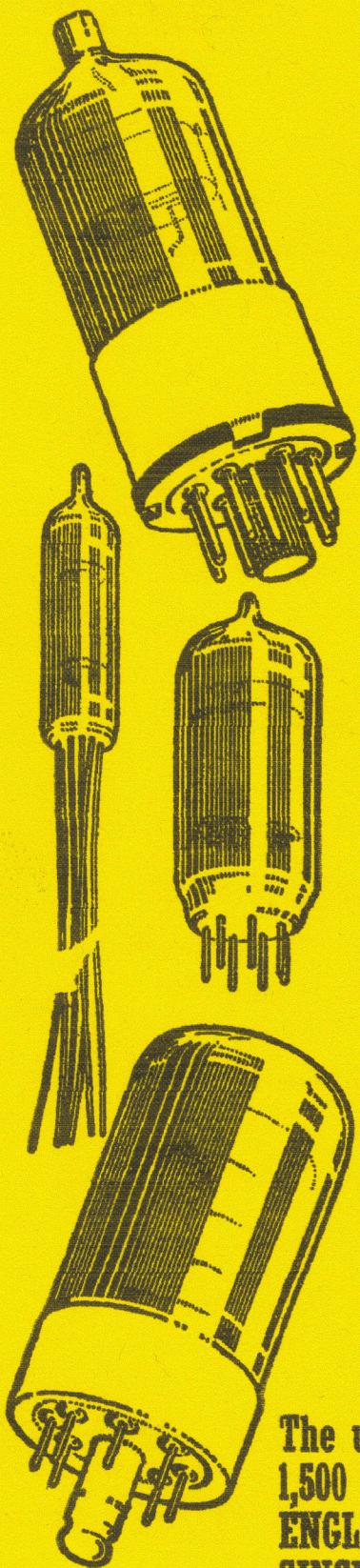


INTERNATIONAL
EDITION

BOOK 2



**A Comprehensive
VALVE GUIDE
BY
B. B. BABANI**

CHARACTERISTICS AND BASE CONNECTIONS ARE GIVEN FOR —

All receiving valves issued since 1951—including English, American and European: miniatures and sub-miniatures.

All the modern English and American television C.R. Tubes.

Voltage and current stabilisers, thyratrons, rectifiers, etc.

* * * * *

Complete diagrams of all the valve bases are shown—not simply the pin connections.

The unique features of Book 1 have been retained: more than 1,500 valves not previously shown are presented, including all ENGLISH, EUROPEAN & AMERICAN RECEIVING VALVES ISSUED SINCE 1951.

No. 121

BERNARDS RADIO MANUALS

5/-

(C) COPYRIGHT HEIN ROS, REPRINT

**A Comprehensive
RADIO VALVE
GUIDE**

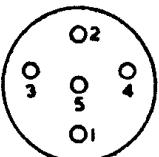
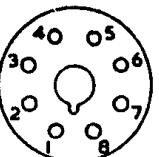
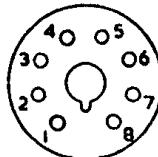
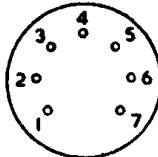
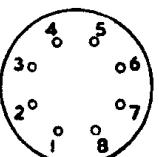
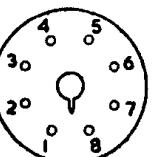
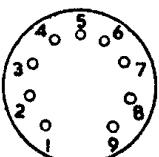
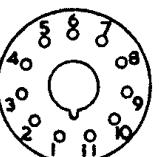
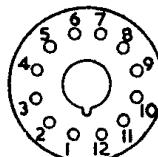
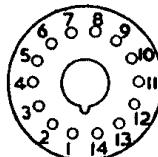
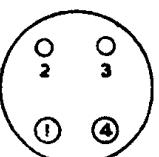
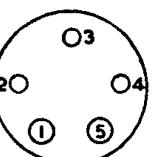
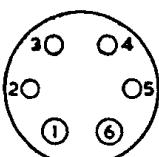
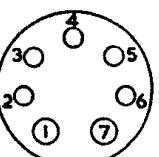
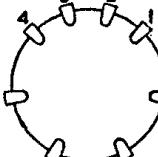
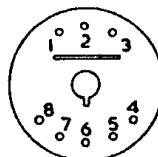
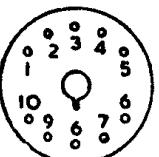
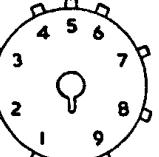
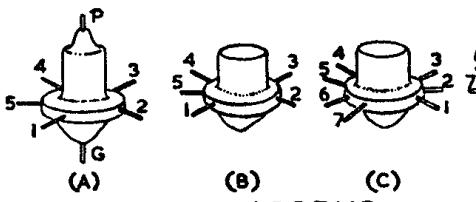
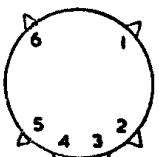
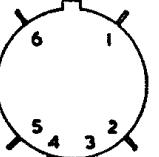
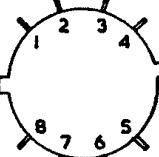
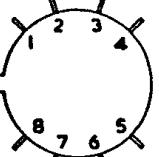
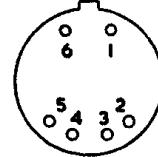
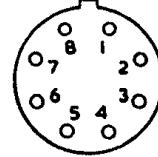
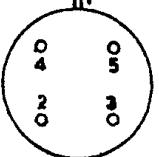
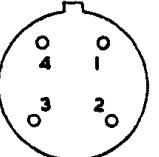
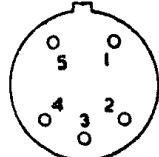
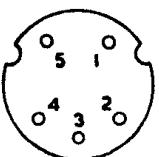
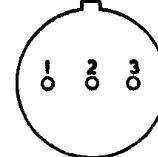
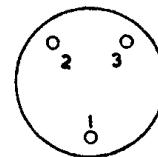
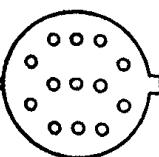
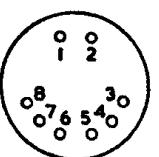
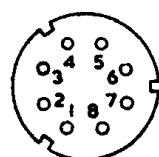
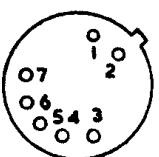
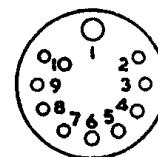
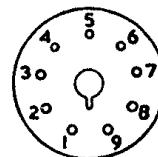
BOOK 2

by

B. B. BABANI

LONDON: BERNARDS (Publishers) LIMITED

VALVE BASE KEY

					
					
					
		 <p>(A) (B) (C) (D)</p> <p>ACORNS</p>			
					
					
					

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 headings according to their function, and they are grouped in each section in base order. All B7G types, for example, will be found in one group. For easy reference each base type is listed in numerical/alphabetical order.

For British valves 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 European Companies which are listed as Mul.-Eupn.; (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.

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. As a matter of necessity many European bases have been given an arbitrary designation.

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.

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. Nonodes

which are extensively used in Europe in F-M circuits are included in this section for convenience.

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 EF44, 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

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

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. Booster or Recovery diodes, used in modern line scan television circuits are included in this section.

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 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 types using electro-static focusing, and in some cases electro-static deflection.

Where possible, the focusing 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. Aluminised, Aquadag coated and Ion Trap tubes, etc., are all identified by footnotes. The deflection angle has also been quoted where possible.

OUTPUT VALVES

All types of output valves are included, with the exception of certain twin output valves (which have a section of their own). 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 of Book 1, 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.

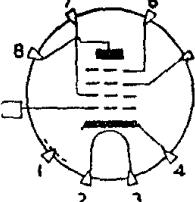
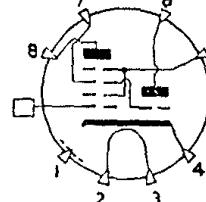
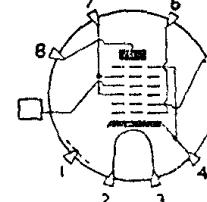
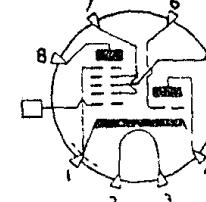
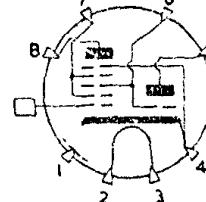
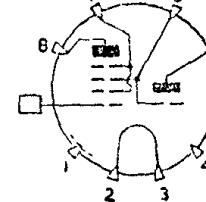
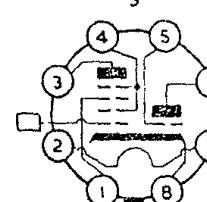
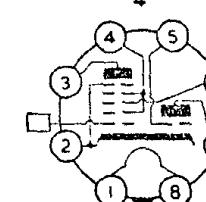
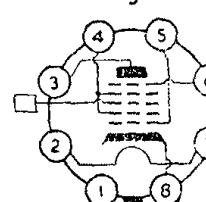
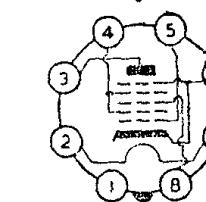
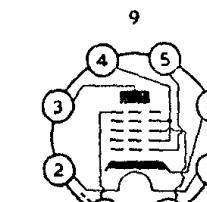
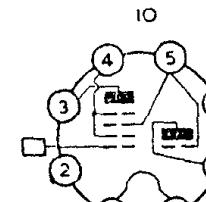
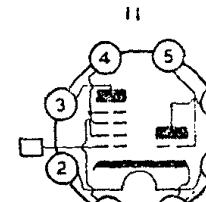
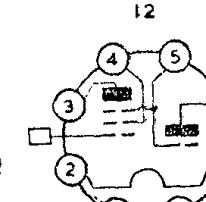
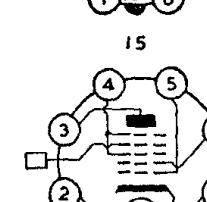
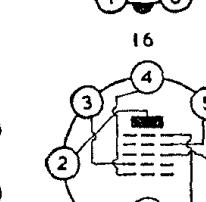
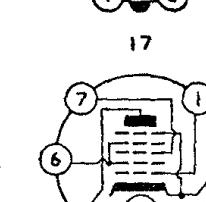
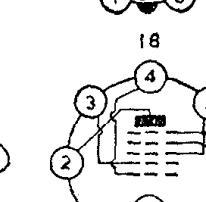
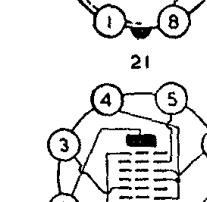
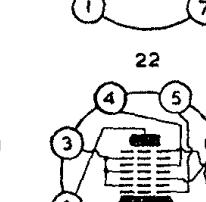
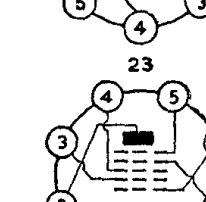
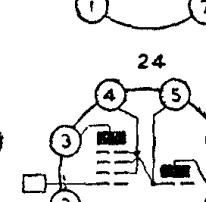
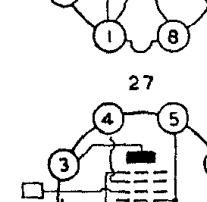
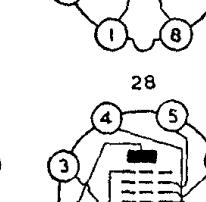
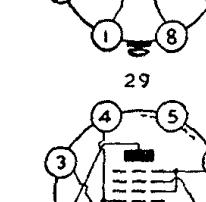
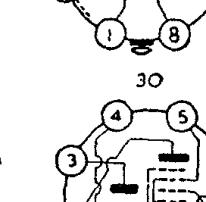
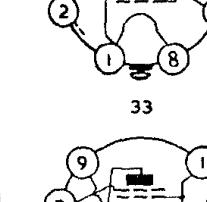
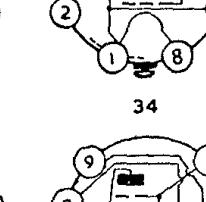
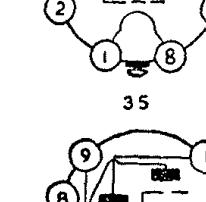
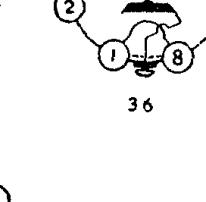
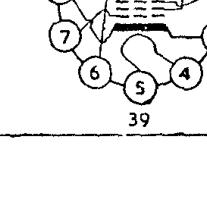
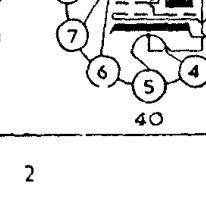
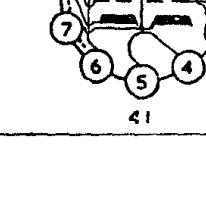
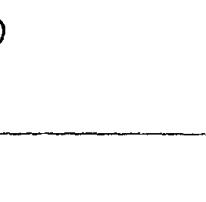
ABBREVIATIONS USED IN THE TABLES

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

FREQUENCY CHANGERS

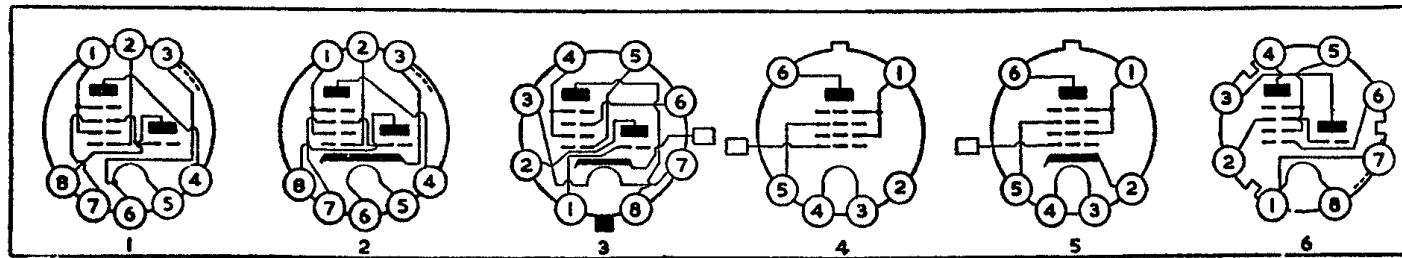
Type	FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	ra MΩ	gc mA/V	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref	
ACH1 (t/hex)	4.0	1.0	300	2.5	70	2.0	150	5.0	2.0	0.8	0.75	P	2	European
AH1 (hex)	4.0	0.65	250	1.7	80	2.5	—	—	2.0	2.0	0.55		1	European
AK2 (oct)	4.0	0.65	250	1.6	70	3.8	90	2.0	1.5	1.6	0.6		3	European
CCH1 (t/hex)	20.0	0.2	200	2.0	50	3.2	200	2.5	2.0	0.9	0.75		2	European
CCH2 (t/hep)	29.0	0.2	200	3.25	100	6.0	100	9.5	2.5	1.5	0.75		5	European
CH1 (hex)	13.0	0.2	200	2.2	100	4.0	—	—	2.0	2.0	0.55		1	European
CK1 (oct)	13.0	0.2	200	1.6	90	2.0	70	3.8	1.5	1.5	0.60		3	European
CK3 (oct)	19.0	0.2	200	2.5	100	5.0	100	5.5	2.5	1.7	0.65		3	European
ECH4 (t/hex)	6.3	0.35	250	3.0	100	6.2	250	4.5	2.0	1.4	0.75		4	European
EH1 (hep)	6.3	0.4	250	3.0	80	1.1	—	—	2.0	1.8	2.0		1	European
EK1 (oct)	6.3	0.4	250	1.6	70	2.0	70	3.8	1.5	2.0	0.6		3	European
KCH1 (t/hex)	2.0	0.18	135	1.0	55	1.2	135	3.0	0.5	1.5	0.32		6	European
KH1 (hex)	2.0	0.13	135	1.0	60	1.1	—	—	1.5	1.1	0.45		7	European
KK2 (oct)	2.0	0.13	135	0.7	135	2.2	45	1.0	0.5	2.5	0.27		8	European
UCH5 (t/hep)	20.0	0.1	200	3.5	100	6.5	200	4.1	2.0	1.0	0.75		4	European
AH100 (hex)	4.0	1.1	200	5.5	100	5.0	—	—	2.5	0.25	0.43		1	European
6EA7 (hep)	6.3	0.3	250	3.5	100	8.5	—	—	0	0.8	0.45	I.O.	11	U.S.A.
6TE8 (t/hex)	6.3	0.3	250	3.7	100	3.8	100	3.4	2.0	1.0	0.65		9	U.S.A.
12EA7 (hep)	12.6	0.15	250	3.5	100	8.5	—	—	0	0.8	0.45		11	U.S.A.
12SY7 (hep)	12.6	0.15	250	3.5	100	8.5	—	—	2.0	1.0	0.45		13	U.S.A.
12SY7GT (hep)	12.6	0.15	28	0.5	28	1.8	—	—	1.0	—	0.25		12	U.S.A.
12TE8 (t/hex)	12.6	0.15	250	3.7	100	3.8	100	3.4	2.0	1.0	0.65		9	U.S.A.
1612 (hep)	6.3	0.3	250	3.3	150	9.2	—	—	6.0	1.0	0.35		14	U.S.A.
5961 (hep)	6.3	0.3	250	3.5	100	8.5	—	—	2.0	1.0	0.45		15	U.S.A.
DCH1 (t/hep)	1.4	0.15	120	1.0	120	2.0	—	—	—	—	0.4		16	European
ECH4G (t/hep)	6.3	0.35	250	3.0	100	6.2	250	4.5	2.0	1.4	0.75		17	European
KCF30 (t/pen)	2.0	0.2	120	0.53	60	0.97	100	—	1.5	0.25	0.26		18	European
KK2G (oct)	2.0	0.13	135	0.7	135	2.2	45	1.0	0.5	2.5	0.27		19	European
OCH4 (t/hep)	15.0	0.15	200	3.5	100	6.0	100	3.5	2.0	1.4	0.75		20	European
OH4 (hep)	12.6	0.15	200	3.5	250	4.0	100	2.7	3.0	0.4	0.5		21	European
PH4 (hep)	6.3	0.3	200	3.5	250	4.0	100	2.7	3.0	0.4	0.5		21	European
UCH4 (t/hep)	20.0	0.1	200	3.5	100	6.5	118	4.1	2.0	1.0	0.75		10	European
1AB6 (hep)	1.4	0.025	65	0.7	35	1.65	—	—	0	1.0	0.3	B7G	22	U.S.A.
1AC6 (hep)	1.4	0.05	85	0.65	30	1.65	—	—	0	1.0	0.325		22	U.S.A.
1C2 (hep)	1.4	0.05	85	0.7	60	0.15	—	—	0	0.065	0.325		22	Mazda
1L6 (hep)	1.4	0.05	90	0.5	45	0.6	90	1.2	0	0.65	0.3		24	U.S.A.
1U6 (hep)	1.4	0.025	90	0.55	45	0.55	90	1.1	0	0.6	0.275		24	U.S.A.
5750 (hep)	6.3	0.3	250	2.6	100	7.5	150	0.5	1.5	1.0	0.475		23	Am.-Brit.
DK92 (hep)	1.4	0.05	85	0.65	60	0.15	30	16.5	0	0.65	0.325		22	Mul.-Eupi
DK96 (hep)	1.4	0.025	65	0.7	35	1.65	—	—	0	1.0	0.3		22	Mul.-Eupi
EK90 (hep)	6.3	0.3	250	3.0	100	7.1	—	—	1.5	1.0	0.47		23	Mul.-Eupi
HK90 (hep)	12.6	0.15	250	3.0	100	7.1	—	—	1.5	1.0	0.47		23	European
HMO4 (hep)	6.3	0.3	250	3.0	100	7.1	—	—	1.5	1.0	0.47		23	M.O.V.
X18 (hep)	1.4	0.05	85	0.65	60	0.15	30	16.5	0	0.65	0.325		22	Mazda
6C10 (t/hep)	6.3	0.23	250	3.6	100	3.75	90	4.8	2.0	1.03	0.71	B8A	25	Mazda
6C11 (t/pen)	6.3	0.45	135	5.0	135	1.7	80	5.0	2.5	—	2.0		26	Mazda
10C2 (t/pen)	28.0	0.1	135	5.0	135	1.7	80	5.0	2.5	—	2.0		26	Mazda
62TH (t/hep)	6.3	0.3	250	3.0	85	3.0	100	4.8	2.0	1.0	0.75		25	Cossor
CF61 (t/hep)	6.3	0.225	250	3.0	105	2.2	100	4.9	2.0	2.0	0.5		25	European
CF141 (t/hep)	14.0	0.1	200	3.0	105	2.2	100	4.6	2.2	1.2	0.5		25	European
DK40 (oct)	1.4	0.05	67.5	1.0	67.5	0.25	67.5	2.6	0	0.9	0.42		27	European
ECH43 (t/hep)	6.3	0.225	250	3.0	85	3.0	100	4.8	2.0	1.0	0.75		25	European
EQ40 (nonode)	6.3	0.2	120	0.28	20	1.5	—	—	5.0	—	—		28	European
UCH43 (t/hep)	14.0	0.1	170	2.1	70	2.6	170	5.7	1.85	1.0	0.67		25	European
1LB6 (hep)	1.4	0.05	90	0.4	67.5	2.2	—	—	0	2.0	0.1	B8G	29	U.S.A.
DCH21 (t/hep)	1.25	0.15	120	0.9	60	1.9	120	1.7	0	1.0	0.45		30	European
DCH22 (t/hep)	1.25	0.1	90	0.75	50	1.1	60	1.4	0	1.0	0.28		31	European
DCH25 (t/hep)	1.2	0.1	120	1.0	60	1.0	115	0.1	0	1.3	0.28		32	European
DK21 (oct)	1.4	0.05	90	1.5	90	0.25	60	2.4	0	1.2	0.5		33	European
DK22 (oct)	1.4	0.05	90	1.0	60	2.0	90	0.2	—	1.0	0.5		34	European
DK25 (oct)	1.2	0.05	120	1.5	60	2.4	90	—	7.0	1.5	0.5		35	European
ECH71 (t/hep)	6.3	0.33	250	3.0	100	6.2	100	4.5	2.0	1.4	0.75		36	European
UCH71 (t/hep)	20.0	0.1	200	3.5	100	6.5	100	4.1	2.0	1.0	0.75		36	European
6AE8 (t/hep)	6.3	0.3	250	4.5	75	3.4	100	4.5	0	0.7	0.78	B9A	37	U.S.A.
6AJ8 (t/hep)	6.3	0.3	250	3.25	103	6.7	100	4.5	2.0	1.0	0.775		38	U.S.A.
6BE7 (nonode)	6.3	0.2	120	0.28	20	1.5	—	—	5.0	—	—		39	U.S.A.
12AH8 (t/hep)	{ 12.6	0.15	250	2.6	100	4.4	100	5.7	3.0	1.5	0.55		40	Brimar
ECH80 (t/hep)		6.3	0.3	250	3.0	85	3.0	82	5.1	2.0	1.0	0.75		37
ECH81 (t/hep)	6.3	0.3	250	3.25	103	6.7	100	4.5	2.0	1.0	0.775		38	Mul.-Eu

FREQUENCY CHANGERS—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	r_a MΩ	e_g mA/V	BASE		Make-
	Volts	Amps	Volts	I/mA	Volts	I/mA	Volts	I/mA				Type	Ref.	
EQ80 (nonode)	6.3	0.2	120	0.28	20	1.5	—	—	—	4.0	—	B9A	39	Mul.-Eupn.
PCF80 (t/pen)	8.5	0.3	170	6.5	170	2.0	—	—	—	—	2.3	41	Mul.-Eupn.	
UCH81 (t/hep)	19.0	0.1	250	3.25	103	6.7	100	4.5	2.0	1.0	0.775	38	Mul.-Eupn.	
UQ80 (nonode)	12.6	0.1	120	0.28	20	1.5	—	—	—	4.0	—	39	Mul.-Eupn.	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	7	6	5	4	3	2	1	8	—	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
	9	8	7	6	5	4	3	2	1	—	—	—	—	
<img alt="Circuit diagram for UQ														

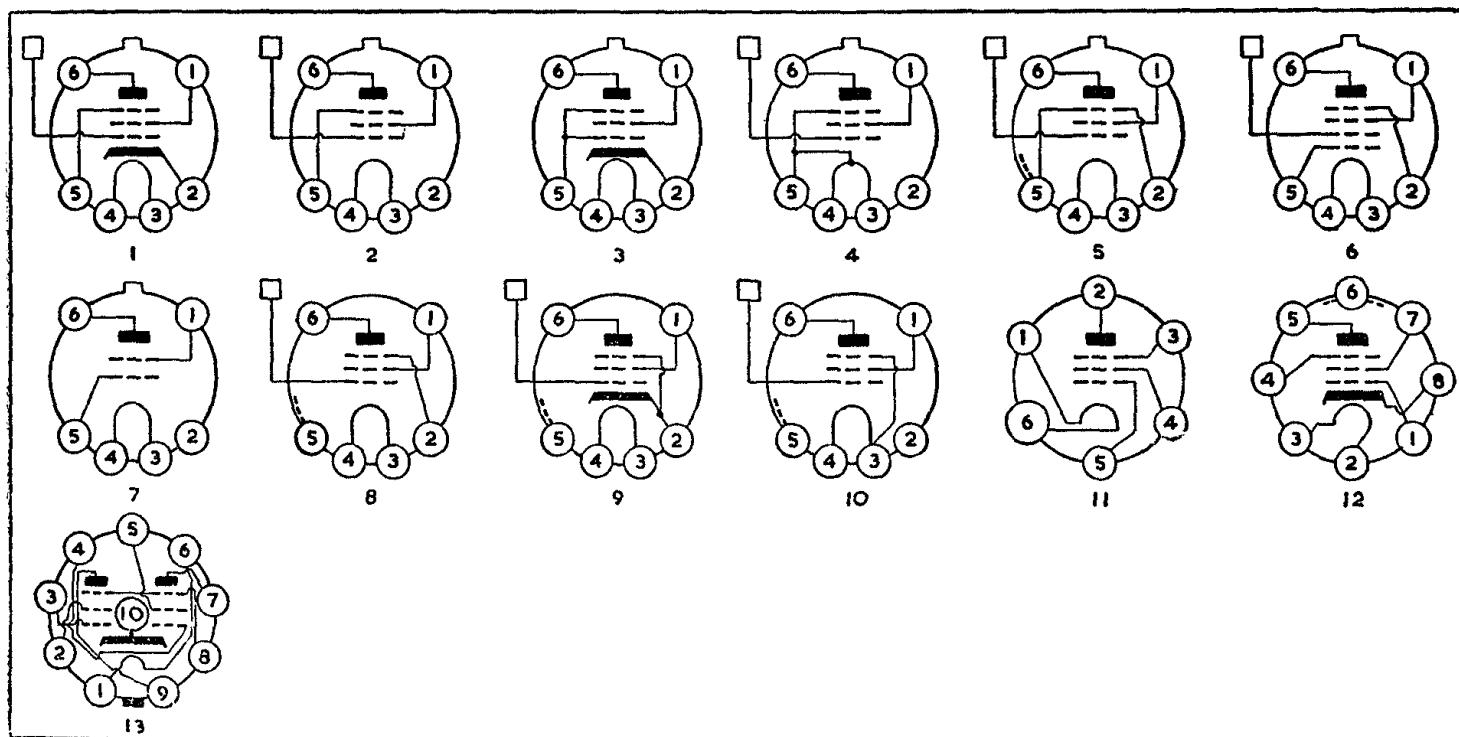
FREQUENCY CHANGERS—Contd.

