.
6H6-GT/G	6·3	0·3	150	8·0		10	Am.-Brit.
12H6	12·6	0·15	150	8·0		10	Am.-Brit.
D63	6·3	0·3	100	2·0		10	M.O.V.
EB34	6·3	0·2	200	0·8		10	Mul.-Tung.
OM3	6·3	0·2	200	0·8		10	Cossor
1A3	1·4	0·15	120	0·5	B7G	18	U.S.A.
6AL5	6·3	0·3	150	9·0		16	Am.-Brit.
6AN6	6·3	0·2	75	3·5		19	U.S.A.
6D2	6·3	0·3	150	9·0		16	Mazda
12AL5	12·6	0·15	117	9·0		16	U.S.A.
20D1	9·5	0·2	150	9·0		16	Mazda
D77	6·3	0·3	200	5·0		16	M.O.V.
DA90	1·4	0·15	120	0·5		18	Mullard
DD6	6·3	0·3	150	9.0		16	Ferranti
DD6G	6·3	0·3	150	10·0		16	Tungsram
EB91	6·3	0·3	150	9·0		16	Mullard
SD6	6·3	0·15	100	10·0		17	Cossor
EB41	6·3	0·3	150	9·0	B8A	20	Mullard
UB41	19·0	0·1	150	9·0		20	Mullard
1R4	1·4	0·15	30	0·34	B8G	21	U.S.A.
7A6	7·0	0·16	150	10·0		22	Am.-Brit.
7C4	7·0	0·16	117	5·0		21	U.S.A.
1294	1·4	0·15	30	0·34		21	U.S.A.
6BC7	6·3	0·45	5	35·0	B9A	23	U.S.A.

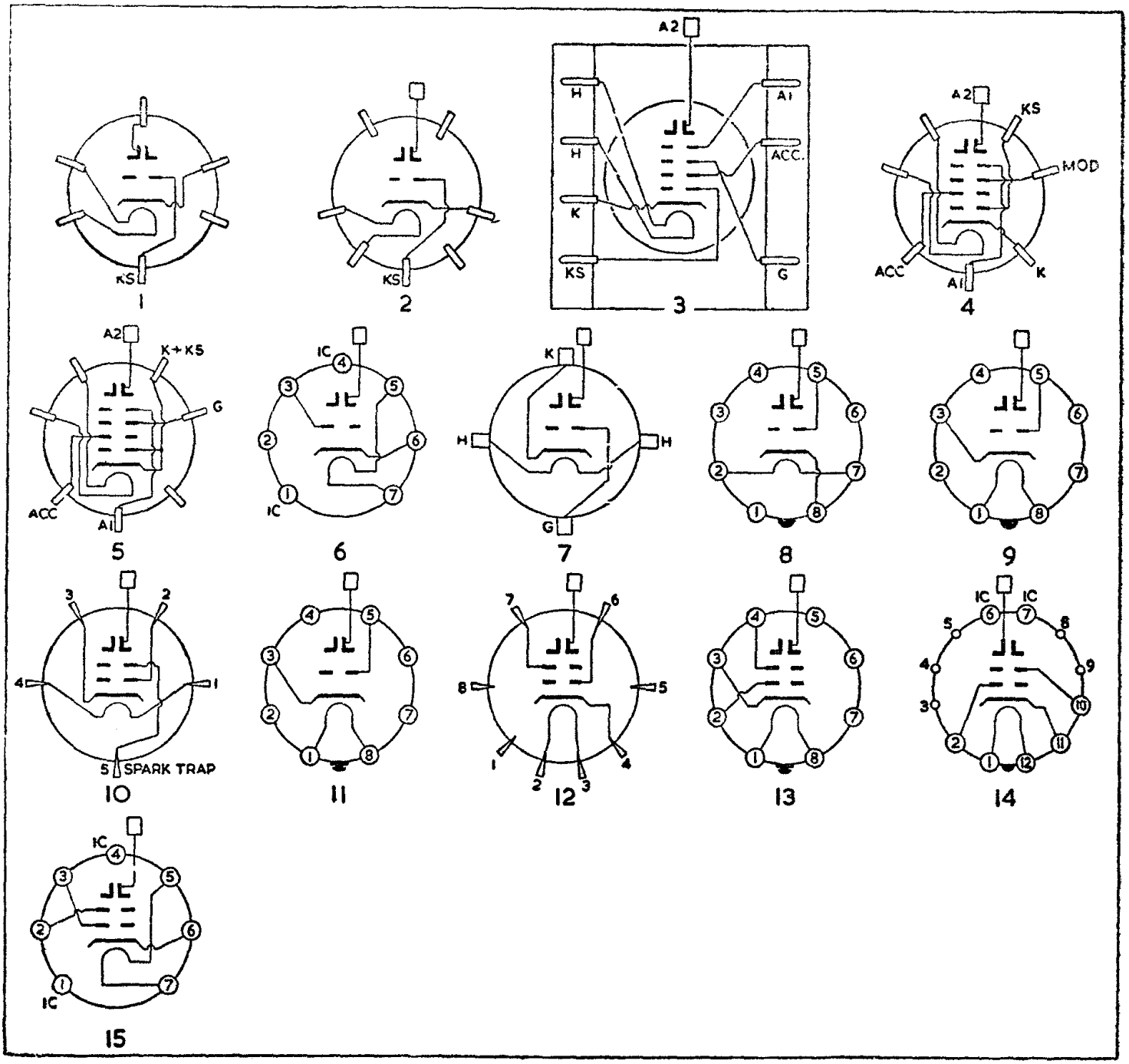


TELEVISION C.R.T.'s

Type		Dia.		HEATER		2ND or FINAL ANODE		ACC.	MODULATOR		Focus A/T	BASE		Maker
				Volts	Amps	Volts	I/μA		Volts Swing	Volts Cut Off		Type	Ref.	
3/1	Triode	5″	‡	4·0	1·3	2700	250	—	18	25	400	EMI	1	E.M.I.
3/2	Triode	7″	‡	4·0	1·3	2700	300	—	21	30	400		1	E.M.I.
3/3	Triode	9″	‡	4·0	1·3	3500	300	—	23	32	450		2	E.M.I.
3/4	Triode	10″	‡	4·0	1·3	4000	350	—	23	32	480		2	E.M.I.
3/5	Triode	14″	‡	4·0	1·3	4000	500	—	27	34	480		2	E.M.I.
3/6A	Triode	15″	‡	4·0	1·3	4000	500	—	27	34	480		2	E.M.I.
3/16	Triode	10″	‡†	13·3	0·3	5500	800	—	23	34	1430	B7B	6	E M.I.
3/20	Triode	10″	*	11·5	0·3	5500	350	—	25	35	—	B4E	7	E.M.I.
6/5	Hexode	9″	§	4·0	1·3	5000	150	250	8	20	ES	EMI	3	E.M.I.
6/6	Hexode	12″	§	4·0	1·3	5000	150	250	8	20	ES		3	E.M.I.
6/7	Hexode	12″	‖	4·0	1·3	7000	200	250	18	25	ES	EMI-BBC	4 or 5	E.M.I.
65K	Triode	15″		4·0	1·1	5000	350	—	30	37	550	B4E	7	Cossor
65K/2	Triode	15″	*	4·0	1·1	6000	400	—	35	50	550		7	Cossor
75K	Triode	10″	*	6·3	0·8	7000	200	—	35	55	625		7	Cossor
85K	Triode	15″	*	6·3	0·55	9000	400	—	35	50	725		7	Cossor
105K	Triode	10″	*	10·5	0·45	8000	150	—	20	25	800		7	Cossor
108K	Triode	10″	*	6·3	0·55	8000	175	—	30	35	800		7	Cossor
112K	Tetrode	12″	¶	6·3	0·3	8000	100	240	35	52	675	B12A	14	Cossor
121K	Tetrode	12″	*¶	6·3	0·3	7000	100	200	—	40	675		14	Cossor
6501	Triode	9″		6·3	0·5	6000	200	—	25	35	500	I.O.	8	G.E.C.
6502	Triode	9″	¶	6·3	0·5	7000	200	—	25	45	500		8	G.E.C.
6503	Triode	9″		10·5	0·3	7000	200	—	25	45	500		8	G.E.C.
6504	Triode	9″		6·3	0·5	7000	200	—	25	45	500		8	G.E.C.
6504A	Triode	9″	†¶	6·3	0·5	7000	150	—	20	45	500		8	G.E.C.
6505A	Triode	9″	†¶	10·5	0·3	7000	150	—	20	45	500		8	G.E.C.
6703A	Triode	12″	†¶	6·3	0·5	8000	100	—	22	49	500		8	G.E.C.
6704A	Triode	12″	†¶	10·5	0·3	8000	100	—	22	49	500		8	G.E.C.
6801A	Triode	14″	†	6·3	0·5	8000	200	—	25	50	500		8	G.E.C.
C9A	Triode	9″		2·0	1·4	6000	150	—	25	30	700	M.O.	9	Brimar
C9B	Triode	9″	†	2·0	2·5	7000	150	—	35	40/100	750	I.O.	8	Brimar
C12A	Triode	12″		2·0	1·4	7000	150	—	25	35	700	M.O.	9	Brimar
C12B	Triode	12″	†	2·0	2·5	12000	150	—	30	60/140	750	I.O.	8	Brimar
C12D	Triode	12″		2·0	2·5	7000	150	—	30	40/100	600		8	Brimar
C12E	Triode	12″		6·3	0·6	7000	150	—	24	40/100	600		8	Brimar
C12F	Tetrode	12″	*	6·3	0·3	7000	150	200	30	40	600	B12A	14	Brimar
C15B	Triode	15″	†	2·0	2·5	10000	150	—	40	60/140	750	I.O.	8	Brimar
CRM71	Triode	7″		2·0	1·4	4000	150	—	21	35	480	M.O.	9	Mazda
CRM91	Triode	9″		2·0	1·4	6000	150	—	26·5	54	650		9	Mazda
CRM92	Triode	9″		2·0	1·4	7000	150	—	27	56	680		9	Mazda
CRM92a	Triode	9″		2·0	1·4	7000	150	—	27	56	680		9	Mazda
CRM121	Triode	12″		2·0	1·4	7500	150	—	27·5	60	790		9	Mazda
CRM121a	Triode	12″		2 0	1·4	7500	150	—	27·5	60	790		9	Mazda
CRM122	Triode	12″		7·3	0·3	7500	150	—	27·5	60	790		9	Mazda
CRM123	Triode	12″	†	2·0	1·4	10000	150	—	31	79	—		9	Mazda
CRM151	Triode	15″	†	2·0	1·4	13000	150	—	34	101	—		9	Mazda
MW6-2	Triode	2½″	¶	6·3	0·3	25000	100	—	100	40/90	—	P5	10	Mullard
MW18-2	Triode	7″		2·0	1·2	4000	100	—	—	43	—	B8G	11	Mullard
MW22-1	Tetrode	9″		4·0	1·0	5000	100	250	—	100	—	P	12	Mullard
MW22-3	Triode	9″		2·0	1·2	5000	100	—	—	55	—	B8G	11	Mullard
MW22-5	Tetrode	9″		6·3	0·65	5000	100	250	—	100	—	P	12	Mullard
MW22-7	Tetrode	9″		6·3	0·6	7000	100	200	—	50	—	B8G	13	Mullard
MW22-14	Tetrode	9″	¶	6·3	0·3	7000	100	200	—	40	600		13	Mullard
MW22-14c	Tetrode	9″		6·3	0·3	7000	100	200	—	40	600		13	Mullard
MW22-15	Tetrode	9″	*	6·3	0·3	9000	100	350	—	44/99	750	B12A	14	Mullard
MW22-16	Tetrode	9″	*¶	6·3	0·3	9000	100	350	—	44/99	750		14	Mullard
MW22-17	Tetrode	9″		6·3	0·3	9000	100	350	—	44/99	750		14	Mullard
MW22-18	Tetrode	9″	¶	6·3	0·3	9000	100	350	—	44/99	750		14	Mullard
MW31-3	Tetrode	12″		6·3	0·65	5000	100	250	—	100	—	P	12	Mullard
MW31-6	Tetrode	12″		6·3	0·6	5000	100	250	—	100	—		12	Mullard
MW31-14c	Tetrode	12″		6·3	0·3	7000	100	200	—	40	600	B8G	13	Mullard
MW31-15	Tetrode	12″	*	6·3	0·3	9000	100	350	—	40	750	B12A	14	Mullard
MW31-16	Tetrode	12″	*¶	6·3	0·3	9000	100	350	—	40	750		14	Mullard
MW31-17	Tetrode	12″		6·3	0·3	9000	100	350	—	40	750		14	Mullard
MW31-18	Tetrode	12″	¶	6·3	0·3	9000	100	350	—	40	750		14	Mullard
MW31-20	Tetrode	12″	†	6·3	0·3	9000	100	350	—	40	750	B8G	13	Mullard
MW31-21	Tetrode	12″	¶	6·3	0·3	9000	100	350	—	40	750		13	Mullard
MW31-22	Tetrode	12″	†	6·3	0·3	9000	100	350	—	40	750	B12A	14	Mullard
MW31-23	Tetrode	12″	¶	6·3	0·3	9000	100	350	—	40	750		14	Mullard
MW41-1	Tetrode	16″	‡‡*	6·3	0·3	12000	—	250	—	32/72	1000		14	Mullard
T9/2	Triode	9″		4·0	1·0	6000	—	—	25	—	—	I.O.	8	Ferranti
T9/3	Triode	9″		4·0	1·0	6000	150	—	22	45	—		8	Ferranti

Type		Dia.		HEATER		2ND or FINAL ANODE		ACC.	MODULATOR		Focus A/T	BASE		Maker
				Volts	Amps	Volts	I/μA		Volts Swing	Volts Cut Off		Type	Ref.	
T9/5	Triode	9″	¶	4·0	1·0	6000	150	—	22	45	—	I.O.	8	Ferranti
T12/2	Triode	12″		4·0	1·0	6000	—	—	27	55	—		8	Ferranti
T12/3	Triode	12″		4·0	1·0	7000	—	—	27	—	—		8	Ferranti
T12/44	Triode	12″		4·0	0·95	7000	150	—	23	42	800		8	Ferranti
T12/46	Triode	12″		6·3	0·6	8000	150	—	24	50	800		8	Ferranti
T12/54	Triode	12″	¶	4·0	0·95	7000	150	—	23	42	800		8	Ferranti
T12/56	Triode	12″	¶	6·3	0·6	8000	150	—	24	50	800		8	Ferranti
T900	Tetrode	16″	*‡‡	6·3	0·6	14000	—	300	—	33/77	—	B12A	14	Eng. Elec.
T901	Tetrode	16″	*‡‡	6·3	0·6	Wide angle version of T900							14	Eng. Elec.
TA10	Tetrode	10″	†‡	4·0	1·0	7000	300	250	24	34	742	B7B	15	E.M.I.
TA15	Tetrode	15″	†‡	4·0	1·0	7000	300	250	24	34	742		15	E.M.I.

† Aluminised. ‡ Intended for cathode modulation. ¶ Aquadag coated. § 1st anode 900 volts. *Ion trap. || 1st anode 1100 volts.
‡‡ The metal cone is internally connected to the final anode.



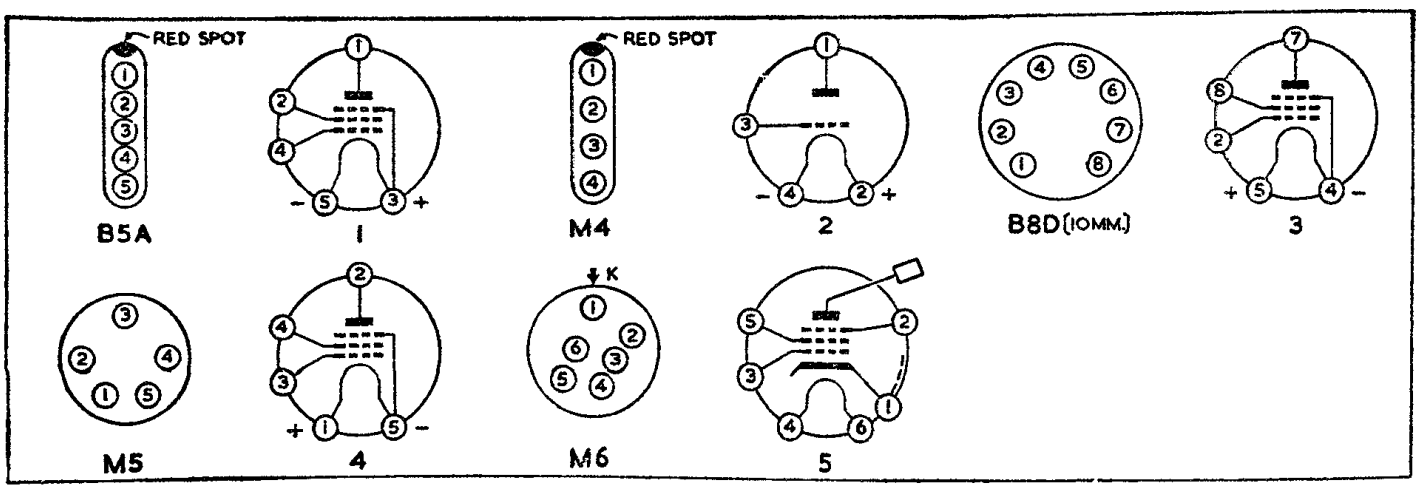
AMERICAN SUB-MINIATURE VALVES

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a (kΩ)	g_m (mA/V)	Anode Load Ω	Output (mW)
		Volts	Amps	Volts	I/mA	Volts	I/mA					
1C8	Heptode	1·25	0·04	30	0·32	30	0·75	0	300	0·1	—	—
1V5	L.F. pen.	1·25	0·04	67·5	2·0	67·5	0·4	4·5	150	0·75	25000	50
1W5	Pentode	1·25	0·04	67·5	1·85	67·5	0·75	0	700	0·73	—	—
2E31	Pentode	1·25	0·05	22·5	0·4	22·5	0·3	0	—	0·5	—	—
2E32	Pentode	1·25	0·05	22·5	0·4	22·5	0·3	0	350	0·5	—	—
2E35	L.F. pen.	1·25	0·03	22·5	0·27	22·5	0·07	0	—	0·38	—	1·2
2E36	L.F. pen.	1·25	0·03	45	0·45	45	0·1	1·25	—	0·5	100000	6
2E41	Diode pen.	1·25	0·03	22·5	0·35	22·5	0·12	0	—	—	—	—
2E42	Diode pen.	1·25	0·03	22·5	0·35	22·5	0·12	0	250	0·37	1 Meg.	—
2G21	Triode hep.	1·25	0·05	22·5	0·3	22·5	0·2	—	—	0·07	—	—
2G22	Converter	1·25	0·05	22·5	0·3	22·5	0·2	0	500	0·06	—	—
6K4	Triode	6·3	0·15	200	11·5	—	—	—	465	3·45	—	—
1247	Diode	0·7	0·065	Max. 300 V. RMS		D.C. I=	0·4 mA.					
CK501	Pentode	1·25	0·033	45	0·28	45	0·05	1·25	1500	0·3	—	—
CK502	L.F. pen	1·25	0·033	30	0·55	30	0·13	0	500	0·4	60000	3
CK503	L.F. pen.	1·25	0·033	30	1·5	30	0·33	0	150	0·6	20000	6
CK504	L.F. pen.	1·25	0·033	30	0·4	30	0·09	1·25	500	0·35	60000	3
CK505	Pentode	0·625	0·03	45	0·2	45	0·08	1·25	2000	0·15	—	—
CK506	L.F. pen.	1·25	0·05	45	1·25	45	0·4	4·5	120	0·5	30000	25
CK507	L.F. pen.	1·25	0·05	45	0·6	45	0·21	2·5	360	0·5	50000	10
CK509	Triode	0·625	0·03	45	0·15	—	—	0	150	0·16	1 Meg.	—
CK510	Tetrode	0·625	0·05	45	0·06	0·2	0·2	0	500	0·06	—	—
CK512	Low mic. pen.	0·625	0·02	22·5	0·12	22·5	0·04	—	—	0·16	—	—
CK515BX	Pentode	0·625	0·03	45	0·15	—	—	0	—	0·16	1 Meg.	—
CK520AX	L.F. pen.	0·625	0·05	45	0·24	45	0·07	2·5	—	0·18	—	4·5
CK521AX	L.F. pen.	1·25	0·05	22·5	0·8	22·5	0·22	2·5	—	0·4	—	6
CK522AX	L.F. pen.	1·25	0·02	22·5	0·3	22·5	0·08	0	—	0·45	—	1·2
CK551AXA	Diode pen.	1·25	0·03	22·5	0·17	22·5	0·04	—	—	0·23	—	—
CK553AXA	Pentode	1·25	0·05	22·5	0·42	22·5	0·13	—	—	0·55	—	—
CK556AX	Triode	1·25	0·125	135	4·0	—	—	5·0	—	1·6	—	—
CK568AX	Triode	1·25	0·07	135	1·9	—	—	6·0	—	0·65	—	—
CK569AX	Pentode	1·25	0·05	67·5	1·8	67·5	0·48	0	—	1·1	—	—
CK650AX	Pentode	6·3	0·2	120	7·5	120	2·5	2·0	—	5·0	—	—
CK606BX	Diode	6·3	0·15	Max. 150 V. RMS		D.C. I=	9 mA.					
CK608CX	Triode	6·3	0·2	120	9·0	—	—	2·0	—	—	—	—
CK619CX	Triode	6·3	0·2	250	4·0	—	—	2·0	—	4·0	—	—
HY113/123*	Triode	1·4	0·07	45	0·4	—	—	4·5	25	0·25	40000	6·5
HY115*	Pentode	1·4	0·07	45	0·03	22·5	0·008	1·5	5200	0·05	—	—
HY125*	L.F. pen.	1·4	0·07	45	0·9	45	0·2	3·0	825	0·31	50000	11·5
HY145*	Pentode	1·4	0·07	90	0·48	45	0·1	1·5	1300	0·27	—	—
HY155*	L.F. pen.	1·4	0·07	90	2·6	90	0·5	7·5	420	0·45	28000	90
M54	L.F. tet.	0·625	0·04	30	0·5	30	0·06	0	130	0·2	35000	5
M64	Tetrode	0·625	0·02	30	0·03	—	—	0	200	0·11	—	—
M74	Tetrode	0·625	0·02	30	0·02	7·0	0·01	0	500	0·12	—	—
SD828A 5633	L.F. pen.	6·3	0·15	100	4·8	100	1·25	—	150	3·3	—	—
SD828E 5634	† Pentode	6·3	0·15	100	6·5	100	2·5	—	240	3·5	—	—
SD917A 5637	Triode	6·3	0·15	100	1·4	—	—	—	26	2·7	—	—
SN944 5633	† Pentode	6·3	0·15	100	7·0	100	2·8	—	200	3·4	—	—
SN946	Diode	6·3	0·15	Max. 150 V. RMS		D.C. I=	9 mA.					
SN947C 5640	L.F. tet.	6·3	0·45	100	31·0	100	2·2	9·0	15	5·0	3000	1250
SN954 5641	Rectifier	6·3	0·45	Max. 300 V. RMS		D.C. I=	45 mA.					
SN955B	Twin triode	6·3	0·45	100	5·5	—	—	—	8	4·25	—	—
SN957A 5645	Triode	6·3	0·15	100	5·0	—	—	—	7·4	2·7	—	—
SN1006	Triode	6·3	0·15	100	1·4	—	—	—	29	2·4	—	—
SN1007A†	Mixer	6·3	0·15	100	4·0	100	5·0	—	230	0·9	∞	—

*Base M5 Ref. 4. †Base M6 Ref. 5.