Type	FILAMENT or HEATER	ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	r_a $M\Omega$	g_c mA/V	BASE		Maker		
		Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.			
DCH11	(t/hex)	1.2	0.075	120	1.0	60	1.5	90	1.0	4.0	1.0	0.3	G8A	1	European
ECH11	(t/hex)	6.3	0.2	250	2.3	100	3.0	250	3.4	2.0	0.8	0.65		2	European
UCH11	(t/hex)	20.0	0.1	200	2.0	80	3.0	115	2.8	2.0	1.0	0.68		2	European
VCH11	(t/hex)	38.0	0.05	200	2.0	80	3.0	200	2.85	2.0	1.0	0.68		2	European
RV2-4H300	(hex)	2.4	0.06	110	0.7	60	1.1	—	—	0.5	0.6	0.3	W6	4	European
RV12H300	(hex)	12.6	0.075	200	1.0	75	3.0	—	—	2.0	1.0	0.37		5	European
ECH171	(t/hex)	6.3	0.32	250	2.0	80	3.0	100	3.0	2.0	1.0	0.7	G8G	3	European
UCH171	(t/hex)	20.0	0.1	200	2.0	80	3.0	80	3.0	2.0	1.0	0.7		3	European
DCH41W	(t/hex)	1.2	0.1	120	1.0	60	1.5	120	1.7	0	1.0	0.3	WC8	6	European



SCREENED TETRODES and PENTODES

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a $k\Omega$	gm mA/V	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
LV5	12.6	0.2	20	7.0	20	17.0	5.2	3	3.3	W6	3	European
LV6	6.3	0.15	210	2.0	75	0.6	2.2	1000	1.5		1	European
MF6	1.9	0.1	150	2.0	75	0.55	1.5	1200	1.0		2	European
RL1P1	1.2	0.32	130	11.5	130	2.5	6.0	70	2.2		4	European
RL2·4P2	2.4	0.17	130	11.5	130	2.5	6.0	70	2.2		2	European
RL2·4P3	2.4	0.13	130	10.0	130	3.0	9.5	—	1.4		5	European
RL12P2	12.6	0.13	130	15.0	130	3.0	6.0	70	2.5		1	European
RV2P700	1.9	0.05	150	2.0	75	0.55	1.5	1200	1.0		2	European
RV2·4P45	2.4	0.06	20	1.6	15	0.4	1.5	500	1.0		6	European
RV2·4P700	2.4	0.06	150	1.7	75	0.35	1.5	60	0.75		2	European
RV2·4P701	2.4	0.06	150	2.7	75	0.5	1.5	1000	1.0		2	European
RV2·4P710	2.4	0.13	130	2.0	75	0.33	1.4	—	1.0		1	European
RV2·4P711	2.4	0.735	130	2.0	75	0.4	1.6	—	1.0		1	European
RV2·4T3	2.4	0.06	20	1.7	15	2.3	2.0	6	0.7		7	European
RV12P2000	12.6	0.075	210	2.0	75	0.6	2.3	1000	1.5		1	European
RV12P2001	12.6	0.075	210	3.0	75	0.55	2.3	700	1.4		1	European
MF2	1.9	0.18	120	2.5	80	0.5	1.5	1000	1.2	WA6	8	European
NF4	12.6	0.2	200	3.0	100	1.0	2.0	1800	2.2		9	European
RL2P3	1.9	0.29	130	10.0	130	2.3	19.0	75	1.0		8	European
RV2P800	1.9	0.18	120	3.5	80	0.8	1.5	500	1.0		10	European
RV12P4000	12.6	0.2	200	3.0	100	1.1	2.1	1000	2.3		9	European
LS1	1.9	0.05	90	5.0	90	0.9	3.0	—	1.2	WD6	11	European
LV1	12.6	0.2	250	20.0	200	2.5	2.5	—	10.5	WD8	12	European
LV4	12.6	0.3	250	20.0	200	3.0	2.0	—	7.0	W10	13	European

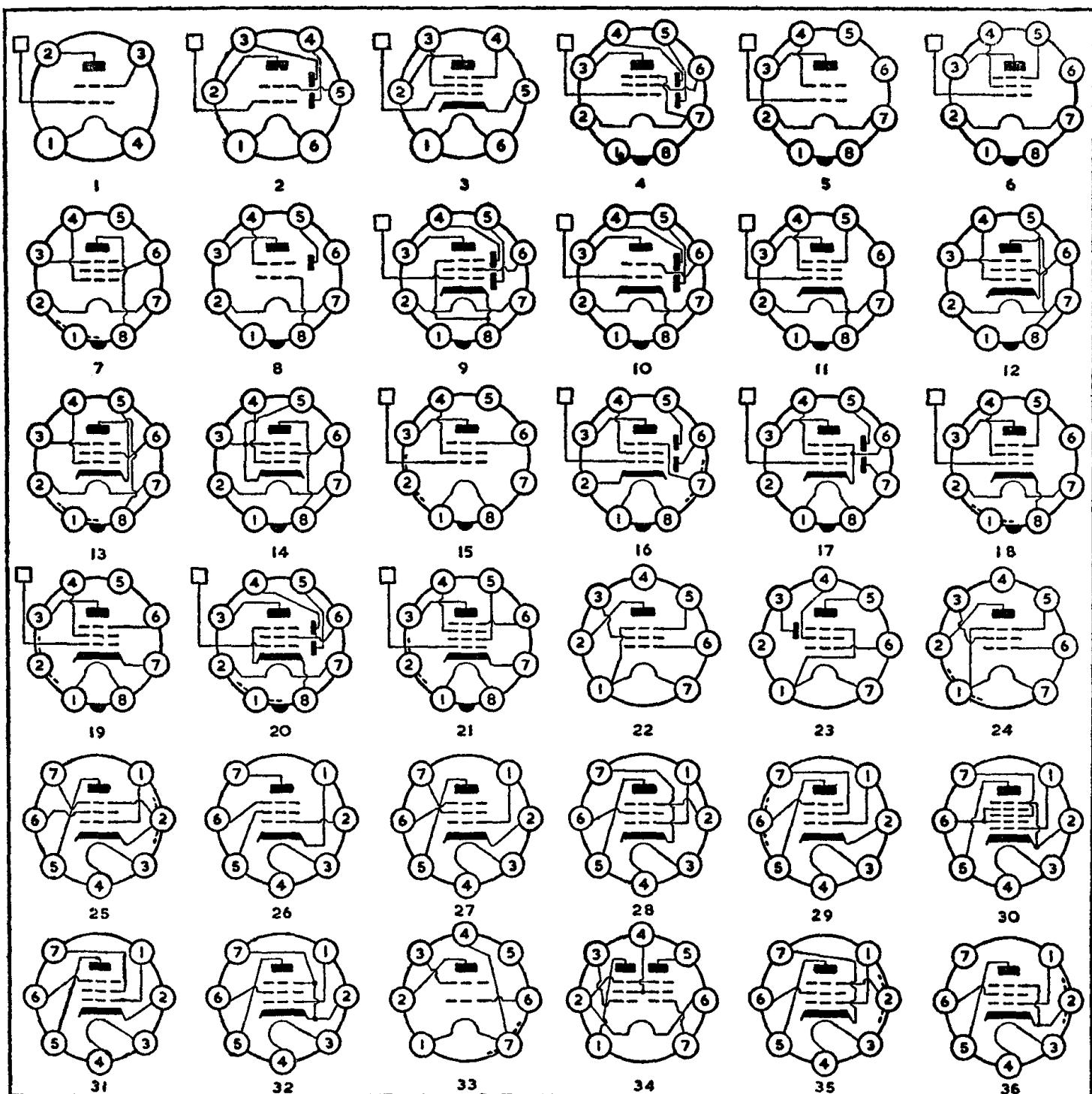


SCREENED TETRODES and PENTODES—Contd.

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.		
1K5	2·0	0·12	135	2·5	67·5	0·93	0	1000	1·05	I.O.	5	U.S.A.	
1K7	2·0	0·12	135	1·5	135	0·5	4·5	1400	0·7		4	U.S.A.	
1M5	Var. μ	2·0	0·12	135	1·5	90	0·5	3·0	1850	0·7		5	U.S.A.
1R		1·4	0·05	90	1·2	90	0·3	0	1500	0·75		6	European
1SA6		1·4	0·05	90	2·45	67·5	0·68	0	800	0·97		7	U.S.A.
1SB6		1·4	0·05	90	1·45	67·5	0·38	0	900	0·5		8	U.S.A.
6BN3		6·3	0·3	250	8·5	100	1·9	3·0	610	1·15		9	European
6G8		6·3	0·3	250	6·5	100	1·5	3·0	850	1·1		10	U.S.A.
6NK7		6·3	0·3	250	5·0	100	1·65	2·0	1000	2·3		11	European
6R		6·3	0·15	250	3·7	100	0·95	2·0	2200	2·0		11	European
6RV		6·3	0·15	250	6·4	100	1·9	2·0	1400	2·1		11	European
12NK7		12·6	0·15	250	5·0	100	1·65	2·0	1000	2·3		11	European
1223		6·3	0·3	250	2·0	100	0·5	3·0	1000	1·2		11	U.S.A.
1620		6·3	0·3	250	2·0	100	0·5	3·0	1000	1·225		11	U.S.A.
1649		6·3	0·45	300	10·0	150	2·5	2·0	1000	9·0		12	U.S.A.
1664		12·6	0·15	90	9·0	125	2·3	3·0	650	1·1		9	U.S.A.
5660		12·6	0·15	250	10·0	125	2·3	3·0	600	1·3		9	U.S.A.
5661		12·6	0·15	250	9·2	100	2·6	3·0	800	2·0		12	U.S.A.
5693		6·3	0·3	250	3·0	100	0·85	3·0	1000	1·65		13	U.S.A.
5732		6·3	0·3	250	10·5	125	2·6	3·0	600	1·65		11	U.S.A.
6006		6·3	0·3	250	11·8	125	4·4	14·0	900	4·7		14	U.S.A.
6137	Var. μ	6·3	0·3	250	9·2	100	2·6	3·0	800	2·0		13	U.S.A.
7000		6·3	0·3	250	2·0	100	0·5	3·0	1500	1·225		11	U.S.A.
DF21		1·4	0·025	90	1·2	90	0·25	0	2000	0·7		15	European
DF22		1·4	0·05	90	1·4	90	0·3	1·5	1500	1·1		15	European
EBF35		6·3	0·2	250	5·0	100	2·0	2·0	1500	1·8		16	European
OBF2		8·5	0·15	200	6·0	100	1·5	2·0	1000	1·75		17	European
OF1		6·3	0·15	240	8·0	100	2·2	2·5	1000	1·75		18	European
OF5		12·6	0·15	240	7·0	100	1·6	3·0	750	1·55		18	European
OF9		8·5	0·15	225	6·5	100	1·2	3·0	850	2·0		19	European
PBF2		6·3	0·3	250	5·8	100	1·6	3·0	650	1·2		20	European
PF9		6·3	0·3	250	7·5	100	1·6	3·5	650	1·65		18	European
UBF2		12·6	0·1	200	5·2	100	1·7	2·0	1000	1·85		17	European
UF8		12·6	0·1	200	8·0	200	0·2	2·5	450	1·8		21	European
UF9	Var. μ	12·6	0·1	200	6·0	100	1·7	2·5	1200	2·2		19	European
1AE4		1·25	0·1	90	3·5	90	1·2	0	500	1·55		22	U.S.A.
1AF4		1·4	0·025	90	1·8	90	0·55	0	1800	1·05		22	U.S.A.
1AF5		1·4	0·025	90	1·1	90	0·4	0	2000	0·6		23	U.S.A.
1AH5		1·4	0·025	90	1·1	90	0·4	0	1600	0·4		23	U.S.A.
1AJ4		1·4	0·025	90	1·65	90	0·5	0	1400	0·85		24	U.S.A.
6BC5		6·3	0·3	250	7·5	150	2·1	1·75	800	5·7		25	U.S.A.
6BN6		6·3	0·3	80	0·23	60	4·5	1·3	Gated Beam			26	U.S.A.
6CB6		6·3	0·3	200	9·5	150	2·8	2·0	600	6·2		27	U.S.A.
6CG6		6·3	0·3	250	9·0	150	2·3	8·0	720	2·0		28	U.S.A.
6CQ6	Var. μ	6·3	0·2	250	8·0	200	2·1	2·5	—	2·1		29	U.S.A.
12BN6		12·6	0·15	80	0·23	60	4·5	1·3	Gated Beam			26	U.S.A.
26CG6		26·5	0·07	250	9·0	150	2·3	8·0	720	2·0		28	U.S.A.
5654		6·3	0·175	120	7·5	120	2·5	2·0	340	5·0		25	U.S.A.
5725		6·3	0·175	120	5·2	120	3·5	2·0	—	3·2		27	U.S.A.
5749		6·3	0·3	250	11·0	100	4·2	1·0	1500	4·4		28	Am.-Brit
5910		1·4	0·05	90	1·6	90	0·45	0	1500	0·9		22	U.S.A.
5915		6·3	0·3	150	5·8	71	9·0	0	Gated Beam			30	U.S.A.
6028		20·0	0·05	120	7·5	120	—	2·0	300	5·0		25	U.S.A.
6064		6·3	0·3	250	10·0	250	2·5	2·0	1000	7·6		31	Am.-Brit
6065	Var. μ	6·3	0·2	250	8·0	200	2·1	2·5	—	2·1		31	Brimar
6136		6·3	0·3	250	10·6	150	4·3	1·0	1000	5·2		28	U.S.A.
6186		6·3	0·3	250	7·0	150	2·0	2·0	800	5·0		32	U.S.A.
6187		6·3	0·15	120	5·2	120	3·5	2·0	—	3·2		27	U.S.A.
9001		6·3	0·15	250	2·0	100	0·7	3·0	1000	1·4		25	U.S.A.
DAF96		1·4	0·025	90	1·1	90	0·4	0	1600	0·4		23	Mul.-Eupn.
DF96		1·4	0·025	90	1·65	90	0·5	0	1400	0·85		24	Mul.-Eupn.
DF904		1·4	0·05	90	1·6	90	0·45	0	1500	0·9		22	European
DF906		1·4	0·1	45	3·0	45	1·0	0	80	1·7		33	European
DFF101		1·4	0·025	45	1·1	45	0·5	—	444	0·22		34	European
EF93	Var. μ	6·3	0·3	250	11·0	100	4·2	1·0	1500	4·4		35	Mul.-Eupn.
EF94		6·3	0·3	250	10·8	150	4·3	1·0	1000	5·2		28	Mul.-Eupn.
EF95		6·3	0·175	150	7·0	140	2·2	3·0	420	4·3		36	Mul.-Eupn.
HF93		12·6	0·15	250	11·0	100	4·2	1·0	1500	4·4		28	European
HF94		12·6	0·15	250	10·8	150	4·3	1·0	1000	5·2		28	European
PMO4	Var. μ	6·3	0·3	250	11·0	100	4·2	—	1500	4·4		28	European
PMO5		6·3	0·175	150	7·0	140	2·2	3·0	420	4·3		36	European
PMO7		6·3	0·3	250	10·0	250	2·5	2·0	1000	7·6		29	European

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.		
QA2400	Var. μ .	6.3	0.2	200	8.0	200	2.1	2.5	500	2.5	B7G	29	Osram
QA2403		6.3	0.3	250	10.0	250	2.5	2.0	300	7.6		29	Osram
1C4		2.0	0.12	135	1.5	90	0.5	3.0	1850	0.7		1	U.S.A.
1K4		2.0	0.12	135	2.5	67.5	0.93	0	1000	1.05		1	U.S.A.
22		3.3	0.132	135	3.7	67.5	1.3	1.5	325	0.5		1	U.S.A.
34		2.0	0.06	180	2.8	67.5	1.0	3.0	1000	0.62		1	U.S.A.
1K6		2.0	0.12	135	1.5	135	0.5	4.5	1400	0.7	UX6	2	U.S.A.
1221		6.3	0.3	250	2.0	100	0.5	3.0	1000	1.2		3	U.S.A.
1603		6.3	0.3	250	2.0	100	0.5	3.0	1000	1.23		3	U.S.A.
7700		6.3	0.3	250	2.0	100	0.5	3.0	1500	1.23		3	U.S.A.



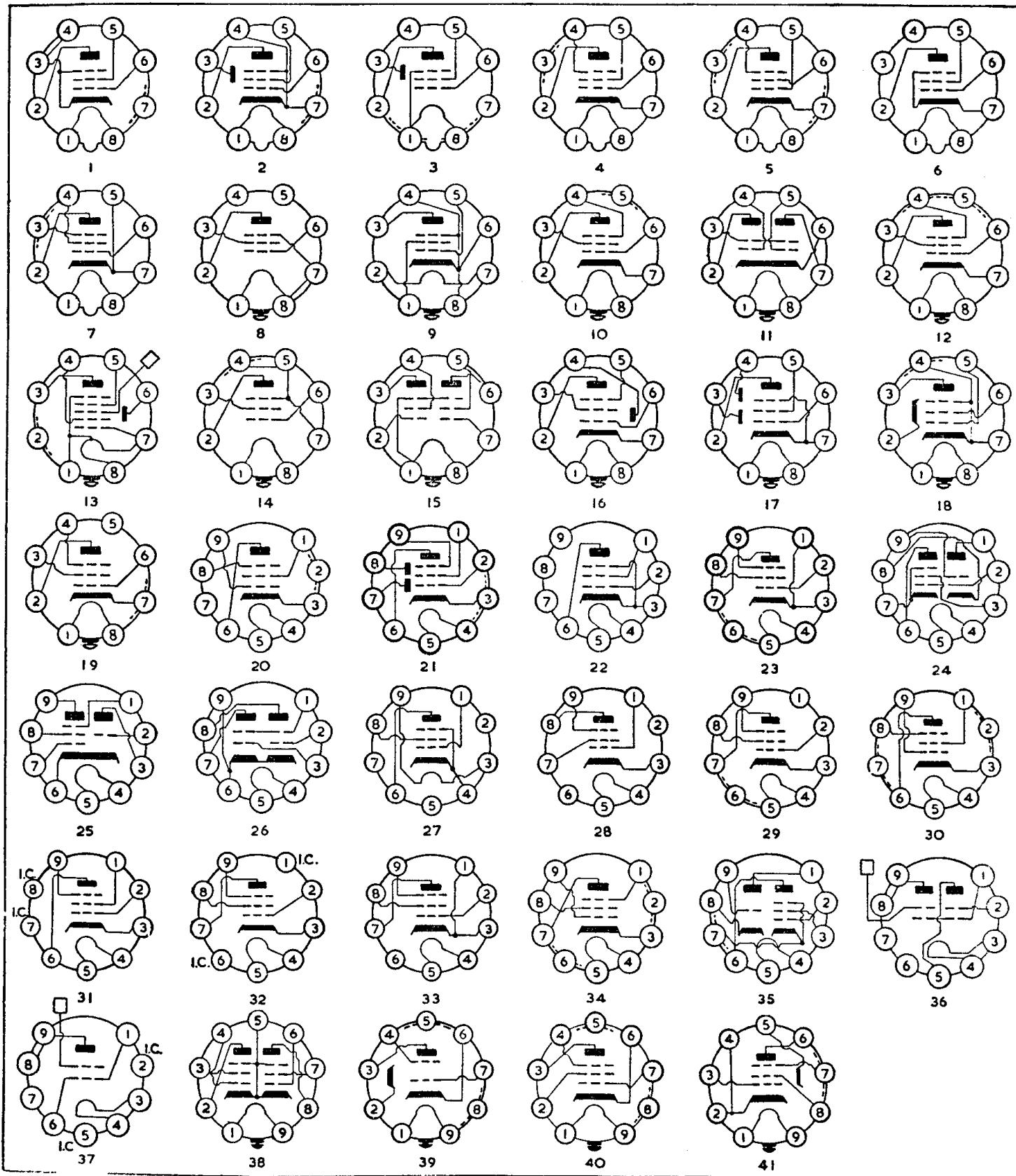
SCREENED TETRODES and PENTODES—Contd.

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.		
6F16	Var. μ	6.3	0.2	250	6.0	125	1.7	2.5	1000	2.4	B8A	1	Mazda
62VP	Var. μ	6.3	0.2	250	6.0	125	1.7	2.5	1000	2.4		1	Cossor
D61	Var. μ	6.3	0.2	250	5.0	125	1.6	2.0	1200	1.8		2	European
DAF40		1.4	0.025	67.5	0.85	67.5	0.2	0	2600	0.7		3	European
DAF41		1.4	0.025	67.5	0.17	67.5	0.04	0	1000	—		3	European
EF43	Var. μ	6.3	0.33	250	15.0	133	3.5	2.0	500	6.4		4	European
EF44		6.3	0.2	250	3.0	140	0.55	2.0	2500	1.8		5	European
low noise version of EF40													
EF410		6.3	0.2	250	6.0	100	1.7	2.5	1000	2.2		6	European
HF61	Var. μ	6.3	0.2	250	6.0	125	1.7	2.5	1000	2.4		1	European
HF62		6.3	0.33	250	10.0	250	2.3	2.0	440	9.5		4	European
HF121	Var. μ	12.6	0.1	200	7.2	150	2.1	3.0	1000	2.3		1	European
UF40		12.6	0.1	200	3.0	150	0.9	2.0	3000	1.8		5	European
UF43	Var. μ	21.0	0.1	170	15.0	135	3.5	2.0	300	6.3		4	European
W142	Var. μ	12.6	0.1	200	7.2	150	2.1	3.0	1000	2.3		1	M.O.V.
Z145		22.0	0.1	200	10.0	200	2.6	1.8	900	9.0		7	M.O.V.
1AB5		1.2	0.13	150	6.8	150	2.0	1.5	120	1.35		8	U.S.A.
7AB7		6.3	0.15	250	4.0	100	1.3	2.0	500	1.8		9	U.S.A.
7AJ7		6.3	0.3	250	2.2	100	0.7	3.0	1000	1.575		10	U.S.A.
1204		6.3	0.15	250	4.0	100	1.3	2.0	500	1.8		9	U.S.A.
1206		6.3	0.3	250	4.5	100	0.8	2.5	225	2.1		11	U.S.A.
1232		6.3	0.45	250	6.0	100	2.0	2.0	800	4.5		10	U.S.A.
1280		12.6	0.15	250	2.2	100	0.7	3.0	1000	1.575		10	U.S.A.
1284		12.6	0.15	250	9.0	100	2.5	3.0	800	2.0		10	U.S.A.
18040		18.0	0.27	210	20.0	210	5.3	3.0	250	11.0		12	European
DAH50		2.8	0.025										
DF23	Var. μ	1.4	0.05	15	0.8	15	1.5	0	100	0.65		13	European
DF25		1.25	0.025	90	0.65	50	0.15	5.0	2500	0.58		14	European
DF26		1.2	0.025	90	0.65	50	0.15	5.0	2500	0.58		14	European
DFF50		1.2	0.05	120	1.2	90	0.3	1.1	1400	0.75		14	European
DFF51		1.4	0.1	25	2.25	25	0.5	1.1	32.5	1.2		15	European
EAF21		6.3	0.3	250	6.0	100	1.6	2.0	1500	2.8		16	European
EBF21		6.3	0.33	250	7.5	100	2.0	3.0	2000	2.2		17	European
EFP20		6.3	0.45	250	5.0	250	0.22	2.0	500	12.0		18	European
UAF21		20.0	0.1	200	6.0	100	1.6	2.0	1500	2.8		16	European
UF21		12.6	0.1	200	6.0	100	1.7	2.5	900	2.2		19	European
6AD8		6.3	0.3	250	6.7	85	2.3	2.0	1000	1.1		21	U.S.A.
6BH5	Var. μ	6.3	0.2	250	6.0	125	1.7	2.5	1000	2.2		22	U.S.A.
6BW7		6.3	0.3	250	9.7	250	3.7	2.5	750	8.2		23	U.S.A.
6BY7	Var. μ	6.3	0.3	250	10.0	100	2.5	2.0	500	6.0		23	U.S.A.
6U8		6.3	0.45	250	10.0	110	3.5	1.0	400	5.2		26	U.S.A.
6X8		6.3	0.45	150	4.6	150	1.1	3.5	—	1.6		25	U.S.A.
19X8		18.9	0.15	250	7.7	150	1.6	2.0	750	4.6		25	U.S.A.
64SPT		6.3	0.3	170	10.0	170	2.5	2.0	400	7.4		23	Cossor
5656		6.3	0.4	150	15.0	120	2.7	2.0	60	5.8		26	U.S.A.
5847		6.3	0.3	150	13.0	150	4.5	1.8	—	12.5		27	U.S.A.
5879		6.3	0.15	250	1.8	100	0.4	3.0	2000	1.0		28	U.S.A.
6059		6.3	0.15	250	2.0	100	0.5	3.0	2300	1.25		29	Am.-Brit.
6084		6.3	0.3	210	10.0	120	2.2	2.0	400	9.0		30	U.S.A.
6086		18.0	0.1	210	10.0	120	2.1	2.0	500	9.0		31	U.S.A.
6132		6.3	0.75	250	40.0	250	6.0	4.5	50	11.0		32	U.S.A.
6196		3.0	0.05	9	0.004	6	0.5	4.0	Electro meter			36	U.S.A.
6250		3.0	0.05	9	0.0075	6	0.5	4.0	Electro meter			37	U.S.A.
6267		6.3	0.2	250	3.0	140	0.55	2.0	2500	1.85		30	U.S.A.
18042		18.0	0.1	210	10.0	120	2.1	165*	400	9.0		31	European
18043		6.3	0.3	210	10.0	120	2.2	165*	400	9.0		31	European
E80F		6.3	0.3	250	3.0	100	0.55	2.0	2000	1.85		30	European
E83F		6.3	0.3	210	10.0	120	2.2	165*	400	9.0		31	European
E8F81		6.3	0.3	250	6.7	85	2.3	2.0	1000	1.1		21	Mul.-Eupn.
EF81	Var. μ	6.3	0.2	250	6.0	125	1.7	2.5	1000	2.2		22	Mul.-Eupn.
EF85	Var. μ	6.3	0.3	250	8.0	85	2.0	1.8	500	5.7		23	Mul.-Eupn.
EF86		6.3	0.2	250	3.0	140	0.55	2.0	2500	1.85		30	Mul.-Eupn.
EF800		6.3	0.3	170	10.0	170	2.5	2.0	400	7.2		23	European
EF802		6.3	0.3	170	12.0	170	3.0	1.8	300	8.0		33	European
EF804		6.3	0.2	250	3.0	140	0.55	2.0	2500	2.0		34	European
EF804S		6.3	0.17	250	3.0	140	0.55	2.0	2500	2.0		34	European
PCF80		8.5	0.3	170	10.0	170	3.0	—	—	6.0		35	Mul.-Eupn
UF80		20.0	0.1	170	10.0	170	2.5	2.0	400	7.2		23	Mul.-Eupn
UF85	Var. μ	21.0	0.1	200	8.0	85	2.0	1.8	400	5.70		23	Mul.-Eupn
Z152		6.3	0.3	170	10.0	170	2.5	2.0	400	7.4		23	Marconi
Z309		12.6/6.3	0.3/0.6	250	20.0	250	5.5	2.0	500	15.0		23*	Osram
Z719		6.3	0.3	170	—	170	—	2.0	400	7.4		23	Osram

*Heater CT to pin 6.