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra (kΩ)	gm (mA/V)	Output (mW)	BASE		Make
		Volts	Amps	Volts	I/mA	Volts	I/mA					Type	Ref.	
DF66	Pentode	0·625	0·015	22·5	0·05	22·5	0·015	1·05	2000	0·1	—	B5A	1	Mullard
DL66	L.F. pen.	1·25	0·015	22·5	0·3	22·5	0·075	1·4	75*	0·35	—		1	Mullard
DL68	L.F. pen.	1·25	0·025	22·5	0·6	22·5	0·15	2·2	37·5*	0·43	5·0		1	Mullard
XFW10	Pentode	0·675	0·025	22·5	—	22·5	—	0	—	—	—		1	Hivac
XFW20	Pentode	0·625	0·0125	22·5	—	—	—	0	—	—	—		1	Hivac
XFY10	L.F. pen.	1·25	0·025	22·5	0·05	22·5	0·02	1·25	50*	0·35	3·0		1	Hivac
XFY11	L.F. pen.	1·25	0·025	22·5	0·3	22·5	0·09	0	200*	0·42	1·2		1	Hivac
XFY12	L.F. pen.	1·25	0·025	22·5	0·25	22·5	0·08	0·5	175*	0·37	1·75		1	Hivac
XFY21	L.F. pen.	1·25	0·0125	22·5	0·25	22·5	—	0·5	—	—	1·75		1	Hivac
XWO75A	Pentode	0·75	0·037	30	0·3	30	0·1	0	1000	0·18	—		1	Hivac
XWO75B	Pentode	0·065	0·025	30	0·2	30	0·1	0	1000	0·18	—		1	Hivac
XY14B	L.F. pen.	1·25	0·025	45	1·5	45	0·45	4·5	30*	0·6	27·5		1	Hivac
XY14C	L.F. pen.	1·25	0·025	45	0·5	45	0·1	1·5	100*	0·5	6·5		1	Hivac
DF70	Pentode	0·625	0·025	30	0·375	30	0·125	0	500	0·22	—	B8D	3	Mullard
DL71	L.F. pen.	1·25	0·025	45	0·6	45	0·15	1·25	100*	0·55	6·3		3	Mullard
DL72	L.F. pen.	1·25	0·025	45	1·16	45	0·35	4·16	30*	0·5	19·5		3	Mullard
XFG1	Thyratron	1·5	0·05	45	—	—	—	—	—	—	—	M4	2	Hivac

* **Anode Load.**



PUSH-PULL DATA

Type	Used as	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	A-A Load Ω	RK Ω	Output W.	Dis. %	Class	Maker
		Volts	Amps	Volts	l/mA	Volts	l/mA							
2A3	Triode	2·5	2·5	300	100	—	—	—	5000	780	10	5	AB1	Am.-Bri
				300	147	—	—	62	3000	—	15	2·5	AB1	Am.-Bri
2A5	Pentode	2·5	1·75	315	73	285	18	—	10000	320	10·5	3	A	Am.-Bri
				315	80	285	19·5	24	10000	—	11	4	A	Am.-Bri
6AC5G	Triode	6·3	0·4	250	—	—	—	0	10000	—	8	—	B2	U.S.A.
6AM5	Pentode	6·3	0·2	250	22	250	3·2	—	24000	600	4	—	A	Brimar
6AQ5	Tetrode	6·3	0·45	250	79	250	13	15	10000	—	10	5	AB1	Am.-Bri
6F6-GT/G	Pentode	6·3	0·7	315	73	285	18	—	10000	320	10·5	3	A	Am.-Bri
				315	80	285	19·5	24	10000	—	11	4	A	Am.-Bri
				375	77	250	18	—	10000	340	19	5	AB2	Am.-Bri
				375	82	250	19·5	26	10000	—	18·5	3·5	AB2	Am.-Bri
	Triode			350	61	—	—	—	10000	730	9	3	AB2	Am.-Bri
				350	92	—	—	38	6000	—	13	2	AB2	Am.-Bri
6K6GT/G	Pentode	6·3	0·4	285	61	285	13	—	12000	400	9·8	6	A	Am.-Bri
				285	72	285	17	25·5	12000	—	10·5	4	A	Am.-Bri
6L6-G	Tetrode	6·3	0·9	270	145	270	17	—	5000	125	18·5	2	A	Am.-Bri
				250	140	250	16	16	5000	—	14·5	2	A	Am.-Bri
				270	155	270	17	17·5	5000	—	17·5	2	A	Am.-Bri
				360	100	270	17	—	9000	250	24·5	4	AB1	Am.-Bri
				360	132	270	15	22·5	6600	—	26·5	2	AB1	Am.-Bri
				360	142	225	11	18	6000	—	31	2	AB2	Am.-Bri
				360	205	270	16	22·5	3800	—	47	2	AB2	Am.-Bri
6P25	Tetrode	6·3	1·1	250	83	250	25	—	7500	180*	11·5	5·0	AB1	Mazda
6V6-GT/G	Tetrode	6·3	0·45	250	79	250	13	15	10000	—	10	5	AB1	Am.-Bri
				285	92	285	13·5	19	8000	—	14	3·5	AB1	Am.-Bri
10P13	Tetrode	40·0	0·1	180	60	185	26·0	9	7000	270*	7·0	3·0	AB1	Mazda
10P14	Tetrode	40·0	0·1	200	68	210	45	—	7000	330*	10·0	3·0	AB1	Mazda
41	Pentode	=6K6												Am.-Bri
42	Pentode	=6F6												Am.-Bri
45	Triode	2·5	1·5	275	90	—	—	—	5060	775	12	5	AB2	U.S.A.
				275	138	—	—	68	3200	—	18	5	AB2	U.S.A.
46	Triode	2·5	1·75	300	150	—	—	0	5200	—	16	—	B2	U.S.A.
				400	200	—	—	0	5800	—	20	—	B2	U.S.A
48	Tetrode	30·0	0·4	125	100	100	19	20	3000	—	5	9	A	U.S.A.
	Triode			125	100	—	—	—	1250	325	3	2	A	U.S.A.
49	Triode	2·0	0·12	180	—	—	—	0	12000	—	3·5	—	B2	U.S.A.
59	Triode	2·5	2·0	400	—	—	—	0	6000	—	20	—	B2	U.S.A.
807	Tetrode	6·3	0·9	600	200	300	21	30	6400	—	80	3·5	AB2	Am.-Bri
				600	150	300	17·5	27·5	10000	—	47·5	2·2	AB1	Am.-Bri
				500	119	300	16·5	—	9000	270	32·5	2·7	AB1	Am.-Bri
APP4E	Pentode	4·0	2·1	375	124	275	18	—	6500	165	28·5	—	AB1	Tungsra
CL6	Pentode	35·0	0·2	100	84	100	25	—	3000	95	4	5·6	AB1	Mul.-Tu
				250	85	125	25	—	7000	182	13·5	6·3	AB1	Mul.-Tu
CL33	Pentode	33·0	0·2	200	66	200	10	—	4500	150	8	1·5	A	Mul.-Tu
DA30	Triode	4·0	2·0	500	230	—	—	145	3400	—	45	4	AB1	M.O.V.
				440	200	—	—	117	2800	—	32	4	AB1	M.O.V.
DA41	Triode	7·5	2·5	1000	280	—	—	0	7000	—	175	5	B2	M.O.V.
DA100	Triode	6·0	2·7	1250	300	—	—	225	4000	—	175	5	AB1	M.O.V.
				1250	365	—	—	225	8000	—	300	6	AB2	M.O.V.
DA250	Triode	10·0	2·0	2500	100	—	—	126	17500	1260	90	—	A	M.O.V.
				2500	360	—	—	160	12000	—	400	5	AB1	M.O.V.
				2500	500	—	—	160	12000	—	800	6	AB2	M.O.V.
DL92	Pentode	2·8	0·05	67·5	11·2	67·5	3·0	12	10000	—	0·34	5·0	AB1	Mullard
		1·4	0·1	76	14	76	5·2	13·6	9000	—	0·49	5·5	AB1	Mullard
				90	16·8	90	5·4	16·5	10000	—	0·78	6·0	AB1	Mullard
DO30	Triode	4·0	2·0	440	—	—	—	117	2800	—	32	3·5	AB1	Mullard
				500	115	—	—	145	3400	—	45	2·5	AB1	Mullard
EBL21	Pentode	6·3	0·8	300	72	300	13	—	9000	120	13·2	1·8	AB1	Mullard
EL6	Pentode	6·3	1·2	250	106	250	17	—	5000	90	14·5	2·2	AB1	Mul.-Tu
EL22	Pentode	6·3	0·7	300	86	300	15·6	—	8000	140	15·4	5	A	Mullard
EL31	Pentode	6·3	1·4	350	166	350	47	—	5000	100	38	4·2	AB1	Mullard
				375	150	375	49	—	6000	122	37·5	5	AB1	Mullard
				400	139	400	48	—	7000	145	37	5	AB1	Mullard
				400	220	400	53·6	23	4000	—	55	3·2	AB2	Mullard
				600	206	400	57	25·2	7500	—	84	5	AB2	Mullard
				800	214	400	57	26	10000	—	120	5	AB1	Mullard
EL32	Pentode	6·3	0·2	200	49	200	12	—	9000	330	5	1·6	A	Mul.-Tu
		6·3	0·2	250	64	250	16	—	8000	310	8	1·5	A	Mul.-Tu
EL33	Pentode	6·3	0·9	250	57	250	9·2	—	10000	140	8·2	3·1	A	Mul.-Tu
EL35	Pentode	6·3	1·35	270	140	270	25	—	5000	135	17	6	AB1	Mullard
				360	106	270	17·5	—	7000	250	21	3	AB1	Mullard
				360	146	270	39	26	6250	—	26	3	AB1	Mullard

*Bias resistance per valve

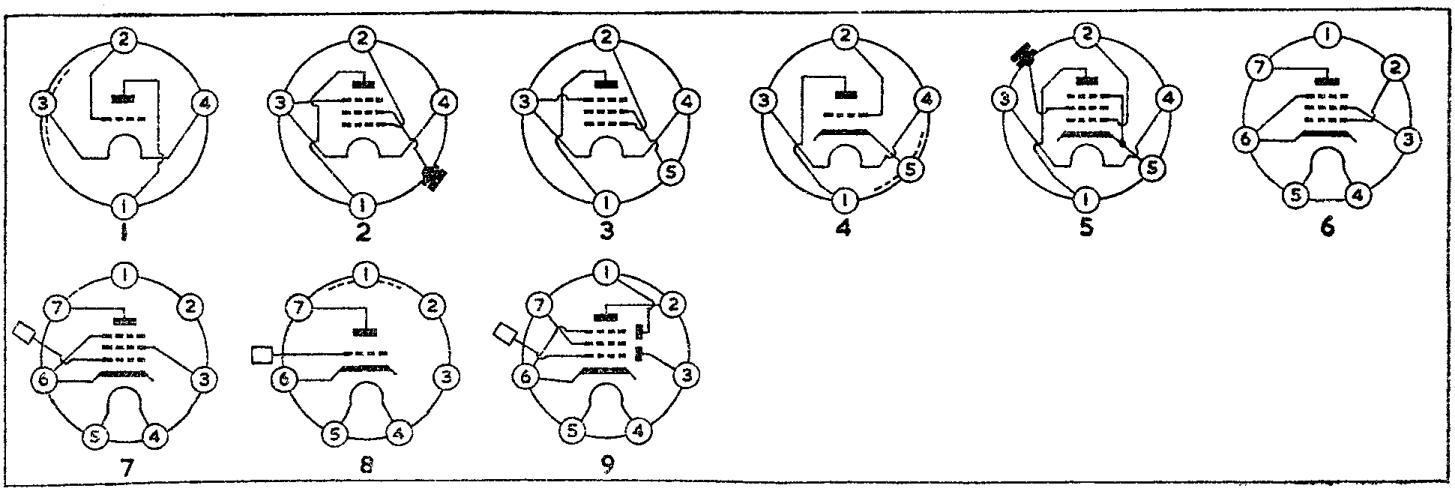
Type	Used as	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	A-A Load Ω	RK Ω	Output W.	Dis. %	Class	Maker
		Volts	Amps	Volts	I/mA	Volts	I/mA							
EL37	Pentode	6·3	1·4	250	136	250	36	—	4000	130	20	2·3	AB1	Mullard
				325	180	325	60	—	4000	130	35	4·4	AB1	Mullard
				350	236	350	58	31	3250	—	46	2·8	AB1	Mullard
				400	276	400	72	36	3250	—	69	2·5	AB1	Mullard
	Triode			320	128	—	—	—	4000	245	12·5	4·1	A	Mullard
				400	160	—	—	—	4000	245	20·6	4·3	A	Mullard
EL41	Pentode	6·3	0·7	250	60	250	16	—	9000	140	9	2·5	AB1	Mullard
				300	72	300	19	—	9000	140	13	2·5	AB1	Mullard
	Triode			250	—	—	—	—	10000	150	2·5	1·0	AB1	Mullard
				300	—	—	—	—	10000	150	4	1·0	AB1	Mullard
EL42	Pentode	6·3	0·2	200	34	200	11·2	—	15000	310	4·1	5·5	AB1	Mullard
				250	43	250	13·4	—	15000	310	7	5·5	AB1	Mullard
				200	32	200	9·2	17	16000	—	4	3·5	B	Mullard
				250	40	250	13	22·5	16000	—	6·5	5	B	Mullard
EL50	Pentode	6·3	1·35	250	130	275	21	—	4500	120	19·5	5·1	AB1	Mullard
				375	124	275	18	—	6500	165	28·5	2·25	AB1	Mullard
EL51	Pentode	6·3	1·9	750	294	750	66	44	6000	—	133	—	AB1	Mullard
EL91	Pentode	6·3	0·2	250	25·6	250	8·2	—	24000	600	4	3·2	A	Mullard
				250	32	250	9	19	20000	—	4·8	3·3	A	Mullard
KT32	Tetrode	26·0	0·3	135	100	135	8·0	10	2500	200	7·5	5	AB1	M.O.V.
	Triode			200	86	—	—	19·5	5000	450	5	2·5	AB1	M.O.V.
				250	80	—	—	26	5000	650	8	4·5	AB1	M.O.V.
KT33c	Tetrode	13	0·6	150	80	150	12	13·2	4000	240	6/7·5	3·5/6	AB1	M.O.V.
		26	0·3	175	105	175	26	15·7	4000	240	8/11	3·5/5·5	AB1	M.O.V.
				200	120	200	39	19·1	4000	240	12/15·5	2·5/7·5	AB1	M.O.V.
				150	120	150	24	10·1	2500	140	7·5	4	AB1	M.O.V.
				175	145	175	30	12·2	2500	140	11·5	4·5	AB1	M.O.V.
KT61	Tetrode	6·3	0·95	250	56	250	12	6	10000	90*	8·6	4	AB1	M.O.V.
				275	72	275	12	6·7	10000	80*	11·5	6·5	AB1	M.O.V.
	Triode			350	63	—	—	—	6000	150	6	2	AB1	M.O.V.
KT66	Tetrode	6·3	1·27	250	165	250	20	17·5	4000	200	17	4	AB1	M.O.V.
				415	125	300	18	27	8000	500	30	6	AB1	M.O.V.
				450	200	450	36	48	5000	—	50	5	AB1	M.O.V.
	Triode			400	125	—	—	38	4000	620	14·5	3·5	AB1	M.O.V.
				250	104	—	—	20	2500	390	4·5	2	AB1	M.O.V.
KT71	Tetrode	48·0	0·16	150	89	150	21	10·6	4000	240	6/7·5	3·5/6	AB1	M.O.V.
				150	120	150	24	8·8	2500	140	7·5	4	AB1	M.O.V.
				175	105	175	26	12·5	4000	240	8/11	3·5/5·5	AB1	M.O.V.
				175	145	175	30	10·2	2500	140	11·5	4·5	AB1	M.O.V.
				200	120	200	39	14·2	4000	240	12/15·5	2·5/7·5	AB1	M.O.V.
KT76	Tetrode	15·0	0·16	150	42	150	12	16	8000	330*	3·4	3	AB1	M.O.V.
				175	50	175	15	18	8000	330*	4·8	3	AB1	M.O.V.
KT81	Tetrode	6·3	0·95	250	62	250	20	7·2	10000	90	8·6	5	AB1	M.O.V.
				275	76	275	20	8	10000	80	11·5	6·5	AB1	M.O.V.
	Triode			350	73	—	—	11	6000	150	6	2	AB1	M.O.V.
KT101	Tetrode	80·0	0·1	150	122	150	24	9	2500	140	7·5	4	AB1	M.O.V.
				175	132	175	30	10·5	2500	140	11·5	4·5	AB1	M.O.V.
LP4	Triode	=PX4												Ferranti
N77	Pentode	6·3	0·2	250	25·6	250	8·2	20	24000	600	4·0	3·2	AB1	M.O.V.
				250	32	250	9	19	20000	—	4·8	3·3	AB1	M.O.V.
PA20	Triode	2·0	2·0	250	96	—	—	29	4600	690*	5·6	5	AB1	Mazda
				300	112	—	—	37·2	5300	880*	9	5	AB1	Mazda
PA40	Triode	4·0	2·0	400	210	—	—	85	3700	—	32	5	AB1	Mazda
				450	230	—	—	96·5	4000	—	40	5	AB1	Mazda
PL82	Pentode	16·5	0·3	170	98	170	33	—	4000	100	9·0	4·0	AB1	Mullard
PP3/250	Triode	4·0	1·0	250	96	—	—	30	4600	715*	5·6	5	A	Mazda
				300	112	—	—	38·2	5300	910*	9	5	AB1	Mazda
PP5/400	Triode	=PX25												Mazda
PP60	=KT66													Tungsram
PP3521	Triode	35·0	0·2	200	140	—	—	—	2500	360*	6	5	A	Mazda
PEN44	Tetrode	4·0	2·1	300	155	275	50	12·2	5000	—	24	5	AB1	Mazda
PEN45	Tetrode	4·0	1·75	250	83	250	25	—	7500	180*	11·5	5	AB1	Mazda
PL33	Pentode	19·0	0·3	250	60	250	10	—	10000	140	8	3	A	Mullard
PX4	Triode	4·0	1·0	300	100	—	—	50	4000	1000	13·5	2·5	A	M.O.V.
				250	116	—	—	38	3000	650	9	2	A	M.O.V.
PX25	Triode	4·0	2·0	400	125	—	—	37	5000	600	15·5	2·5	A	M.O.V.
				500	100	—	—	50	10000	1000	20	2	A	M.O.V.
				525	165	—	—	54	3400	—	26	4	AB1	M.O.V.
UL41/46	Pentode	45·0	0·1	100	54	100	13·6	—	4000	100	2·2	3·5	AB1	Mullard
				170	98	170	33	—	4000	100	9·0	4·0	AB1	Mullard
				200	106	200	38	—	4000	130	12·5	4·0	AB1	Mullard
V503	Triode	4·0	2·0	400	210	—	—	85	3700	—	32	5	AB1	Mazda
				450	230	—	—	96·5	4000	—	40	5	AB1	Mazda

*Bias resistance per valve.

OUTPUT VALVES

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
2P	2·0	2·0	250	40·0	—	—	22·0	1·15	7·0	3000	2·0	5	B4	1	Cossor
2XP	2·0	2·0	300	50·0	—	—	36·0	0·9	7·0	4000	4·0	4		1	Cossor
4XP	4·0	1·0	300	50·0	—	—	36·0	0·9	7·0	4000	4·0	4		1	Cossor
220P	2·0	0·2	150	11·0	—	—	7·5	4·0	2·25	9000	0·19	5		1	Cossor
220PA	2·0	0·2	150	11·0	—	—	4·5	4·0	4·0	9000	0·19	5		1	Cossor
230XP	2·0	0·3	150	22·0	—	—	18·0	1·5	3·0	3500	0·45	5		1	Cossor
ACO42	2·0	2·0	300	50·0	—	—	38·0	1·2	5·0	2300	3·5	5		1	Mullard
ACO44	4·0	1·0	300	50·0	—	—	38·0	1·2	5·0	2300	3·5	5		1	Mullard
DA30	4·0	2·0	500	60·0	—	—	134·0	0·76	3·7	6000	11·0	—		1	M.O.V.
DO24	4·0	1·85	400	63·0	—	—	40·0	1·07	7·5	3200	7·1	4		1	Mullard
DO26	4·0	2·0	400	63·0	—	—	92·0	0·95	3·8	3000	7·5	10		1	Mullard
DO30	4·0	2·0	500	60·0	—	—	134·0	0·5	6·9	6000	11·0	—		1	Mullard
K30G	2·0	0·2	135	5·0	—	—	6·0	6·0	2·0	7000	0·15	—		1	Ever Read
LP2	2·0	0·3	150	22·0	—	—	18·0	1·5	3·0	3500	—	—		1	Ferranti
LP4	4·0	1·0	250	48·0	—	—	35·0	0·86	5·4	2500	3·5	4		1	Ferranti
P4	4·0	0·5	250	30·0	—	—	21·0	—	2·8	—	1·0	—		1	Ferranti
P12/250	4·0	1·0	300	50·0	—	—	42·0	0·85	6·0	4000	3·7	—		1	Tungsran
P15/250	4·0	1·0	350	60·0	—	—	45·0	—	6·0	2300	4·2	—		1	Tungsram
P24/450	7·5	1·25	600	55·0	—	—	84·0	1·9	2·1	4250	4·5	—		1	Tungsram
P25/400	6·0	1·1	400	70·0	—	—	112·0	0·8	3·7	4000	7·0	—		1	Tungsram
P25/450	7·5	1·25	600	55·0	—	—	84·0	1·9	2·1	4250	4·5	—		1	Tungsram
P25/500	6·0	1·1	400	65·0	—	—	104·0	1·0	3·0	4000	7·0	—		1	Tungsram
P26/500	4·0	2·0	400	62·5	—	—	102·0	0·76	4·2	4500	8·0	—		1	Tungsram
P27/500	4·0	2·0	400	62·5	—	—	31·0	1·2	7·5	3200	6·5	—		1	Tungsram
P30/500	4·0	2·0	500	60·0	—	—	150·0	0·75	4·0	2500	6·0	—		1	Tungsram
P40/800	7·2	0·8	800	50·0	—	—	184·0	1·45	2·2	10000	9·0	—		1	Tungsram
P41/800	7·2	0·8	800	50·0	—	—	90·0	3·0	2·2	10000	9·0	—		1	Tungsram
P215	2·0	0·15	150	5·8	—	—	13·5	6·5	1·1	11000	0·15	5		1	Mazda
P215	2·0	0·15	150	8·0	—	—	9·0	—	1·5	7000	0·26	—		1	Tungsram
P220	2·0	0·2	150	5·5	—	—	7·0	5·6	2·2	10000	0·15	5		1	Mazda
P220A	2·0	0·2	150	15·0	—	—	14·0	2·4	2·7	4100	0·35	5		1	Mazda
P4100	4·0	1·0	400	30·0	—	—	40·0	—	—	6000	7·0	—		1	Tungsram
PA20	2·0	2·0	300	48·0	—	—	36·0	1·1	5·2	3000	4·2	5		1	Mazda
PA40	4·0	2·0	450	(For Class AB	Push-Pull)			0·42	10·0	—	—	—		1	Mazda
PM2	2·0	0·2	120	4·0	—	—	7·5	—	0·9	9000	—	—		1	Mullard
PM2A	2·0	0·2	135	5·0	—	—	6·0	6·0	2·0	7000	0·15	5		1	Mullard
PM22	2·0	0·2	150	15·0	150	4·0	10·0	—	1·2	8000	—	—		2	Mullard
PM22A	2·0	0·15	135	5·6	135	4·5	—	150·0	2·2	19000	0·34	10		2	Mullard
PM202	2·0	0·2	150	14·0	—	—	12·0	2·0	3·5	3700	—	—		1	Mullard
PM252	2·0	0·3	125	10·0	—	—	15·0	—	—	6000	—	—		1	Mullard
PP2	2·0	0·14	135	7·0	135	1·0	5·0	150·0	2·1	19000	0·44	—		2	Tungsran
PP3/250	4·0	1·0	300	48·0	—	—	37·0	1·1	5·2	3000	4·2	5		1	Mazda
PP5/400	4·0	2·0	400	62·5	—	—	32·0	1·1	8·0	2700	5·9	5		1	Mazda
PX4	4·0	1·0	300	50·0	—	—	42·0	0·83	6·0	4000	3·5	5		1	M.O.V
PX25	4·0	2·0	500	50·0	—	—	50·0	1·26	7·5	5500	8·5	7		1	M.O.V.
PX25A	4·0	2·0	400	62·5	—	—	102·0	0·58	6·9	4500	8·0	—		1	M.O.V.
S30C	4·0	1·0	300	50·0	—	—	38·0	1·2	5·0	2300	3·5	5		1	Ever Read
SP220	2·0	0·2	150	14·0	—	—	18·0	2·2	3·0	6700	0·36	—		1	Tungsram
V503	4·0	2·0	450	(For Class AB	Push-Pull)			0·42	10·0	—	—	—		1	Mazda
7A2	4·0	1·2	250	34·0	250	6·5	16·5	—	2·3	7000	3·5	—	B5	5	Brimar
41MP	4·0	1·0	200	24·0	—	—	7·5	2·5	7·5	3000	1·0	5		4	Cossor
41MXP	4·0	1·0	200	40·0	—	—	12·5	1·5	7·5	2000	1·6	5		4	Cosso
220HPT	2·0	0·2	150	8·0	150	1·5	4·5	—	2·5	10000	0·5	10		3	Cosso
220OT	2·0	0·2	150	9·5	150	2·0	4·5	—	2·5	20000	0·5	8		3	Cosso
220PT	2·0	0·2	150	19·0	150	4·0	8·5	—	2·5	7500	1·0	8		3	Cossor
230PT	2·0	0·3	150	14·0	150	3·0	15·0	—	2·0	10000	1·0	8		3	Cossor
415PT	4·0	0·25	300	20·0	200	4·5	25·0	35·0	1·7	—	3·0	—		3	Cossor
415QT	4·0	0·25	300	20·0	200	4·5	25·0	34·0	1·8	—	3·0	—		3	Cossor
A70B	4·0	1·35	250	36·0	250	—	22·0	40·0	2·8	6000	3·8	—		3	Ever Read
A70D	4·0	1·95	250	36·0	250	—	5·8	50·0	9·5	8000	3·8	—		3	Ever Read
AC/P	4·0	1·0	200	17·0	—	—	13·5	3·65	2·75	5000	0·65	7		4	Mazda
AC/P1	4·0	1·0	200	24·0	—	—	28·0	2·2	2·3	5000	1·0	5		4	Mazda
AC/Pen	4·0	1·0	250	32·0	250	6·0	15·5	75·0	2·7	7500	3·3	7		5	Mazda
APP4A	4·0	1·2	250	35·0	250	6·0	16·5	—	3·5	7000	3·0	—		5	Tungsram
APP4100	4·0	1·1	250	24·0	250	7·0	15·0	70·0	2·5	15000	2·8	—		5	Tungsram
APP4120	4·0	1·2	350	22·0	200	3·0	15·0	60·0	3·5	—	—	—		5	Tungsram
K70B	2·0	0·1	135	5·6	135	—	4·5	150·0	2·2	19000	0·34	—		3	Ever Read
K70D	2·0	0·1	135	5·0	135	—	2·5	—	3·0	24000	0·3	—		3	Ever Read
KT2	2·0	0·2	150	7·5	150	1·7	4·5	—	2·5	17000	0·5	—		3	M.O.V.
KT21	2·0	0·3	150	5·2	150	1·0	2·5	—	5·3	19000	0·4	—		3	M.O.V.
KT24	2·0	0·2	150	10·0	150	2·0	2·7	—	3·2	10000	0·64	10		3	M.O.V.
L4	4·0	1·0	250	20·0	—	—	16·0	3·3	3·2	10000	0·5	—		4	Ferranti

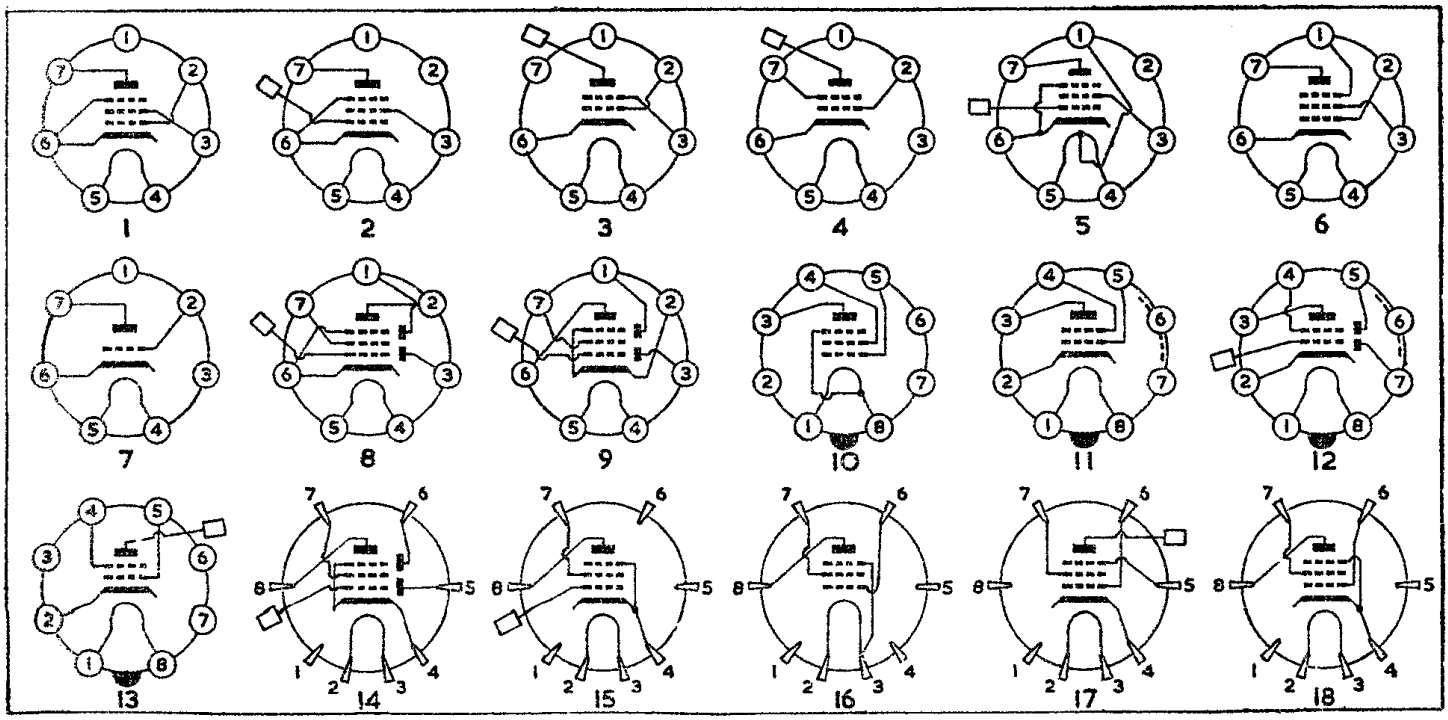
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	g_m mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
MKT4	4·0	1·0	250	32·0	200	4·0	10·5	—	3·0	8000	2·5	—	B5	5	M.O.V.
ML4	4·0	1·0	250	14·0	—	—	16·0	2·8	4·2	7000	—	—		4	M.O.V.
MP/Pen	4·0	1·0	250	30·0	250	3·5	16·0	—	3·5	10000	3·0	—		5	Cossor
MPT4	4·0	1·0	250	32·0	200	5·0	11·0	—	2·5	8000	2·2	—		5	M.O.V.
P2018	20·0	0·18	200	20·0	—	—	18·0	4·0	2·7	—	—	—		4	Tungsram
PA1	4·0	1·1	200	40·0	—	—	9·0	1·05	12·0	4000	1·8	—		4	Brimar
Pen4VX	4·0	1·2	350	22·0	200	3·0	15·0	60·0	3·5	—	—	—		5	Mullard
Pen20	20·0	0·18	200	20·0	200	8·0	18·0	40·0	1·7	10000	1·7	—		5	Mullard
Pen220	2·0	0·2	150	9·0	150	1·6	4·9	—	2·2	14000	0·6	7		3	Mazda
Pen220A	2·0	0·2	150	18·0	150	3·6	9·0	270·0	2·2	6000	1·1	7		3	Mazda
Pen231	2·0	0·3	120	5·0	120	1·0	2·5	500·0	3·6	19000	0·37	14		3	Mazda
Pen425	4·0	0·25	150	18·0	150	4·0	12·0	—	2·0	7000	0·8	—		3	Mazda
PenA1	4·0	1·0	250	32·0	250	6·5	16·5	60·0	3·0	8000	0·7	5		3	Brimar
PenB1	2·0	0·2	150	8·0	150	2·0	4·5	—	—	18000	0·5	—		3	Brimar
PM22	2·0	0·3	135	13·0	135	3·5	9·0	—	—	8000	0·5	—		3	Mullard
PM22A	2·0	0·15	135	5·6	135	—	4·5	150·0	2·2	19000	0·34	10		3	Mullard
PM22C	2·0	0·3	135	24·0	135	—	16·0	—	—	5200	1·5	—		3	Mullard
PM22D	2·0	0·3	135	5·0	135	0·8	2·4	—	3·0	24000	0·3	10		3	Mullard
PM24A	4·0	0·275	300	20·0	200	—	22·5	—	—	10000	1·5	—		3	Mullard
PM24B	4·0	1·0	400	30·0	300	—	40·0	—	—	8000	—	—		3	Mullard
PM24C	4·0	1·0	400	30·0	200	—	28·0	—	—	12000	—	—		3	Mullard
PM24D	4·0	2·0	300	83·0	300	4·6	40·0	20·0	3·9	3600	10·3	—		3	Mullard
PM24DC	4·0	0·25	300	20·0	200	0·4	42·0	25·0	1·5	15000	3·0	—		3	Mullard
PM24E	4·0	2·0	300	83·0	300	4·6	40·0	20·0	3·9	3600	10·3	—		3	Mullard
PM24M	4·0	1·1	250	30·0	250	5·6	17·0	43·0	3·0	7000	2·8	—		3	Mullard
PP2	2·0	0·14	135	7·0	135	1·0	5·0	150·0	2·1	19000	0·44	—		3	Tungsram
PP4	4·0	1·1	250	36·0	250	4·0	15·0	42·0	3·5	7500	2·8	—		3	Tungsram
PP215	2·0	0·15	90	8·0	90	1·2	4·5	—	1·7	14000	0·25	—		3	Tungsram
PP225	2·0	0·26	135	18·0	135	3·6	12·0	30·0	2·0	6000	0·8	—		3	Tungsram
PP2018–D	20·0	0·18	200	20·0	200	5·0	18·0	—	2·8	8000	1·4	—		4	Tungsram
PT2	2·0	0·2	120	5·3	120	1·1	4·5	—	2·6	20000	0·35	—		3	Ferranti
PT2–/K	2·0	0·2	150	9·5	150	1·9	4·5	—	2·5	16700	0·5	—		3	M.O.V.
PT4	4·0	1·0	250	32·0	250	8·0	16·0	42·0	2·8	7500	—	—		3	M.O.V.
PT16	4·0	1·0	300	55·0	300	8·0	15·0	—	4·8	5000	—	—		3	M.O.V.
PT25	4·0	2·0	400	62·5	200	10·0	22·0	25·0	4·0	6000	10·0	—		3	M.O.V.
PT25H	4·0	2·0	400	62·5	400	12·5	16·0	28·0	6·5	4000	10·0	—		3	M.O.V.
PT41	4·0	1·0	250	30·0	200	—	12·5	—	3·0	8000	2·5	—		3	Cossor
PT41B	4·0	1·0	400	26·0	250	—	33·0	—	2·2	8000	—	—		3	Cossor
7A2	4·0	1·2	250	34·0	250	6·5	16·5	—	2·3	7000	3·5	—	B7	6	Brimar
7A3	4·0	2·0	250	32·0	250	6·0	6·0	60·0	10·0	8500	3·75	—		6	Brimar
7D3	40·0	0·2	160	33·0	120	6·5	18·0	40·0	2·4	5000	2·2	—		6	Brimar
7D5	13·0	0·315	250	34·0	250	6·5	16·5	80·0	2·35	7000	3·5	—		6	Brimar
7D6	40·0	0·2	250	32·0	250	6·0	6·0	60·0	10·0	8500	3·75	—		6	Brimar
7D8	13·0	0·65	250	32·0	250	6·0	6·0	60·0	10·0	8500	3·75	—		6	Brimar
40PPA	40·0	0·2	150	36·0	150	—	25·0	—	4·0	4000	2·0	—		6	Cossor
42MP/Pen	4·0	2·0	250	32·0	250	—	5·5	—	7·0	8000	3·0	—		6	Cossor
42OT	4·0	2·0	250	34·0	250	—	5·5	—	7·0	6500	3·0	10		7	Cossor
42OT/DD	4·0	2·0	250	34·0	250	—	5·5	—	7·0	6500	3·0	10		9	Cossor
402OT	40·0	0·2	250	40·0	250	—	6·6	—	7·0	5500	3·0	10		7	Cossor
402P	40·0	0·2	200	30·0	—	—	9·5	1·3	7·5	2500	1·5	8		8	Cossor