SCREENED TETRODES and PENTODES—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a $k\Omega$	gm mA/V	BASE		Maker	
	Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.		
Z729	Var. μ	6.3	0.2	250	3.0	140	—	2.5	2000	1.85	B9A	20	Osram
ZD152		6.3	0.3	250	5.0	85	1.75	2.0	1500	2.2	B9G	21	Marconi
EE50		6.3	0.3	250	10.0	250	0.6	3.0	250	14.0	B9G	39	European
EF53		6.3	0.3	250	10.0	250	3.0	2.0	1000	6.5	B9G	40	European
EFF51		6.3	0.75	250	6.0	200	1.2	2.0	350	7.5	B9G	38	European
EFP60		6.3	0.37	250	20.0	250	1.5	2.0	70	25.0	B9G	41	European

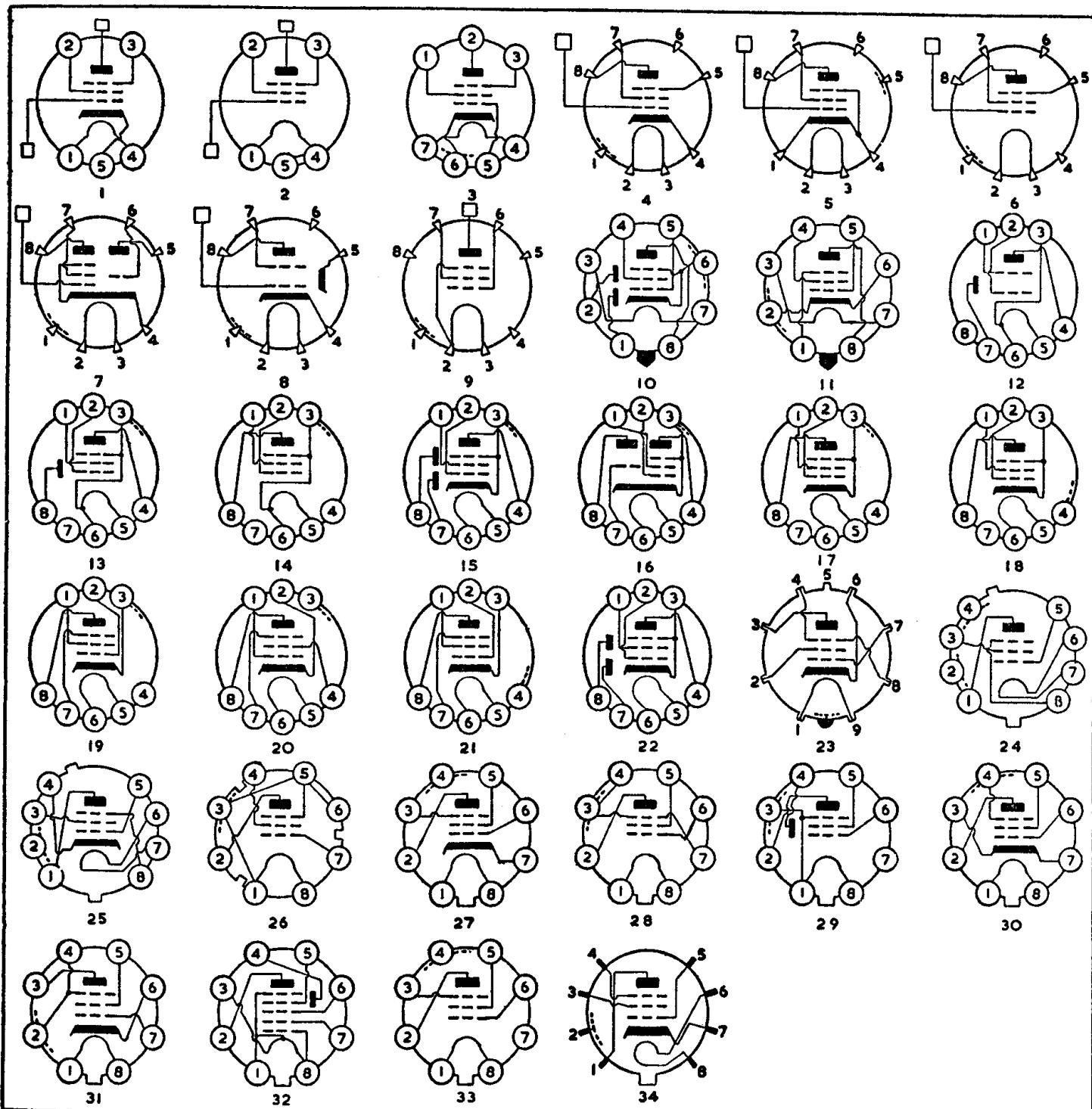


SCREENED TETRODES and PENTODES—Contd.

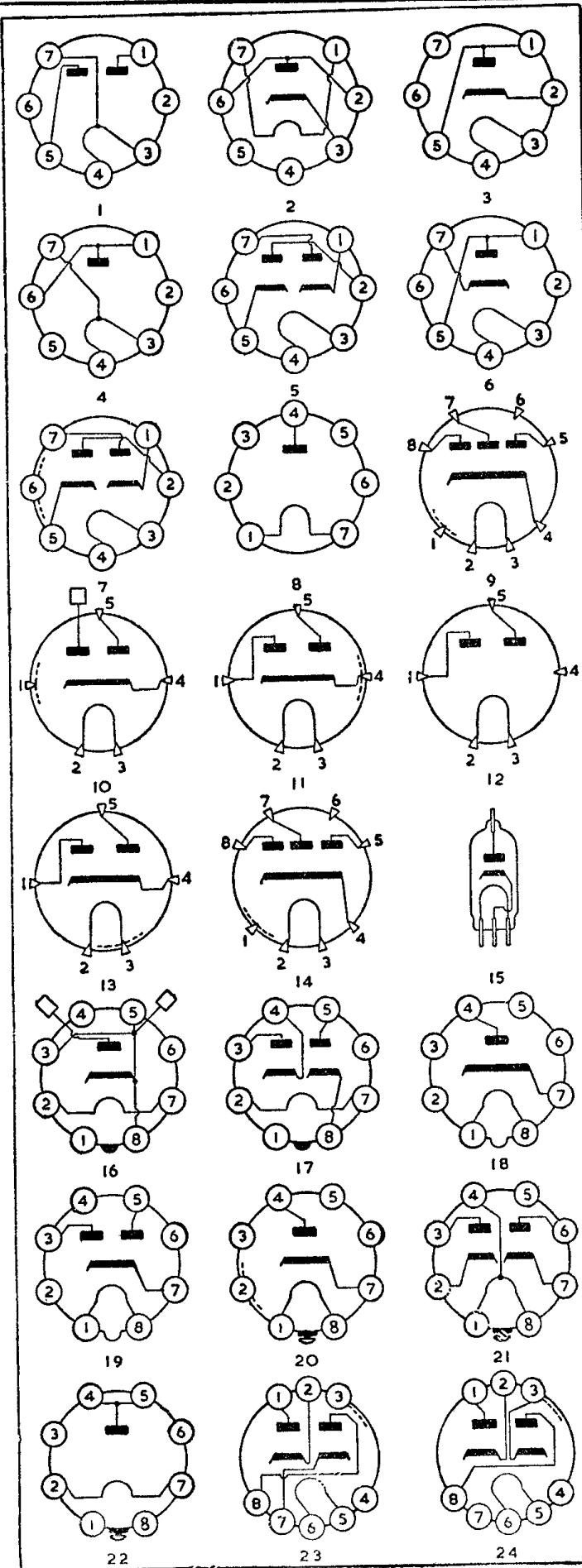
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	BASE		Maker	
	Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.		
954	6.3	0.15	250	2.0	100	0.7	3.0	1000	1.4	Acorn A	1	U.S.A.	
956	6.3	0.15	250	6.7	100	2.7	3.0	700	1.8		1	U.S.A.	
959	1.25	0.05	135	1.7	67.5	0.4	3.0	800	0.6		2	U.S.A.	
D3F	1.25	0.05	135	1.7	67.5	0.4	3.0	800	0.6		2	European	
E1F	6.3	0.15	250	2.0	100	0.7	3.0	3500	1.4		1	European	
E2F	6.3	0.15	250	5.5	100	1.8	3.0	800	1.8		1	European	
D1F	1.4	0.1	150	3.0	50	1.0	1.5	500	1.8	Acorn C	3	European	
D2F	1.4	0.24	250	10.0	250	1.8	5.5	500	3.4		3	European	
E3F	6.3	0.2	200	4.5	200	1.5	2.0	900	2.4		3	European	
4673	4.0	1.35	250	8.0	200	1.5	2.5	1500	5.0	P	4	European	
AF3	Var. μ	4.0	0.65	250	8.0	100	2.6	3.0	1200	1.8		4	European
AF7	4.0	0.65	250	3.0	100	1.1	2.0	2000	2.1		4	European	
CF1	Var. μ	13.0	0.2	200	3.0	100	0.9	2.0	700	3.2		4	European
CF2	Var. μ	13.0	0.2	200	4.5	100	1.4	2.0	1400	2.2		4	European
CF3	Var. μ	13.0	0.2	200	8.0	100	2.6	3.0	900	1.8		4	European
CF7		13.0	0.2	200	3.0	100	1.1	2.0	2000	2.1		4	European
CF50		30.0	0.2	250	1.5	100	0.3	2.0	2500	3.3		5	European
CF51		30.0	0.2	250	1.5	100	0.3	2.0	2500	3.3		5	European
ECF1		6.3	0.2	250	5.0	75	2.0	2.0	1600	2.0		7	European
EE1		6.3	0.6	250	8.0	150	0.45	2.5	50	17.0		8	European
EEP1		6.3	0.6	250	8.0	150	0.45	2.5	50	17.0		8	European
EF3		6.3	0.24	250	8.0	100	3.1	2.5	1500	1.8		4	European
EF7		6.3	0.24	250	3.0	100	1.0	1.5	2000	2.0		4	European
KF3	Var. μ	2.0	0.045	135	2.0	135	0.6	0.5	1300	0.65		6	European
KF4		2.0	0.065	90	1.2	90	0.4	0.0	1300	0.7		6	European
KF7		2.0	0.065	90	1.8	90	0.7	1.5	2000	0.7		9	European
KF8		2.0	0.065	90	1.5	90	0.6	1.0	1200	0.6		9	European
NF2		12.6	0.2	200	3.0	100	1.0	2.0	1800	2.2		4	European
NF3		12.6	0.195	200	4.5	100	1.5	2.0	700	2.3		4	European
UF5		12.6	0.1	100	3.2	100	1.7	2.5	100	2.2		4	European
UF6		12.6	0.1	200	3.0	100	0.8	2.0	2000	1.8		4	European
UF10		12.6	0.1	250	6.0	100	1.7	2.5	1250	2.2		4	European
VF3		55.0	0.05	200	6.0	100	2.6	2.0	1500	2.1		4	European
VF7		55.0	0.05	200	3.0	100	1.0	1.0	2000	2.1		4	European
EBF171		6.3	0.32	250	6.0	80	1.8	2.0	1500	1.8	G8G	10	European
EF172		6.3	0.32	250	5.0	100	1.5	2.0	800	3.0		11	European
EF174		6.3	0.45	200	12.0	200	3.0	3.5	150	9.0		11	European
EF175		6.3	0.45	250	12.0	100	3.0	2.0	—	4.5		11	European
UBF171		20.0	0.1	200	6.0	80	1.8	2.0	1500	1.8		10	European
UF172		20.0	0.1	200	5.0	100	1.5	2.0	800	3.0		11	European
UF174		30.0	0.1	200	12.0	200	3.0	3.5	150	9.0		11	European
UF175		30.0	0.1	200	12.0	100	3.0	2.0	—	4.5		11	European
DAF1		1.2	0.05	120	1.4	60	0.20	0	—	—	G8A	12	European
DAF11		1.2	0.05	120	0.29	90	0.05	5.5	300	—		13	European
DF11	Var. μ	1.25	0.025	120	1.2	60	0.22	0	1000	0.7		14	European
EBF11		6.3	0.2	250	5.0	100	1.6	2.0	2000	1.8		15	European
EBF15		6.3	0.47	250	12.0	100	3.0	2.0	500	5.0		15	European
ECF12		6.3	0.3	250	5.0	100	1.7	2.0	1500	2.0		16	European
EF11		6.3	0.2	250	6.0	75	2.0	2.0	2000	2.2		17	European
EF12		6.3	0.2	250	3.0	100	1.0	2.0	2000	2.1		17	European
EF12 Spez		6.3	0.2	250	3.0	100	0.65	2.0	1300	1.7		18	European
EF13	Var. μ	6.3	0.2	250	4.5	100	0.6	2.0	500	2.3		19	European
EF14		6.3	0.47	250	12.0	200	1.9	5.0	180	7.0		20	European
EF15		6.3	0.47	250	12.0	100	3.0	2.0	500	5.5		21	European
EF111		6.3	0.2	250	6.0	75	2.0	2.0	2000	2.2		20	European
EF112		6.3	0.2	250	3.0	100	1.0	2.0	2000	2.1		20	European
UBF11	Var. μ	20.0	0.1	200	5.0	80	1.7	2.0	1500	1.8		15	European
UBF15		27.0	0.1	250	12.0	100	3.0	2.0	500	5.0		15	European
UCF12		20.0	0.1	200	5.0	100	1.7	2.0	1500	2.0		16	European
UF11		15.0	0.1	200	6.0	80	2.0	2.0	1500	2.2		17	European
UF14		25.0	0.1	200	12.0	200	1.9	5.0	180	7.0		20	European
UF15		26.0	0.1	200	12.0	80	3.0	1.0	500	5.5		21	European
VBF11	Var. μ	35.0	0.05	200	5.0	80	1.7	2.0	1500	1.8		22	European
VF14		55.0	0.05	200	12.0	200	3.0	4.5	150	7.0		20	European
EF21		6.3	0.2	250	6.0	100	1.7	2.5	1250	2.2	G9	23	European
6C9		6.3	0.45	300	10.0	150	2.5	160*	1000	9.0	WB8	34	European
6V9		6.3	0.45	300	12.5	200	3.2	3.0	700	5.0		34	European
AF100		4.0	0.7	250	15.0	200	1.6	2.1	300	10.5		34	European

SCREENED TETRODES and PENTODES—Contd.

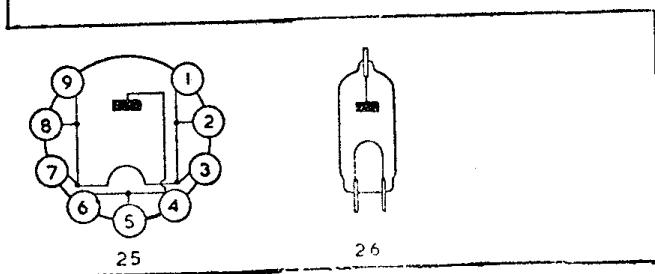
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	gm mA/V	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
DF41W	1.2	0.025	120	1.0	60	0.25	—	1000	0.6	WC8	26	European
RV2-4P1400	2.4	0.26	110	6.0	110	1.1	1.0	200	3.0	W8	24	European
RV12P3000	12.6	0.2	250	20.0	200	2.3	2.5	200	10.0	—	25	European
LV9	1.2	0.05	45	1.15	45	0.2	2.3	500	0.8	WA8	28	European
LV10	1.2	0.1	45	3.0	45	0.6	2.3	800	1.6	—	29	European
LV11	12.6	0.09	200	3.0	90	0.5	1.6	—	2.0	—	27	European
LV14	12.6	0.18	200	8.0	70	1.3	1.7	—	3.7	—	27	European
LV16	12.6	0.18	250	14.0	250	2.6	2.0	500	9.5	—	30	European
RD2-4Pd	2.4	0.19	130	3.0	130	0.35	1.2	1000	1.6	—	31	European
RD12Pb	12.6	0.07	200	4.0	130	0.6	1.2	1000	2.6	—	31	European
RV1PG1	2.4	0.025	—	—	—	—	—	—	—	—	—	—
RV2-4Pa	1.2	0.05	15	0.8	15	0.2	0	90	0.65	—	32	European
RV12Pa	2.4	0.12	130	4.0	130	0.8	2.0	—	1.5	—	33	European
RV12Pa	12.6	0.18	200	5.0	150	—	5.5	—	2.8	—	27	European



DIODES

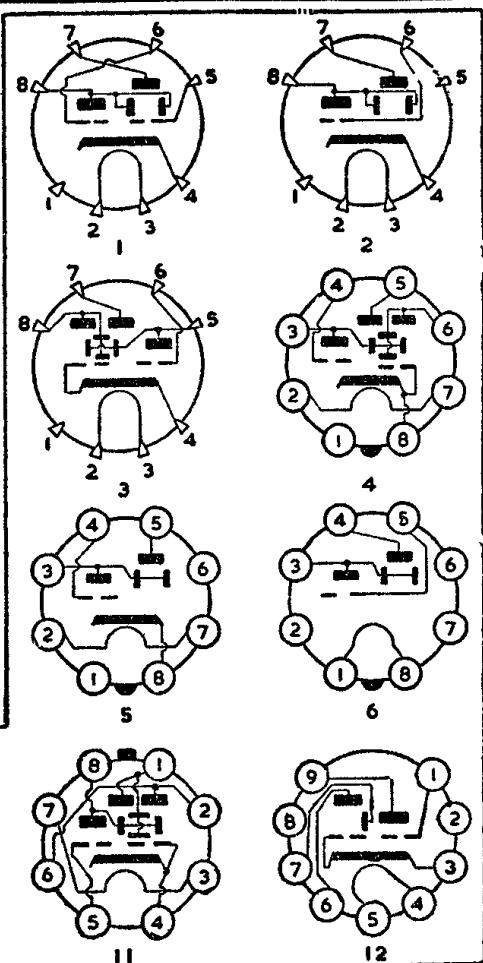


Type	FILAMENT or HEATER		Input Volts (RMS)	Max. I/mA	BASE		Maker
	Volts	Amps			Type	Ref.	
952F	6.3	0.15	200	2.0	Acorn	B	34 European
9004	6.3	0.15	117	5.0			35 U.S.A.
9005	6.3	0.15	117	1.0			36 U.S.A.
SA1	4.0	0.21	30	0.2	WA3		40 European
SA100	1.9	0.32	100	0.1			41 European
SA102	1.9	0.35	100	0.1			41 European
LG1	12.6	0.24	100	2.0	WA5		37 European
LG7	12.6	0.3	100	5.0			37 European
RD2-4Ga	2.4	0.05	6	0.6	WB5		38 European
RD2-4Gc	2.4	0.3	4	2.0			38 European
RD12Ga	12.6	0.07	4	2.0			39 European
RG2-4D1	2.4	0.1	5	1.5	W6		28 European
RG12D2	12.6	0.075	5	4.0			29 European
RG12D3	12.6	0.1	5	3.0			30 European
LG9	12.6	0.35	100	5.0	WB6		31 European
LG8	1.2	0.05	200	0.8	WA8		32 European
K81A	2.0	2.5	150	Noise Diode	B9A		25 European
DA50	1.2	0.3	125	0.2	B2A		26 European
6DR4	6.3	0.15	200	2.0	B3G		15 Cossor
SD61	6.3	0.15	50	5.0			15 U.S.A.
559	6.3	0.75	5	24.0	I.O.		16 U.S.A.
1638	6.3	0.2	200	0.8			17 U.S.A.
EA40	6.3	0.2	—	25.0	B8A		18 European
EB40	6.3	0.26	200	2.0			19 European
1203/A	6.3	0.16	117	5.0	B8G		20 U.S.A.
5679	6.3	0.15	150	10.0			21 U.S.A.
X6030	3.0	0.6	250	3.0	G8A		22 U.S.A.
EAA11	6.3	0.4	—	—			23 European
EB11	6.3	0.26	200	0.8			24 European
UAA11	20.0	0.1	200	5.0	G8G		23 European
EAA171	6.3	0.36	200	5.0			33 European
UAA171	25.0	0.1	200	5.0			33 European
AAB1	4.0	0.65	200	0.8	P		9 European
AB2	4.0	0.65	200	0.8			11 European
CB1	13.0	0.2	200	0.8			10 European
CB2	13.0	0.2	200	0.8			11 European
EB1	6.3	0.25	200	0.8			11 European
EB2	6.3	0.25	200	0.8			12 European
KB1	2.0	0.065	50	0.4			13 European
KB2	2.0	0.095	200	0.8			14 European
PAB1	6.3	0.3	200	0.8			Mazda
1D13	1.4	0.15	130	0.5	B7G		2 Mazda
6D3	6.3	0.3	250	5.0			3 Mazda
5722	4.9	1.6	200	35.0			4 U.S.A.
5726	6.3	0.3	117	9.0			5 Am-Brit.
5845	4.3	0.435	300	Noise Diode			1 U.S.A.
6058	6.3	0.3	150	9.0			5 Am-Brit.
9006	6.3	0.15	270	5.0			6 U.S.A.
D2M9	6.3	0.3	150	9.0			7 European
D152	6.3	0.3	150	9.0			7 Marconi
DA101	1.25	0.05	125	0.2			8 European
EAA91	6.3	0.3	150	9.0			7 Osram
QA2404	6.3	0.3	200	5.0			7 European
UAA91	12.6	0.15	117	9.0			7 European

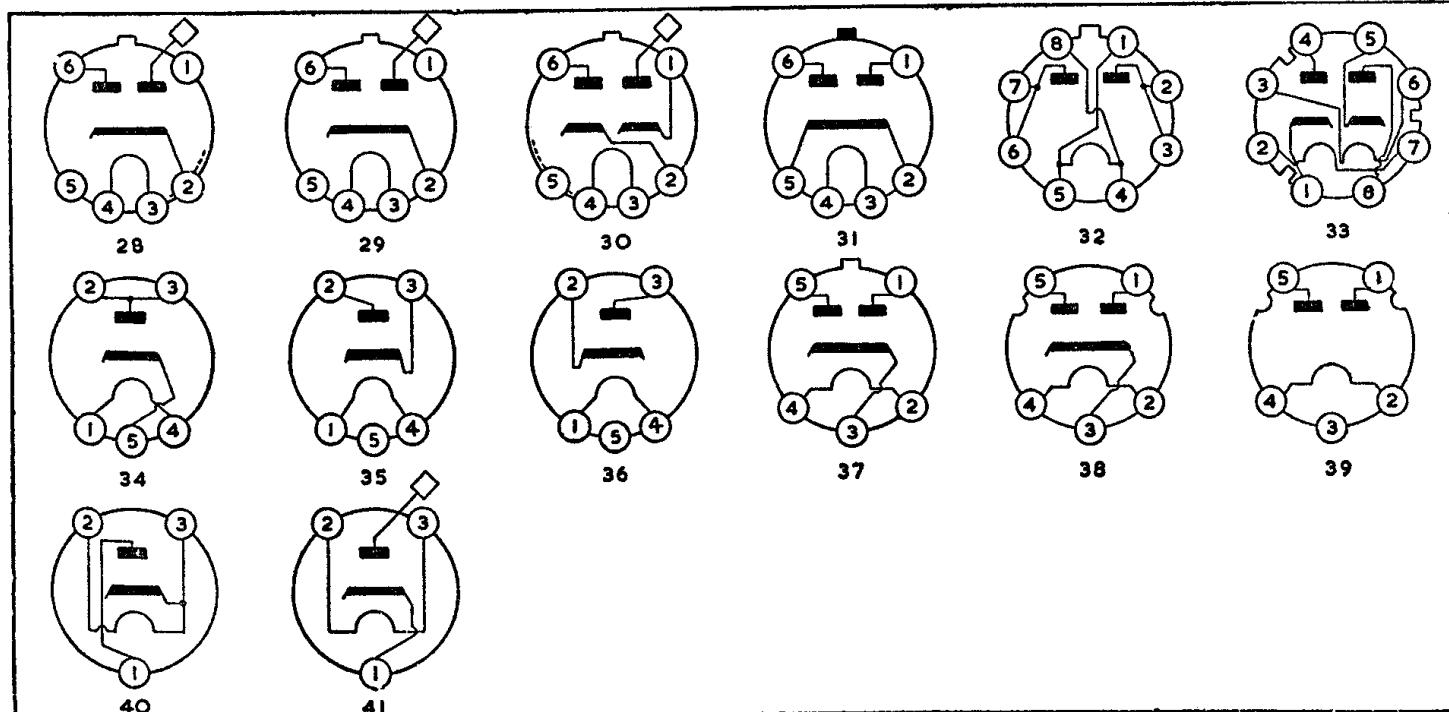


TUNING INDICATORS

Type	HEATER		TARGET		Grid Volts	BASE		Maker
	Volts	Amps	Volts	I/mA		Type	Ref.	
AM1	4.0	0.3	250	0.14	5.0	P	1	European
AM2	4.0	0.3	250	0.9	6.0		1	European
C/EM2	6.3	0.2	250	0.9	6.0		1	European
EM2	6.3	0.2	200	0.9	5.0		2	European
EM5	6.3	0.2	250	0.45	20.0		3	European
6CD7	6.3	0.2	250	0.75	16.0	I.O.	4	U.S.A.
6SS	6.3	0.3	250	3.0	8.0		5	U.S.A.
DM21	1.25	0.025	120	0.26	4.0		6	European
OM5	12.6	0.15	200	0.63	15.0		7	European
PM5	6.3	0.3	200	0.63	15.0		7	European
UM4	12.6	0.1	250	0.75	4.2		7	European
EM71	6.3	0.3	250	2.5	20.0	B8G	8	European
EM72	6.3	0.3	250	2.5	20.0		8	European
EM85	6.3	0.3	250	2.1	18.0	B9A	12	European
HM85	12.6	0.15	250	2.1	18.0		12	European
UM85	18.9	0.1	250	2.1	18.0		12	European
EFM11	6.3	0.2	250	1.0	20.0	G8A	9	European
EM11	6.3	0.2	250	0.46	20.0		10	European
UFM11	15.0	0.1	200	0.50	18.0		9	European
UM11	15.0	0.1	200	0.4	20.0		10	European
EM171	6.3	0.2	250	—	18.0	G8G	11	European
UM171	15.0	0.1	200	—	20.0		11	European

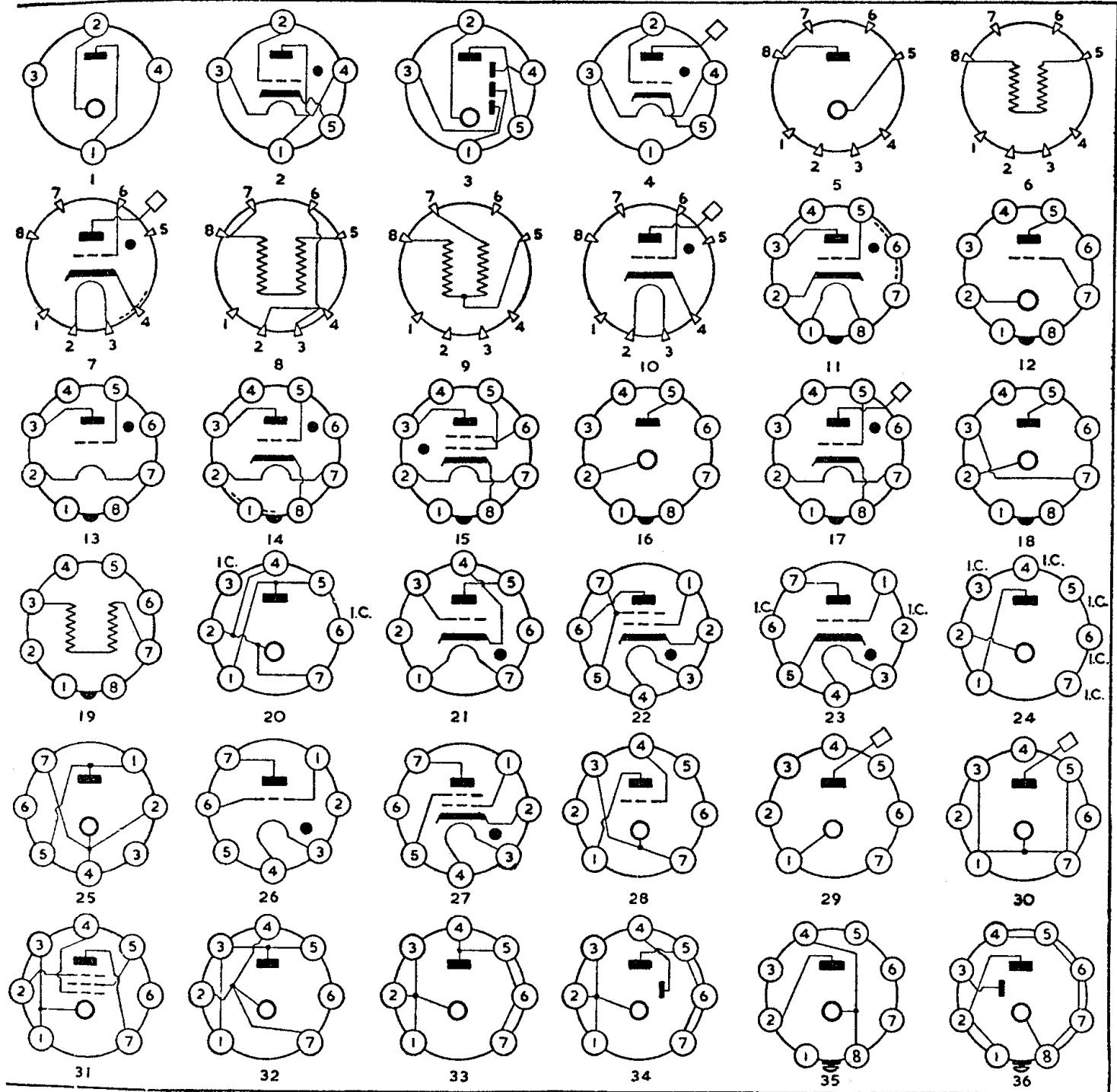


DIODE BASES—Contd.



REGULATORS and THYRATRONS

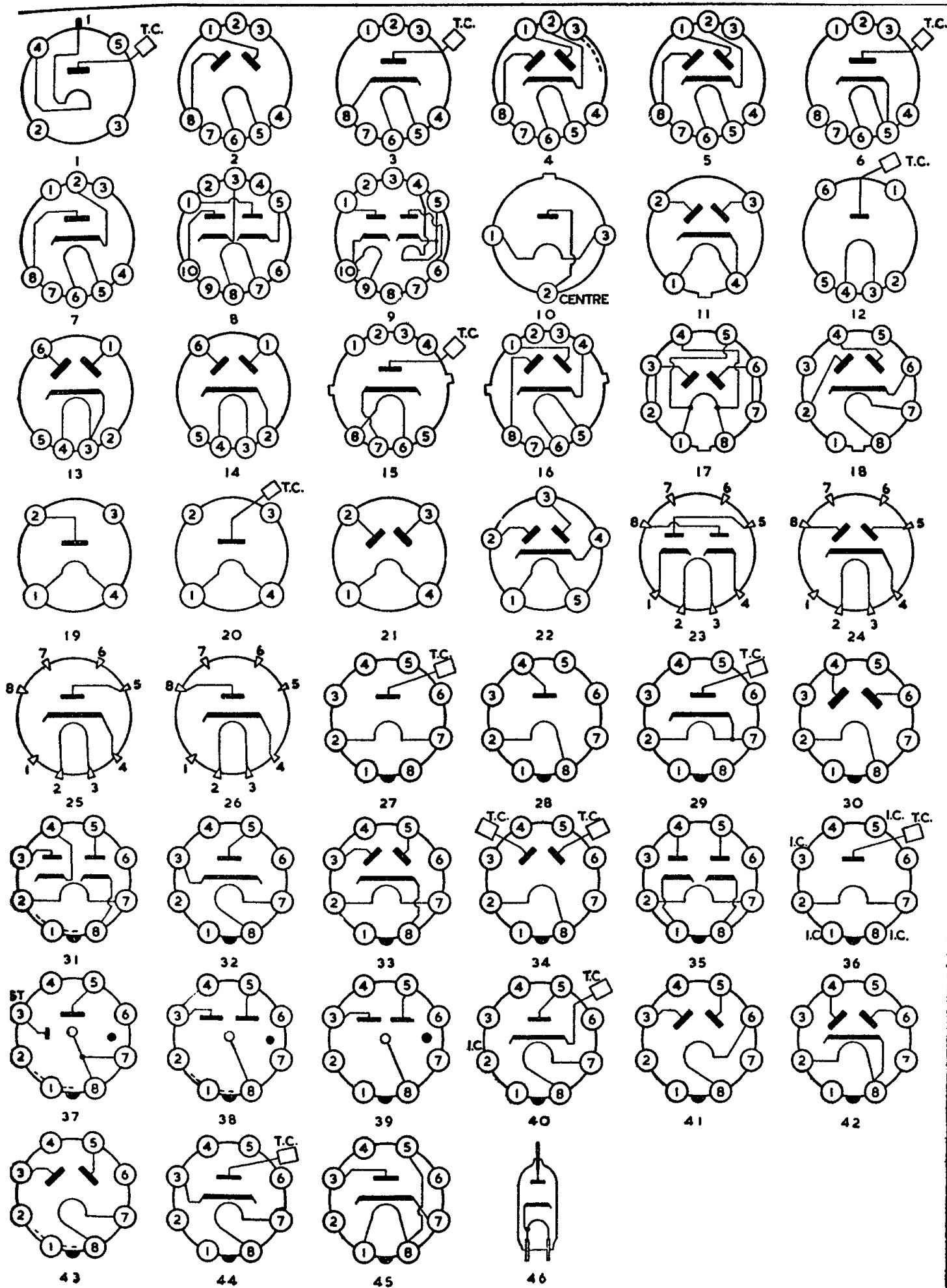
Type	Used as	HEATER Vf If		STABILISED SUPPLY		STRIKING VOLTS	VOLTAGE DROP	TUBE CURRENT mA		Max. Anode	Max. Peak Current	Control Ratio	BASE		Maker	
		Vols	Amps	Volts	Amps			Min.	Max.				Type	Ref.		
100E1	VR	—	—	90-105	—	140	—	50	200	—	—	—	B4	1	M.O.V.	
GT1C	Relay	4-0	1.35	—	—	—	16	—	—	500	1.0	28	B5	2	M.O.V.	
STV280/40	VR	—	—	280	—	420	—	35	60	—	—	—	—	3	M.O.V.	
STV280/80	VR	—	—	280	—	420	—	70	100	—	—	—	—	3	M.O.V.	
T31	Relay	4-0	1.5	—	—	—	40	—	—	200	0.5	20	—	4	Mazda	
150A1	VR	—	—	150-170	—	205	—	1	8	—	—	—	—	5	European	
150C1P	VR	—	—	146-166	—	205	—	5	40	—	—	—	—	5	European	
1945	CR	—	—	—	0.275	—	80-120	—	—	—	—	—	—	7	European	
4690	Relay	4-0	1.3	—	—	—	80-200	—	—	500	0.75	35	—	6	European	
C8	CR	—	—	—	0.2	—	35-100	—	—	—	—	—	—	6	European	
C10	CR	—	—	—	0.2	—	80-200	—	—	—	—	—	—	8	European	
C12	CR	—	—	—	0.2	—	35-100	—	—	—	—	—	—	9	European	
EC50	Relay	6.3	1.3	—	—	—	—	35	—	—	1000	0.75	35	—	10	Mul.-Eupn
T41	Relay	4-0	1.5	—	—	—	—	40	—	—	400	0.5	20	M.O.	11	Mazda
1C21	Relay	Cold	—	—	—	—	—	—	—	—	145	0.1	—	I.O.	12	U.S.A.
2A4	Relay	2.5	2.5	—	—	—	—	15	—	—	200	1.25	100	—	13	U.S.A.
6K25	Relay	6.3	0.95	—	—	—	—	4	—	—	400	0.5	20	—	14	Mazda
6Q5	Relay	6.3	0.6	—	—	—	—	19	—	—	300	0.3	—	—	14	U.S.A.
2U2	Relay	6.3	1.0	—	—	—	—	9	—	—	600	1.25	—	—	15	Mazda
150C1K	VR	—	—	146-166	—	205	—	5	40	—	—	—	—	16	European	
502A	Relay	6.3	0.6	—	—	—	—	11	—	—	400	0.5	—	—	15	U.S.A.
884	Relay	6.3	0.6	—	—	—	—	100	—	—	300	0.3	—	—	14	U.S.A.
1267	Relay	—	—	—	—	—	—	76	—	—	225	0.225	—	—	12	U.S.A.
2050	Relay	6.3	0.6	—	—	—	—	16	—	—	650	—	—	—	15	U.S.A.
2051	Relay	6.3	0.6	—	—	—	—	—	—	—	350	0.375	—	—	15	U.S.A.
4687K	VR	—	—	90-100	—	130	—	10	40	—	—	—	—	I.O.	16	European
EN31	Relay	6.3	1.3	—	—	—	—	35	—	—	1000	0.75	—	—	17	Mullard
OA4	Relay	—	—	—	—	—	—	76	—	—	225	0.225	—	—	12	U.S.A.
QS150/40	VR	—	—	150	—	160	—	5	40	—	—	—	—	18	M.O.V.	
STV70/60	VR	—	—	70	—	105	—	5	60	—	—	—	—	18	M.O.V.	
U30	CR	—	—	—	0.1	—	70-122	—	—	—	—	—	—	B7G	19	European
1B46	VR	—	—	82	—	250	—	1	2	—	—	—	—	—	20	U.S.A.
2C4	Relay	2.5	0.65	350v. Anode	—	50v. Grid	5mA	—	—	—	—	—	—	—	21	U.S.A.
2D21	Relay	6.3	0.6	400v. Peak	—	—	—	—	—	—	—	—	—	—	22	U.S.A.
6D4	Relay	6.3	0.25	350 Anode Volts	—	50v. Grid	25mA	—	—	—	—	—	—	—	23	U.S.A.
20A3	Relay	6.3	0.6	—	—	—	—	8	—	—	650	.5	—	—	22	Mazda
90C1	VR	—	—	90	—	125	—	1	40	—	—	—	—	—	20	Mullard
150B2	VR	—	—	143-147	—	180	—	5	15	—	—	—	—	—	25	U.S.A.
5651	VR	—	—	87	—	115	—	1.5	3.5	—	—	—	—	—	26	U.S.A.
5662	Relay	6.3	0.15	—	—	—	—	—	—	200	20	—	—	—	27	U.S.A.
5663	Relay	6.3	0.15	500v. Peak	100 mA	Peak	20 mA	—	Average	—	—	—	—	—	22	U.S.A.
5696	Relay	6.3	0.15	—	—	—	—	—	—	500	100	250	—	—	22	U.S.A.
5727	Relay	6.3	0.6	—	—	—	—	—	—	650	500	—	—	—	22	U.S.A.
5823	Relay	—	—	—	—	—	—	—	—	200	100	—	—	—	28	U.S.A.
5962	VR	—	—	700	—	730	—	.005	.055	—	—	—	—	—	29	U.S.A.
6073	VR	—	—	150	—	185	—	5	30	—	—	—	—	—	25	U.S.A.
6074	VR	—	—	108	—	133	—	5	30	—	—	—	—	—	25	U.S.A.
CK1017	VR	—	—	700	—	800	—	.005	.055	—	—	—	—	—	30	U.S.A.
CK1022	VR	—	—	1000	—	1100	—	.005	.055	—	—	—	—	—	30	U.S.A.
OA5	Relay	—	—	750v. Anode	—	90v. Screen	+	3v. Grid	85v. Pulse	—	—	—	—	—	31	U.S.A.
OG3	VR	—	—	85	—	125	—	1	10	—	—	—	—	—	32	U.S.A.
PL21	Relay	6.3	0.6	400v. Peak	—	—	—	—	—	—	—	—	—	—	22	Mul.-Eupl
QS70/20	VR	—	—	70	—	95	—	2	20	—	—	—	—	—	33	M.O.V.
QS83/3	VR	—	—	83	—	130	—	1	5	—	—	—	—	—	20	M.O.V.
QS95/10	VR	—	—	95	—	110	—	2	10	—	—	—	—	—	34	M.O.V.
QS150/15	VR	—	—	150	—	177	—	2	15	—	—	—	—	—	34	M.O.V.
SM150-30	VR	—	—	150	—	185	—	5	30	—	—	—	—	—	20	European
TXM100	Relay	6.3	0.6	400v. Peak	0.3	—	40-90	—	—	—	—	—	—	E.Sw.	22	Osram
305	CR	—	—	85	—	125	—	1	8	—	—	—	—	B8G	35	U.S.A.
OE3	VR	—	—	105	—	150	—	5	45	—	—	—	—	—	36	M.O.V.
QS105/45	VR	—	—	150	—	180	—	5	45	—	—	—	—	—	36	M.O.V.
QS150/45	VR	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



RECTIFIERS

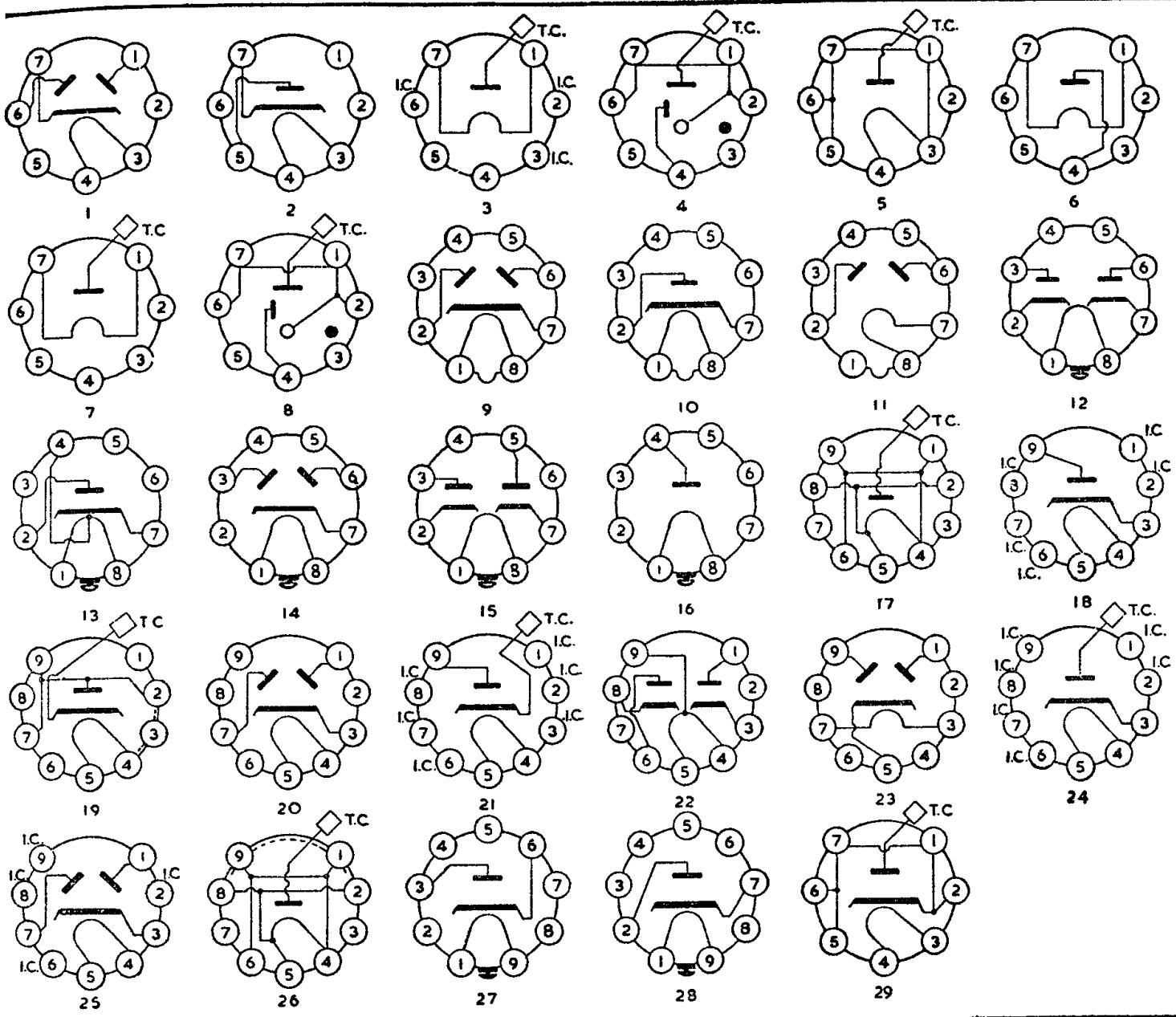
Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref.	
6W2	6.3	0.08	9000	5.0	25000	—	—	B2A	46	Emitron
6X2	6.3	0.09	5000	3.0	17000	0.1	100000	—	46	U.S.A.
U43	6.3	0.09	—	—	17000	—	—	—	46	Osram
U151	6.3	0.09	5000	3.0	17000	0.1	100000	—	46	Marconi
LG17	2.0	3.0	500	200.0	—	—	—	—	10	European
S934	2.5	6.0	—	25.0	20000	—	—	BC4	1	U.S.A.
S695	2.5	3.0	—	150.0	5000	—	—	UX4	19	U.S.A.
S825	1.6	1.25	—	2.0	60000	—	—	—	20	U.S.A.
CK1006	1.75	2.0	—	200.0	1600	—	—	—	21	U.S.A.
CK1012	1.75	2.0	—	300.0	1200	—	—	UX5	21	European
6AW4	6.3	0.6	450	60.0	1250	32	125	P	23	European
CY2	30.0	0.2	250	120.0	—	—	—	—	24	European
EZ1	6.3	0.5	250	50.0	—	—	—	—	24	European
FZ1	13.0	0.25	250	50.0	—	—	—	—	25	European
UY2	26.0	0.1	250	45.0	—	—	—	—	26	European
UY3	50.0	0.1	250	140.0	—	—	—	—	26	European
UY4	35.0	0.1	250	55.0	—	—	—	—	26	European
VY1	55.0	0.05	250	60.0	—	—	—	—	25	European
VY2	30.0	0.05	250	20.0	—	—	—	—	25	European
VY2N	30.0	0.05	250	30.0	—	—	—	—	13	European
RG2-4D10	2.4	0.15	700	5.0	—	—	—	—	14	European
RG12D60	12.6	0.2	300	60.0	—	—	—	I.O.	27	U.S.A.
2V3	2.5	5.0	5500	2.0	16500	—	—	—	28	U.S.A.
2W3	2.5	1.5	350	55.0	—	—	—	—	28	U.S.A.
2X3	2.5	2.0	500	125.0	—	—	—	—	29	U.S.A.
3B26	2.5	4.75	—	20.0	15000	—	—	—	30	U.S.A.
5AX4	5.0	2.5	350	175.0	1400	—	—	—	31	U.S.A.
6AW5	6.3	0.6	450	70.0	1250	—	—	TV Dumper Diode	32	U.S.A.
6AX4	6.3	1.2	—	125.0	4000	—	50	—	33	U.S.A.
6AX5	6.3	1.2	350	125.0	1250	—	145	—	31	U.S.A.
6AX6	6.3	2.5	350	250.0	1250	—	100	—	35	U.S.A.
6BY5	6.3	1.6	375	175.0	1400	—	—	—	32	U.S.A.
6W4	6.3	1.2	350	125.0	1250	20	—	—	31	U.S.A.
6Z6	6.3	0.5	350	50.0	—	—	—	—	32	U.S.A.
12AX4	12.6	0.6	—	125.0	4000	—	—	—	27	Mazda
19H4	2.5	1.7	—	5.0	20000	0.5	18000	—	32	U.S.A.
25W4	25.0	0.3	350	125.0	1250	20	—	—	31	U.S.A.
25X6	25.0	0.15	125	60.0	—	—	—	—	31	U.S.A.
50AX6	50.0	0.3	350	250.0	1250	—	150	—	33	U.S.A.
5838	12.6	0.6	350	55.0	1375	—	150	—	33	U.S.A.
5839	26.5	0.285	350	55.0	1375	—	150	—	33	U.S.A.
5852	6.3	1.2	350	55.0	1375	—	75	—	30	U.S.A.
5931	5.0	3.0	450	225.0	1550	40	—	—	34	U.S.A.
6004	5.0	3.0	—	300.0	1400	—	—	—	36	U.S.A.
6215	1.25	0.2	—	1.0	18000	—	—	—	29	U.S.A.
8016	1.25	0.2	—	2.0	40000	—	—	—	39	U.S.A.
CK1003	—	—	—	110.0	880	—	—	—	41	U.S.A.
CK1005	6.3	0.1	160	70.0	450	—	—	—	43	U.S.A.
CK1007	1.0	1.2	285	110.0	980	—	—	—	39	U.S.A.
CK1024	—	—	—	175.0	1000	—	—	—	27	European
DY30	1.25	0.2	—	2.0	40000	—	—	—	33	European
EZ33	6.3	0.65	400	100.0	—	—	—	—	42	European
GZ30	5.0	2.0	350	125.0	1400	40	50	—	42	European
GZ34	5.0	1.9	350	250.0	1500	60	150	—	37	U.S.A.
OY4	—	—	117	75.0	300	—	—	—	38	U.S.A.
OZ4-A	—	—	—	110.0	880	—	—	—	36	M.O.V.
U41	1.25	0.2	—	2.0	35000	—	—	—	44	Mazda
U282	28.0	0.2	—	120.0	—	—	—	—	40	Mazda
U301	30.0	0.2	—	150.0	4500	—	175	—	45	European
UY1N	50.0	0.1	250	140.0	—	60	—	W8	15	European
LG3	12.6	0.18	5000	2.0	—	—	—	—	16	European
RG12D300	12.6	0.8	500	300.0	—	—	—	WA8	17	European
LG5	1.2	0.5	300	40.0	—	32	—	G8A	2	European
AZ11	4.0	1.1	500	70.0	—	60	—	—	2	European
AZ12	4.0	2.3	500	120.0	—	—	—	—	3	European
EA111	6.3	1.4	250	80.0	—	—	600	—	4	European
EZ11	6.3	0.29	250	60.0	—	—	300	—	5	European
EZ12	6.3	0.85	500	100.0	—	—	—	—	6	European
RFG5	6.3	0.2	5500	2.0	—	60	175	—	7	European
UY11	50.0	0.1	250	140.0	—	—	—	—	9	European
EYY53	6.3	1.4	400	150.0	—	—	—	G10A	8	European
EZ150	6.3	3.0	500	560.0	—	32	—	—	—	—

RECTIFIERS—Contd.



RECTIFIERS—Contd.