OUTPUT VALVES—*Contd.*

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
402Pen	40·0	0·2	250	40·0	250	—	6·7	—	7·0	5500	3·0	10	B7	2	Cossor
402PenA	40·0	0·2	150	56·0	150	—	9·0	—	8·0	2500	3·0	10		2	Cossor
A70B	4·0	1·35	250	36·0	250	3·0	20·0	40·0	2·8	6000	3·8	10		1	Ever Ready
A70C	4·0	2·0	250	40·0	250	8·0	4·4	50·0	10·5	6000	4·2	10		1	Ever Ready
A70D	4·0	1·95	250	36·0	250	5·0	5·8	50·0	9·5	8000	3·8	10		1	Ever Ready
A70E	4·0	2·1	250	72·0	275	—	14·0	22·0	8·5	3500	8·8	—		1	Ever Ready
A70P	4·0	2·0	250	70·0	250	7·0	14·5	—	—	3450	9·0	—		1	Ever Ready
AC2/Pen	4·0	1·75	250	32·0	250	6·0	5·3	110	8·5	6700	3·5	7		1	Mazda
AC2/PenDD	4·0	2·0	250	32·0	250	6·0	5·3	110	8·5	6700	3·5	7		8	Mazda
AC4/Pen	4·0	1·75	250	64·0	250	13·0	8·75	20	12·0	3300	6·9	7		1	Mazda
AC5/Pen	4·0	1·75	250	40·0	250	7·5	8·5	—	9·4	5200	4·8	7		1	Mazda
AC5/PenDD	4·0	2·0	250	40·0	250	7·5	8·5	—	9·4	5200	4·8	7		8	Mazda
AC6/Pen	4·0	1·75	310	63·0	210	14·0	6·9	(Line Time Base Amplifier)				—		3	Mazda
AC/Pen	4·0	1·0	250	32·0	250	6·0	15·5	75	2·7	7500	3·3	7		1	Mazda
APP4A	4·0	1·2	250	35·0	250	6·0	16·5	—	3·5	7000	3·0	—		1	Tungsram
APP4B	4·0	1·95	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		1	Tungsram
APP4C	4·0	1·95	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		6	Tungsram
APP4D	4·0	2·0	250	70·0	250	6·5	16·0	—	—	3500	7·5	—		6	Tungsram
APP4E	4·0	2·0	375	70·0	275	8·0	13·5	—	—	3500	8·5	—		1	Tungsram
APP4G	4·0	2·0	250	36·0	250	4·0	6·0	50·0	10·0	7000	3·6	—		2	Tungsram
C70D	35·0	0·2	200	40·0	200	—	9·0	—	8·0	4000	4·0	—		1	Ever Ready
DDPP4B	4·0	2·0	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		8	Tungsram
DDPP4M	4·0	2·0	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		9	Tungsram
DDPP6B	6·3	1·4	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		8	Tungsram
DDPP39	39·0	0·2	200	45·0	200	5·0	—	—	8·5	4400	3·2	—		8	Tungsram
DDPP39M	39·0	0·2	200	45·0	200	5·0	—	—	8·5	4400	3·2	—		9	Tungsram
DN41	4·0	2·3	250	32·0	200	8·0	3·5	21·0	10·0	7800	4·5			8	M.O.V.
DP/Pen	16·0	0·25	200	31·0	200	—	10·0	—	3·5	10000	2·0	—		1	Cossor
KT30	13·0	0·3	250	40·0	250	7·0	12·0	—	3·9	7500	2·7	—		1	M.O.V.
KT31	26·0	0·3	200	40·0	180	10·6	4·0	—	10·0	5500	2·5	—		5	M.O.V.
KT41	4·0	2·0	250	40·0	250	8·5	4·5	—	10·5	6000	4·25	—		1	M.O.V.
KT42	4·0	1·0	250	35·0	250	5·0	16·0	—	2·5	7000	3·25	—		1	M.O.V.
KT44	4·0	2·0	—	—	300	—	—	} (Line Time Base Amplifiers)						4	M.O.V.
KT45	4·0	2·0	—	—	300	—	—							4	M.O.V.
MKT4	4·0	1·0	250	32·0	200	4·0	11·0	—	3·0	8000	2·5	—		1	M.O.V.
MP/Pen	4·0	1·0	250	30·0	250	3·5	16·0	—	3·5	10000	3·0	—		1	Cossor
N30–G	13·0	0·3	250	32·0	250	8·0	15·0	—	—	7500	3·0	—		1	M.O.V.
N31	26·0	0·3	200	40·0	180	10·0	4·4	—	10·0	5600	2·5	—		5	M.O.V.
N40	4·0	1·0	250	32·0	250	7·5	3·5	—	2·9	7900	3·5	—		1	M.O.V.
N43	4·0	2·0	250	40·0	250	10·0	4·4	—	10·0	5400	4·5	—		2	M.O.V.
Pen4DD	4·0	2·25	250	36·0	250	5·0	6·0	50·0	9·5	7000	4·3	10		9	Mullard
Pen4VA	4·0	1·35	250	36·0	250	3·0	—	40·0	2·8	6000	3·8	10		1	Mullard
Pen4VB	4·0	1·95	250	36·0	250	5·0	5·8	50·0	9·5	8000	3·8	10		1	Mullard
Pen13C	13·0	0·2	250	32·0	250	—	12·0	—	6·5	6500	—	—		1	Mullard
Pen36A	35·0	0·2	250	45·0	250	—	—	35·0	—	7000	—	—		6	Mullard
Pen36C	33·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		1	Mullard
Pen40DD	44·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		9	Mullard
Pen428	4·0	2·1	250	72·0	250	—	—	—	—	3200	8·0	10		1	Mullard
Pen1340	13·0	0·4	240	41·0	240	8·0	8·5	80·0	6·4	5500	3·5	10		1	Mazda
Pen3520	35·0	0·2	200	40·0	200	8·0	8·0	67·0	7·3	4400	3·0	7		1	Mazda
Pen3820	38·0	0·2	160	64·0	175	13·0	10·0	—	10·5	2600	3·75	7		1	Mazda
PenA4	4·0	1·95	250	36·0	250	5·0	5·8	50·0	9·5	8000	3·8	10		1	Mullard
PenB4	4·0	2·1	250	72·0	275	7·0	—	22·0	8·5	3500	8·8	10		1	Mullard
PenDD1360	13·0	0·6	250	32·0	250	6·0	5·3	100·0	8·2	6700	3·5	10		8	Mazda
PenDD2530	25·0	0·3	240	43·0	250	8·5	7·75	—	7·8	4800	3·9	7		8	Mazda
PenDD4020	40·0	0·2	240	43·0	250	8·5	7·75	—	7·8	4800	3·9	7		8	Mazda
PenDD4021	45·0	0·2	160	64·0	175	13·0	10·0	—	10·5	2600	3·75	7		8	Mazda
PP13A	13·0	0·3	250	34·0	250	6·5	16·5	—	2·6	7000	3·0	—		1	Tungsram
PP24	24·0	0·2	200	40·0	100	8·0	11·0	—	8·0	5000	3·0	—		2	Tungsram
PP34	35·0	0·2	200	45·0	200	5·0	—	—	8·5	4400	3·2	—		2	Tungsram
PP35	35·0	0·2	200	45·0	200	5·0	—	—	8·5	4400	3·2	—		1	Tungsram
PP36	35·0	0·2	200	45·0	200	5·0	—	—	8·5	4400	3·2	—		6	Tungsram
PP37	35·0	0·2	200	45·0	100	5·5	9·5	19·0	8·0	4500	4·0	10		2	Tungsram
PP2018–D	20·0	0·18	200	20·0	200	5·0	18·0	—	2·8	8000	1·4	—		1	Tungsram
PP3521	35·0	0·2	200	70·0	—	—	25·0	0·95	6·3	2000	2·3	5		7	Mazda
PT4	4·0	2·0	250	32·5	250	7·0	6·0	—	7·5	6500	3·5	10		1	Ferranti
PT4D	4·0	2·0	250	32·5	250	7·0	6·0	—	7·5	6500	3·5	10		8	Ferranti
PT10	4·0	2·0	250	40·0	250	—	7·5	—	9·0	5000	4·25	10		1	Cossor
PTA	13·0	0·3	250	32·0	250	5·0	10·0	—	4·0	6500	3·2	—		1	Ferranti
PTAD	13·0	0·6	250	32·0	250	5·0	6·0	—	7·0	6500	3·2	—		8	Ferranti
PTS	40·0	0·3	250	40·0	200	7·0	5·5	—	6·0	6000	3·5	—		2	Ferranti
PTSD	26·0	0·3	250	40·0	200	7·0	5·0	—	6·0	6000	3·5	—		8	Ferranti

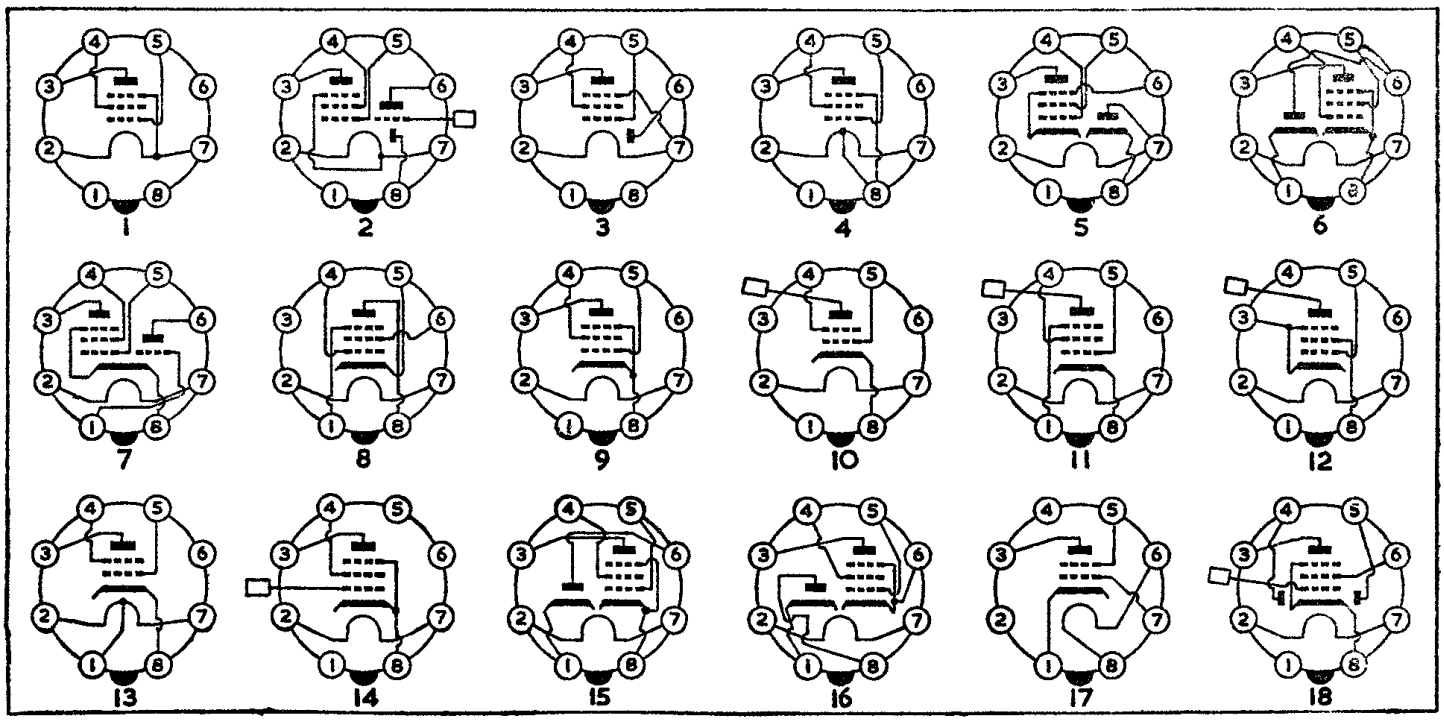
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
PTZ	40·0	0·2	250	40·0	200	7·0	5·5	—	7·5	6000	3·5	—	B7	2	Ferranti
Pen24	2·0	0·3	120	5·0	120	1·0	3·3	—	4·0	15000	0·37	16	M.O.	10	Mazda
Pen25	2·0	0·15	120	5·0	120	1·0	3·6	35·0	3·0	14000	0·4	16		10	Mazda
Pen44	4·0	2·1	260	70·0	270	12·0	11·1	—	10·6	3000	8·0	7		11	Mazda
Pen45	4·0	1·75	250	40·0	250	8·0	8·5	40	8·8	5000	4·5	7		11	Mazda
Pen45DD	4·0	2·0	250	40·0	250	8·0	8·5	40	8·8	5000	4·5	7		12	Mazda
Pen46	4·0	1·75	315	63·0	230	14·0	7·8	(Line Time Base Amplifier)				—		13	Mazda
Pen141	1·4	0·1	90	5·5	90	1·1	9·0	—	1·4	10000	0·24	12		10	Mazda
Pen383	38·0	0·2	160	64·0	175	13·0	10·0	—	10·5	2600	3·75	7		11	Mazda
Pen384	38·0	0·2	110	40·0	110	2·9	7·0	—	12·5	2200	1·9	7		11	Mazda
Pen453DD	45·0	0 2	160	64·0	175	13·0	10·0	—	10·5	2600	3·75	7		12	Mazda
APP4As	4·0	1·2	250	35·0	250	6·0	16·5	—	3·5	7000	3·0	—	P	15	Tungsram
APP4Bs	4·0	1·95	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		18	Tungsram
CBL1	44·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		14	Mul.-Tung.
CBL6	44·0	0·2	200	40·0	100	9·0	9·2	37·0	6·2	5000	3·8	10		14	Mul.-Tung.
CL4	33·0	0·2	200	45·0	200	6 0	8·5	35·0	8·0	4500	4·0	10		15	Mul.-Tung.
CL6	35·0	0·2	200	45·0	100	5·5	9·5	19·0	8·0	4500	4·0	10		15	Mul.-Tung.
DDPP4Bs	4·0	2·0	250	36·0	250	4·0	6·0	—	10·0	7000	3·6	—		14	Tungsram
DDPP39s	35·0	0·2	200	45·0	200	6·0	8·0	—	8·5	4400	3·2	—		14	Tungsram
DL1	1·4	0·05	90	4·0	90	—	3·0	300·0	1·25	22000	—	—		16	Mullard
DL2	1·4	0·1	90	7·5	90	1 6	7·5	115·0	1·55	8000	0·24	10		16	Mullard
EBL1	6·3	1·5	250	36·0	250	5·0	6·0	50·0	9·5	7000	4·3	10		14	Mul.-Tung.
EL2	6·3	0·2	250	32·0	250	5·0	18·0	70·0	2·8	8000	3·6	10		15	Mul.-Tung.
EL3	6·3	0·9	250	36·0	250	4·0	6·0	50·0	9·0	7000	4·5	10		18	Mul.-Tung.
EL5	6·3	1·3	250	72·0	250	7·5	16·0	22·0	8·5	3500	8·8	—		18	Tungsram
EL6	6·3	1·2	250	72·0	250	8·0	7·0	20·0	14·5	3500	8·0	10		18	Mul.-Tung.
EL50	6·3	1·35	250	72·0	275	8·0	14·0	22·0	8·5	3500	8·8	10		17	Mullard
EL51	6·3	1·9	750	40·0	750	—	44·0	55·0	7·0	—	—	—		18	Mullard
Pen13	13·0	0·2	200	—	200	—	—	—	3·5	8000	—	—		15	Mullard
Pen13A	33·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		15	Mullard
Pen26	24·0	0·2	200	40·0	100	5·0	19·0	—	3·1	5000	3·0	10		15	Mullard
Pen650	6·3	1·35	600	30·0	300	3·0	24·0	30·0	5·0	—	—	—		17	Mullard
Pen2020	20·0	0·2	200	40·0	100	5·0	19·0	23·0	3·1	5000	3·0	—		15	Mullard
PP2s	2·0	0·14	135	7·0	135	1·0	5·0	150·0	2·1	19000	0·44	—		16	Tungsram
PP4s	4·0	1·1	250	36·0	250	4·0	15·0	42·0	3·5	7500	2·8	—		16	Tungsram
PP6As	6·3	0·2	250	32·0	250	5·0	18·0	—	2·8	8000	2·3	—		15	Tungsram
PP13s	13·0	0·2	200	25·0	200	2·5	14·0	—	3·5	8000	1·8	—		15	Tungsram
PP24s	24·0	0·2	200	40·0	100	8·0	11·0	—	8·0	5000	3·0	—		15	Tungsram
PP34s	35·0	0·2	200	45·0	200	5·0	—	—	8·5	4400	3·2	—		15	Tungsram
PP215s	2·0	0·15	90	8·0	90	1·2	4·5	—	1·7	14000	0·25	—		16	Tungsram
PP225s	2·0	0·26	135	18·0	135	3·6	12·0	30·0	2·0	6000	0·8	—		16	Tungsram



OUTPUT VALVES—*Contd.*

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	g_m mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
1A5GT	1·4	0·05	90	4·0	90	0·8	4·5	300·0	0·85	25000	0·11	7	I.O.	1	Am.-Brit.
1B8GT	1·4	0·1	90	6·3	90	1·4	6·0	—	1·15	14000	0·21	—		2	U.S.A.
1C5GT/G	1·4	0·1	90	7·5	90	1·6	7·5	115·0	0·15	8000	0·24	10		1	Am.-Brit.
1D8GT	1·4	0·1	90	5·0	90	1·0	9·0	200·0	0·92	12000	0·2	10		2	U.S.A.
1F5G	2·0	0·12	135	8·0	135	2·4	4·5	200·0	1·7	16000	0·31	5		1	U.S.A.
1J5G	2·0	0·12	135	7·0	135	2·0	16·5	105·0	0·9	13500	0·45	—		1	U.S.A.
1N6G	1·4	0·05	90	3·4	90	1·2	4·5	300·0	0·8	25000	0·1	7		3	U.S.A.
1Q5GT/G	1·4	0·1	90	9·5	90	1·3	4·5	75·0	2·2	8000	0·27	6		1	Am.-Brit.
1T5GT	1·4	0·05	90	6·5	90	1·5	6·0	250·0	1·15	14000	0·17	7		1	U.S.A.
3B5GT	2·8	0·05	67·5	6·7	67·5	0·5	7·0	100·0	1·5	5000	0·18	—		4	U.S.A.
	1·4	0·1	67·5	8·0	67·5	0·6	7·0	100·0	1·6	5000	0·2	—		4	U.S.A.
3C5GT	2·8	0·05	90	6·0	90	1·4	9·0	—	1·4	10000	0·26	—		4	U.S.A.
	1·4	0·1	90	6·0	90	1·4	9·0	—	1·5	8000	0·24	—		4	U.S.A.
3Q5GT	2·8	0·05	90	7·5	90	1·0	4·5	—	1·8	8000	0·25	—		4	Am.-Brit.
	1·4	0·1	90	9·5	90	1·3	4·5	—	2·1	8000	0·27	—		4	Am.-Brit.
6AD7G	6·3	0·85	250	36·0	250	10·5	16·5	80·0	2·5	7000	3·2	8		7	U.S.A.
6AG6G	6·3	1·25	250	32·0	250	6·0	6·0	—	10·0	8500	3·75	—		9	Am.-Brit.
6AG7	6·3	0·65	300	30·5	150	9·0	3·0	130·0	11·0	10000	3·0	7		8	Am.-Brit.
6AK7	6·3	0·65	300	30·0	150	7·0	3·0	130·0	11·0	10000	3·0	—		8	U.S.A.
6AL6G	6·3	0·9	250	72·0	250	5·0	14·0	22·5	6·0	2500	6·5	—		10	U.S.A.
6AR6	6·3	1·2	250	77·0	250	5·0	22·5	21·0	5·4	—	—	—		17	U.S.A.
6BG6G	6·3	0·9	300	60·0	250	4·0	18·0	30·0	6·0	(Line Time Base Amplifier)				12	Am.-Brit.
6CD6G	6·3	2·5	—	—	—	—	—	—	—	(Line Time Base Amplifier)				12	Am.-Brit.
6F6–GT/G	6·3	0·7	285	38·0	285	12·0	20·0	78·0	2·5	7000	4·8	9		9	Am.-Brit.
6F6 as Triode	6·3	0·7	250	34·0	—	—	20·0	2·6	2·6	4000	0·85	6·5		9	Am.-Brit.
6G6G	6·3	0·15	180	15·0	180	2·5	9·0	175·0	2·3	10000	1·1	10		9	Am.-Brit.
6G6G as Triode	6·3	0·15	180	11·0	—	—	12·0	4·7	2·0	12000	0·25	5		9	Am.-Brit.
6K6-GT/G	6·3	0·4	315	28·0	250	9·0	21·0	75·0	2·1	9000	4·5	15		9	Am.-Brit.
	6·3	0·4	100	9·0	100	3·0	7·0	104·0	1·5	12000	0·35	11		9	Am.-Brit.
6L6-G	6·3	0·9	350	66·0	250	7·0	18·0	33·0	5·2	4200	10·8	15		9	Am.-Brit.
6L6-G as Triode	6·3	0·9	250	42·0	—	—	20·0	1·7	4·7	6000	1·3	5		9	Am.-Brit.
6M6G	6·3	1·2	250	36·0	250	4·0	6·0	—	9·5	7000	4·4	—		9	Am.-Brit.
6P25	6·3	1·1	250	40·0	250	8·0	8·5	40	8·8	5000	4·5	7		9	Mazda
6P28	6·3	1·1	350	72·0	250	16·0	8·8	(Line Time Base Amplifier)				—		10	Mazda
6U6GT	6·3	0·75	200	56·0	135	3·0	14·0	20·0	6·2	3000	5·5	—		9	U.S.A.
6V6–GT/G	6·3	0·45	315	35·0	225	6·0	13·0	77·0	3·7	8500	5·5	12		9	Am.-Brit.
	6·3	0·45	250	47·0	250	7·0	12·5	52·0	4·1	5000	4·5	8		9	Am.-Brit.
	6·3	0·45	180	30·0	180	4·0	8·5	58·0	3·7	5500	2·0	8		9	Am.-Brit.
6W6	6·3	1·25	135	61·0	135	12·0	9·5	—	9·0	2000	3·3	—		9	U.S.A.
6Y6G	6·3	1·25	200	66·0	135	9·0	14·0	18·3	7·1	2600	6·0	10		9	Am.-Brit.
	6·3	1·25	135	60·0	135	11·5	13·5	9·3	7·0	2000	3·6	10		9	Am.-Brit.
10P14	40·0	0·1	195	51·0	210	12·7	11·5	—	7·4	3700	4·5	7		9	Mazda
12A6	12·6	0·15	250	32·0	250	5·5	12·5	70·0	3·0	7500	3·4	7		9	Am.-Brit.
19BG6	19·0	0·3	300	60·0	250	4·0	18·0	30·0	6·0	(Line Time Base Amplifier)				12	Am.-Brit.
20P1	38·0	0·2	(Line Time Base Amplifier)				—	—	7·0	—	—	—	I.O.	10	Mazda
20P2	38·0	0·2	(Line Time Base Amplifier)				—	—	13·5	—	—	—		10	Mazda
25A6–GT/G	25·0	0·3	160	36·0	120	12·0	18·0	42·0	2·3	5000	2·2	10		9	Am.-Brit.
	25·0	0·3	135	39·0	135	14·0	20·0	35·0	2·4	4000	2·0	9		9	Am.-Brit.
	25·0	0·3	95	22·0	95	8·0	15·0	45·0	2·0	4500	0·9	11		9	Am.-Brit.
25A7–GT/G	25·0	0·3	100	20·5	100	4·0	15·0	50·0	1·8	4500	0·8	9		15	U.S.A.
	—	—	RECTIFIER 117 V. RMS 75 m/A D.C.				—	—	—	—	—	—		15	U.S.A.
25B6G	25·0	0·3	200	71·0	135	13·0	23·0	18·0	5·0	2500	7·1	15		9	U.S.A.
	25·0	0·3	135	69·0	135	14·5	22·0	15·0	5·0	1700	4·3	14		9	U.S.A.
	25·0	0·3	105	55·0	105	10·0	16·0	15·5	4·8	1700	2·4	12		9	U.S.A.
25C6G	25·0	0·3	200	66·0	135	9·0	14·0	18·3	7·1	2600	6·0	10		9	U.S.A.
	25·0	0·3	135	60·0	135	11·5	13·0	9·3	7·0	2100	3·6	10		9	U.S.A.
25L6–GT/G	25·0	0·3	200	55·0	110	7·0	8·0	30·0	9·5	3000	4·3	10		9	Am.-Brit.
	25·0	0·3	100	50·0	110	11·0	7·5	13·0	9·0	2000	2·1	10		9	Am.-Brit.
32L7GT	32·5	0·3	90	27·0	90	2·0	7·0	17·0	4·8	2600	1·0	9		15	U.S.A.
	—	—	RECTIFIER 125 V. RMS 60 m/A D.C.				—	—	—	—	—	—		15	U.S.A.
35L6GT	35·0	0·15	200	44·0	110	7·0	8·0	40·0	5·9	4500	3·3	10		9	Am.-Brit.
	35·0	0·15	110	41·0	110	7·0	7·0	14·0	5·8	2500	1·5	10		9	Am.-Brit.
50C6GT	50·0	0·15	135	60·0	135	11·5	13·5	9·3	7·0	2000	3·6	10		9	U.S.A.
50L6–GT/G	50·0	0·15	200	55·0	110	7·0	8·0	30·0	9·5	3000	4·3	10		9	Am.-Brit.
	50·0	0·15	110	50·0	110	10·0	7·5	13·0	9·0	2000	2·1	10		9	Am.-Brit.
61BT	6·3	0·7	200	40·0	200	3·0	20·0	—	4·0	(Line Time Base Amplifier)				10	Cossor
62BT	6·3	1·27	250	120·0	180	10·0	18·5	6·0	9·5	(Line Time Base Amplifier)				10	Cossor
70A7GT	70·0	0·15	110	40·0	110	3·0	7·5	—	5·8	2500	1·5	—	I.O.	15	U.S.A.
	—	—	RECTIFIER 117 V. RMS 60 m/A D.C.				—	—	—	—	—	—		15	U.S.A.
70L7GT	70·0	0·15	110	43·0	110	6·0	7·5	15·0	7·5	2000	1·8	10		16	U.S.A.
	—	—	RECTIFIER 117 V. RMS 70 m/A D.C.				—	—	—	—	—	—		16	U.S.A.
117L7GT	117·0	0·09	105	43·0	105	5·5	5·2	17·0	5·3	4000	0·85	5		6	U.S.A.
117M7GT	—	—	RECTIFIER 117 V. RMS 75 m/A D.C.				—	—	—	—	—	—			U.S.A.