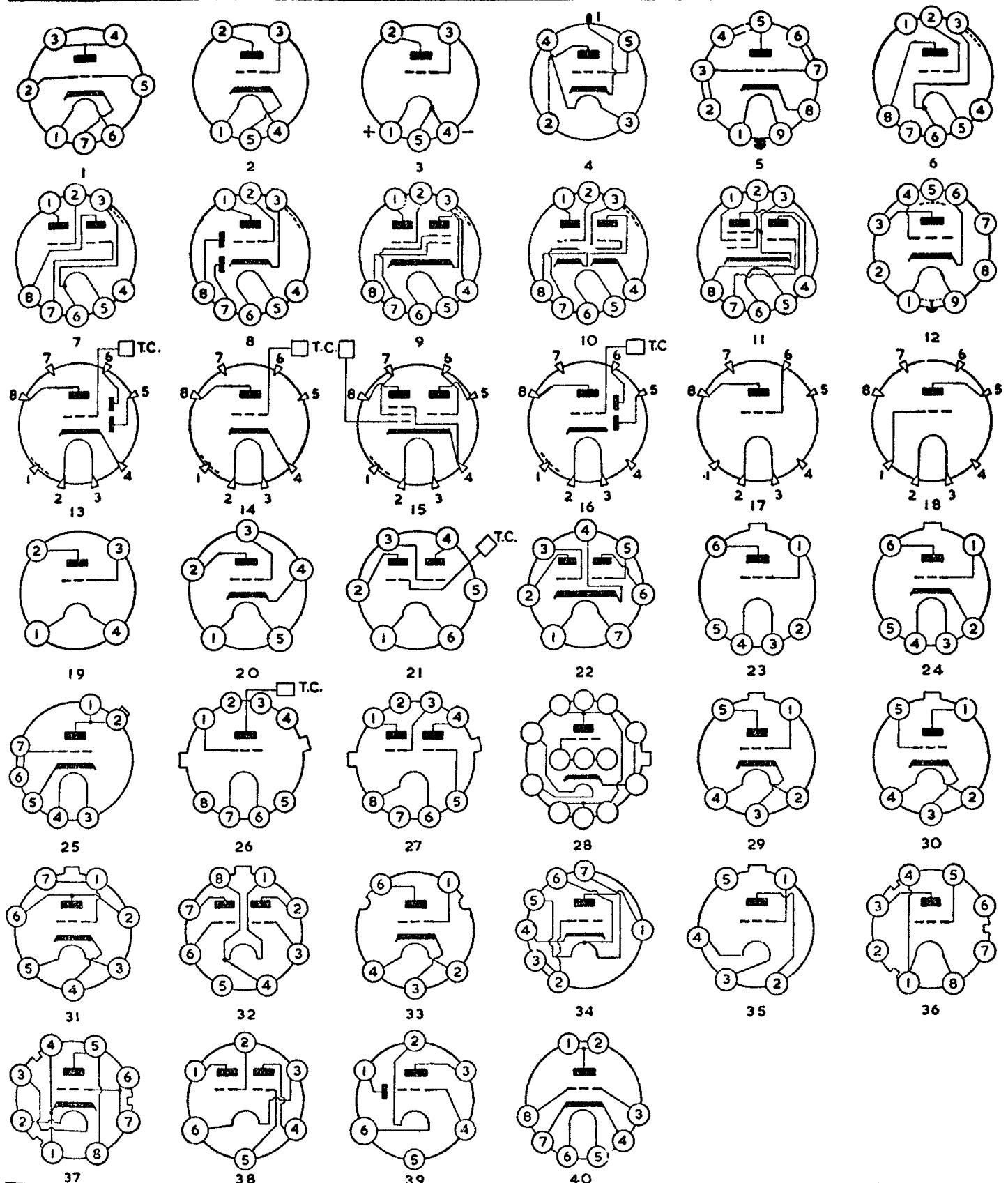
Type	FILAMENT or HEATER		MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	MAXIMUM INVERSE PEAK VOLTS	MAXIMUM RESERVOIR CAPACITANCE (50 c/s)	MINIMUM SERIES RESISTANCE Ω	BASE		Maker
	Volts	Amps						Type	Ref	
6AV4	6.3	0.95	325	90.0	—	—	150	B7G	1	Mullard
12X4	12.6	0.3	325	70.0	—	—	150		1	U.S.A.
19G6	4.0	0.5	2500	30.0	7000	1.0	5400		29	Mazda
35X4	35.0	0.15	210	100.0	700	40	100		2	U.S.A.
1654	1.4	0.05	2500	1.0	7000	—	—		3	U.S.A.
5517	—	—	—	12.0	2800	—	—		8	U.S.A.
6063	6.3	0.6	325	70.0	—	—	150		1	Am.-Brit.
6174	—	—	1200	3.0	2800	—	—		4	U.S.A.
CK1013	—	—	—	12.0	2800	—	—		4	U.S.A.
CK1028	6.3	0.55	—	100.0	2500	—	—		5	U.S.A.
CK1091	1.4	0.11	1000	1.5	—	—	—		6	U.S.A.
EZ90	6.3	0.6	325	70.0	—	—	100		1	European
QA2407	6.3	0.7	350	70.0	1250	—	—		1	Osram
V2M70	6.3	0.6	325	70.0	—	—	150		1	European
VM1	1.4	0.05	—	1.0	4300	—	—		7	European
66KU	6.3	0.6	350	90.0	—	50	300	B8A	9	Cossor
AZ41	4.0	0.75	500	60.0	—	—	—		11	European
GZ40	5.0	0.75	350	90.0	—	—	—		9	European
GZ41	5.0	0.75	355	70.0	—	—	—		10	European
UY42	31.0	0.1	110	100.0	—	50	—		11	European
V41	4.0	0.75	500	60.0	—	—	—		9	European
V51	5.0	0.75	350	90.0	—	—	—		9	European
V61	6.3	0.6	350	90.0	—	50	300	B8G	12	European
7X6	6.3	1.2	235	75.0	700	—	100		13	U.S.A.
35Y4	35.0	0.15	235	100.0	700	—	—		14	U.S.A.
1274	6.3	0.5	350	70.0	1250	—	150		14	European
EZ22	6.3	0.9	450	100.0	—	—	—		15	European
LG6	12.6	0.63	400	100.0	—	—	—		16	European
PY71	21.5	0.3	—	140.0	6000	TV Damp er Diode	—	B9A	17	U.S.A.
1AX2	1.4	0.65	—	1.0	25000	—	—		17	U.S.A.
1X2	1.25	0.2	—	1.0	15000	—	—		17	U.S.A.
1X2A	1.25	0.2	—	1.1	20000	—	—		17	U.S.A.
1X2B	1.25	0.2	—	1.1	22000	—	—		18	U.S.A.
6U3	6.3	0.9	220	180.0	4000	TV Damp er Diode	—		19	U.S.A.
6V3	6.3	1.75	350	125.0	6000	20	145		20	U.S.A.
6V4	6.3	0.6	350	90.0	—	50	300		21	U.S.A.
17Z3	17.0	0.3	—	150.0	4500	TV Damp er Diode	—		18	Cossor
19BD	19.0	0.3	—	180.0	4000	TV Damp er Diode	—		18	U.S.A.
19X3	19.0	0.3	—	180.0	4000	TV Damp er Diode	—		18	U.S.A.
19Y3	19.0	0.3	250	180.0	700	60	100		18	U.S.A.
26Z5W	26.5	0.2	450	100.0	1250	—	—		22	U.S.A.
5993	6.3	0.8	300	50.0	1250	—	150		23	Brimar
6157	6.3	0.8	500	75.0	1400	32	50		17	European
DY80	1.25	0.2	—	1.0	15000	TV Damp er Diode	—		18	European
EY80	6.3	0.9	220	180.0	4000	24	250		24	Mullard
EY84	6.3	1.0	625	125.0	2000	50	300		25	European
EZ80	6.3	0.6	350	90.0	—	—	—		21	Mulld. Eu
PY81	17.0	0.3	—	150.0	4500	TV Damp er Diode	—		24	Brimar
R17	6.3	0.8	500	75.0	1450	32	50		24	Brimar
R18	6.3	1.1	625	125.0	1800	8	100		24	Brimar
R19	1.25	0.2	—	2.0	25000	—	—		26	Brimar
U152	19.0	0.3	—	180.0	4000	TV Damp er Diode	—		18	M.O.V.
U309	20.0	0.3	—	170.0	4000	TV Damp er Diode	—		18	M.O.V.
U319	20.0	0.3	250	170.0	700	12	—		18	M.O.V.
U329	25.0	0.3	—	120.0	7000	TV Damp er Diode	—		21	M.O.V.
CY 21	25.0	0.2	250	100.0	—	—	—	B9G	27	European
EW60	6.3	2.3	500	400.0	—	—	—		28	European



TRIODE AMPLIFIERS

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	r_g kΩ	gm mA/V	Amp Factor	R _k Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
6F4	6.3	0.225	80	13.0	—	2.9	5.8	17	150	Acorn D	1	U.S.A.
6L4	6.3	0.225	80	9.5	—	4.4	6.4	28	150	Acorn B	2	U.S.A.
955	6.3	0.15	250	6.3	7.0	11.4	2.2	25	—		3	U.S.A.
957	1.25	0.05	135	2.0	5.0	20.8	0.65	13.5	—		3	U.S.A.
958/A	1.25	0.1	135	3.0	7.5	10.0	1.2	12	—		3	U.S.A.
1650	6.3	0.15	250	6.3	7.0	11.4	2.2	25	—		2	U.S.A.
4671	6.3	0.15	180	4.5	5.0	12.5	2.0	25	—		2	European
5731	6.3	0.15	250	6.3	7.0	11.4	2.2	25	—		2	U.S.A.
D1C	1.25	0.05	135	2.0	5.0	25.0	0.65	17.5	—		3	European
D2C	1.25	0.1	135	3.0	7.5	10.0	1.2	12	—		3	European
DS310	2.0	0.75	100	24.0	0	3.3	6.0	20	—		2	European
DS311	12.6	0.11	100	24.0	0	3.3	6.0	20	—		2	European
DS320	5.0	0.7	200	12.0	3.0	5.0	6.0	30	—		2	European
E1C	6.3	0.15	180	4.5	5.0	12.5	2.0	25	—		2	European
RL12T15	12.6	0.55	250	50.0	3.0	—	6.0	—		BC4 G8A	4	European
DC11	1.25	0.025	120	2.0	4.5	15.0	1.0	15	—		6	European
DDD11	1.2	0.1	120	1.5	4.5	20.0	0.85	17	—		7	European
EBC11	6.3	0.2	250	5.0	8.0	11.5	2.2	26.3	1600		8	European
ECL11	6.3	1.0	250	2.0	2.5	35.0	2.0	70	—		9	European
EDD111	6.3	0.4	250	9.0	8.0	8.0	2.3	18.4	—		10	European
UCF12	20.0	0.1	100	—	0	—	3.0	—			11	European
UCL11	60.0	0.1	200	2.0	2.0	—	2.0	—			9	European
VCL11	90.0	0.05	200	0.85	—	—	—	65	—		9	European
LD1	12.6	0.1	100	10.0	4.0	3.35	3.0	10	—	WA5	29	European
LD2	12.6	0.18	200	30.0	4.0	2.7	9.25	25	—		29	European
LD5	12.6	0.24	380	100.0	30.0	2.0	10.0	20	—		30	European
S893	6.3	0.33	200	25.0	—	4.5	6.0	27	100	Pencil WC8	—	U.S.A.
DC41W	1.2	0.025	90	2.0	4.0	—	0.85	—			36	European
RD12Te	12.6	0.22	100	35.0	—	—	9.0	—			37	European
RL2-4T1	2.4	0.17	130	9.2	3.0	—	2.4	—		W6	23	European
RL12T1	12.6	0.07	75	10.0	1.0	—	3.4	—			24	European
RL12T2	12.6	0.17	200	10.0	7.5	6.0	2.0	12	—		24	European
SD1A	1.9	0.5	75	10.0	1.0	4.7	3.4	16.0	—		24	European
LS30	12.6	0.28	700	100.0	55.0	—	5.5	—		WA7	31	European
RD2-4Ta	2.4	0.4	100	24.0	—	—	6.0	—		WB5	33	European
RD12Ta	12.6	0.08	100	24.0	—	—	6.0	—			33	European
LV12	1.2	0.1	45	1.2	2.7	—	0.65	—		WA8	32	European
LV18	0.6	0.3	6000	0.06	150.0	—	0.015	—		W8	26	European
RL2-4T4	2.4	0.25	150	3.0	6.0	—	2.0	—			27	European
LS2	1.9	0.2	150	30.0	+3.0	—	2.0	—		WD6	38	European
LS3	1.9	0.09	80	1.5	1.5	—	0.8	—			39	European
LD15	12.6	0.24	380	100.0	30.0	2.0	10.0	20	—	W7	25	European
LV13	12.6	1.4	250	160.0	7.0	—	30.0	—		WB7	34	European
RD12Tf	12.6	0.6	400	100.0	—	—	17.0	—		W13	28	European
RL2T2	1.9	0.29	130	15.0	1.5	5.0	2.4	12	—	WC5	35	European
RL12T75	12.6	2.3	500	100.0	26.0	—	18.0	—		WF8	40	European
12A	5.0	0.25	180	7.7	13.5	4.7	1.8	8.5	—	UX4	19	U.S.A.
26	1.5	1.05	250	1.0	3.0	58.0	1.2	70	—		19	U.S.A.
40	5.0	0.25	180	0.2	3.0	150.0	0.2	30	—		19	U.S.A.
37	6.3	0.3	250	7.5	18.0	8.4	1.1	9.2	—	UX5	20	U.S.A.
56	2.5	1.0	250	5.0	13.5	9.5	1.45	13.8	—		21	U.S.A.
5674	3.8	0.09	5.0	0.02	3.5	Electro meter	—	—		UX6	21	U.S.A.
6A6	6.3	0.8	250	6.0	5.0	11.3	3.1	35	—	UX7	22	U.S.A.
5608A	2.5	2.0	300	6.0	6.0	13.0	2.45	32	—		22	U.S.A.
EC54	6.3	0.45	250	12.0	—	11.1	9.0	100	—	B9G	5	Mul.-Eupn.
5861	6.3	0.4	250	20.0	3.5	5.0	6.0	30	—	Disc Seal	—	U.S.A.
EC55	6.3	0.4	250	20.0	3.5	5.0	6.0	30	—			European
EC21	6.3	0.2	250	5.0	4.0	17.0	2.7	45	800	G9	12	European
ABC1	4.0	0.65	250	4.0	7.0	13.5	2.0	27	1750	P	13	European
AC2	4.0	0.65	250	6.0	5.5	12.0	2.5	30	900		14	European
CC1	13.0	0.2	200	2.6	3.7	25.0	2.0	50	—		14	European
CC2	13.0	0.2	200	6.0	4.0	12.0	2.5	30	650		14	European
EBC1	6.3	0.4	250	4.0	7.0	13.5	2.0	27	1750		13	European
EBC30	6.3	0.2	250	5.0	5.5	15.0	2.0	30	1100		13	European
EC2	6.3	0.4	250	6.0	5.5	12.0	3.5	42	925		14	European
ECF1	6.3	0.2	150	8.0	3.0	9.0	2.2	20	—		15	European
KBC1	2.0	0.1	135	2.5	4.5	16.0	1.0	16	—		16	European
KC1	2.0	0.065	135	1.2	1.5	40.0	0.6	24	—		17	European
KC3	2.0	0.21	135	3.0	2.8	12.0	2.5	30	—		17	European
KC4	2.0	0.1	135	2.2	1.5	21.5	1.4	30	—		17	European
MC1	1.9	0.19	100	4.0	1.5	11.0	0.8	8.8	—		18	European
VC1	55.0	0.05	200	6.0	2.0	14.5	3.0	43.5	—		14	European

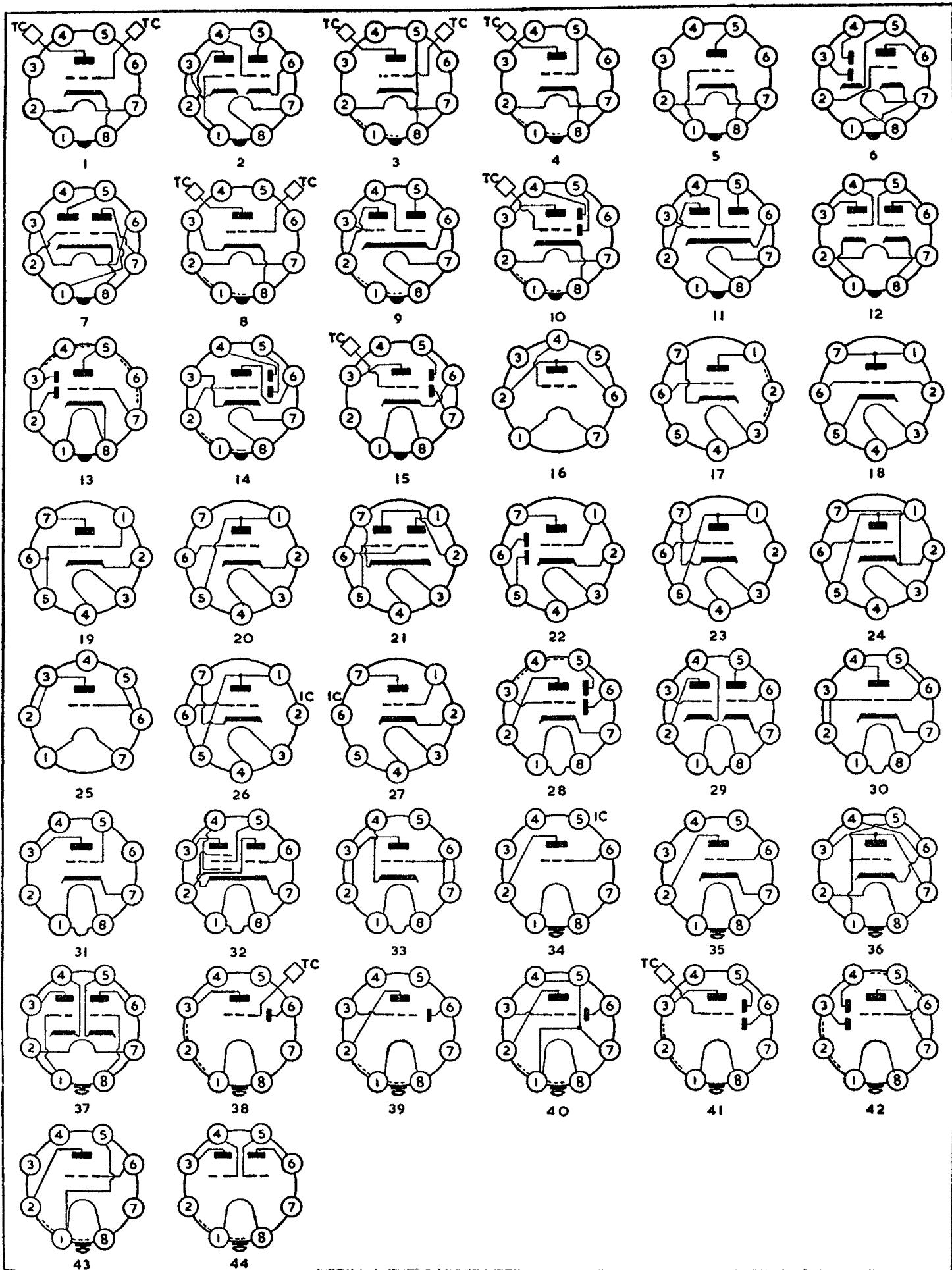
TRIODE AMPLIFIERS—Contd.



TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	r_a kΩ	gm mA/V	Amp Factor	R_k Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
2C22	6.3	0.3	300	11.0	10.5	6.6	3.0	20	—	I.O.	1	U.S.A.
2C35	6.3	0.3	8000	5.0	Voltage	Shunt Regulator	7.0	—	100	—	4	U.S.A.
2C44	6.3	0.75	250	25.0	—	—	7.0	—	—	—	3	U.S.A.
2C52	12.6	0.3	250	1.3	2.0	55.5	1.9	100	—	—	2	U.S.A.
6AH4	6.3	0.75	250	30.0	23.0	1.78	4.5	8	—	—	5	U.S.A.
6AW7	6.3	0.3	100	1.4	0	66.6	1.2	80	—	—	6	U.S.A.
6BL7	6.3	1.5	250	40.0	9.0	2.15	7.0	15	—	—	2	U.S.A.
6BX7	6.3	1.5	250	42.0	—	1.3	7.6	10	390	—	7	U.S.A.
13D1	25.0	0.15	250	9.0	8.0	7.7	2.6	20	890	—	2	Brimar
446A/B	6.3	0.75	250	15.0	—	10.0	4.5	45	200	—	8	U.S.A.
464A	6.3	0.75	250	25.0	—	—	7.0	—	100	—	3	U.S.A.
1633	25.0	0.15	250	9.0	8.0	7.7	2.6	20	890	—	2	U.S.A.
1634	12.6	0.15	250	2.0	2.0	53.0	1.3	70	1000	—	9	U.S.A.
1639	6.3	0.2	250	5.0	5.5	15.0	2.0	30	1100	—	10	U.S.A.
1655	6.3	0.3	250	2.0	2.0	53.0	1.3	70	1000	—	11	U.S.A.
5691	6.3	0.6	250	2.3	2.0	44.0	1.6	70	—	—	2	U.S.A.
5692	6.3	0.6	250	6.5	9.0	9.1	2.2	20	—	—	2	U.S.A.
5694	6.3	0.8	294	7.0	6.0	11.0	3.2	35	—	—	12	U.S.A.
5998	6.3	2.4	110	100.0	—	0.3	15.5	5.4	—	—	2	U.S.A.
6042	25.0	0.15	250	9.0	8.0	7.7	2.6	20	890	—	2	Brimar
6080	6.3	2.5	135	125.0	—	0.28	7.0	2	250	—	2	U.S.A.
6082	26.5	0.6	135	125.0	—	0.28	7.0	2	250	—	2	U.S.A.
6113	6.3	0.8	250	2.3	2.0	44.0	1.6	70	—	—	2	U.S.A.
6180	6.3	0.6	250	6.5	9.0	9.1	2.2	20	—	—	2	Am.-Brit.
EBC51	6.3	0.55	250	10.0	7.5	6.0	4.0	24	—	—	13	European
OBC3	12.6	0.15	250	0.9	2.0	91.0	1.1	100	2200	—	14	European
QA2408	6.3	0.6	250	9.0	8.0	7.7	2.6	20	890	—	2	Osram
UBC1	12.6	0.1	200	3.5	1.7	33.0	2.0	66	—	—	15	European
1C3	1.4	0.05	90	1.4	3.0	19.0	0.76	14.5	—	B7G	16	U.S.A.
6AB4	6.3	0.15	250	10.0	2.0	10.0	5.5	55	—	—	17	U.S.A.
6AF4	6.3	0.225	80	16.0	—	2.27	6.6	15	150	—	18	U.S.A.
6AN4	6.3	0.225	200	13.0	—	7.77	9.0	70	100	—	18	U.S.A.
6J4	6.3	0.4	100	10.0	—	5.0	11.0	55	100	—	19	U.S.A.
6T4	6.3	0.225	80	18.0	—	1.9	7.0	13	150	—	18	U.S.A.
5610	6.3	0.15	90	17.0	1.5	3.5	4.0	14	—	—	20	U.S.A.
5844	6.3	0.3	100	4.8	—	7.95	3.4	27	470	—	21	U.S.A.
5920	6.3	0.4	100	8.5	1.5	5.4	5.6	30	—	—	21	U.S.A.
5964	6.3	0.45	100	9.5	0	6.5	6.0	39	50	—	21	U.S.A.
6066	6.3	0.3	250	1.0	3.0	58.0	1.2	70	—	—	22	Am.-Brit.
6135	6.3	0.175	250	10.5	8.5	7.7	2.2	17	—	—	23	U.S.A.
9002	6.3	0.15	250	6.3	7.0	11.4	2.2	25	—	—	24	U.S.A.
A1714	6.3	0.55	150	10.0	2.0	—	8.0	35	—	—	27	Osram
ABC91	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	—	22	European
DC90	1.4	0.05	67.5	4.5	0	11.0	1.1	12	—	—	25	European
E90CC	6.3	0.4	100	8.5	1.5	5.4	5.6	30	—	—	21	European
EBC90	6.3	0.3	250	1.0	3.0	58.0	1.2	70	—	—	22	European
EBC91	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	—	22	European
EC90	6.3	0.15	250	10.5	8.5	7.7	2.2	17	—	—	23	European
EC92	6.3	0.15	250	10.0	2.0	12.0	5.0	60	—	—	17	European
HBC91	12.6	0.15	250	1.2	2.0	62.5	1.6	100	—	—	27	European
QA2401	6.3	0.15	250	10.5	8.5	7.7	2.2	17	—	—	25	Osram
T2M05	6.3	0.45	100	8.5	0.85	7.1	5.3	38	—	—	21	European
TM12	6.3	0.4	100	10.0	2.0	10.0	5.5	55	—	—	19	European
UC92	9.5	0.1	250	10.0	2.0	12.0	5.0	60	—	—	17	European
62DDT	6.3	0.23	250	1.0	3.0	58.0	1.2	70	—	—	28	Cossor
AA61	6.3	0.6	250	6.0	5.5	11.0	2.7	30	900	—	29	European
EC40	6.3	0.48	275	15.0	1.5	6.5	12.0	78	—	—	30	European
EC41	6.3	0.2	180	20.0	—	3.3	4.5	15	—	—	31	European
ECL113	6.3	0.6	250	0.6	1.5	—	—	—	—	—	32	European
ED111	6.3	0.45	200	40.0	5.0	2.3	8.0	18.4	—	—	33	European
1LF3	1.4	0.05	90	4.5	0	11.2	1.3	14.5	—	B8G	34	U.S.A.
7B4	6.3	0.3	250	0.9	2.0	66.0	1.5	100	—	—	35	U.S.A.
7E5	6.3	0.15	180	5.5	3.0	12.0	3.0	36.0	—	—	36	U.S.A.
7F8W	6.3	0.3	250	11.0	—	9.5	5.2	50	200	—	37	U.S.A.
1201	6.3	0.15	180	5.5	3.0	12.0	3.0	36	—	—	36	U.S.A.
DAC21	1.4	0.025	120	0.75	0	100.0	0.4	40	—	—	38	European
DAC22	1.25	0.025	90	0.35	0	160.0	0.3	48	—	—	39	European
DAC25	1.2	0.025	120	0.6	0	110.0	0.35	40	—	—	40	European
DBC21	1.4	0.05	120	1.6	1.5	28.0	0.9	25	—	—	41	European
DBC25	1.4	0.05	120	1.6	1.5	28.0	0.9	25	—	—	42	European
DC25	1.2	0.025	120	2.1	—	15.0	0.85	13	—	—	43	European
DDD25	1.4	0.1	90	3.5	1.5	12.5	1.2	15	—	—	44	European

TRIODE AMPLIFIERS—Contd.

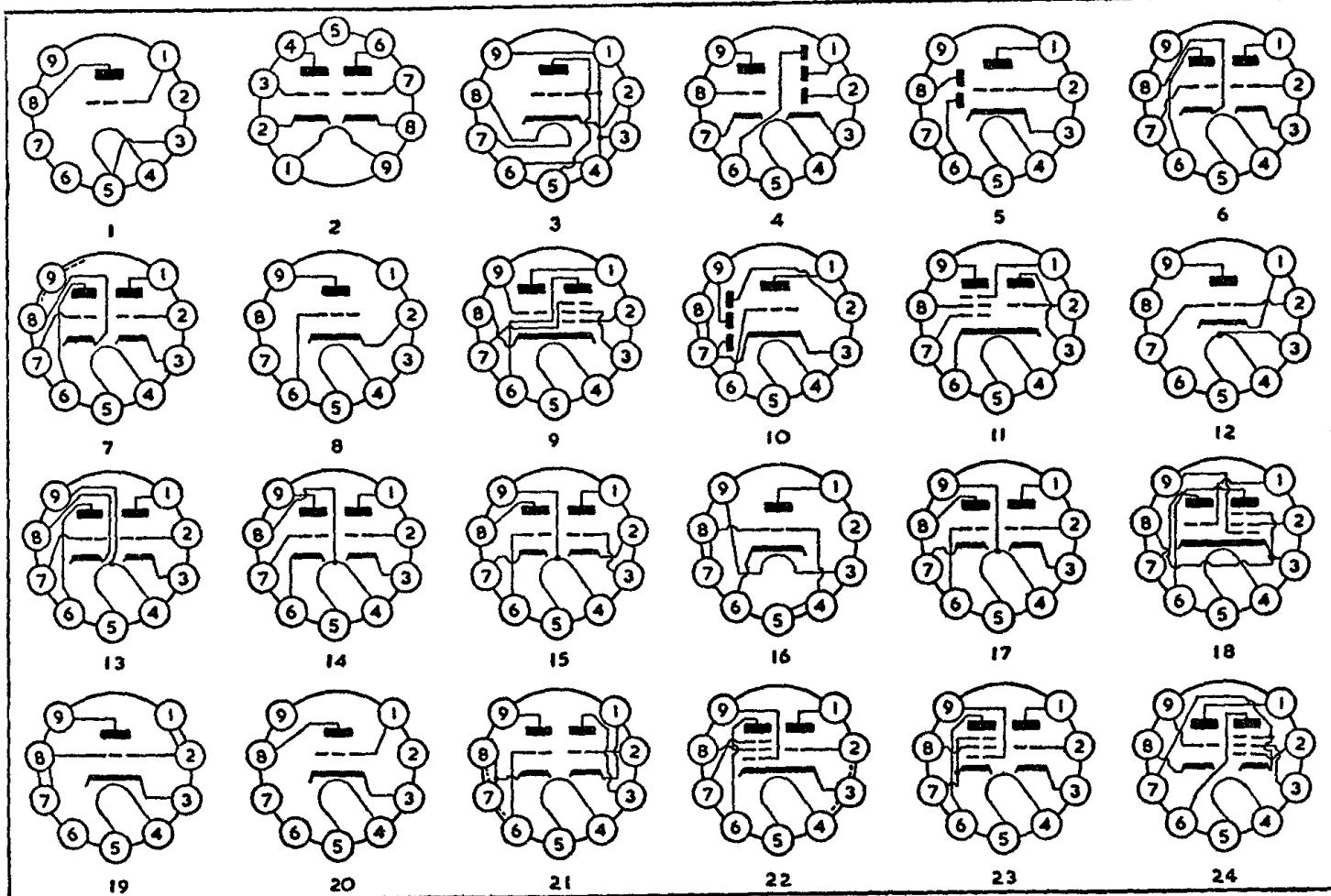


TRIODE AMPLIFIERS—Contd.

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.	
1E3	1.25	0.22	150	20.0	3.5	14.0	3.5	49	—	B9A	1	U.S.A.
2C51	6.3	0.3	150	8.2	2.0	6.5	5.5	35	—		2	U.S.A.
6AJ4	6.3	0.225	125	16.0	—	4.2	10.0	42	68		3	U.S.A.
6AK8	6.3	0.45	250	1.0	3.0	58.0	1.2	70	—		4	U.S.A.
6AM4	6.3	0.225	150	13.3	0	9.5	9.0	85	—		3	U.S.A.
6BD7	6.3	0.23	250	1.0	3.0	58.0	1.2	70	—		5	U.S.A.
6BK7	6.3	0.45	{ 100	9.0	9.0	6.1	6.1	37	120 }		6	U.S.A.
			{ 150	18.0	12.0	4.8	8.5	41	56 }			
6BQ7	6.3	0.4	150	9.0	—	5.8	6.0	35	220		7	U.S.A.
6BQ7-A	6.3	0.4	150	9.0	—	6.1	6.4	39	220		7	U.S.A.
6BZ7	6.3	0.4	150	10.0	—	5.6	6.8	38	220		7	U.S.A.
6S4	6.3	0.6	250	26.0	8.0	3.6	4.5	16	—		8	U.S.A.
6U8	6.3	0.45	150	18.0	—	5.0	8.5	40	56		9	U.S.A.
6V8	6.3	0.45	250	1.0	3.0	58.0	1.2	70	—		10	U.S.A.
6X8	6.3	0.45	150	18.0	—	—	—	—	2700		11	U.S.A.
12A4	{ 12.6	0.3										
	{ 6.3	0.6	250	21.0	9.0	2.6	7.8	20	—		12	U.S.A.
12AZ7	{ 12.6	0.22										
	{ 6.3	0.45	250	10.0	—	10.9	5.5	60	200		13	U.S.A.
12B4	{ 12.6	0.3										
	{ 6.3	0.6	150	35.0	17.5	1.0	6.5	6.5	—		12	U.S.A.
12BZ7	{ 12.6	0.15										
	{ 6.3	0.3	250	2.5	2.0	31.8	3.2	100	—		13	U.S.A.
13D3	{ 12.6	0.3										
	{ 6.3	0.6	250	6.0	4.6	14.0	2.3	32	—		13	Brimar
19V8	19.0	0.15	250	1.0	3.0	58.0	1.2	70	—		10	U.S.A.
19X8	18.9	0.15	100	8.5	—	6.9	5.8	40	100		11	U.S.A.
63TP	6.3	0.3	100	4.0	2.3	12.5	1.4	17	—		22	Cossor
5670	6.3	0.35	150	8.2	—	6.37	5.5	35	240		2	U.S.A.
5687	{ 12.6	0.45										
	{ 6.3	0.9	180	2.3	7.0	2.75	6.4	17.5	—		14	U.S.A.
5751	{ 12.6	0.175										
	{ 6.3	0.35	250	1.0	3.0	58.0	1.2	70	—		13	U.S.A.
5755	{ 12.6	0.18										
	{ 6.3	0.36	310	0.15	—	140.0	0.5	70	—		15	U.S.A.
5814	{ 12.6	0.175										
	{ 6.3	0.35	250	10.5	8.5	7.7	2.2	17	—		13	U.S.A.
5842	{ 6.3	0.3	150	26.0	—	1.8	24.0	43	62		16	U.S.A.
5963	{ 12.6	0.15										
	{ 6.3	0.3	67.5	7.0	—	7.85	2.8	22	—		13	U.S.A.
5965	{ 12.6	0.225										
	{ 6.3	0.45	150	8.2	—	7.25	8.5	62	220		13	U.S.A.
6057	{ 12.6	0.15										
	{ 6.3	0.3	250	1.2	2.0	62.5	1.6	100	—		13	Am.-Brit.
6060	{ 12.6	0.15										
	{ 6.3	0.3	250	10.0	2.0	10.0	5.5	55	—		13	Am.-Brit.
6067	{ 12.6	0.15										
	{ 6.3	0.3	250	10.5	8.5	7.7	2.2	17	—		13	Am.-Brit.
6072	{ 12.6	0.35										
	{ 6.3	0.175	250	3.0	4.0	25.0	1.75	45	—		13	U.S.A.
6085	{ 12.6	0.3										
	{ 6.3	0.6	250	6.0	5.6	11.0	2.9	32	920		13	U.S.A.
6158	{ 12.6	0.3										
	{ 6.3	0.6	250	6.0	4.6	14.0	2.3	32	—		13	Brimar
6201	{ 12.6	0.15										
	{ 6.3	0.3	250	10.0	—	10.9	5.5	60	60		17	U.S.A.
6211	{ 12.6	0.15										
	{ 6.3	0.3	100	4.6	—	7.5	3.6	27	470		13	U.S.A.
B309	{ 12.6	0.15										
	{ 6.3	0.3	250	10.0	2.0	10.0	5.5	55	—		13	M.O.V.
DC80	1.25	0.22	150	20.0	3.5	4.0	3.5	14	—		1	European
E80CC	{ 12.6	0.3										
	{ 6.3	0.6	250	6.0	5.6	11.0	2.9	32	920		13	European
EABC80	6.3	0.45	250	1.0	3.0	58.0	1.2	70	—		4	European
EBC80	6.3	0.23	250	1.0	3.0	58.0	1.2	70	—		5	European
EC80	6.3	0.48	250	15.0	1.5	6.6	12.0	80	—		19	European
EC81	6.3	0.2	150	30.0	2.0	2.9	5.5	16	—		20	European
ECC82	6.3	0.3	250	10.5	8.5	7.7	2.2	17	800		13	European
ECC83	{ 12.6	0.15										
	{ 6.3	0.3	250	1.2	2.0	62.5	1.6	100	—		13	European

TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	r_a kΩ	gm mA/V	Amp Factor	R_k Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
ECC84	6.3	0.4	90	12.0	1.5	3.7	6.2	23	—	B9A	21	European
ECC85	6.3	0.45	200	11.0	2.0	7.0	6.8	48	—		7	Mul.-Eupn.
HABC80	19.0	0.15	250	1.0	3.0	58.0	1.2	70	—		4	European
LN152	6.3	0.3	100	4.0	2.3	12.5	1.4	17	—		22	M.O.V.
LN309	12.6	0.3	250	14.0	8.5	7.7	2.2	17	—		23	M.O.V.
PCC84	8.5	0.3	90	12.0	1.5	3.7	6.2	23	—		21	Mul.-Eupn.
PCF80	8.5	0.3	100	14.0	2.0	4.0	5.0	20	—		24	Mul.-Eupn.
PCL81	12.6	0.3	180	0.4	1.5	6.0	7.2	43	—		18	Mul.-Eupn.
QA2406	12.6	0.15	250	10.0	2.0	10.0	5.5	55	—		13	Osram
UABC80	6.3	0.3	250	1.0	3.0	58.0	1.2	70	—		4	Mul.-Eupn.
	28.0	0.1	250	1.0								



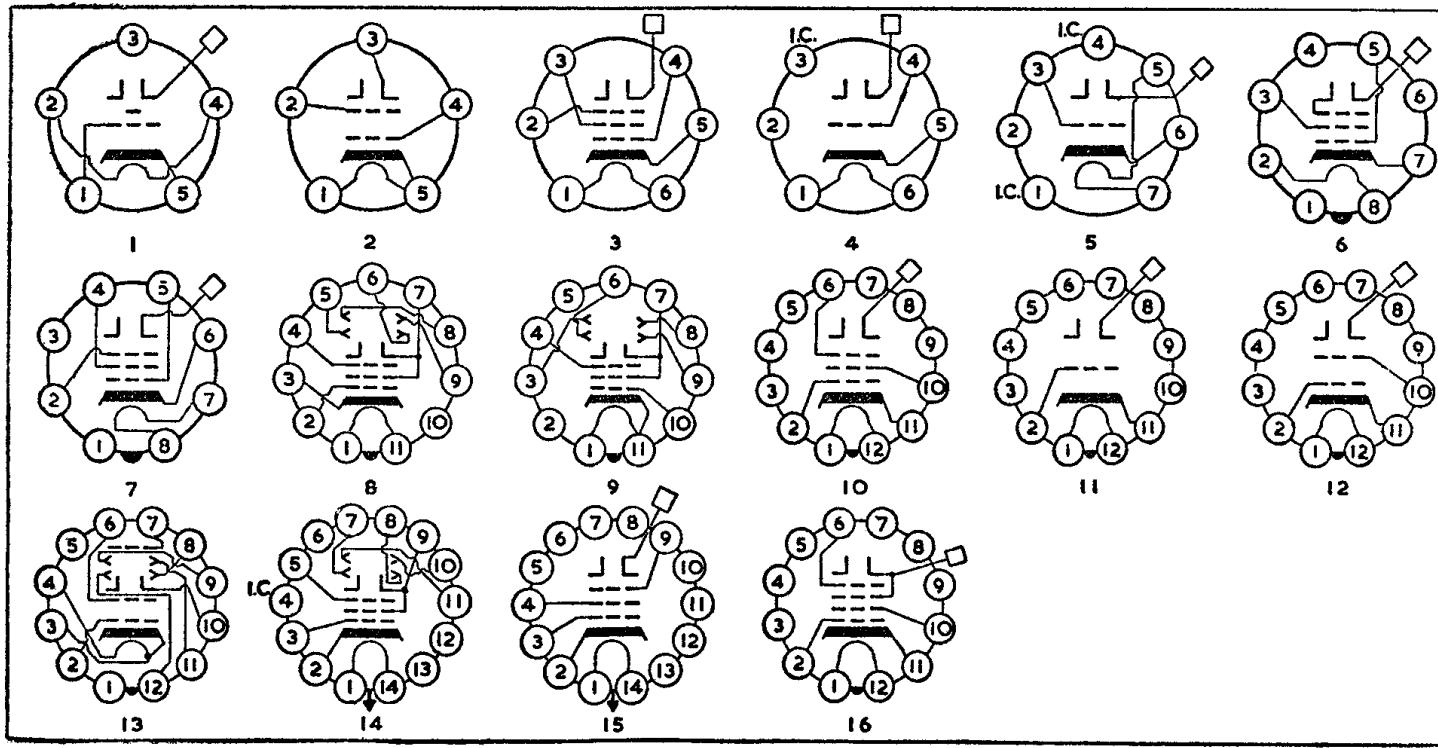
TELEVISION C.R.T.'s

Type	Dia. in Inches	Remarks	HEATER		2ND or FINAL ANODE		Focus Anode	ACC	MODULATOR		Focus A/T or Focus/Def. Method	Def. Angle	BASE		Maker	
			Volts	Amps	Volts	I/ μ A			Volts Swing	Volts Cut Off			Type	Ref.		
3-18	Triode	12	±	13.3	0.3	5500	350	—	—	25	34	1430	—	B7B	5	E.M.I.
3-31	Triode	12	±	13.0	0.3	5500	100	—	—	15	20	1830	—	—	5	E.M.I.
3-32	Triode	15	±	13.0	0.3	5500	100	—	—	15	20	1830	—	—	5	E.M.I.
3KP4		3		6.3	0.6	2000	—	460	—	—	38-90	ES/ES	—	—	8	U.S.A.
3NP4	Triode	3	A§	6.3	0.6	24000	—	—	—	—	36-84	MG/MG	42	UX5	1	U.S.A.
5BP4		5		6.3	0.6	2000	—	425	—	—	40	ES/ES	—	B11A	9	U.S.A.
SFP4A	Pentode	5		6.3	0.6	6000	—	—	250	—	25-70	MG/MG	53	I.O.	6	U.S.A.
SQP4	Pentode	5	A	6.3	0.6	10000	—	—	300	—	28-42	MG/MG	53	—	6	U.S.A.
5TP4	Pentode	5	A§¶	6.3	0.6	27000	—	4900	200	—	42-98	ES/MG	50	B12A	10	U.S.A.
7AP4	Tetrode	7		2.5	2.1	3500	—	—	625	—	67-5	ES/MG	55	UX5	2	U.S.A.
7CP4	Pentode	7		6.3	0.6	6000	—	1140	250	—	22-68	ES/MG	57	I.O.	7	U.S.A.
7DP4	Pentode	7	φ¶	6.3	0.6	6000	—	1430	250	—	27-63	ES/MG	50	B12A	10	U.S.A.
7EP4		7		6.3	0.6	2500	—	650	—	—	36-84	ES/ES	—	B11A	9	U.S.A.
7GP4		7		6.3	0.6	3000	—	1000	—	—	36-84	ES/ES	—	B14A	14	U.S.A.
7HP4	Tetrode	7	¶	6.3	0.6	6000	—	—	250	—	33-77	MG/MG	50	B12A	12	U.S.A.
7JP4		7		6.3	0.6	6000	—	2010	—	—	72-168	ES/ES	—	B14A	14	U.S.A.
7NP4	Pentode	7	§¶	6.6	0.62	75000	—	17000	500	—	155	ES/MG	35	—	15	U.S.A.
7QP4	Tetrode	7	*	6.3	0.6	8000	—	—	300	—	33-77	MG/MG	52	B12A	12	U.S.A.
7RP4	Tetrode	7	A¶	6.3	0.6	9000	—	—	250	—	27-63	MG/MG	50	—	12	U.S.A.
7TP4	Pentode	7	A	6.3	0.6	10000	—	1220	200	—	22-52	ES/MG	50	—	10	U.S.A.
7WP4	Pentode	7	§¶	6.6	0.62	75000	—	18000	500	—	155	ES/MG	—	B14A	15	U.S.A.
8AP4	Triode	8	*	6.3	0.6	7000	—	—	—	—	27-33	MG/MG	54	B12A	11	U.S.A.
8AP4-A	Triode	8	G *	6.3	0.6	7000	—	—	—	—	27-63	MG/MG	54	—	11	U.S.A.
8BP4		8		6.3	0.6	6000	—	2010	—	—	72-168	ES/ES	—	B14A	14	U.S.A.
9AP4	Pentode	9		2.5	2.1	7000	—	1425	250	—	75	ES/MG	40	UX6	3	U.S.A.
9CP4	Triode	9		2.5	2.1	6000	—	—	—	—	90	MG/MG	—	—	4	U.S.A.
10BP4	Tetrode	10	¶φ	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	50	B12A	12	U.S.A.
10BP4A	Tetrode	10	¶φ	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	50	—	12	U.S.A.
10CP4	Tetrode	10	¶	6.3	0.6	9000	—	—	250	—	30-66	MG/MG	50	—	12	U.S.A.
10DP4	Hexode	10	A	6.3	0.6	9000	—	2900	250	—	36-84	ES/MG	50	—	12	U.S.A.
10EP4	Tetrode	10		6.3	0.6	8000	—	—	250	—	45	MG/MG	—	—	12	U.S.A.
10FP4	Tetrode	10	A¶¶	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	50	—	12	U.S.A.
10FP4-A	Tetrode	10	GA¶¶	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	50	—	12	U.S.A.
10GP4		10		6.3	0.6	5000	—	1550	—	—	60-140	ES/ES	—	B14A	14	U.S.A.
10HP4		10		6.3	0.6	5000	—	1500	—	—	60-140	ES/ES	—	—	14	U.S.A.
10MP4	Triode	10	¶φ	6.3	0.6	9000	—	—	—	—	27-63	MG/MG	52	B12A	11	U.S.A.
10MP4-A	Triode	10	F¶φ	6.3	0.6	9000	—	—	—	—	27-63	MG/MG	52	—	11	U.S.A.
10SP4	Pentode	10		6.3	0.6	14000	—	2225	200	—	18-48	ES/MG	35	UX6	3	U.S.A.
12AP4	Pentode	12		2.5	2.1	7000	—	1460	250	—	75	ES/MG	—	—	4	U.S.A.
12CP4	Triode	12		2.5	2.1	7000	—	—	250	—	110	MG/MG	—	I.O.	6	U.S.A.
12DP4	Pentode	12		6.3	0.6	7000	—	—	250	—	45	ES/MG	—	—	12	U.S.A.
12JP4	Tetrode	12		6.3	0.6	10000	—	—	250	—	27-63	MG/MG	56	B12A	12	U.S.A.
12KP4	Tetrode	12	A¶¶	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	54	—	12	U.S.A.
12KP4-A	Tetrode	12	GA¶¶	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	54	—	12	U.S.A.
12LP4	Tetrode	12	¶φ	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	54	—	12	U.S.A.
12LP4-A	Tetrode	12	G¶φ	6.3	0.6	11000	—	—	300	—	33-77	MG/MG	54	—	12	U.S.A.
12QP4	Tetrode	12	*	6.3	0.6	10000	—	—	250	—	27-63	MG/MG	55	—	12	U.S.A.
12RP4	Tetrode	12	*	6.3	0.6	10000	—	—	250	—	27-63	MG/MG	56	—	12	U.S.A.
12TP4	Tetrode	12	φ	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	54	—	12	U.S.A.
12UP4	Tetrode	12	φ	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	54	—	12	U.S.A.
12UP4A	Tetrode	12	G φ	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	54	—	12	U.S.A.
12UP4B	Tetrode	12	G¶ φ	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	54	—	12	U.S.A.
12VP4	Triode	12	¶φ	6.3	0.6	11000	—	—	—	—	33-77	MG/MG	55	—	11	U.S.A.
12VP4A	Triode	12	G¶φ	6.3	0.6	11000	—	—	—	—	33-77	MG/MG	55	—	11	U.S.A.
12XP4	Tetrode	12	¶¶	6.3	0.3	8000	150	—	250	—	40	MG/MG	60	—	12	Emitron
12YP4	Tetrode	12	¶¶	6.3	0.6	11000	—	—	250	—	33-73	ES/MG	54	—	12	U.S.A.
14AP4	Pentode	14		2.5	2.1	8000	—	1000	4000	—	40-120	ES/ES	—	—	13	U.S.A.
14BP4	Tetrode	14	R¶F¶	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	70	—	12	U.S.A.
14CP4	Tetrode	14	R*F¶	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	12	U.S.A.
14DP4	Tetrode	14	R¶F	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	70	—	12	U.S.A.
14EP4	Tetrode	14	R*F¶	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	12	U.S.A.
14GP4	Hexode	14	R*G¶¶	6.3	0.6	12000	—	2550	300	—	33-77	ES/MG	70	—	16	U.S.A.
14HP4	Hexode	14	*	6.3	0.6	12000	—	—	300	—	33-77	ES/MG	—	—	16	U.S.A.
14KP4	Tetrode	14	¶¶	6.3	0.3	10000	150	—	250	—	40	MG/MG	70	—	12	Emitron
15AP4	Tetrode	15		6.3	0.6	12000	—	—	250	—	27-63	MG/MG	57	—	12	U.S.A.
15CP4	Tetrode	15	φ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	57	—	12	U.S.A.
15DP4	Tetrode	15	*	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	57	—	12	U.S.A.
15EP4	Tetrode	15	¶¶	6.3	0.3	10000	150	—	250	—	40	MG/MG	52	—	12	Emitron
16ACP4	Tetrode	16	¶φ	6.3	0.6	13000	—	—	250	—	33-68	ES/MG	60	—	12	U.S.A.
16AP4	Tetrode	16	φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	53	—	12	U.S.A.
16AP4-A	Tetrode	16	G *φ	6.3	0.6	13000	—	—	300	—	33-77	MG/MG	53	—	12	U.S.A.

TELEVISION C.R.T.'s—Contd.

Type	Dia. in Inches	Remarks	HEATER		2ND or FINAL ANODE		Focus Anode	ACC	MODULATOR		Focus A/T or Focus/Def. Method	Def. Angle	BASE		Maker	
			Volts	Amps	Volts	I/ μ A			Volts Swing	Volts Cut Off			Type	Ref.		
			—	—	—	—			—	—			—	—		
16CP4	Tetrode	16	φ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	52	B12A	12	U.S.A.
16DP4	Tetrode	16	φ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	60		12	U.S.A.
16DP4-A	Tetrode	16	Gφ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	60		12	U.S.A.
16EP4	Tetrode	16	φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	60		12	U.S.A.
16EP4-A/B	Tetrode	16	GF φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	60		12	U.S.A.
16FP4	Tetrode	16	*	6.3	0.6	13000	—	—	250	—	27-63	MG/MG	62		12	U.S.A.
16GP4	Tetrode	16	G *	6.3	0.6	13000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16GP4-A	Tetrode	16	*	6.3	0.6	13000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
16GP4-B	Tetrode	16	GF *	6.3	0.6	13000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
16GP4-C	Tetrode	16	F *	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16HP4	Tetrode	16	¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	60		12	U.S.A.
16HP4-A	Tetrode	16	G¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	60		12	U.S.A.
16JP4	Tetrode	16	¶φ	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	60		12	U.S.A.
16JP4-A	Tetrode	16	G¶φ	6.3	0.6	11000	—	—	250	—	27-63	MG/MG	60		12	U.S.A.
16KP4	Tetrode	16	RGT *	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16KP4-A	Tetrode	16	RGAT *	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16LP4	Tetrode	16	¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	52		12	U.S.A.
16LP4-A	Tetrode	16	G¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	52		12	U.S.A.
16MP4	Tetrode	16	¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	60		12	U.S.A.
16MP4-A	Tetrode	16	G¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	60		12	U.S.A.
16QP4	Tetrode	16	RGφ	6.3	0.6	14000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
16RP4	Tetrode	16	RG¶*	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16SP4	Tetrode	16	¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16SP4-A	Tetrode	16	G¶φ	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16TP4	Tetrode	16	RGT *	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16UP4	Tetrode	16	RG*	6.3	0.6	12000	—	—	300	—	27-63	MG/MG	70		12	U.S.A.
16VP4	Tetrode	16	G*	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
16WP4	Tetrode	16	Gφ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
16WP4-A	Tetrode	16	G¶φ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
XP4	Tetrode	16	GRφ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	70		12	U.S.A.
YP4	Tetrode	16	G¶*	6.3	0.6	12000	—	—	200	—	33-77	MG/MG	70		12	U.S.A.

A=Aluminised. G=Tinted. F=Frosted. ¶=Aquadag coated. *=Single ion trap. φ=Double ion trap. ||=Metal Cone.
 R=Rectangular tube. §=Projection tube. ‡=Intended for cathode modulation.



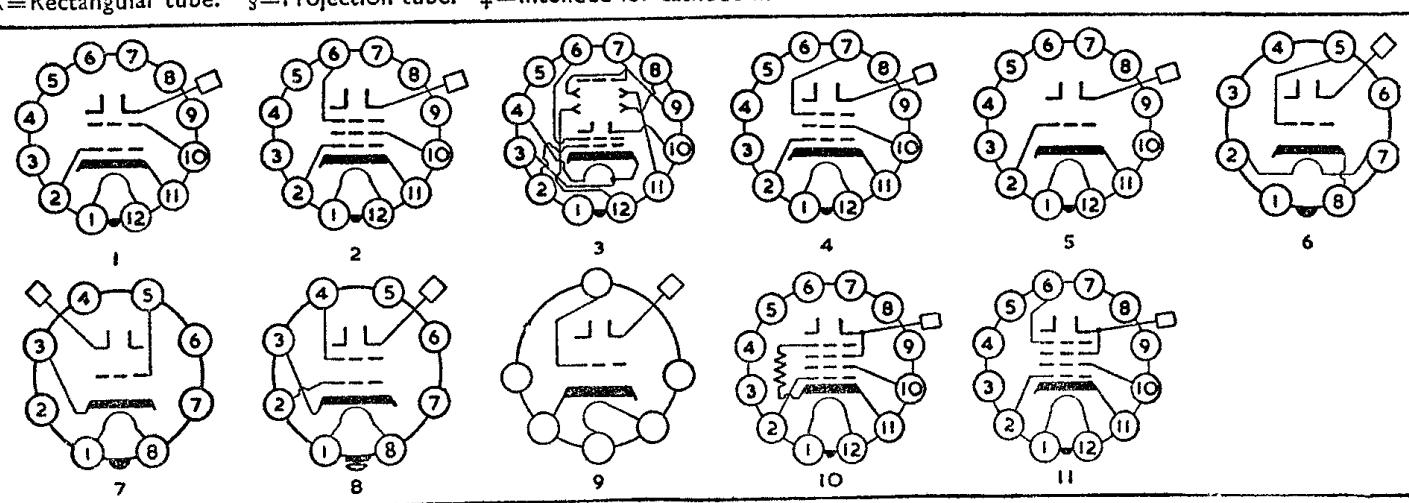
TELEVISION C.R.T.'s—Contd.