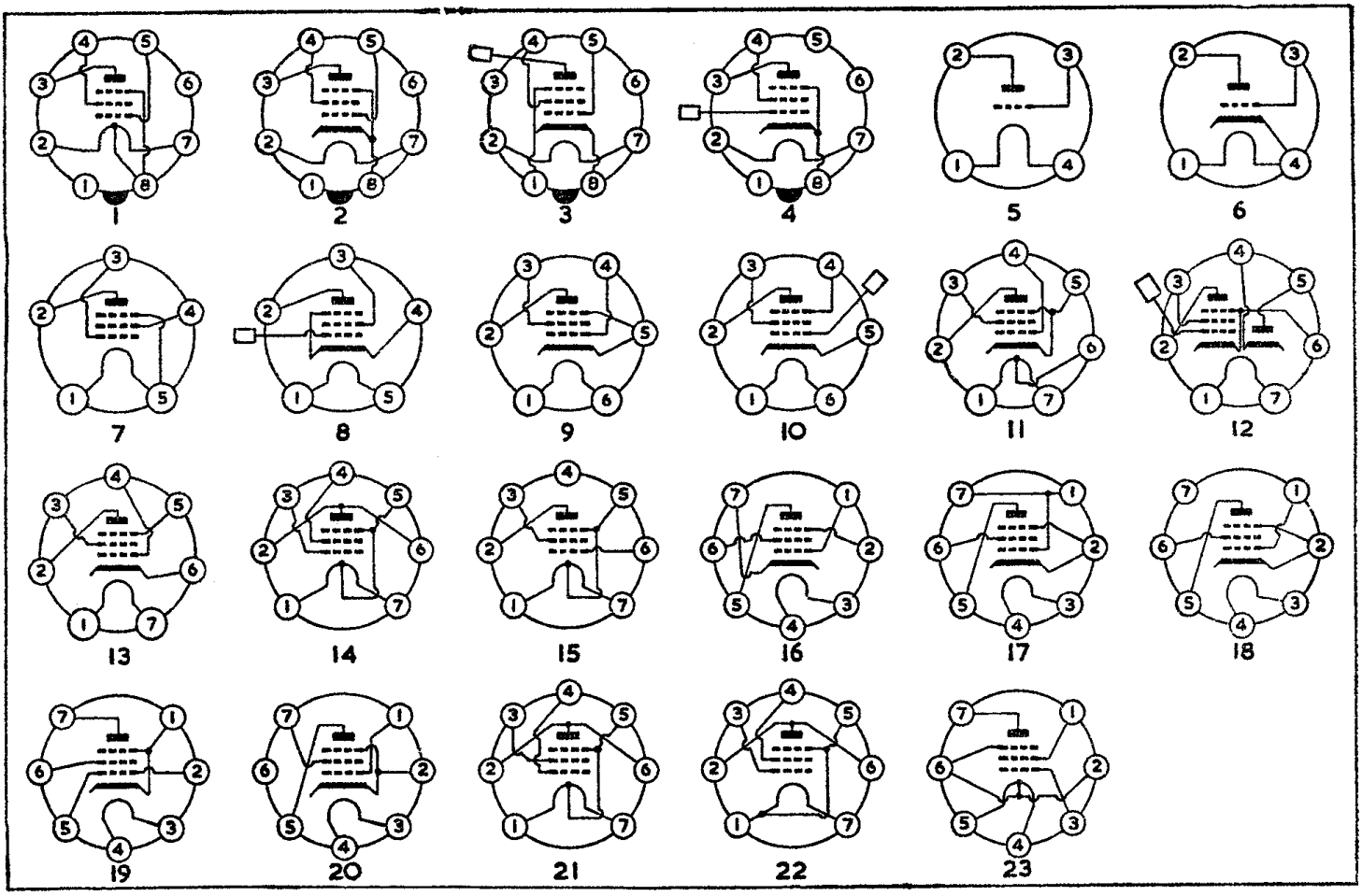
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
117N7GT	117·0	0·09	100	51·0	100	5·0	6·0	16·0	7·0	3000	1·2	—	I.O.	5	U.S.A.
	—	—	RECTIFIER 117 V. 75			m/A	D.C.	—	—	—	—	—			U.S.A.
117P7GT	117·0	0·09	105	43·0	105	5·5	5·2	17·0	5·3	4000	0·85	—		5	U.S.A.
	—	—	RECTIFIER 117 V. 75			m/A	D.C.	—	—	—	—	—			U.S.A.
142BT	14·0	0·2	180	29·0	180	3·0	8·5	58·0	3·7	5500	2·0	8		9	Cossor
185BT	18·0	0·45	250	120·0	180	10·0	18·5	(Line Time Base Amplifier)				—		10	Cossor
185BT-A	18·0	0·45	= 185 BT with high insulation for EHT generators											10	Cossor
332Pen	33·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		9	Cossor
CBL31	44·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		18	Mul.-Tung.
CL33	33·0	0·2	200	45·0	200	6·0	8·5	35·0	8·0	4500	4·0	10		9	Mul.-Tung.
DL31	1·4	0·05	120	5·0	120	0·9	4·5	350·0	1·35	22500	0·26	10		1	Mullard
DL33	2·8	0·05	110	8·5	110	1·1	6·6	110·0	2·0	9000	0·33	8·5		4	Mullard
	1·4	0·1	110	10·0	110	1·4	6·6	100·0	2·2	8000	0·4	6		4	Mullard
DL35	1·4	0·1	90	7·5	90	1·6	7·5	115·0	1·55	8000	0·24	10		1	Mullard
EBL31	6·3	1·5	250	36·0	250	5·0	6·0	50·0	9·5	7000	4·3	10		18	Mul.-Tung.
EL31	6·3	1·4	600	42·0	400	5·0	22·0	43·0	(Intended for Class AB Push Pull)					11	Mullard
EL32	6·3	0·2	250	32·0	250	5·0	18·0	70·0	2·8	8000	3·6	10	I.O.	14	Mul.-Tung.
EL32 as Triode	6·3	0·2	250	30·0	—	—	20·0	3·1	2·6	—	—	—		14	Mul.-Tung.
EL33	6·3	0·9	250	36·0	250	4·0	6·0	50·0	9·0	7000	4·5	10		9	Mul.-Tung.
EL33 as Triode	6·3	0·9	250	20·0	—	—	8·5	3·0	6·5	7000	1·1	5		9	Mul.-Tung.
EL35	6·3	1·35	250	72·0	250	8·0	15·5	15·0	5·0	2500	6·0	10		9	Mullard
EL36	6·3	1·2	250	72·0	250	8·0	7·0	20·0	14·5	3500	8·0	10		9	Mul.-Tung
EL37	6·3	1·4	250	100·0	250	13·5	13·5	13·5	11·0	2500	10·5	10		9	Mullard
EL37 as Triode	6·3	1·4	400	37·5	—	—	39·0	2·0	4·5	—	—	—		9	Mullard
EL38	6·3	1·4	275	91·0	275	11·0	9·0	2·0	16 5	(Line Time Base Amplifier)				11	Mullard
KL35	2·0	0·15	135	5·0	135	—	4·8	150·0	2·2	20000	0·31	10		1	Mullard
KT32	26·0	0·3	135	75·0	135	5·0	7·6	—	9·0	1300	3·5	11		9	M.O.V.
KT33	26·0	0·3	200	60·0	200	10·0	13·2	—	10·0	3000	5·0	8		9	M.O.V.
KT33c	26·0	0·3													
	13·0	0·6	200	60·0	200	10·0	13·2	—	10·0	3000	5·0	8		13	M.O.V.
KT35	26·0	0·3													
	13·0	0·6	200	50·8	200	8·0	11·0	—	10·0	4000	4·25	—		13	M.O.V.
KT36	26·0	0·3	250	—	200	—	10·0	(Line Time Base Amplifier)				—		10	M.O.V.
KT61	6·3	0·95	250	40·0	250	7·5	4·4	—	10·5	6000	4·3	8	I.O.	9	M.O.V.
KT63	6·3	0·7	250	34·0	250	5·5	16·5	—	2·5	7000	3·0	—		9	M.O.V.
KT66	6·3	1·27	250	85·0	250	6·3	15·0	22·5	6·3	2200	7·25	9		9	M.O.V.
KT66 as Triode	6·3	1·27	400	63·0	—	—	38·0	1·4	6·15	4500	5·8	7		9	M.O.V.
	6·3	1·27	250	60·0	—	—	19·0	1·3	6·15	2750	2·2	6		9	M.O.V.
KT71	48·0	0·16	175	70·0	175	12·0	9·8	—	10·0	2500	5·0	9		9	M.O.V.
KT72	15·0	0·16	175	30·0	175	6·0	12·5	—	2·5	6000	2·0	—		9	M.O.V.
KT73	6·0	0·4	175	33·0	175	6·0	12·5	—	2·5	6000	2·0	—		9	M.O.V.
KT74	15·0	0·16	175	33·0	175	6·0	12·5	—	2·5	5000	2·0	—		9	M.O.V.
KT76	15·0	0·16	175	33·0	175	6·0	12·5	—	2·5	5000	2·0	4·5		9	M.O.V.
N14	1·4	0·1	90	7·5	90	1·6	7·5	115·0	1·55	8000	0·24	10		1	M.O.V.



OUTPUT VALVES—*Contd.*

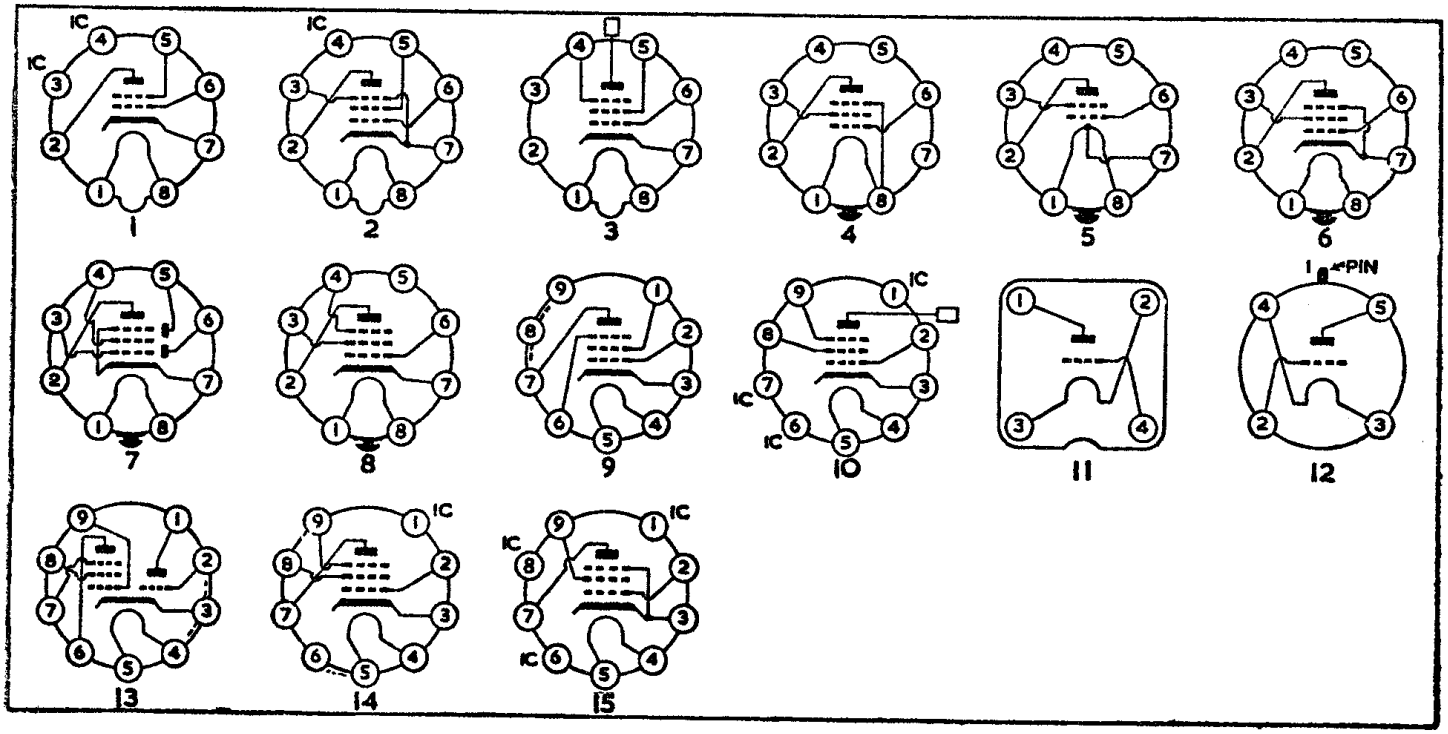
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	g_m mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
N15	2·8	0·05	90	7·5	90	1·0	4·5	115·0	1·8	8000	0·25	—	I.O.	1	M.O.V.
	1·4	0·1	90	9·5	90	1·3	4·5	115·0	2·1	8000	0·27	—		1	M.O.V.
N16	2·8	0·05	90	7·5	90	1·0	4·5	125·0	1·8	8000	0·25	—		1	M.O.V
	1·4	0·1	90	9·5	90	1·3	4·5	125·0	2·1	8000	0·27	—		1	M.O.V.
N147	6·3	0·9	250	36·0	250	4·0	6·0	50·0	9·0	7000	4·5	—		2	Marconi
OM9	6·3	0·2	250	32·0	250	5·0	18·0	70·0	2·8	8000	3·6	10		4	Cossor
PL33	19·0	0·3	225	32·0	225	3·4	5·3	50·0	9·0	7000	3·3	10		2	Mullard
PL38	30·0	0·3	200	75·0	200	9·0	5·5	20·0	13·5	(Line T	ime Ba	se Am	plifier)	3	Mullard
PP60	6·3	1·27	250	85·0	250	6·3	15·0	22·5	6·3	2200	7·25	9		2	Tungsram
PP60 as Triode	6·3	1·27	400	63·0	—	—	38·0	1·4	5·5	4500	5·8	7		2	Tungsram
	6·3	1·27	250	60·0	—	—	19·0	1·3	6·15	2750	2·2	6		2	Tungsram
2A3	2·5	2·5	250	60·0	—	—	45·0	0·8	5·2	2500	3·5	5	UX4	5	Am.-Brit.
2A3H	2·5	2·5	250	60·0	—	—	45·0	0·8	5·2	2500	3·5	5		6	U.S.A.
6A3	6·3	1·0	250	60·0	—	—	45·0	0·8	5·2	2500	3·2	5		5	Am.-Brit.
10	7·5	1·25	425	18·0	—	—	40·0	5·0	1·6	10200	1·6	5		5	Am.-Brit.
31	2·0	0·13	180	12·3	—	—	30·0	3·6	1·0	5700	0·37	—		5	U.S.A.
45–A	2·5	1·5	275	36·0	—	—	56·0	1·7	2·0	4600	2·0	—		5	Am.-Brit.
50	7·5	1·25	450	55·0	—	—	84·0	1·8	2·1	4350	4·6	—		5	Am.-Brit.
71–A	5·0	0·25	180	20·0	—	—	40·5	1·75	1·7	4800	0·79	—		5	U.S.A.
210T	7·5	1·25	425	18·0	—	—	40·0	5·0	1·6	10000	1·6	—		5	U.S.A.
1F4	2·0	0·12	135	8·0	135	2·4	4·5	200·0	1·7	16000	0·31	—	UX5	7	U.S.A.
6A4/LA	6·3	0·3	180	22·0	180	3·9	12·0	45·5	2·2	8000	1·4	9		7	U.S.A.
33	2·0	0·26	180	22·0	180	5·0	18·0	55·0	1·7	6000	1·4	7		7	Am.-Brit.
38	6·3	0·3	250	22·0	250	3·8	25·0	100·0	1·2	10000	2·5	8		8	Am.-Brit.
46	2·5	1·75	250	22·0	—	—	33·0	2·4	2·3	6400	1·25	—		7	Am.-Brit.
47–E	2·5	1·75	250	31·0	250	6·0	16·5	60·0	2·5	7000	2·7	6		7	Am.-Brit.
49	2·0	0·12	135	6·0	—	—	20·0	4·1	1·1	11000	0·17	—		7	U.S.A.
52	6·3	0·3	110	43·0	—	—	0	1·7	3·0	2000	1·5	—		7	U.S.A.
68–A	6·3	0·4	135	14·0	135	3·0	13·5	64·5	1·4	7500	0·65	—		8	U.S.A.
PP2101	2·0	0·14	135	7·0	135	1·0	3·0	—	2·1	18000	0·44	—		7	Tungsram
2A5	2·5	1·75	285	38·0	285	12·0	22·0	75·0	2·5	7000	4·5	9	UX6	9	Am.-Brit.
18	14·0	0·3	250	36·0	250	9·5	16·5	80·0	2·5	7000	3·2	8		9	Am.-Brit.
41–E	6·3	0·4	315	28·0	250	9·0	21·0	75·0	2·1	9000	4·5	15		9	Am.-Brit.
42–E	6·3	0·7	285	38·0	285	12·0	22·0	75·0	2·1	7000	4·5	9		9	Am.-Brit.
43–E	25·0	0·3	160	36·0	120	12·0	18·0	42·0	2·3	5000	2·2	10		9	Am.-Brit.
48	30·0	0·4	125	56·0	100	9·5	20·0	—	3·9	1500	2·5	9		9	U.S.A.
89	6·3	0·4	250	32·0	250	5·5	25·0	70·0	1·8	6750	3·4	9		10	U.S.A.
95	2·5	1·75	315	42·0	315	8·0	22·0	96·0	2·3	7000	5·0	—		9	U.S.A.
PP6B	6·3	1·2	250	36·0	250	4·0	—	—	10·0	7000	3·6	—		9	Tungsram
12A5	12·6	0·3	100	19·0	100	6·5	15·0	50·0	1·7	4500	0·8	—	UX7	11	U.S.A.
	6·3	0·6	180	48·0	180	14·0	25·0	35·0	2·4	3300	3·4	—		11	U.S.A.
12A7	12·6	0·3	135	9·0	135	2·5	13·0	102·0	0·97	13500	0·5	—		12	U.S.A.
	—	—	RECT	IFIER 12	5 V. R	MS 30	m/A D	.C.	—	—	—	—			U.S.A.
59	2·5	2·0	250	35·0	250	9·0	18·0	40·0	2·5	6000	3·0	—		13	Am.-Brit.
1P10	2·8	0·05	90	6·1	67·5	1·1	7·0	100·0	1·43	8000	0·23	13	B7G	14	Mazda
	1·4	0·1	90	7·4	67·5	1·4	7·0	100·0	1·58	8000	0·27	12		14	Mazda
1P11	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		15	Mazda
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·1	10000	0·27	7		15	Mazda
1S4	1·4	0·1	90	7·4	67·5	1·4	7·0	—	1·6	8000	0·27	12		22	Am.-Brit.
3A4	2·8	0·1	150	14·1	90	2·2	8·4	100·0	1·9	8000	0·7	—		21	Am.-Brit.
	1·4	0·2	135	14·9	90	2·6	7·5	90·0	1·9	8000	0·6	—		21	Am.-Brit.
3B4	2·5	0·165	150	—	135	—	7·5	—	1·7	—	1·25	—		23	U.S.A.
	1·25	0·33	—	—	—	—	—	—	—	—	—	—		23	U.S.A.
3Q4	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		14	Am.-Brit.
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·1	10000	0·27	7		14	Am.-Brit.
3S4	2·8	0·05	90	6·1	67·5	1·1	7·0	100·0	1·43	8000	0·23	13		14	Am.-Brit.
	1·4	0·1	90	7·4	67·5	1·4	7·0	100·0	1·58	8000	0·27	12		14	Am.-Brit.
3V4	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		15	Am.-Brit.
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·1	10000	0·27	7		15	Am.-Brit.
6AK6	6·3	0·15	180	15·0	180	2·5	9·0	200·0	2·3	10000	1·1	—		16	Am.-Brit.
6AM5	6·3	0·2	250	16·0	250	2·4	13·5	150·0	2·6	16000	1·4	10		20	Brimar
6AN5	6·3	0·5	120	35·0	120	12·0	6·0	12·5	8·0	—	—	—		16	U.S.A.
6AQ5	6·3	0·45	250	47·0	250	7·0	12·5	52·0	4·1	5000	4·5	—		17	U.S.A.
6AR5	6·3	0·4	250	33·0	250	5·5	18·0	68·0	2·3	7600	3·4	—		18	U.S.A.
6AS5	6·3	0·8	150	36·0	110	6·5	8·5	—	5·6	4500	2·2	—		19	U.S.A.
7D9	6·3	0·2	250	16·0	250	2·4	13·5	150·0	2·6	16000	1·4	10		20	Brimar
19AQ5	19·0	0·15	250	47·0	250	7·0	12·5	52·0	4·1	5000	4·5	—		17	Am.-Brit.
35B5	35·0	0·15	110	40·0	110	3·0	7·5	—	5·8	2500	1·5	—		17	U.S.A.
35C5	35·0	0·15	110	41·0	110	7·0	7·5	—	5·8	2500	1·5	—		19	U.S.A.
50B5	50·0	0·15	110	49·0	110	4·0	7·5	14·0	7·5	2500	1·9	—		17	U.S.A.
50C5	50·0	0·15	110	50·0	110	8·5	7·5	10·0	7·5	2500	1·9	—		19	Am.-Brit.
DL91	1·4	0·1	90	7·4	67·5	1·4	7·0	100·0	1·58	8000	0·27	12		14	Mullard

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
DL92	2·8	0·05	90	6·1	67·5	1·1	7·0	100·0	1·43	8000	0·23	13	B7G	14	Mullard
	1·4	0·1	90	7·4	67·5	1·4	7·0	100·0	1·58	8000	0·27	12		14	Mullard
DL93	2·8	0·1	150	14·1	90	3·5	8·4	100·0	1·9	8000	0·7	6		21	Mullard
	1·4	0·2												21	Mullard
DL94	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		15	Mullard
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·15	10000	0·27	7		15	Mullard
DL95	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		14	Mullard
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·15	10000	0·27	7		14	Mullard
EL91	6·3	0·2	250	16·0	250	2·4	12·5	130·0	2·6	16000	1·4	10		20	Mullard
N17	2·8	0·05	90	6·1	67·5	1·1	7·0	100·0	1·4	8000	0·23	13		14	M.O.V.
	1·4	0·1	90	7·4	67·5	1·4	7·0	100·0	1·5	8000	0·27	12		14	M.O.V
N18	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		14	M.O.V.
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·15	10000	0·27	7		14	M.O.V.
N19	2·8	0·05	90	7·7	90	1·7	4·5	120·0	2·0	10000	0·24	7		15	M.O.V.
	1·4	0·1	90	9·5	90	2·1	4·5	100·0	2·15	10000	0·27	7		15	M O.V.
N37	13·0	0·3	165	54·0	165	7·0	9·3	23·2	9·5	3000	4·0	10		20	M.O.V.
N77	6·3	0·2	250	16·0	250	—	12·5	130·0	2·6	16000	1·4	10		20	M.O.V.
N78	6·3	0·64	250	36·0	250	5·0	5·5	55·0	10·0	7000	4·0	10		20	M.O.V.
N108	40·0	0·1	165	54·0	165	7·0	9·3	23·2	9·5	3000	4·0	10		20	M.O.V.
	40·0	0·1	100	31·0	100	3·3	4·5	—	—	3000	1·2	10		20	M.O.V.
N144	6·3	0·2	250	16·0	250	2·4	12·5	130·0	2·6	16000	1·4	10		20	Marconi



OUTPUT VALVES—*Contd.*

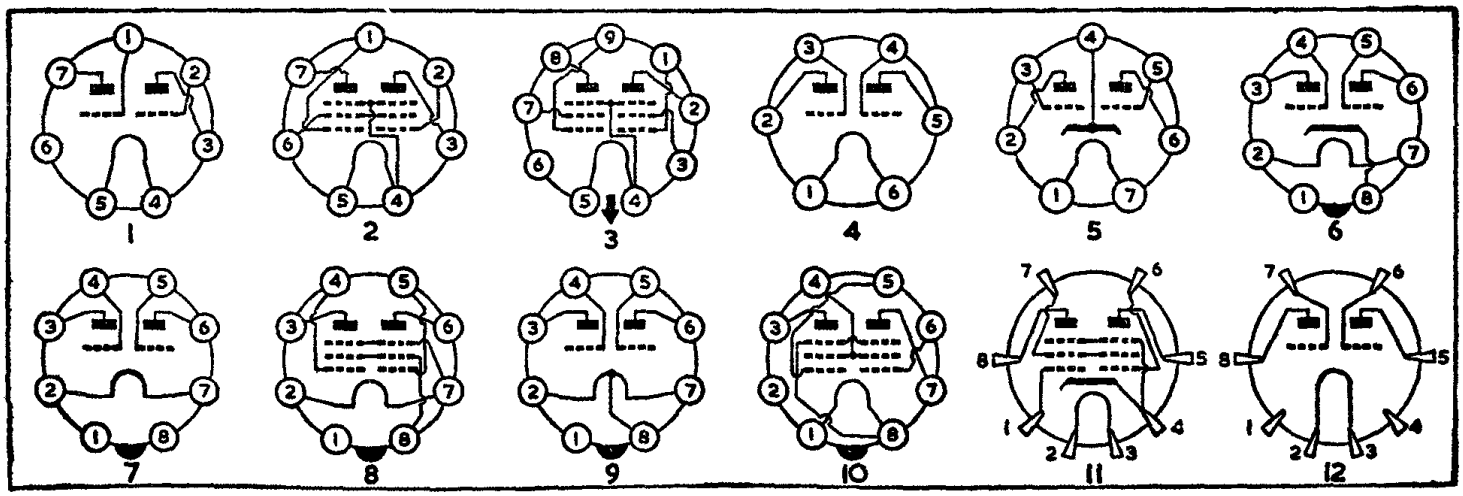
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	g_m mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
10P13	40·0	0·1	180	29·0	150	5·8	6·3	—	7·5	5800	2·6	10	B8A	1	Mazda
EL41	6·3	0·7	250	36·0	250	5·2	7·0	40·0	10·0	7000	4·2	10		2	Mullard
EL42	6·3	0·2	225	26·0	225	4·1	10·8	90·0	3·2	9000	2·5	10		2	Mullard
N142	45·0	0·1	165	54·5	165	9·0	9·5	—	9·5	3000	4·2	—		2	Marconi
N145	40·0	0·1	150	30·0	150	5·8	6·3	—	7·5	5800	2·6	14		2	Marconi
N150	6·3	0·7	250	36·0	250	5·2	7·0	40·0	10·0	7000	4·2	10		2	Marconi
N151	6·3	0·2	225	26·0	225	4·1	10·8	90·0	3·2	9000	2·5	10		2	Marconi
UL41/46	45·0	0·1	170	53·0	170	10·0	10·4	20·0	10·0	3000	4·2	10		2	Mullard
UL44	45·0	0·1	175	30·0	175	4·7	13·5	—	7·1	(Line Time Base Amplifier)				3	Mullard
1LA4E	1·4	0·05	90	4·0	90	0·8	4·5	300·0	0·85	25000	0·11	—	B8G	4	Am.-Brit.
1LB4	1·4	0·05	90	5·0	—	1·0	9·0	200·0	0·95	12000	0·2	—		4	U.S.A.
3D6	2·8	0·11	90	9·5	90	1·6	4·5	—	2·4	8000	0·27	—		5	Am.-Brit.
	1·4	0·22	135	9·8	90	1·2	4·5	—	2·4	12000	0·5	—		5	Am.-Brit.
3LE4	2·8	0·05	90	9·0	90	1·8	9·0	110·0	1·6	6000	0·3	—		5	U.S.A.
	1·4	0·1	—	—	—	—	—	—	—	—	—	—		5	Am.-Brit.
3LF4	2·8	0·05	90	8·0	90	1·0	4·5	80·0	2·0	7000	0·23	—		5	U.S.A.
	1·4	0·1	90	9·5	90	1·3	4·5	75·0	2·2	8000	0·27	—		5	U.S.A.
7A5	6·3	0·3	125	37·5	125	3·2	9·0	17·0	6·1	2700	1·9	—		6	U.S.A.
7B5	6·3	0·4	250	32·0	250	5·5	18·0	68·0	2·3	7600	3·4	11		6	U.S.A.
7B5E	6·3	0·4	250	32·0	250	5·5	18·0	68·0	2·2	7600	3·4	11		8	Brimar
7C5	6·3	0·45	315	34·0	225	2·2	13·0	77·0	3·75	8500	5·5	12		6	Am.-Brit.
14A5	12·6	0·15	250	30·0	250	3·5	12·5	70·0	3·0	7500	2·8	—		6	U.S.A.
14C5	12·6	0·22	250	47·0	250	4·5	12·5	52·0	4·1	5000	4·5	—		6	U.S.A.
35A5	35·0	0·15	110	40·0	110	3·0	7·5	14·0	5·8	2500	1·5	—		6	Am.-Brit.
50A5	50·0	0·15	110	49·0	110	4·0	7·5	10·0	8·2	2000	2·2	—		6	Am.-Brit
DN143	6·3	0·8	250	44·0	275	5·8	6·2	—	9·5	5700	5·5	—		7	Marconi
EBL21	6·3	0·8	250	36·0	250	4·5	6·0	50·0	9·0	7000	4·5	10		7	Mullard
EL22	6·3	0·7	250	44·0	250	5·2	7·0	—	9·5	5750	5·2	—		6	Mullard
KT81	6·3	0·95	250	40·0	250	7·5	4·3	—	10·8	6000	4·3	8		6	M O V.
KT101	80·0	0·1	175	70·0	175	12·0	9·8	—	10·0	2500	5·0	9		6	M.O.V.
UBL21	55·0	0·1	200	55·0	200	9·5	13·0	25·0	8·0	3500	4·8	10		7	Mullard
6AB8	6·3	0·3	170	15·0	170	2·8	6·3	150·0	3·3	11000	1·0	—	B9A	13	U.S.A.
6BW6	6·3	0·45	315	34·0	225	2·2	13·0	77·0	3·75	8500	5·5	12		14	Am.-Brit.
6CH6	6·3	0·75	250	40·0	250	6·0	4·5	50·0	11·0	(Video Amplifier)				14	U.S.A.
7D10	6·3	0·75	250	40·0	250	6·0	4·5	50·0	11·0	(Video Amplifier)				14	Brima.r
15A6	15·0	0·3	180	36·0	180	4·0	2·9	100·0	10·0	(Video Amplifier)				9	U.S.A
21A6	21·5	0·3	180	45·0	180	3·0	23·0	—	6·5	(Line Time Base Amplifier)				10	U.S.A.
ECL80	6·3	0·3	170	15·0	170	2·8	6·3	150·0	3·3	11000	1·0	—		13	Mullard
PL81	21·5	0·3	170	45·0	170	3·0	22·0	10·0	6·2	(Line Time Base Amplifier)				10	Mullard
PL82	16·5	0·3	170	53·0	170	10·0	10·4	20·0	9·5	3000	4·2	10		15	Mullard
PL83	15·0	0·3	170	36·0	170	5·0	2·3	100·0	10·0	(Video Amplifier)				9	Mullard
DA100	6·0	2·7	1250	100·0	—	—	150·0	1·41	3·9	6800	30·0	—	4-Pin	11	M.O.V.
DA250	10·0	2·0	2500	100·0	—	—	126·0	2·29	7·0	17500	90·0	—		12	M.O.V.



TWIN OUTPUT VALVES

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	A-A Load Ω	Output W	Dis. %	Class	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA						Type	Ref.	
220B	2·0	0·2	120	7·5	—	—	0	12000	1·0	—	B2	B7	1	Cossor
240B	2·0	0·4	135	9·0	—	—	0	8000	2·0	—	B2		1	Cossor
240QP	2·0	0·4	150	—	150	—	12·0	24000	1·2	—	B1		2	Cossor
CB215	2·0	0·22	135	12·0	—	—	0	10000	1·75	—	B2		1	Tungsram
CB220	2·0	0·25	150	15·0	—	—	1·5	10000	2·0	—	B2		1	Tungsram
HP2	2·0	0·2	120	20·0	—	—	0	14000	1·25	—	B2		1	Ferranti
K33A	2·0	0·2	120	20·0	—	—	0	14000	1·25	—	B2		1	Ever Ready
K33B	2·0	0·2	120	—	—	—	4·5	14000	1·45	—	B2		1	Ever Ready
PD220	2·0	0·2	150	29·0	—	—	1·15	11500	2·85	5·0	B2		1*	Mazda
PD220A	2·0	0·2	150	32·0	—	—	6·0	10000	2·9	5·0	B2		1*	Mazda
PM2B	2·0	0·2	120	20·0	—	—	0	14000	1·25	—	B2		1	Mullard
PM2BA	2·0	0·2	120	20·0	—	—	4·5	14000	1·45	—	B2		1	Mullard
QP21	2·0	0·4	150	12·0	150	6·0	9·0	25000	1·0	—	B1		2	M.O.V.
QP22B	2·0	0·3	135	—	135	—	11·7	14700	1·33	—	B1		2	Mullard
QP230	2·0	0·3	120	15·0	120	5·0	9·6	17000	0·85	5·0	B1		2	Mazda
QPT2	2·0	0·4	150	12·0	150	6·0	9·0	25000	1·0	—	B1		2	Ferranti
K77A	2·0	0·5	150	—	150	—	13·0	15000	1·5	—	B1	B9	3	Ever Ready
QP22A	2·0	0·45	135	32·0	135	—	10·5	16000	1·4	—	B1		3	Mullard
QP240	2·0	0·45	150	24·0	130	7·5	11·5	15000	2·25	5·0	B1		3	Mazda
QP25	2·0	0·2	120	16·0	120	5·1	10·0	15500	1·2	5·0	B1	M.O.	10	Mazda
CB215s	2·0	0·22	135	12·0	—	—	0	10000	1·75	—	B2	P	12	Tungsram
ELL1	6·3	0·45	250	30·0	250	5·0	—	16000	5·4	—	A		11	Tungsram
1G6GT	1·4	0·1	90	7·0	—	—	0	12000	0·675	—	B2	I.O.	7	Tungsram
1J6G	2·0	0·24	135	—	—	—	0	10000	2·1	—	B2		7	Tungsram
4A6G	4·0	0·06	90	10·8	—	—	1·5	8000	1·0	—	B2		9	Tungsram
6N7–GT/G	6·3	0·8	300	70·0	—	—	0	8000	10·0	8 0	B2		6	Am.-Brit.
6Y7G	6·3	0·6	250	—	—	—	0	14000	8·0	—	B2		6	Am.-Brit.
6Z7G	6·3	0·3	180	—	—	—	0	12000	4·2	—	B2		6	U.S.A.
1635	6 3	0·6	400	63·0	—	—	0	14000	17·0	—	B2		6	U.S.A.
KLL32	2 0	0 3	135	16·9	135	5·7	11·3	16000	1·2	2·8	AB1		8	Mullard
19	2·0	0 26	135	—	—	—	0	10000	2·1	—	B2	UX6	4	Am.-Brit.
6A6	6·3	0·8	300	70·0	—	—	0	8000	10·0	8·0	B2	UX7	5	Am.-Brit.
53	2·5	2·0	300	70·0	—	—	0	8000	10·0	8·0	B2		5	Am.-Brit.