Type	Dia. in Inches	Remarks	HEATER		2ND or FINAL ANODE		Focus Anode	ACC	MODULATOR		Focus A/T or Focus/Def. Method	Def. Angle	BASE		Maker	
			Volts	Amps	Volts	I/ μ A			Volts Swing	Volts Cut Off			Type	Ref.		
16ZP4	Tetrode	16	G _T φ	6.3	0.6	12000	—	—	200	—	33-77	MG/MG	52	B12A	1	U.S.A.
17AP4	Tetrode	17	GR _T **	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17BP4	Tetrode	17	GR*	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17BP4-A	Tetrode	17	GR _T **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17BP4-B	Tetrode	17	GAR _T **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17CP4	Tetrode	17	GFR _T **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17CP4-A	Tetrode	17	R _T **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17FP4	Hexode	17	GR _T **	6.3	0.6	12000	—	2600	300	—	33-77	ES/MG	70	—	11	U.S.A.
17FP4-A	Hexode	17	GR _T **	6.3	0.6	12000	—	2600	300	—	33-77	ES/MG	70	—	11	U.S.A.
17GP4	Hexode	17	GFR _T **	6.3	0.6	14000	—	2800	300	—	33-77	ES/MG	70	—	11	U.S.A.
17HP4	Hexode	17	GR _T **	6.3	0.6	14000	—	180	300	—	33-77	ES/MG	70	—	11	U.S.A.
17JP4	Tetrode	17	GR _T **	6.3	0.6	16000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17KP4	Hexode	17	GR _T **	6.3	0.6	12000	—	—	300	—	33-77	ES/MG	70	—	10	U.S.A.
17LP4	Hexode	17	GR _T **	6.3	0.6	12000	—	154	300	—	33-77	ES/MG	70	—	11	U.S.A.
17QP4	Tetrode	17	GR _T **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
17RP4	Hexode	17	GR _T **	6.3	0.6	14000	—	0	300	—	33-77	ES/MG	70	—	11	U.S.A.
17SP4	Tetrode	17	GR _T **	6.3	0.6	12000	—	—	250	—	33-66	ES/MG	70	—	1	U.S.A.
17TP4	Hexode	17	GFR _T **	6.3	0.6	14000	—	175	300	—	33-77	ES/MG	70	—	2	U.S.A.
17UP4	Tetrode	17	GR _T **	6.3	0.6	12000	—	—	250	—	33-66	MG/MG	70	—	1	U.S.A.
17VP4	Hexode	17	GR _T **	6.3	0.6	14000	—	0	300	—	33-77	ES/MG	70	—	11	U.S.A.
17YP4	Tetrode	17	*	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
19AP4	Tetrode	19	**	6.3	0.6	15000	—	—	300	—	33-77	MG/MG	66	—	1	U.S.A.
19AP4-A	Tetrode	19	G _I **	6.3	0.6	15000	—	—	300	—	33-77	MG/MG	66	—	1	U.S.A.
19AP4-B	Tetrode	19	GF _I **	6.3	0.6	15000	—	—	300	—	33-77	MG/MG	66	—	1	U.S.A.
19AP4-D	Tetrode	19	F _I **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	66	—	1	U.S.A.
19DP4	Tetrode	19	T _I **	6.3	0.6	13000	—	—	250	—	26-63	MG/MG	66	—	1	U.S.A.
19DP4-A	Tetrode	19	G _T **	6.3	0.6	13000	—	—	250	—	26-63	MG/MG	66	—	1	U.S.A.
19EP4	Tetrode	19	RGTφ	6.3	0.6	13000	—	—	250	—	26-63	MG/MG	70	—	1	U.S.A.
19FP4	Tetrode	19	Gφ	6.3	0.6	13000	—	—	250	—	27-63	MG/MG	66	—	1	U.S.A.
19GP4	Tetrode	19	G*	6.3	0.6	13000	—	—	250	—	27-63	MG/MG	66	—	1	U.S.A.
19JP4	Tetrode	19	RG*	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
19QP4	Hexode	19	RGT _T **	6.3	0.6	12000	—	200	300	—	33-77	ES/MG	70	—	11	U.S.A.
20AP4	Pentode	20	2.5	2.1	8000	—	1000	—	—	40-120	ES/ES	—	—	3	U.S.A.	
20BP4	Tetrode	20	6.3	0.6	15000	—	—	250	—	27-63	MG/MG	54	—	1	U.S.A.	
20CP4	Tetrode	20	RG*	6.3	0.6	15000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
20CP4-A	Tetrode	20	RGT _T **	6.3	0.6	15000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
20DP4	Tetrode	20	RG*	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
20DP4-A	Tetrode	20	RGT _T **	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
20FP4	Hexode	20	RG*	6.3	0.6	12000	—	2750	300	—	33-77	ES/MG	70	—	11	U.S.A.
20GP4	Hexode	20	RGT _T **	6.3	0.6	16000	—	3750	300	—	33-77	ES/MG	70	—	11	U.S.A.
20HP4	Hexode	20	RG*	6.3	0.6	14000	—	180	300	—	33-77	ES/MG	70	—	11	U.S.A.
20HP4-A	Hexode	20	RGT _T **	6.3	0.6	14000	—	180	300	—	33-77	ES/MG	70	—	2	U.S.A.
20JP4	Tetrode	20	RGT _T **	6.3	0.6	12000	—	—	300	—	33-77	ES/MG	70	—	1	U.S.A.
20LP4	Hexode	20	*	6.3	0.6	14000	—	0	300	—	33-77	ES/MG	70	—	11	U.S.A.
20MP4	Hexode	20	RGT _T **	6.3	0.6	16000	—	207	300	—	33-77	ES/MG	70	—	11	U.S.A.
21AP4	Tetrode	21	R _T **	6.3	0.6	16000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
21DP4	Hexode	21	RGF _T **	6.3	0.6	16000	—	3650	300	—	33-77	ES/MG	70	—	11	U.S.A.
21EP4	Tetrode	21	GR*	6.3	0.6	12000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
21EP4-A	Tetrode	21	GRT _T **	6.3	0.6	16000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
21EP4-B	Tetrode	21	GAR _T **	6.3	0.6	16000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
21FP4	Hexode	21	GR*	6.3	0.6	14000	—	180	300	—	33-77	ES/MG	70	—	11	U.S.A.
21FP4-A	Hexode	21	GRT _T **	6.3	0.6	14000	—	180	300	—	33-77	ES/MG	70	—	11	U.S.A.
21KP4	Tetrode	21	GR*	6.3	0.6	12000	—	—	300	—	38-77	ES/MG	70	—	1	U.S.A.
21KP4-A	Hexode	21	GRT _T **	6.3	0.6	12000	—	—	300	—	33-77	ES/MG	70	—	10	U.S.A.
21MP4	Hexode	21	GFR _T **	6.3	0.6	16000	—	207	300	—	33-77	ES/MG	70	—	11	U.S.A.
22AP4	Tetrode	22		6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
22AP4-A	Tetrode	22	G _I **	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
24AP4	Tetrode	24	G _I **	6.3	0.6	15000	—	—	300	—	33-77	MG/MG	70	—	1	U.S.A.
24BP4	Hexode	24	G _I **	6.3	0.6	14000	—	180	300	—	33-77	ES/MG	70	—	11	U.S.A.
27AP4	Hexode	27	GFR _T **	6.3	0.6	15000	—	120	300	—	33-77	ES/MG	90	—	11	U.S.A.
27EP4	Tetrode	27	GAR*	6.3	0.6	16000	—	—	300	—	33-77	MG/MG	90	—	1	U.S.A.
30BP4	Tetrode	30	G _I **	6.3	0.6	22000	—	—	300	—	33-77	MG/MG	90	—	1	U.S.A.
171K	Tetrode	17	R*	6.3	0.3	14000	—	—	300	—	40-60	MG/MG	70	—	1	Cossor
172K	Pentode	17	RG*	6.3	0.3	14000	—	—	300	—	40-60	MG/MG	70	—	4	Cossor
6705A	Triode	12	AT	6.3	0.5	9000	100	—	—	—	43	MG/MG	—	I.O.	6	G.E.C.
6706A	Triode	12	AT	10.8	0.3	9000	100	—	—	—	43	MG/MG	—	—	6	G.E.C.
6901A	Triode	16	A	6.3	0.3	14000	100	—	—	—	100	MG/MG	70	B12A	5	G.E.C.
7102A	Triode	12	AT	6.3	0.3	9000	100	—	—	20	43	MG/MG	55	I.O.	6	G.E.C.
7201A	Triode	14	AGR	6.3	0.3	14000	—	—	—	30	—	MG/MG	70	B12A	5	G.E.C.
Bm31-1	Triode	12	RG	6.3	0.3	9000	100	—	—	30	60-100	MG/MG	50	Pins	9	European
Bm35R-1	Triode	14	RG	6.3	0.45	9000	100	—	—	30	25-80	MG/MG	70	B12A	5	European
Bm35R-2	Tetrode	14	RA	6.3	0.3	12000	100	—	300	—	33-77	MG/MG	70	—	1	European

TELEVISION C.R.T.'s—Contd

Type	Dia. in Inches	Remarks	HEATER		2ND or FINAL ANODE		Focus Anode	ACC	MODULATOR		Focus A/T or Focus/Def. Method	Def. Angle	BASE		Maker		
			Volts	Amps	Volts	I/fA			Volts Swing	Volts Cut Off			Type	Ref.			
Bmv35/2	Tetrode	14	R	6.3	0.3	12000	—	—	300	—	33-77	MG/MG	70		1	European	
Bmv42/2	Tetrode	17	R	6.3	0.3	14000	—	—	300	—	33-77	MG/MG	70		1	European	
Bs42R-3	Pentode	17	R	6.3	0.3	14000	—	Vk	300	—	33-77	ES/MG	70		2	European	
Bs42R-6	Pentode	17	R*	6.3	0.3	14000	—	Vk	300	—	33-77	ES/MG	70		2	European	
C12BM	Triode	12	A¶	2.0	2.5	12000	150	—	—	30	60-140	750	—	I.O.	6	Brimar	
C12DM	Triode	12	¶	2.0	2.5	7000	150	—	—	30	40-100	600	—	B12A	6	Brimar	
C12FM	Tetrode	12	¶*	6.3	0.3	7000	175	—	200	25	40	600	63		5	Brimar	
C14BM	Triode	14	ART	6.3	0.6	12000	250	—	—	30	50-100	800	70		1	Brimar	
C14FM	Tetrode	14	RA¶*	12.6	0.3	12000	150	—	300	30	33-77	ES/MG	70		11	Brimar	
C14GM	Hexode	14	RA¶¶	12.6	0.3	12000	—	—	0	300	30	33-77	850	70		5	Brimar
C17BM	Triode	17	ART	6.3	0.6	15000	150	—	300	30	40-70	850	70		1	Brimar	
C17FM	Tetrode	17	RA¶*	12.6	0.3	14000	150	—	300	30	33-77	850	70			Brimar	
C17GM	Hexode	17	RA¶¶	12.6	0.3	14000	—	—	0	300	30	33-37	ES/MG	70		11	Brimar
CRM121B	Triode	12	G	2.0	1.4	9000	150	—	—	30	45-98	750	—	M.O.	7	Mazda	
CRM124	Tetrode	12	—	12.6	0.3	10000	—	—	400	33	80	MG/MG	56			Mazda	
CRM141	Tetrode	14	—	12.6	0.3	11000	—	—	400	33	59/127	MG/MG	70		1	Mazda	
CRM152	Triode	15	A	2.0	1.4	10000	—	—	—	33	59/127	MG/MG	70		5	Mazda	
CRM152A	Triode	15	A	2.0	1.4	12000	150	—	—	33	59-127	MG/MG	70		5	Mazda	
CRM152B	Triode	15	GA	2.0	1.4	12000	150	—	400	33	59/127	MG/MG	70		1	Mazda	
CRM153	Tetrode	15	—	12.6	0.3	15000	—	—	400	33	59/127	MG/MG	70			Mazda	
CRM171	Tetrode	17	—	12.6	0.3	16000	—	—	—	—	—	—	—	B8G	1	Mazda	
MW31-7	Tetrode	12	—	6.3	0.6	9000	100	—	350	—	40	750	63		8	Eupn.-Mul.	
MW31-14	Tetrode	12	¶	6.3	0.3	9000	100	—	350	—	40	750	63		8	Eupn.-Mul.	
MW31-74	Tetrode	12	G¶*	6.3	0.3	9000	—	—	350	—	44-99	750	—	B12A	1	Mullard	
MW36-22	Tetrode	14	R¶*	6.3	0.3	10000	—	—	250	—	33-72	1000	65		1	Eupn.-Mul.	
MW36-24	Tetrode	14	RG¶*	6.3	0.3	10000	—	—	250	—	33-72	1000	65		1	Eupn.-Mul.	
MW36-29	Tetrode	14	ARG¶	6.3	0.3	10000	—	—	250	—	33-72	1075	70		4	Eupn.-Mul.	
MW36-44	Pentode	14	R*	6.3	0.3	14000	—	—	250	—	33-72	1000	70		1	Mullard	
MW43-22	Tetrode	17	R¶*	6.3	0.3	10000	—	—	250	—	33-72	1000	70		1	Mullard	
MW43-24	Tetrode	17	RG¶*	6.3	0.3	10000	—	—	250	—	33-72	1000	70		1	Mullard	
MW43-29	Tetrode	17	RA¶*	6.3	0.3	10000	—	—	250	—	33-72	1000	70		4	Eupn.-Mul.	
MW43-43	Pentode	17	RG¶*	6.3	0.3	14000	—	—	300	—	40-86	1065	70		1	Eupn.-Mul.	
MW43-61	Tetrode	17	R*	6.3	0.3	14000	—	—	400	—	43-103	MG/MG	70		4	Mul.-Eupn	
MW43-64	Pentode	17	RG*	6.3	0.3	14000	—	0/600	300	—	43-77	MG/MG	65		2	European	
R42	Pentode	14	R*	6.3	0.3	14000	—	0/600	325	—	33-77	ES/MG	70		2	European	
R50	Pentode	17	R*	6.3	0.3	14000	—	0/600	325	—	33-77	ES/MG	70			I.O.	
T12/71U	Triode	12	—	8.0	0.3	9000	150	—	—	32	60	800	—		6	Ferranti	
T12/72U	Triode	12	¶	8.0	0.3	9000	150	—	—	32	60	800	—		6	Ferranti	
T12/81U	Triode	12	A	8.0	0.3	9000	150	—	—	32	60	800	—		6	Ferranti	
T12/82U	Triode	12	A¶	8.0	0.3	9000	150	—	—	32	60	800	—		6	Ferranti	
T12/91	Triode	12	—	2.0	1.5	9000	150	—	—	32	70	800	—		6	Ferranti	
T12/92	Triode	12	¶	2.0	1.5	9000	150	—	—	30	55	800	—		6	Ferranti	
T12/404	Triode	12	A	4.0	0.95	9000	150	—	—	30	54	800	—		6	Ferranti	
T12/449	Triode	12	—	4.0	0.95	9000	150	—	—	30	55	800	—		6	Ferranti	
T12/504	Triode	12	A¶	4.0	0.95	9000	150	—	—	30	54	800	—		6	Ferranti	
T12/549	Triode	12	¶	4.0	0.95	9000	150	—	—	30	54	800	—		6	Ferranti	
T901B	Tetrode	16		6.3	0.3	14000	—	—	300	—	33-77	MG/MG	70		1	Eng.-Elec	
TP400-A	Triode	4	¶\$	6.3	0.6	20000	—	—	—	—	70-140	MG/MG	50	I.O.	6	U.S.A.	
TR14-1	Triode	14	RA	4.0	0.95	10000	100	—	—	30	67	MG/MG	70	B12A	5	Ferranti	
TR14-2	Triode	14	RA¶	4.0	0.95	10000	100	—	—	30	67	MG/MG	70		5	Ferranti	
TR17-1	Triode	17	RA	4.0	0.95	14000	100	—	—	31	66	MG/MG	70		5	Ferranti	
TR17-2	Triode	17	RA¶	4.0	0.95	14000	100	—	—	31	66	MG/MG	70		5	Ferranti	

A=Aluminised G=Tinted F=Frosted ¶=Aquadag coated. * = Single ion trap. ‡=Double ion trap. R=Rectangular tube. \$=Projection tube. †=Intended for cathode modulation.



SUB-MINIATURE VALVES

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a (kΩ)	gm (mA/V)	Anode Load Ω	Output (in W)	
	Volts	Amps	Volts	I/mA	Volts	I/mA						
1AC5	L.F. Pentode	1.25	0.04	67.5	2.0	67.5	0.4	4.5	150	0.75	25000	50
1AD1	Pentode	1.25	0.1	45	2.8	45	0.8	—	500	2.0	—	—
1AD5	Pentode	1.25	0.04	67.5	1.85	67.5	0.75	0	700	0.735	—	—
1AE5	Converter	1.25	0.06	45	0.9	45	2.0	—	200	0.2	—	—
1AG4	L.F. Pentode	1.25	0.04	41.5	2.4	41.5	0.6	3.6	180	1.0	12000	35
1AG5	Diode Pen.	1.25	0.03	45	0.8	45	0.25	—	260	0.35	—	—
1AH4	Pentode	1.25	0.04	45	0.75	45	0.2	—	1500	0.75	—	—
1D3	Triode	1.25	0.3	90	12.5	—	—	5	2.6	3.4	—	—
1E8	Converter	1.25	0.04	67.5	1.0	37.5	1.5	0	400	0.15	—	—
1M3	Tuning Ind.	1.4	0.025	90	0.25	Target	—	13.5	—	—	—	—
1Q6	Diode Pen.	1.25	0.04	67.5	1.6	67.5	0.4	0	400	0.6	—	—
1S6	Diode Pen.	1.25	0.04	67.5	1.6	67.5	0.4	0	400	0.6	—	—
1T6	Diode Pen.	1.25	0.04	67.5	1.6	67.5	0.4	0	400	0.6	—	—
1V6	Converter	1.25	0.04	45	0.4	45	0.15	—	1000	0.2	—	—
2B5	Twin Triode	{ 2.4 1.2	0.13	90	2.6	—	—	1.0	18.7	1.15	—	—
6AD4	Triode		0.26	—	—	—	—	—	—	—	—	—
6AK4	Triode	6.3	0.15	100	1.4	—	—	820*	26	2.7	—	—
6AZ5	Rectifier	6.3	0.15	200	9.5	—	—	680*	5.3	3.8	—	—
6AZ6	Rectifier	6.3	0.15	150 Volts RMS	D.C.I. = 4 mA.	420 P.I.V.	—	—	—	—	—	—
6BA5	Pentode	6.3	0.15	200 Volts RMS	D.C.I. = 20 mA.	450 P.I.V.	—	—	—	—	—	—
6BF7	Twin Triode	6.3	0.3	100	8.0	—	—	100*	7	4.8	—	—
6BG7	Twin Triode	6.3	0.3	100	8.0	—	—	100*	7	4.8	—	—
70B1	Voltage Reg.	—	—	100 V. Starting.	70 V. Operating.	5-15 mA	Operating	Current.	—	—	—	—
4065	E'meter Tri.	1.25	0.013	9	0.1	—	—	2.5	20	0.08	—	—
5635	Twin Triode	6.3	0.45	100	4.8	—	—	100*	10	3.8	—	—
5636	Pentode	6.3	0.15	100	3.0	100	5	150*	160	1.0	—	—
5639	Pentode	6.3	0.45	150	21.0	100	4	100*	50	9.0	—	—
5642	Rectifier	1.25	0.14	10000 V. P.I.V.	D.C.I. = 2 mA.	—	—	—	—	—	—	—
5643	Thyratron	6.3	0.15	500 V. P. Anode	500 V. Inv.	Average I = 22.	—	—	—	—	—	—
5644	Voltage Reg.	—	—	125 V. Starting.	95 V. Operating.	5-25 mA	Operating	Current.	—	—	—	—
5646	Triode	6.3	0.15	100	1.4	—	—	820*	29	2.4	—	—
5647	Rectifier	6.3	0.15	150 V. RMS	D.C.I. = 9 mA.	—	—	—	—	—	—	—
5672	L.F. Pentode	1.25	0.05	67.5	3.25	67.5	1.1	6.5	—	0.65	20000	65
5675	L.F. Triode	6.3	0.135	135	24.0	—	—	—	3.225	6.2	—	—
5676	Triode	1.25	0.125	135	4.0	—	—	5	—	1.6	—	—
5677	Triode	1.25	0.07	135	1.9	—	—	6	—	0.65	—	—
5678	Pentode	1.25	0.05	67.5	1.8	67.5	0.48	0	—	1.1	—	—
5697	Triode	0.625	0.02	12	0.22	—	—	3	—	0.135	—	—
5702/WA	Pentode	6.3	0.2	120	7.5	120	2.5	200*	340	5.0	—	—
5703/WA	Triode	6.3	0.2	120	9.0	—	—	2	—	—	—	—
5704	Diode	6.3	0.15	Max. 150 V. RMS	D.C.I. = 9 mA.	—	—	—	—	—	—	—
5718	Triode	6.3	0.15	100	12.0	—	—	150*	3.65	5.5	—	—
5719	Triode	6.3	0.15	100	1.4	—	—	820*	26	2.7	—	—
5734	Triode	6.3	0.15	300	1.5	—	—	0	72	0.275	—	—
5744/WA	Triode	6.3	0.2	250	4.0	—	—	2	—	4.0	—	—
5768	Rocket Tri.	6.3	0.4	250	9.3	—	—	1	—	4.5	—	—
5783/WA	Voltage Reg.	—	—	115 V. Starting.	85 V. Operating.	1.5 to 3.5	Operating	Current.	—	—	—	—
5784/WA	Pentode	6.3	0.2	120	5.2	120	3.5	2.0	—	3.2	—	—
5785	Diode	1.25	0.015	3500 P.I.V.	D.C.I. = 0.1 mA.	Rectifier.	—	—	—	—	—	—
5787	Voltage Reg.	—	—	135 V. Starting.	100 V. Operating.	5 to 25	mA. Operating	Current.	—	—	—	—
5787/WA	Voltage Reg.	—	—	145 V. Starting.	100 V. Operating.	1 to 25	mA. Operating	Current.	—	—	—	—
5797	Pentode	26.5	0.045	26.5	2.75	26.5	—	—	21	—	—	—
5798	Twin Triode	26.5	0.09	26.5	15	—	—	—	—	—	—	—
5799	Rectifier	1.25	0.01	3000 V. P.I.V.	D.C.I. = 0.2 mA.	—	—	—	—	—	—	—
5800	Triode	1.25	0.01	4.5	0.01	—	—	3	—	0.015	—	—
5801	Triode	1.25	0.01	135	0.2	—	—	2	—	0.15	—	—
5802	Triode	1.25	0.01	10	0.1	—	—	3	25	0.065	—	—
5803	Triode	1.25	0.01	7.5	0.09	—	—	1.7	—	0.1	—	—
5828	Triode	1.25	0.01	45	0.25	—	—	1	—	0.45	—	—
5829/WA	Twin Diode	6.3	0.15	330 V. P.I.V.	D.C.I. = 5 mA.	Detector.	—	—	—	—	—	—
5840	Pentode	6.3	0.15	100	7.5	100	2.4	150*	230	5.0	—	—
5841	Voltage Reg.	—	—	930 V. Starting.	900 V. Operating.	2 to 50	μ A. Operating	Current.	—	—	—	—
5851	L.F. Pentode	{ 2.5 1.25	0.055	5.5	125	0.9	7.5	175	1.6	—	—	—
5854	L.F. Pentode		0.1	45	0.8	45	0.25	2	350	0.55	50000	9.5
5873	Triode	6.3	0.3	150	9.0	—	—	3	7.4	2.9	—	—
5875	Pentode	1.25	0.1	90	3.5	90	1.0	0	—	2.5	—	—
5876	L.F. Triode	6.3	0.135	250	18.0	—	—	2	8.625	6.5	—	—
5884	Twin Tetrode	1.25	0.01	4.5	0.02	—	—	3	—	0.015	—	—
5885	Twin Tetrode	1.25	0.02	13.5	0.185	—	—	3	—	0.16	—	—

SUB-MINIATURE VALVES—Contd.

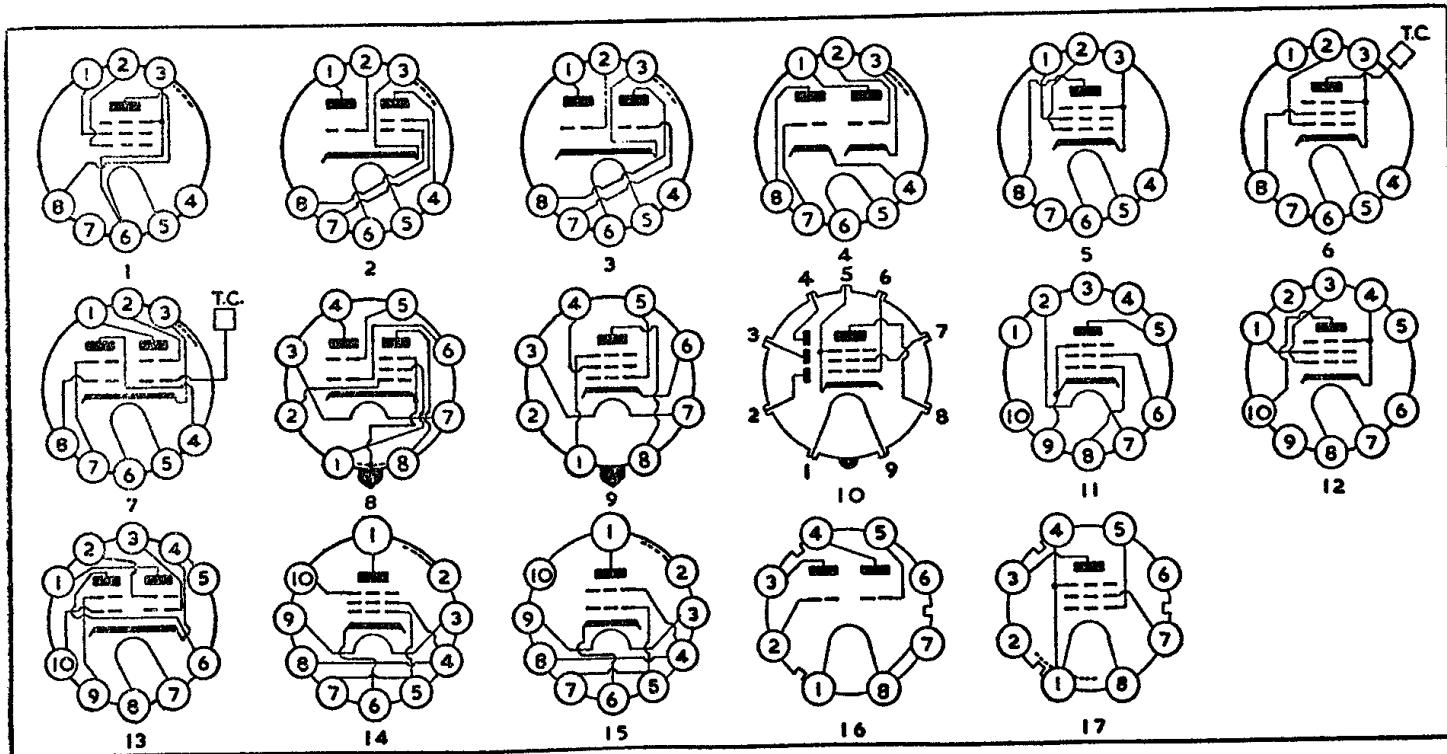
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a (kΩ)	gm (mA/V)	Anode Load Ω	Output (mW)
	Volts	Amps	Volts	I/mA	Volts	I/mA					
5886	Pentode	1.25	0.01	10.5	0.2	—	—	3	—	0.16	—
5889	Pentode	1.25	0.007	12	0.005	4.5	0.005	2	18000	0.014	—
5896	Twin Diode	6.3	0.3	460 V. P.I.V. D.C.I. = 10 mA.				—	—	—	—
5897	Triode	6.3	0.15	100	8.5	—	—	150*	4.5	5.8	—
5898	Triode	6.3	0.15	150	1.7	—	—	680*	26	2.7	—
5899	Pentode	6.3	0.15	100	7.2	100	2.2	120*	260	4.5	—
5900	Pentode	6.3	0.15	100	7.2	100	2.2	120*	260	4.5	—
5901	Pentode	6.3	0.15	100	7.5	100	2.4	150*	230	5.0	—
5902	L.F. Pentode	6.3	0.45	110	30.0	110	2.2	270*	15	4.2	3000
5903	Twin Diode	26.5	0.075	460 V. P.I.V. D.C.I. = 10 mA.				—	—	—	1000
5904	Triode	26.5	0.045	26.5	3.0	—	—	—	3.8	5.0	—
5905	Pentode	26.5	0.045	26.5	2.3	26.5	0.9	—	110	2.85	—
5906	Pentode	26.5	0.045	100	7.5	100	2.4	150*	230	5.0	—
5907	Pentode	26.5	0.045	26.5	2.7	26.5	1.1	—	125	3.0	—
5908	Pentode	26.5	0.045	26.5	2.3	26.5	1.8	—	30	1.75	—
5916	Pentode	26.5	0.045	100	4.4	100	3.4	150*	130	3.0	—
5935	Diode	6.3	0.15	Detector				—	—	—	—
5950	Voltage Reg.	—	—	730 V. Starting.	700 V. Operating.	2 to 50	μA. Operating	Current.	—	—	—
5967	Twin Triode	1.25	0.12	45	3.5	—	—	—	7.4	2.3	—
5968	Twin Triode	1.25	0.12	45	0.7	—	—	0	34.6	1.3	—
5969	Twin Tetrode	1.25	0.2	135	7.5	45	0.4	1	—	1.85	—
5970	Twin Pentode	1.25	0.16	45	3.0	45	0.9	—	170	1.85	—
5971	Triode	1.25	0.08	135	5.6	—	—	2.5	9.2	2.5	—
5972	Pentode	1.25	0.06	67.5	1.9	67.5	0.5	—	1000	1.15	—
5975	Triode	6.3	0.175	200	12.5	—	—	680*	4	4.0	—
5977	Triode	6.3	0.15	100	10.0	—	—	270*	3.55	4.5	—
5987	Triode	6.3	0.45	100	9.0	—	—	18	2.2	1.85	—
5995	Rectifier	6.3	0.3	850 V. P.I.V. D.C.I. = 45 mA.				—	—	—	—
5997	Triode	6.3	0.15	100	10.0	—	—	270*	3.4	4.5	—
6007	L.F. Pentode	1.25	0.013	22.5	0.45	22.5	0.1	0.2	400	0.42	100000
6008	Pentode	0.625	0.013	22.5	0.05	18	0.01	1.15	4000	0.1	—
6021	Twin Triode	6.3	0.3	100	6.5	—	—	150*	6.45	5.4	—
6026	Triode	6.3	0.2	100	12.0	—	—	—	4	5.9	—
6029	Triode	1.25	0.2	90	11.0	—	—	4	4.25	2.0	—
6050	Triode	1.25	0.12	135	4.0	—	—	5	10	1.6	—
6051	L.F. Pentode	1.25	0.1	45	3.0	45	0.9	4	35	1.2	20000
6052	Rectifier	6.3	0.3	460 P.I.V. D.C.I. = 10 mA.				—	—	—	—
6053	Rectifier	26.5	0.075	450 P.I.V. D.C.I. = 10 mA.				—	3.8	5.0	—
6055	Triode	26.5	0.045	26.5	3.0	—	—	—	125	3.0	—
6056	Pentode	26.5	0.045	26.5	2.7	26.5	1.1	—	0.45	—	1.2
6088	L.F. Pentode	1.25	0.02	22.5	0.3	22.5	0.08	0	—	0.75	20000
6092	L.F. Pentode	1.25	0.05	67.5	2.9	67.5	0.8	6.5	—	—	80
6110	Rectifier	6.3	0.15	150 V. RMS D.C.I. = 8 mA. 460 P.I.V.				—	—	—	—
6111	Twin Triode	6.3	0.3	100	8.5	—	—	8.5	4.2	4.75	—
6112	Twin Triode	6.3	0.3	150	1.75	—	—	3.7	28	2.5	—
6147	L.F. Pentode	2.5	0.06	125	5.5	125	0.9	7.5	175	1.6	—
6148	Pentode	6.3	0.12	120	7.5	120	2.5	200*	340	5.0	—
6149	Triode	6.3	0.2	120	9.0	—	—	200*	5	5.0	—
6150	Pentode	6.3	0.2	120	5.2	120	3.5	2	17.5	3.2	—
6151	Triode	6.3	0.2	250	4.0	—	—	500*	17.5	4.0	—
6152	Triode	6.3	0.2	200	12.5	—	—	680*	4	4.0	—
6169	Triode	6.3	0.15	180	11.5	—	—	1	8.5	6.5	—
6176	Pentode	6.3	0.2	120	7.5	120	2.6	10	—	5.0	—
6184	Rectifier	6.3	0.15	150 V. RMS D.C.I. = 16 mA. 450 P.I.V.				—	—	5.0	—
6190	Triode	6.3	0.2	250	4.0	—	—	500*	—	—	—
6191	Pentode	6.3	0.2	120	5.2	120	3.5	2	17.5	4.0	—
6192	Triode	6.3	0.2	120	9.0	—	—	200*	—	3.2	—
6193	Twin Triode	6.3	0.3	180	11.5	—	—	1	8.5	6.5	—
6195	Pentode	2.5	0.11	125	9.0	125	1.5	7.5	120	2.1	—
6195	Pentode	1.25	0.22	—	—	—	—	—	—	—	—
6213	Voltage Reg.	—	—	200 V. Starting	127 to 133 V. Operating	1 to 2.5 mA.	Operating	Current.	—	—	—
CK500	Pentode	0.75	0.05	45	0.5	45	0.2	0	1000	0.25	—
CK511X	Pentode	1.25	0.05	45	0.24	45	0.2	0	220	0.22	—
CK516AX	Triode	0.625	0.02	22.5	0.15	—	—	0.625	50	0.2	—
CK518AX	L.F. Pentode	1.25	0.03	45	0.8	45	0.25	2	350	0.55	50000
CK523AX	L.F. Pentode	1.25	0.03	22.5	0.3	22.5	0.075	1.2	—	0.36	2.2
CK524AX	L.F. Pentode	1.25	0.03	15	0.45	15	0.125	1.75	200	0.3	30000
CK525AX	L.F. Pentode	1.25	0.02	22.5	0.25	22.5	0.06	1.2	330	0.325	60000
CK526AX	L.F. Pentode	1.25	0.02	22.5	0.45	22.5	0.12	1.5	220	0.4	50000
											3.75