***On this valve grid connections to pins 1 and 2 are reversed**



NUMERICAL / ALPHABETICAL INDEX

1A3—7E6

OMISSIONS

Type	Base	Page
6N5/6ABS	UX6	6
DL33	I.O.	42
DL35	I.O.	42
G84	UX4	21

REPLACEMENT Valves — CURRENT Valves — OBSOLETE Valves

Type	Base	Page
7E7	B8G	14
7F7	B8G	28
7F8	B8G	28
7G7	B8G	14
7G8	B8G	14
7H6	B8G	14
7H7	B8G	14
7J7	B8G	4
7K7	B8G	29
7L7	B8G	14
7N7	B8G	29
7Q7	B8G	4
7R7	B8G	14
7S7	B8G	4
7T7	B8G	14
7V7	B8G	14
7W7	B8G	14
7X7	B8G	29
7Y4	B8G	21
7Z4	B8G	21
8		
8A1	B5	7
	B7	8
8D2	B7	8
8D3	B7G	13
8D4	I.O.	11
8D5	B9A	15
8D6	B9A	15
8D7	B9A	15
9		
9A1	B7	8
9A3	B7	8
9D2	B7	8
9D6	B7G	13
10		
10	UX4	43
10C1	B8A	3
10D1	B5	30
10F1	B8A	13
10F3	B8A	13
10F9	B8A	13
10LD11	B8A	27
10P13	B8A	35, 45
10P14	I.O.	35, 41
11		
11A2	B7	24
11D3	B7	24
11D5	B7	24
12		
12A5	UX7	43
12A6	I.O.	41
12A7	UX7	43
12A8	I.O.	3
12AH7	I.O.	25
12AL5	B7G	30
12AT6	B7G	27
12AT7	B9A	29
12AU6	B7G	13
12AU7	B9A	29
12AV6	B7G	27
12AV7	B9A	29
12AW6	B7G	13
12AW7	B7G	13
12AX7	B9A	29
12AY7	B9A	29
12B6M	I.O.	25
12B7	B8G	14
12B8	I.O.	11
12BA6	B7G	13
12BA7	B9A	5
12BD6	B7G	13

Type	Base	Page
12BE6	B7G	3
12BF6	B7G	27
12BH7	B9A	29
12BK6	B7G	27
12BT6	B7G	27
12BU6	B7G	27
12C8	I.O.	11
12E5	I.O.	25
12F5	I.O.	25
12G7	I.O.	25
12H6	I.O.	30
12J5	I.O.	25
12J7	I.O.	11
12K7	I.O.	11
12K8	I.O.	3
12Q7	I.O.	25
12S8	I.O.	25
12SA7-GT	I.O.	3
12SC7	I.O.	25
12SF5	I.O.	25
12SF7	I.O.	11
12SG7	I.O.	11
12SH7	I.O.	11
12SJ7	I.O.	11
12SK7	I.O.	11
12SL7	I.O.	25
12SN7	I.O.	25
12SQ7	I.O.	25
12SR7	I.O.	25
12SW7	I.O.	25
12SX7	I.O.	25
12U5G	I.O.	6
12Z3	UX4	21
12Z5	UX7	21
13		
13DHA	B7	24
13PGA	B7	1
13SPA	B7	8
13VPA	B7	8
14		
14A4	B8G	29
14A5	B8G	45
14A7	B8G	14
14AF7	B8G	29
14B6	B8G	29
14B8	B8G	4
14C5	B8G	45
14C7	B8G	14
14E6	B8G	29
14E7	B8G	14
14F7	B8G	29
14F8	B8G	29
14H7	B8G	15
14J7	B8G	4
14N7	B8G	29
14Q7	B8G	4
14R7	B8G	15
14S7	B8G	4
14V7	B8G	15
14W7	B8G	15
14X7	B8G	29
14Y4	B8G	21
14Z3	UX4	21
15		
15	UX5	12
15A2	B7	1
15A6	B9A	45
15D1	B7	1
15D2	B7	1
15X6	I.O.	19
18/19		
18	UX6	43
19	UX6	46
19AQ5	B7G	43
19BG6G	I.O.	41

Type	Base	Page
19C8	B9A	29
19G6	B7G	21
19J6	B7G	27
19T8	B9A	29
19W3	B9A	22
20/24		
20A1	B7	1
20D1	B7G	30
20D2	B7	1
20D3	B9A	5
20F2	B8A	13
20J8	I.O.	3
20L1	B8A	27
20P1	I.O.	41
20P2	I.O.	41
21A6	B9A	45
24-A/E	UX5	12
25		
25A6	I.O.	41
25A7	I.O.	41
25B6	I.O	41
25B8	I.O.	11
25C6	I.O.	41
25D8	I.O.	11
25L6	I.O.	41
25RE	UX6	21
25SN7	I.O.	25
25U4	I.O.	19
25X4	I.O.	19
25Y4	I.O.	19
25Y5	UX6	21
25Z3	UX4	21
25Z4	I.O.	19
25Z5	UX6	21
25Z6	I.O.	19
26		
26A6	B7G	13
26BK6	B7G	27
26C6	B7G	27
26D6	B7G	3
27		
27	UX5	27
27SU	I.O.	19
28/33		
28Z5	B8G	21
30	UX4	27
31	UX4	43
32-E	UX4	12
32L7	I.O.	41
33	UX5	43
35		
35/51	UX5	12
35A5	B8G	45
35B5	B7G	43
35C5	B7G	43
35L6	I.O.	41
35W4	B7G	21

Type	Base	Page
35Z3	B8G	21
35Z4	I.O.	19
35Z5	I.O.	19
35Z6	I.O.	19
36/39		
36	UX5	12
38	UX5	43
39/44	UX5	12
40		
40PPA	B7	38
40SUA	B5	18
40Z5	I.O.	19
41		
41-E	UX6	35, 43
41FP	B5	23
41MH	B5	23
41MHF	B5	23
41MHL	B5	23
41MLF	B5	23
41MP	B5	37
41MPG	B7	1
41MPT	B7	8
41MRC	B5	23
41MSG	B5	7
41MTA	B5	23
41MTB	B5	23
41MTL	B5	23
41MTS	B7	8
41MVSG	B5	7
41MXP	B5	37
41STH	B7	1
42		
42-A	UX6	35, 43
42MP/Pen	B7	38
42MPT	B7	8
42OT	B7	38
42OT/DD	B7	38
42PTB	B7	8
42SPT	B7	8
43/44		
43-E	UX6	43
43IU	B4	17
44IU	B4	17
44SU	B4	17
45		
45-A	UX4	35, 43
45IU	B4	17
45Z3	B7G	21
45Z5	I.O.	19
46/49		
46	UX5	35, 43
47-E	UX5	43
48	UX6	35, 43
49	UX5	35, 43
50		
50	UX4	43
50A5	B8G	45
50B5	B7G	43
50C5	B7G	43

Type	Base	Page
50C6	I.O.	41
50L6	I.O.	41
50X6	B8G	21
50Y6	I.O.	19
50Y7	I.O.	19
50Z6	I.O.	19
50Z7	I.O.	19
52/64		
52	UX5	43
52KU	I.O.	19
53	UX7	46
53KU	I.O.	19
54KU	I.O.	19
55	UX6	27
57	UX6	12
58	UX6	12
59	UX7	35, 43
61BT	I.O.	41
61SPT	I.O.	11
62BT	I.O.	41
63ME	I.O.	6
63SPT	B9G	15
64-A	UX5	12
64ME	I.O.	6
65		
65-A	UX5	12
65K	B4E	31
65K/2	B4E	31
68/83		
68-A	UX5	43
70A7	I.O.	41
70L7	I.O.	41
71-A	UX4	43
72	UX4	21
75	UX6	27
75K	B4E	31
76	UX5	27
77-E	UX6	12
78-E	UX6	12
80	UX4	21
80A	UX4	21
80s	UX4	21
81	UX4	21
82	UX4	21
83	UX4	21
83v	UX4	21
84/1X2		
84/6Z4	UX5	21
85	UX6	27
85A1	B8G	16
85A2	B7G	16
85K	B4E	31
89	UX6	43
95	UX6	43

Type	Base	Page
104V	B5	23
105K	B4E	31
108K	B4E	31
112K	B12A	31
117		
117L7/M7	I.O.	41
117N7	I.O.	42
117P7	I.O.	42
117Z3	B7G	21
117Z4	I.O.	19
117Z6	I.O.	19
121/185		
121K	B12A	31
142BT	I.O.	42
144V	B5	23
150A4	B4	16
150AC	P	16
154V	B5	23
161	—	16
164V	B5	23
171	—	16
185BT	I.O.	42
185BT-A	I.O.	42
202/3		
202	B4	16
202DDT	B7	24
202MPG	B7	1
202SPB	B7	8
202STH	B7	1
202VP	B7	8
202VPB	B7	8
203THA	B7	1
210/5		
210DDT	B5	23
210Det	B4	23
210HF	B4	23
210HL	B4	23
210LF	B4	23
210PG	B7	1
210PGA	B7	1
210RC	B4	23
210SPG	B7	1
210SPT	B4	7
	B7	8
210T	UX4	43
210VPA	B4	7
	B7	8
210VPT	B4	7
	B7	8
215SG	B4	7
220		
220B	B7	46
220DD	B5	30
220HPT	B5	37
220IPT	B7	8
220OT	B5	37
220P	B4	37
220PA	B4	37
220PT	B5	37
220SG	B4	7
220TH	B7	1
220VS	B4	7
220VSG	B4	7
225/354		
225DU	B7	19
230PT	B5	37
230XP	B4	

Type	Base	Page
240B	B7	46
240QP	B7	46
244V	B5	23
251	B4	16
301	—	16
302	—	16
302THA	B7	1
303	—	16
304	—	16
332Pen	I.O.	42
354V	B5	23
402		
402OT	B7	38
402P	B7	38
402Pen	B7	39
402PenA	B7	39
405/460		
405BU	B4	17
408BU	B4	17
412BU	B4	17
412SU	B4	17
415PT	B5	37
415QT	B5	37
442BU	B4	17
460BU	B4	17
506/994		
506BU	B4	17
717A	I.O.	11
807	UX5	35
825BU	B4	17
874	UX4	16
879	UX4	21
904V	B5	23
991	—	16
994V	B5	23
1231/94		
1231	B8G	15
1247	—	33
1265	I.O.	16
1266	I.O.	16
1273	B8G	15
1294	B8G	30
1611/1851		
1629	I.O.	6
1635	I.O.	46
1851	I.O.	11
4687		
4687	P	16
4687A	B4	16
5590/5645		
5590	B7G	13
5591	B7G	13
5633	M6	33
SN944		

Type	Base	Page
5634	M6	33
SD828E		
5637	—	33
SD917A		
5638	—	33
SD828A		
5640	—	33
SN947C		
5641	—	33
SN954		
5645	—	33
SN957A		
6501/05		
6501	I.O.	31
6502	I.O.	31
6503	I.O.	31
6504	I.O.	31
6504A	I.O.	31
6505A	I.O.	31
6703/13201		
6703A	I.O.	31
6704A	I.O.	31
6801A	I.O.	31
7475	B4	16
9001	B7G	13
9003	B7G	13
13201A	B4	16
A		
A11B	B4	17
A11C	B4	17
A11D	B4	17
A20B	B5	30
A23P	B7	24
A30B	B5	23
A30D	B5	23
A36A	B7	1
A36B	B7	1
A36C	B7	1
A39A	P	6
A50A	B5	7
A50B	B7	8
A50M	B5	7
A50N	B5	7
A50P	B7	8
A70B	B5	37
	B7	39
A70C	B7	39
A70D	B5	37
	B7	39
A70E	B7	39
A70P	B7	39
A80A	B7	1
AC/2HL	B5	23
AC2/Pen	B7	39
AC2/PenDD	B7	39
AC4/Pen	B7	39
AC5/Pen	B7	39
AC5/PenDD	B7	39
AC6/Pen	B7	39
AC/DD	B5	30
ACO42	B4	37
ACO44	B4	37
AC104	B5	23
AC/HL	B5	23
AC/HL.DD	B7	24
AC/HL.DDD	B9	25
AC/ME	B7	6
AC/P	B5	23
		37
AC/PI	B5	37
AC/Pen	B5	37
	B7	39

Type	Base	Page
AC/S1VM	B5	7
AC/S2Pen	B7	8
AC/S2	B5	7
AC/SG	B5	7
AC/SGVM	B5	7
AC/SP1	B7	8
AC/SP3	B7	8
AC/TH1	B7	1
AC/TH1A	M.O.	2
AC/TP	B9	2
AC/VP1	B7	8
AC/VP2	B7	8
AG8	I.O.	3
APP4A	B5	37
	B7	39
APP4As	P	40
APP4B	B7	39
APP4Bs	P	40
APP4C	B7	39
APP4D	B7	39
APP4E	B7	35
		39
APP4G	B7	39
APP4100	B5	37
APP4120	B5	37
APV4	B4	17
APV4100	B4	17
APV4200	B4	17
AS494	B5	7
AS495	B5	7
AS4100	B5	7
AS4120	B5	7
AS4125	B5	7
AX50	B4	17
AZ1	P	19
AZ2	P	19
AZ3	P	19
AZ4	P	19
AZ21	I.O.	19
AZ31	I.O.	19
AZ32	I.O.	19
AZ33	I.O.	19
AZ50	P	19
B		
B36	I.O.	25
B65	I.O.	25
BL63	I.O.	25
BR201	B4	16
BR201s	P	16
BR202	B4	16
BR202s	P	16
BR300	—	16
BR3000E	—	16
C		
C1	P	16
C1C	B4	16
C2	P	16
C2C	B4	16
C3	P	16
C9	P	16
C9A	M.O.	31
C9B	I.O.	31
C12A	M.O.	31
C12B	I.O.	31
C12D	I.O.	31
C12E	I.O.	31
C12F	B12A	31
C15B	I.O.	31
C20C	B5	30
C23B	B7	24
C30B	B7	24
C36A	B7	1
C36B	B7	1
C36C	B7	1
C50B	B7	8
C50N	B7	8
C70D	B7	39
C80B	B7	1
CB215	B7	46
CB215s	P	46
CB220	B7	46
CBL1	P	40
CBL6	P	40

Type	Base	Page
CBL31	I.O.	42
CCH35	I.O.	3
CK501	—	33
CK502	—	33
CK503	—	33
CK504	—	33
CK505	—	33
CK506	—	33
CK507	—	33
CK509	—	33
CK510	—	33
CK512	—	33
CK515BX	—	33
CK520AX	—	33
CK521AX	—	33
CK522AX	—	33
CK551AXA	—	33
CK553AXA	—	33
CK556AX	—	33
CK568AX	—	33
CK569AX	—	33
CK650AX	—	33
CK606BX	—	33
CK608CX	—	33
CK619CX	—	33
CL4	P	40
CL6	P	35
		40
CL33	I.O.	35
		42
CRM71	M.O.	31
CRM91	M.O.	31
CRM92	M.O.	31
CRM92A	M.O.	31
CRM121	M.O.	31
CRM121A	M.O.	31
CRM122	M.O.	31
CRM123	M.O.	31
CRM151	M.O.	31
CY1	P	19
CY31	I.O.	19
CY32	I.O.	19
D		
D1	B3G	30
D4	B5	23
D15	I.O.	16
D41	B5	30
D42	B4	30
D43	B4	30
D63	I.O.	30
D77	B7G	30
D418	B4	30
DA	B7	24
DA30	B4	35
		37
DA41	—	35
DA90	B7G	30
DA100	4-pin	35
		45
DA250	4-pin	35
		45
DAC1	P	27
DAC31	I.O.	25
DAC32	I.O.	25
DAF91	B7G	13
DBC31	I.O.	25
DC2/HLDD	B7	24
DC2/SG	B5	7
DC2/SGVM	B5	7
DC3/HL	B5	23
DCC90	B7G	27
DCH31	I.O.	3
DD4	B5	30
DD4D	B7	30
DD4s	P5	30
DD6	B7G	30
DD6Ds	P	30
DD6G	B7G	30
DD13	B5	30
DD13s	P5	30
DD41	M.O.	30
DD101	M.O.	30
DD207	B4	30
DD465	B5	30
DD620	B5	30
DD818	B5	30

Type	Base	Page
DDL4	B5	30
DDPP4B	B7	39
DDPP4Bs	P	40
DDPP4M	B7	39
DDPP6B	B7	39
DDPP39	B7	39
DDPP39M	B7	39
DDPP39s	P	40
DDT	B7	24
DDT2	B5	23
DDT2B	B5	23
DDT2Bs	P	27
DDT4	B7	24
DDT6	B7	24
DDT13	B7	24
DDT13s	P	27
DDT16	B7	24
DFI	P	10
DF31	I.O.	11
DF32	I.O.	11
DF33	I.O.	11
DF66	B5A	34
DF70	B8D	34
DF91	B7G	13
DF92	B7G	13
DH30	B7	24
DH42	B7	24
DH63	I.O.	25
DH73	I.O.	25
DH76	I.O.	25
DH77	B7G	27
DH81	B8G	29
DH101	B8G	29
DH107	B7G	27
DH142	B8A	27
DH147	I.O.	25
DH149	B8G	29
DH150	B8A	28
DHD	B7	24
DHL	B5	23
DKI	P	2
DK31	I.O.	3
DK32	I.O.	3
DK91	B7G	3
DL	B5	23
DLI	P	40
DL2	P	40
DL31	I.O.	42
DL63	I.O.	26
DL66	B5A	34
DL68	B8D	34
DL71	B8D	34
DL72	B8D	34
DL74	I.O.	26
DL82	B8G	29
DL91	B7G	43
DL92	B7G	44, 35
DL93	B7G	44
DL94	B7G	44
DL95	B7G	44
DL145	B8A	28
DN41	B7	39
DN143	B8G	45
DO24	B4	37
DO26	B4	37
DO30	B4	35, 37
DP61	B7G	13
DP/Pen	B7	39
DS	B5, B7	7, 24
DSB	B5	7
DUI	B4	17
DU2	B4	17
DU3	B4	17
DU4	B4	17
DU5	B4	17
DU10	B4	17
DVSG	B5	7
DVS/Pen	B5	7
DWI	B4	17
DW2	B4	17
DW2x	B4	17
DW3	B4	17
DW4	B4	17
DW4/350	B4	17
DW4/500	B4	17
DWS	B4	17
DW7x	B4	17
DW8	B4	17
DW30	B4	17

E

Type	Base	Page
EA50	B3G	30
EABI	P	30
EAC91	B7G	3, 27
EAF41	B8A	13
EAF42	B8A	13
EB4	P	30
EB34	I.O.	30
EB41	B8A	30
EB91	B7G	30
EBC3	P	27
EBC21	B8G	29
EBC33	I.O.	26
EBC41	B8A	28
EBFI	P	10
EBF2	P	10
EBF32	I.O.	11
EBF80	B9A	15
EBL1	P	40
EBL21	B8G	35, 45
EBL31	I.O.	42
EC31	I.O.	26
EC52	B9G	29
EC91	B7G	27
ECC31	I.O.	26
ECC32	I.O.	26
ECC33	I.O.	26
ECC34	I.O.	26
ECC35	I.O.	26
ECC40	B8A	28
ECC81	B9A	29
ECC91	B7G	27
ECH2	P	2
ECH3	P	2
ECH21	B8G	4
ECH33	I.O.	3
ECH35	I.O.	3
ECH41	B8A	3
ECH42	B8A	3
ECL80	B9A	29, 45
EFI	P	10
EF2	P	10
EF5	P	10
EF6	P	10
EF8	P	10
EF9	P	10
EF22	B8G	15
EF25	P	10
EF36	I.O.	11
EF37	I.O.	11
EF37A	I.O.	11
EF38	I.O.	11
EF39	I.O.	11
EF40	B8A	13
EF41	B8A	13
EF42	B8A	13
EF50	B9G	15
EF51	B8G	15
EF52	B8G	15
EF54	B9G	15
EF55	B9G	15
EF80	B9A	15
EF91	B7G	13
EF92	B7G	13
EFM1	P	6
EH2	P	2
EK2	P	2
EK3	P	2
EK32	I.O.	3
EL2	P	35, 40
EL3	P	35, 40
EL5	P	40
EL6	P	35, 40
EL22	B8G	35, 45
EL31	I.O.	35, 42
EL32	I.O.	35, 42
EL33	I.O.	35, 42
EL35	I.O.	35, 42
EL36	I.O.	42
EL37	I.O.	36, 42
EL38	I.O.	42
EL41	B8A	36, 45
EL42	B8A	36, 45
EL50	P	36, 40
EL51	P	36, 40
EL91	B7G	36, 44
ELLI	P	46
EM1	P	6
EM3	P	6
EM4	P	6
EM31	I.O.	6
EM34	I.O.	6
EM35	I.O.	6
EY51	B2G	21
EY91	B7G	21
EZ2	P	19
EZ3	P	19
EZ4	P	19
EZ35	I.O.	19
EZ40	B8A	21
EZ41	B8A	21

F

Type	Base	Page
FC2	B7	1
FC2A	B7	1
FC4	B7	1
FC13	P	2
FC13C	B7	1
FC141	M.O.	2
FT4	I.O.	6
FW4/500	B4	17
FW4/800	B4	17

G

Type	Base	Page
GR4	B4	17
GU1	B4	17
GU5	B4	17
GU50	B4	17
GZ32	I.O.	19

H

Type	Base	Page
H2	B4	23
H4D	B7	24
HI2	B4	23
HI3	P	27
H20	B5	23
H30	B7	24
H42	B7	24
H63	I.O.	26
H141D	M.O.	27
H210	B4	23
HAD	B7	24
HD14	I.O.	26
HD21	B5	24
HD22	B5	24
HD23	B5	24
HD24	B5	24
HL2	B4	23
HL2-/K	B4	27
HL2s	P	23
HL4	B5	24
HL4+	B5	24
HL4g	B7	24
HL13	B7	24
HL13	P	27
HL13C	B7	24
HL13s	P	27
HL21	B4	23
HL21DD	B5	24
HL22	M.O.	27
HL22DD	M.O.	27
HL23	M.O.	27
HL23DD	M.O.	27
HL41	M.O.	27
HL41DD	M.O.	27
HL42DD	M.O.	27
HLI33	M.O.	27
HL133DD	M.O.	27
HLI34DD	M.O.	27
HL210	B4	23
HL1320	B7	24
HLAI	B5	24
HLA2	B5	24
HLBI	B4	23
HLDD1320	B7	24
HP2	B7	46
HP6	B7G	13
HPI3	B7	9
HPI3s	P	10
HP210c	B7	9
HP210nc	B4, B7	7, 9
HP211	B7	9
HP211c	B4, B7	7, 9
HP2018	B5, B7	7, 9
HP2118	B5, B7	7, 9
HP4100	B5	7
HP4101	B5	7
HP4101c	B5, B7	7, 9
HP4105	B5, B7	7, 9
HP4106	B5	7
HP4106c	B5, B7	7, 9
HP4115	B5	7
HP4115c	B5, B7	7, 9
HRI	B7G	21
HR2	B7G	21
HR2	B4	23
HR2s	P	27
HR3	B7G	21
HR4	B7G	21
HR5	B7G	21
HR6	I.O.	20
HR7	I.O.	20
HR210	B4	23
HSD	B7	24
HVRI	B4	17
HVR2	B4	17
HVR2A	B4	17
HY113/123	M5	33
HY115	M5	33
HY125	M5	33
HY145	M5	33
HY155	M5	33

I

Type	Base	Page
IW2	B4	17
IW3	B4	17
IW4	B4	17
IW4/350	B4	17
IW4/500	B4	17

K

Type	Base	Page
K23A	B5	24
K23B	B5	24
K30A	B5	24
K30B	B4	23
K30C	B4	23
K30D	B4	23
K30E	B4	23
K30G	B4	37
K30K	B4	23
K33A	B7	46
K33B	B7	46
K40B	B4	7
K40N	B4	7
K50M	B7	9
K50N	B7	9
K70B	B5	37
K70D	B5	37
K77A	B9	46
K80A	B7	1
K80B	B7	1
KBC32	I.O.	26
KCF30	I.O.	3
KD60	—	16
KF35	I.O.	11
KK32	I.O.	3
KL35	I.O.	42
KLL32	I.O.	46
KT2	B5	37
KT21	B5	37
KT24	B5	37
KT30	B7	39
KT31	B7	39
KT32	I.O.	36, 42
KT33	I.O.	42
KT33c	I.O.	36, 42
KT35	I.O.	42
KT36	I.O.	42
KT41	B7	39
KT42	B7	39
KT44	B7	39
KT45	B7	39
KT61	I.O.	36, 42
KT63	I.O.	42
KT66	I.O.	36, 42
KT71	I.O.	36, 42
KT72	I.O.	42
KT73	I.O.	42
KT74	I.O.	42
KT76	I.O.	36, 42
KT81	B8G	36, 45
KT101	B8G	36, 45
KTW61-M	I.O.	11
KTW62	I.O.	11
KTW63	I.O.	11
KTW73/M	I.O.	11
KTW74/M	I.O.	11
KTZ41	B7	9
KTZ63	I.O.	11
KTZ63/6J7	I.O.	11
KTZ73/M	I.O.	11

L

Type	Base	Page
L2	B4	23
L2DD	B5	24
L4	B5	37
LII	B4	23
LI2	B4	23
L21	B4	23
L21/DD	B5	24
L22/DD	M.O.	27
L30	B7	25
L63	I.O.	26
L77	B7G	27
L210	B4	23
LD210	B4	23
LL2	B4	23
LL2s	P	27
LP2	B4	23, 37
LP4	B4	36, 37

M

Type	Base	Page
M34	—	33
M64	—	33
M74	—	33
ME4s	P	6
ME6s	P	6

REPLACEMENT Valves

CURRENT Valves

OBSOLETE Valves

Type	Base	Page
ME41	M.O.	6
ME91	M.O.	6
ME920	37	6
MH4	B5	24
MH40	B5	24
MH41	B5	24
MH206	B7	1
MH4105	B7	1
MHD4	B7	25
MHL4	B5	24
MHLD6	I.O.	26
MKT4	B5	38
	B7	39
ML4	B5	24
		38
ML6	B5	24
ML40	B5	24
MM4V	B5	7
MM20	B5	7
MO465	B7	1
MP/Pen	B5	38
	B7	39
MPT4	B5	38
MS4	B5	7
MS4B	B5	7
MSG/HA	B5	7
MSG/LA	B5	7
MSP4	B5	7
	B7	9
MSP41	B5	8
	B7	9
MS/Pen	B5	8
	B7	9
MS/PenA	B7	9
MS/PenB	B7	9
MU2	B4	17
MU12	B4	17
MU12/14	B4	17
MU14	B4	17
MVSG	B5	8
MVS/Pen	B5	8
	B7	9
MVS/PenB	B7	9
MW6-2	P5	31
MW18-2	B8G	31
MW22-1	P	31
MW22-3	B8G	31
MW22-5	P	31
MW22-7	B8G	31
MW22-14	B8G	31
MW22-14c	B8G	31
MW22-15	B12A	31
MW22-16	B12A	31
MW22-17	B12A	31
MW22-18	B12A	31
MW31-3	P	31
MW31-6	P	31
MW31-41c	B8G	31
MW31-15	B12A	31
MW31-16	B12A	31
MW31-17	B12A	31
MW31-18	B12A	31
MW31-20	B8G	31
MW31-21	B8G	31
MW31-22	B12A	31
MW31-23	B12A	31
MW41-1	B12A	31
MX40	B7	1

N

N14	I.O.	42
N15	I.O.	43
N16	I.O.	43
N17	B7G	44
N18	B7G	44
N19	B7G	44
N30-G	B7	39
N31	B7	39
N37	B7G	44
N40	B7	39
N43	B7	39
N77	B7G	36
		44
N78	B7G	44
N108	B7G	44
N142	B8A	45
N144	B7G	44
N145	B8A	45
N147	I.O.	43
N150	B8A	45
N151	B8A	45

O

OA2	B7G	16
OA3/VR75	I.O.	16
OB2	B7G	16
OB3/VR90	I.O.	16
OC3/VR105	I.O.	16
OD3/VR150	I.O.	16
OM1	I.O.	20
OM3	I.O.	30
OM4	I.O.	26
OM5A	I.O.	11
OM5B	I.O.	11
OM6	I.O.	11
OM7	I.O.	11
OM8	I.O.	3
OM9	I.O.	43
OM10	I.O.	3
OZ4	I.O.	20

P

P2	B4	23
P4	B4	37
P12/250	B4	37
P15/250	B4	37
P24/450	B4	37
P25/400	B4	37
P25/450	B4	37
P25/500	B4	37
P26/500	B4	37
P27/500	B4	37
P30/500	B4	37
P40/800	B4	37
P41	M.O.	27
P41/800	B4	37
P61	M.O.	27
P215	B4	37
P220	B4	37
P220A	B4	37
P2018	B5	38
P4100	B4	37
PA1	B5	38
PA20	B4	36
		37
PA40	B4	36
		37
PD220	B7	46
PD220A	B7	46
PEN4DD	B7	39
PEN4VA	B7	39
PEN4VB	B7	39
PEN4VX	B5	38
PEN13	P	40
PEN13A	P	40
PEN13C	B7	39
PEN20	B5	38
PEN24	M.O.	40
PEN25	M.O.	40
PEN26	P	40
PEN36A	B7	39
PEN36C	B7	39
PEN40DD	B7	39
PEN44	M.O.	36
		40
PEN45	M.O.	36
		40
PEN45DD	M.O.	40
PEN46	M.O.	40
PEN141	M.O.	40
PEN220	B5	38
PEN220A	B5	38
PEN231	B5	38
PEN383	M.O.	40
PEN384	M.O.	40
PEN425	B5	38
PEN428	B7	39
PEN453DD	M.O.	40
PEN650	P	40
PEM1340	B7	39
PEN2020	P	40
PEN3520	B7	39
PEN3820	B7	39
PENA1	B5	38
PENA4	B7	39
PENB1	B5	38
PENB4	B7	39
PENDD1360	B7	39
PENDD2530	B7	39
PENDD4020	B7	39
PENDD4021	B7	39
PL33	I.O.	36
		43
PL38	I.O.	43
PL81	B9A	45
PL82	B9A	36
		45
PL83	B9A	45
PM1A	B4	23
PM1HF	B4	23
PM1HL	B4	23
PM1LF	B4	23
PM2	B4	37
PM2A	B4	37
PM2B	B7	46
PM2BA	B7	46
PM2DL	B4	23
PM2DX	B4	23
PM2HL	B4	23
PM12	B4	7
PM12A	B4	7
PM12M	B4	7
PM12V	B4	7
PM22	B4	37
	B5	38
PM22A	B4	37
	B5	38
PM22C	B5	38
PM22D	B5	38
PM24A	B5	38
PM24B	B5	38
PM24C	B5	38
PM24D	B5	38
PM24DC	B5	38
PM24E	B5	38
PM24M	B5	38
PM202	B4	37
PM252	B4	37
PP2	B4	37
	B5	38
PP2s	P	40
PP3/250	B4	36
		37
PP4	B5	38
PP4s	P	40
PP5/400	B4	36
		37
PP6As	P	40
PP6B	UX6	43
PP13A	B7	39
PP13s	P	40
PP24	B7	39
PP24s	P	40
PP34	B7	39
PP34s	P	40
PP35	B7	39
PP36	B7	39
PP37	B7	39
PP60	I.O.	36
		43
PP215	B5	38
PP215s	P	40
PP225	B5	38
PP225s	P	40
PP2018-D	B5	38
	B7	39
PP2101	UX5	43
PP3521	B7	36
		39
PT2	B5	38
PT2-/K	B5	38
PT4	B5	38
	B7	39
PT4D	B7	39
PT10	B7	39
PT16	B5	38
PT25	B5	38
PT25H	B5	38
PT41	B5	38
PT41B	B5	38
PTA	B7	39
PTAD	B7	39
PTS	B7	39
PTSD	B7	39
PTZ	B7	40
PV4	B4	17
PV25	B7	19
PV29	B7	19
PV29s	P	19
PV30	B7	19
PV30s	P	19
PV75/1000	B4	17
PV100/2000	B4	17
PV200/600	B4	17
PV400	B4	17
PV430	B4	17
PV475	B4	17
PV480	B4	17
PV495	B4	17
PV4100	B4	17
PV4200	B4	17
PV4201	B4	17
PV4300	B4	17
PX4	B4	36
		37
PX25	B4	36
		37
PX25A	B4	37
PY31	I.O.	20
PY80	B9A	22
PY82	B9A	22
PZ30	I.O.	20

Q

QP21	B7	46
QP22A	B9	46
QP22B	B7	46
QP25	M.O.	46
QP230	B7	46
QP240	B9	46
QPT2	B7	46

R

R1	B4	17
R2	B4	17
R3	B4	17
R4	B4	18
R4A	B4	18
R4B	B4	18
R10	B7G	21
R11	B4	18
R12	B2G	21
R14	I.O.	20
R16	B2G	21
R18	I.O.	20
R41	B4	18
R42	B4	18
R52	I.O.	20
RG250/1000	B4	18
RS	B5	18
RV120/250	B4	18
RV120/350	B4	18
RV120/350s	P	19
RV120/500	B4	18
RV120/500s	P	19
RV200/600	B4	18
RZ	B5	18

S

S4V	B5	8
S4VA	B5	8
S4VB	B5	8
S11A	B4	18
S11D	B4	18
S21	B4	7
S22	B4	7
S23	B4	7
S24	B4	7
S30C	B4	37
S130	B4	16
S130P	B4	16
S215A	B4	7
S215B	B4	7
S215VM	B4	7
S220	B4	7
S2018	B4	7
SD	B5	30
SD6	B7G	30
SD828A	—	33
5638		
SD828E	M6	33
5634		
SD917A	—	33
5637		
SE211	B4	7
SE211c	B4	7
SE2018	B5	8
SE2118	B5	8
SG215	B4	7
SGA1	B5	8
SN944	M6	33
5633		
SN946	—	33
SN947C	—	33
5640		
SN954	—	33
5641		
SN955B	—	33
SN957A	—	33
5645		
SN1006	—	33
SN1007A	M6	33
SP2	B7	9
SP2B	B7	9
SP2Bs	P	10
SP2D	B4	7
	B7	9
SP4	B5	8
	B7	9
SP4A	B7	9
SP4B	B7	9
SP4s	P	10
SP6	B7G	13
SP13	B7	9
SP13	P	10
SP13B	B7	9
SP13C	B7	9
SP13s	P	10
SP22	M.O.	10
SP41	M.O.	10
SP42	M.O.	10
SP61	M.O.	10
SP62	M.O.	10
SP141	M.O.	10
SP181	M.O.	10
SP210	B7	9
SP215	B7	9
SP220	B4	37
SP1320	B7	9
SP2220	B7	9
SPT2	B4	7
SPT4A	B7	9
SPTS	B7	9
SS210	B4	7
SS2018	B5	8
ST11	B4	16
SU25	I.O.	20
SU45	B7G	21
SU61	B2G	21
SU2150	B4	18
SU2150A	B4	18
T4D	B3G	30
T9/2	I.O.	32
T9/3	I.O.	32
T9/5	I.O.	33
T12/2	I.O.	33
T12/3	I.O.	33
T12/44	I.O.	32
T12/46	I.O.	33
T12/54	I.O.	32
T12/56	I.O.	32
T900	B12A	32
T901	B12A	32
TA10	B7B	32

REPLACEMENT Valves **CURRENT** Valves *OBSOLETE* Valves

Type	Base	Page
TA15	B7B	32
TDD2	B5	24
TDD2A	B5	24
TDD4	B7	25
TDD13C	B7	25
TH2	B7	1
TH4	B7	1
TH4A	B7	1
TH4B	B7	1
TH13C	B7	1
TH21C	B7	1
TH22C	B7	1
TH29	B7	1
TH30	B7	1
TH30C	B7	1
TH41	M.O.	2
TH233	M.O.	2
TH2320	B7	1
TH2321	B7	1
TH2620	B7	1
TP4	B9	2
TP22	B9	2
TP23	B7	1
TP25	M.O.	2
TP26	M.O.	2
TP1340	B9	2
TP2620	B9	2
TSP4	B7	9
TT4	B5	24
TT4A	B5	24
TV4	P	6
TV4A	P	6
TV6	P	6
TX4	B7	1
TX21	B7	1
TX29	B7	1

U

U8	B4	18
U9	B4	18
U10	B4	18
U12	B4	18
U12/14	B4	18
U14	B4	18
U16	B4	18
U17	B4	18
U18	B4	18
U18/20	B4	18
U19	B4	18
U20	B4	18
U21	B4	18
U22	M.O.	19
U23	B4	18
U24	I.O.	20
U25	B2G	21
U29	B4	18
U30	B7	19
U31	I.O.	20
U33	B4	18
U35	I.O.	20
U37	B2G	21
U50	I.O.	20
U52	I.O.	20
U70	I.O.	20
U74	I.O.	20
U75/300	B4	18
U76	I.O.	20
U78	B7G	21
U81	B8G	21
U82	B8G	22
U84	B8G	22
U101	B8G	21
U107	B7G	21
U134	I.O.	20
U142	B8A	21
U143	I.O.	20
U145	B8A	21
U147	I.O.	20
U149	B8G	22
U150	B8A	21
U201	I.O.	20
U281	I.O.	20
U403	M.O.	19
U404	B8A	21
U801	I.O.	20
U4020	B5	18

Type	Base	Page
UAF41	B8A	13
UAF42	B8A	13
UB41	B8A	30
UBC41	B8A	28
UBF80	B9A	15
UBL21	B8G	45
UCH21	B8G	4
UCH41	B8A	3
UCH42	B8A	3
UD41	B7	19
UF41	B8A	13
UF42	B8A	13
UL41/46	B8A	36, 45
UL44	B8A	45
UM34	I.O.	6
UR1C	B5	18
UR3C	B7	19
UU2	B4	18
UU3	B4	18
UU4	B4	18
UU5	B4	18
UU6	M.O.	19
UU7	M.O.	19
UU8	M.O.	19
UU9	B8A	21
UU10	B4	18
UU30/250	B4	18
UU60/250	B4	18
UU120/350	B4	18
UU120/500	B4	18
UY21	B8G	22
UY31	I.O.	20
UY41	B8A	21

V

V20	B5	18
V30	B5	18
V312	B5	24
V339	B7	25
V503	B4	36, 37
V914	B5	30
V2018	B5	18
V2118	B5	18
VDSB	B5	8
VFT4	I.O.	6
VFT6	I.O.	6
VHT2	B7	1
VHT2A	B7	1
VHT4	B7	1
VHTA	B7	1
VHTS	B7	1
VLS61	B4	18
VME4	B7	6
VMP4	B5, B7	8, 9
VMP4G	B7	9
VMS4	B5	8
VMS4B	B5	8
VO2	B7	1
VO2s	P	2
VO4	B7	1
VO4s	P	2
VO13	B7	1
VO13s	P	2
VP2	B7	9
VP2B	B7	9
VP2Bs	P	10
VP2D	B7	9
VP4	B7	9
VP4A	B5, B7	8, 9
VP4B	B7	9
VP4c	B7	9
VP4s	P	10
VP6	B7G	13
VP6	B7	9
VP6s	P	10
VP12D	I.O.	11
VP13	B7	9
VP13K	B7	9
VP13A	P	10
VP13B	B7	9
VP13C	B7	9
VP13s	P	10

Type	Base	Page
VP20	B5	8
VP21	B7	9
VP22	M.O.	10
VP23	M.O.	10
VP24	B7	9
VP41	M.O.	10
VP133	M.O.	10
VP210	B4, B7	7, 9
VP215	B7	9
VP1320	B7	9
VP1321	B7	9
VP1322	B7	9
VPT2	B4, B7	7, 9
VPT4	B5	8
VPT4B	B7	9
VPTA	B7	9
VPTS	B7	9
VR75/OA3	I.O.	16
VR90/OB3	I.O.	16
VR105/OC3	I.O.	16
VR150/OD3	I.O.	16
VS2	B4	7
VS24	B4	7
VX2	B7	1
VX2s	P	2
VX4s	P	2
VX13s	P	2

W

W17	B7G	13
W21	B4, B7	7, 9
W30	B7	9
W31	B7	9
W42	B7	9
W61	I.O.	11
W63	I.O.	11
W76	I.O.	12
W77	B7G	13
W81/M	B8G	15
W101/M	B8G	15
W107	B7G	13
W143	B8G	15
W145	B8A	13
W147	I.O.	12
W148	B8G	15
W149	B8G	15
W150	B8A	13
WD30	B9	9
WD40	B9	9
WD142	B8A	14
WD150	B8A	14

X

X14	I.O.	3
X17	B7G	3
X21	B7	1
X22	B7	1
X23	B7	1
X24	B7	1
X30	B7	1
X31	B7	1
X32	B7	1
X41	B7	1
X42	B7	1
X61M	I.O.	3
X62	I.O.	3
X63	I.O.	3
X64	I.O.	3
X65	I.O.	3
X66	I.O.	3
X71	I.O.	3
X73	I.O.	3
X75	I.O.	3
X76M	I.O.	3
X77	B7G	3
X78	B7G	3
X79	B9A	5
X81	B8G	4
X101	B8G	4
X108	B7G	3
X109	B9A	5

Type	Base	Page
X142	B8A	3
X143	B8G	4
X145	B8A	3
X147	I.O.	3
X148	B8G	4
X150	B8A	3
XFG1	M4	34
XFW10	B5A	34
XFW20	B5A	34
XFY10	B5A	34
XFY11	B5A	34
XFY12	B5A	34
XFY21	B5A	34
XWO75A	B5A	34
XWO75B	B5A	34
XY14B	B5A	34
XY14C	B5A	34

Y

Y61	I.O.	6
Y62	I.O.	6
Y63	I.O.	6
Y64	I.O.	6
Y65	I.O.	6
Y73	I.O.	6

Z

Z14	I.O.	12
Z22	B7	9
Z62	I.O.	12
Z63	I.O.	12
Z66	I.O.	12
Z77	B7G	13
Z90	B9G	15
Z142	B8A	14
Z150	B8A	14
ZD	B5	30
ZD17	B7G	13

REPLACEMENT Valves — **CURRENT** Valves — *OBSOLETE* Valves

BERNARDS RADIO BOOKS

No.		
35.	Dictionary of Mathematical Data	2/–
65.	Radio Designs Manual	2/6
66.	Communications Receivers' Manual	2/6
68.	Frequency Modulation Receivers' Manual	2/6
73.	Radio Test Equipment Manual	2/6
78.	Radio and Television Laboratory Manual	2/6
83.	Radio Instruments and Their Construction	2/6
86.	Midget Radio Construction	3/6
96.	Crystal Set Construction	1/–
97.	Practical Radio for Beginners, Book 1	3/–
99.	One Valve Receivers	1/6
100.	A Comprehensive Radio Valve Guide, Book 1	5/–
101.	Two Valve Receivers	1/6
102.	40 Circuits using Germanium Diodes	3/–
103.	"Radiofolder" A. The Master Colour Code Index for Radio and Television	1/6
104.	Three Valve Receivers	1/6
106.	Radio Circuits Handbook No. 4	2/6
107.	Four Valve Circuits	1/6
108.	Five Valve Circuits	2/6
112.	"Radiochart" Electronic Multimeter Construction	2/6
115.	Constructors' Handbook of Germanium Circuits	2/6
121.	A Comprehensive Radio Valve Guide, Book 2	5/–
123.	"Radiofolder" F. The Beginners' Push-Pull Amplifier	1/6
125.	Listeners' Guide to Radio and Television Stations of the World	2/6
126.	The Boys' Book of Crystal Sets	2/6
127.	Wireless Amplifier Manual No. 3	3/6
128.	Practical Transistors and Transistor Circuits	3/6
129.	Universal Gram-Motor Speed Indicator	1/–
131.	"Radiochart" Guide to Modern Valve Bases	2/6
132.	Reactance—Frequency Chart for Designers and Constructors	1/6
133.	Radio Controlled Models for Amateurs	5/–
134.	F.M. Tuner Construction	2/6
135.	All Dry Battery Portable Construction	2/6
138.	How to make T.V. and F.M. Aerials Bands, 1, 2 and 3	2/6
139.	Practical Radio for Beginners, Book 2	3/6
140.	Television Servicing for Beginners, Book 1	4/6
141.	Radio Servicing for Amateurs	3/6
142.	Modern Television Circuits and Fault Finding Guide	4/6
143.	A Comprehensive Valve Guide, Book 3	5/–
144.	The New "At a Glance" Valve and Television Tube Equivalents	5/–
145.	Handbook of AM/FM Circuits and Components	2/–
146.	High Fidelity Enclosures	5/–
147.	Practical Tape Recording Handbook	5/–
148.	Practical Transistor Receivers, Book 1	5/–
149.	Practical Stereo Handbook	3/6
150.	Practical Radio Inside Out	3/6