SUB-MINIATURE VALVES—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra (kΩ)	gm (mA/V)	Anode Load Ω	Output (mW)	
	Volts	Amps	Volts	I/mA	Volts	I/mA						
CK527AX	L.F. Pentode	1.25	0.015	22.5	0.1	22.5	0.025	0	1800	0.225	300000	0.75
CK528AX	L.F. Pentode	1.25	0.02	22.5	0.3	22.5	0.08	0	600	0.45	200000	1.2
CK529AX	L.F. Pentode	1.25	0.02	15	0.32	15	0.075	1.25	300	0.35	50000	1.6
CK531DX	L.F. Pentode	1.25	0.02	15	0.3	15	0.09	1.5	250	0.275	60000	1.6
CK532DX	L.F. Pentode	1.25	0.015	22.5	0.4	22.5	0.125	0	180	0.45	100000	1.8
CK533AX	L.F. Pentode	1.25	0.015	22.5	0.36	22.5	0.09	0	500	0.4	75000	1.8
CK534AX	Pentode	0.625	0.015	15	0.0047	15	0.0014	0.625	12000	0.02	—	—
CK535AX	L.F. Pentode	1.25	0.02	15	0.32	15	0.075	1.25	300	0.35	50000	1.6
CK536AX	L.F. Pentode	1.25	0.015	22.5	0.36	22.5	0.09	0	500	0.4	75000	1.8
CK537AX	L.F. Pentode	1.25	0.02	22.5	0.45	22.5	0.12	1.5	220	0.4	50000	3.75
CK538DX	Pentode	0.625	0.015	15	0.0046	15	0.002	0.625	10000	0.018	—	—
CK539DX	L.F. Pentode	1.25	0.015	22.5	0.25	22.5	0.075	1.4	250	0.3	100000	2.2
CK541DX	L.F. Pentode	1.25	0.015	30	0.25	30	0.075	0	500	0.425	200000	1.4
CK542DX	L.F. Pentode	1.25	0.015	22.5	0.425	22.5	0.13	2	150	0.325	50000	3.75
CK543AX	Pentode	0.625	0.015	15	0.005	15	0.002	0.625	5000	0.015	—	—
CK544AX	L.F. Pentode	1.25	0.01	30	0.135	30	0.035	0	1200	0.325	200000	5.25
CK545DX	Pentode	0.625	0.0075	15	0.0046	15	0.002	0.625	12000	0.016	—	—
CK546DX	L.F. Pentode	1.25	0.01	22.5	0.375	22.5	0.085	0	200	0.425	100000	1.75
CK547DX	L.F. Pentode	1.25	0.01	30	0.24	30.0	0.06	0	500	0.425	200000	1.35
CK548DX	L.F. Pentode	1.25	0.01	22.5	0.24	22.5	0.06	1.4	250	0.3	100000	2.1
CK549DX	Pentode	0.625	0.01	15	0.005	15	0.002	0.625	12000	0.017	—	—
CK570AX	Triode	0.625	0.02	22.5	0.2	—	—	3	50000	—	—	—
CK571AX	Triode	1.25	0.01	10.5	0.2	—	—	3	—	—	—	—
CK573AX	Triode	1.25	0.2	135	14	—	—	7.5	—	2.0	—	—
CK574AX	Pentode	0.625	0.02	22.5	0.125	22.5	0.04	0.625	1250	0.16	—	—
CK605AX	Pentode	6.3	0.2	120	7.5	120	2.5	2	—	5.0	—	—
CK623CX	Pentode	6.3	0.2	120	7.5	120	2.5	200*	340	5.0	—	—
CK624AX	Pentode	6.3	0.2	120	5.2	120	3.5	2	—	3.0	—	—
CK1036	Rectifier	—	—	1500 P.I.V. D.C.I. = 0.1 mA.				—	—	—	—	—
CK1037	Voltage Reg.	—	—	730 V. Starting.	700 V.	Operating.	5 to 100	μA.	Operating	Current.	—	—
CK1038	Voltage Reg.	—	—	930 V. Starting.	900 V.	Operating.	5 to 55	μA.	Operating	Current.	—	—
CK1039	Voltage Reg.	—	—	1230 V. Starting.	1200 V.	Operating.	5 to 100	μA.	Operating	Current.	—	—
CK1042	Rectifier	—	—	2800 P.I.V. D.C.I. 8.0 mA.				—	—	—	—	—
CK1089	Thyatron	—	—	225 V.	15 mA.	Average	—	—	—	—	—	—
DAF70	Diode Pen.	1.25	0.025	90	0.6	90	0.2	2.3	200	0.45	—	—
DC70	Triode	1.25	0.2	150	12	—	—	4.5	4	3.4	—	—
DF64	Pentode	0.625	0.01	15	0.075	15	0.025	0.62	1000	0.115	—	—
DF65	Pentode	0.625	0.013	22.5	0.05	18	0.01	1.15	4000	0.1	—	—
DF67	Pentode	0.625	0.013	22.5	0.05	18	0.01	1.15	4000	0.1	—	—
DF72	Pentode	1.25	0.025	67.5	1.7	67.5	0.75	0	650	1.0	—	—
DF73	Pentode	1.25	0.025	67.5	1.7	67.5	0.05	0	450	0.8	—	—
DL64	L.F. Pentode	1.25	0.01	15	0.157	15	0.39	1.5	390	0.117	—	—
DL65	L.F. Pentode	1.25	0.013	22.5	0.45	22.5	0.1	0.2	400	0.42	100000	1.8
DL67	L.F. Pentode	1.25	0.013	22.5	0.45	22.5	0.1	0.2	400	0.42	100000	1.8
DL70	L.F. Pentode	1.25	0.1	150	7	90	1.2	8.5	—	1.0	—	630
DL73	L.F. Pentode	1.25	0.11	100	15	100	3.8	9	—	2.3	—	—
DL75	L.F. Pentode	1.25	0.025	90	1.3	90	0.3	3	500	0.67	60000	47
DM70/71	Tuning Ind.	1.4	0.025	90	0.25	Target	—	13.5	—	—	—	—
DY70	Rectifier	1.25	0.14	10000 V. P.I.V. D.C.I. = 2 mA.				—	—	—	—	—
EA76	Diode	6.3	0.15	150 V.	RMS	D.C.I. = 9 mA.	Detector.	3.3	11.5	2.9	—	—
EC53	Triode	6.3	0.25	200	7.5	—	—	680*	4.65	3.45	—	—
EC70	Triode	6.3	0.15	200	11.5	—	—	—	—	—	—	—
EF70	Pentode	6.3	0.2	100	3	100	2.3	2	100	2.75	—	—
EF71	Pentode	6.3	0.15	100	7.2	100	2.2	1.2	260	4.5	—	—
EF72	Pentode	6.3	0.15	100	7	100	2.2	1.4	250	5.0	—	—
EF73	Pentode	6.3	0.2	100	7.5	100	2.5	2	250	5.0	—	—
EL70	L.F. Pentode	6.3	0.45	100	31	100	2.2	9	15	5.0	3000	1250
ET3	Triode	1.25	0.025	9	0.1	—	—	4	E'meter	0.07	—	—
EY70	Rectifier	6.3	0.45	300 V.	RMS	D.C.I. = 45 mA.	—	—	—	—	—	—
LG14	Diode	6.3	0.145	200 V.	RMS	D.C.I. = 5 mA.	—	—	—	—	—	—
ME1401	Triode	1.25	0.013	9	0.1	—	—	2.5	—	0.08	Electrometer	—
ME1402	Tetrode	1.25	0.013	4.5	0.01	—3	—	+1	—	0.01	Electrometer	—
RG2D1	Diode	1.9	0.055	70 V.	RMS	D.C.I. = 3 mA.	—	—	—	—	—	—
SN946B	Rectifier	6.3	0.15	150 V.	RMS	D.C.I. = 9 mA.	—	—	—	—	—	—
SN947D	L.F. Pentode	6.3	0.45	100	31	100	2.2	9	15	5.0	3000	1250
SN948C	Voltage Reg.	—	—	133 V. Starting.	95 V.	Operating.	5 to 25 mA.	Operating	Current.	—	—	—
SN953A	Pentode	6.3	0.45	200	14	150	4.0	100*	120	10.0	—	—
SN953D	Pentode	6.3	0.45	150	20	100	7.5	—	50	9.0	Video Amp.	—
SN956B	Rectifier	1.25	0.14	10000 V.	P.I.V.	D.C.I. = 2 mA.	—	150*	200	5.0	—	—
SN1016	Pentode	6.3	0.15	100	7.5	100	3.0	150*	300	5.0	—	—
SN1039A	Pentode	6.3	0.15	100	7	100	2.2	150*	180	3.0	—	—
X8066	Pentode	6.3	0.2	100	7	100	2.2	—	—	—	—	—

OUTPUT VALVES

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
DL11	1.25	0.05	120	4.7	120	0.85	6.0	500.0	1.1	22000	0.35	—	G8A	1	European
ECL11	6.3	1.0	250	36.0	250	4.0	6.0	25.0	9.0	7000	3.8	—		2	
EDD11	6.3	0.4	250	7.0	—	—	6.3	—	—	16000	5.5	—		3	European
EDD111	6.3	0.4	250	9.0	—	—	8.0	8.0	2.3	—	—	—		4	European
EL11	6.3	0.9	250	36.0	250	4.0	6.0	50.0	9.0	7000	4.5	—		5	European
EL12	6.3	1.2	250	72.0	250	8.0	7.0	25.0	15.0	3500	8.0	—		5	European
EL12 Spez	6.3	1.2	425	72.0	425	8.0	7.0	50.0	10.0	3500	8.0	—		6	European
EL12/375	6.3	1.2	375	72.0	250	8.0	7.0	25.0	15.0	3500	8.0	—		5	European
EL13	6.3	0.5	250	20.0	250	3.2	7.5	60.0	5.5	12500	2.0	—		5	European
EL112	6.3	0.8	300	130.0	250	20.0	24.0	10.0	6.5	—	18.0	—		5	European
EL150	6.3	1.2	350	110.0	350	14.0	50.0	12.0	5.0	—	—	—		5	European
UCL11	60.0	0.1	200	45.0	200	6.0	8.5	18.0	9.0	4500	4.0	—		2	European
UEL11	48.0	0.1	200	22.0	200	4.0	6.0	30.0	5.0	9000	2.0	—		7	European
UL11	45.0	0.1	200	45.0	200	7.5	14.0	20.0	9.0	4000	4.2	—		5	European
UL12	60.0	0.1	200	75.0	125	9.0	8.0	12.0	12.0	2000	5.2	—		5	European
VCL11	90.0	0.05	200	12.0	200	1.3	4.5	60.0	5.0	17000	1.2	—		2	European
VEL11	90.0	0.05	200	22.0	200	4.0	6.0	30.0	5.2	9000	2.0	—		7	European
EEL171	6.3	1.0	250	40.0	250	6.0	12.0	17.0	9.0	4000	4.0	—	G8G	8	European
EL171	6.3	0.9	250	40.0	250	6.0	12.0	17.0	9.0	4000	4.5	—		9	European
EL172	6.3	1.2	250	72.0	250	8.0	7.0	30.0	15.0	3000	8.0	—		9	European
UEL171	65.0	0.1	200	50.0	200	8.0	8.0	17.0	9.0	4000	4.5	—		8	European
UL171	55.0	0.1	200	50.0	200	8.0	8.0	17.0	9.0	4000	4.5	—		9	European
UL172	80.0	0.1	200	90.0	200	10.0	9.0	20.0	15.0	2500	8.0	—		9	European
EL151	6.3	1.9	450	120.0	450	20.0	27.5	15.0	14.0	5000	60.0	6.0	G10A	11	European
EL156	6.3	1.9	450	112.0	280	27.0	90*	25.0	10.0	3800	25.0	9.0		17	European
UEL51	62.0	0.1	200	44.0	200	8.5	8.4	—	9.0	4500	4.0	9.5		10	European
EL152	6.3	1.5	1000	40.0	300	16.0	—	—	4.0	—	85.0	—	G10G	12	European
EL153	6.3	1.5	1000	40.0	300	16.0	—	—	3.7	—	85.0	—		13	European
DDD41W	1.2	0.1	90	2.4	—	—	4.0	—	1.0	18000	0.8	—	WC8	14	European
DL41W	1.2	0.05	120	5.0	120	1.0	6.0	500.0	1.6	22000	0.4	—		15	European
CABL21	42.0	0.2	200	45.0	100	5.8	9.5	22.0	8.0	4500	4.0	—	G9	16	European

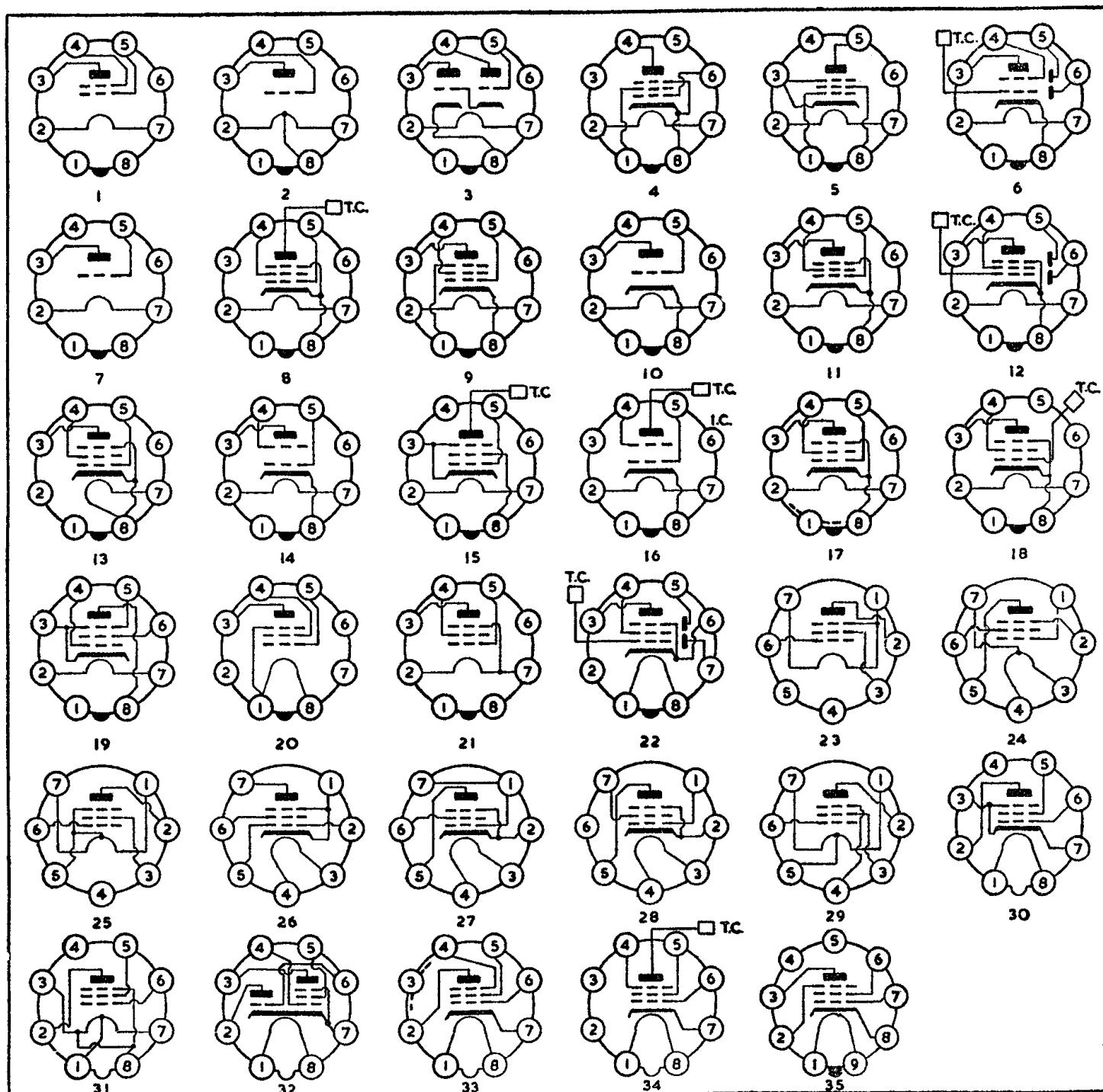


OUTPUT VALVES—Contd.

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.		
1G5	2·0	0·12	135	8·7	135	2·5	13·5	160·0	1·55	9000	0·55	—	I.O.	1	U.S.A.	
1L5	2·0	0·24	180	9·5	180	2·3	6·0	137·0	2·4	15000	0·75	—	I.O.	1	U.S.A.	
1T	2·8	0·05	90	9·9	90	1·4	4·5	128·0	2·1	8000	0·27	7·5	I.O.	2	European	
6AC6	6·3	1·1	180	45·0	180	7·0	0	18·0	3·0	3500	3·6	—	Line Time Base Amplifier	3	U.S.A.	
6AH5	6·3	0·9	350	54·0	250	2·5	18·0	33·0	5·2	4200	10·8	—	Line Time Base Amplifier	4	U.S.A.	
6AU5	6·3	1·25	315	59·0	150	9·0	250*	Line Time Base Amplifier	5	U.S.A.						
6AV5	6·3	1·2	250	55·0	150	2·1	22·5	—	5·8	Line Time Base Amplifier	5	U.S.A.				
6AY8	6·3	1·25	250	52·0	100	1·5	5·0	20·0	9·5	7000	4·0	7·0	I.O.	6	European	
6B4	6·3	1·0	250	60·0	—	—	45·0	0·8	5·2	2500	3·2	5·0	Line Time Base Amplifier	7	U.S.A.	
6BD5	6·3	0·9	310	—	310	(Max. I _k =100 MA.)	100	Line Time Base Amplifier	5	U.S.A.						
6BQ6	6·3	1·2	250	55·0	150	2·1	22·5	—	5·5	Line Time Base Amplifier	8	U.S.A.				
6BY8	6·3	1·25	250	44·0	250	2·4	4·0	100·0	12·0	6000	4·5	9·0	Line Time Base Amplifier	6	European	
6CA7	6·3	1·5	265	100·0	250	14·0	13·5	15·0	11·0	2000	12·0	10·0	Line Time Base Amplifier	9	U.S.A.	
6D5	6·3	0·7	275	71·0	—	—	40·0	2·3	2·1	7200	1·4	—	Line Time Base Amplifier	10	U.S.A.	
6PX6	6·3	0·9	250	35·0	250	5·0	6·0	65·0	9·0	6000	4·5	—	Line Time Base Amplifier	11	European	
6PZ8	6·3	1·25	250	35·0	250	5·0	6·0	65·0	9·2	6000	4·5	—	Line Time Base Amplifier	12	European	
6V5	6·3	0·45	250	45·0	250	4·5	12·5	—	—	—	4·5	—	Line Time Base Amplifier	13	U.S.A.	
12V6	12·6	0·225	250	47·0	250	7·0	12·5	52·0	4·1	5000	4·5	8·0	Line Time Base Amplifier	11	U.S.A.	
20P3	20·0	0·2	195	51·0	210	12·7	11·5	—	7·4	3700	4·5	7·0	Line Time Base Amplifier	14	Mazda	
20P4	38·0	0·2	400	—	250	(Max. I _k =100 MA.)	Line Time Base Amplifier	16	U.S.A.							
25AC5	25·0	0·3	110	45·0	—	—	+15	15·2	3·8	2000	2·0	—	Line Time Base Amplifier	10	U.S.A.	
25AV5	25·0	0·3	250	45·0	150	2·1	22·5	—	5·8	Line Time Base Amplifier	5	U.S.A.				
25CD6	25·0	0·6	200	64·0	150	3·0	30·0	Line Time Base Amplifier	15	U.S.A.						
25W6	25·0	0·3	110	50·0	110	10·0	7·5	130·0	8·0	2000	2·1	—	Line Time Base Amplifier	11	U.S.A.	
26BQ6	25·0	0·3	250	55·0	150	2·1	22·5	—	5·8	Line Time Base Amplifier	16	U.S.A.				
50CD6	50·0	0·3	200	64·0	150	3·0	30·0	Line Time Base Amplifier	15	U.S.A.						
1611	6·3	0·7	285	38·0	285	12·0	20·0	78·0	2·5	7000	4·8	9·0	Line Time Base Amplifier	11	U.S.A.	
1613	6·3	0·7	285	38·0	285	12·0	20·0	78·0	2·5	7000	4·8	9·0	Line Time Base Amplifier	17	U.S.A.	
1614	6·3	0·9	350	66·0	250	7·0	18·0	33·0	5·2	4200	10·8	15·0	Line Time Base Amplifier	11	U.S.A.	
1621	6·3	0·7	285	38·0	285	12·0	20·0	78·0	2·5	7000	4·8	9·0	Line Time Base Amplifier	17	U.S.A.	
1622	6·3	0·9	350	66·0	250	7·0	18·0	33·0	5·2	4200	10·8	15·0	Line Time Base Amplifier	11	U.S.A.	
1624	2·5	2·0	300	45·0	250	5·0	10·0	—	4·5	8800	3·0	—	Line Time Base Amplifier	14	U.S.A.	
1631	12·6	0·45	350	66·0	250	7·0	18·0	33·0	5·2	4200	10·8	15·0	Line Time Base Amplifier	11	U.S.A.	
1632	12·6	0·6	200	55·0	110	7·0	8·0	30·0	9·5	3000	4·3	10·0	Line Time Base Amplifier	11	U.S.A.	
1637	6·3	0·2	250	32·0	250	5·0	18·0	70·0	2·8	8000	3·6	10·0	Line Time Base Amplifier	18	U.S.A.	
5603	6·3	0·5	135	50·0	135	4·0	230*	17·0	5·4	2500	2·2	—	Line Time Base Amplifier	19	U.S.A.	
5659	12·6	0·15	250	32·0	250	5·5	12·5	—	—	7500	3·4	—	Line Time Base Amplifier	17	U.S.A.	
5824	25·0	0·3	135	61·0	135	2·5	22·0	15·0	5·0	1700	4·3	—	Line Time Base Amplifier	11	U.S.A.	
5871	6·3	0·45	315	34·0	225	2·2	13·0	77·0	3·75	8500	5·5	—	Line Time Base Amplifier	11	U.S.A.	
5881	6·3	0·9	350	53·0	250	2·5	18·0	48·0	5·2	4200	11·3	—	Line Time Base Amplifier	11	U.S.A.	
5932	6·3	0·9	350	66·0	250	7·0	18·0	33·0	5·2	4200	10·8	15·0	Line Time Base Amplifier	11	U.S.A.	
5992	6·3	0·6	250	47·0	250	7·0	12·5	45·0	4·0	5000	4·0	8·0	Line Time Base Amplifier	11	U.S.A.	
6046	25·0	0·3	200	55·0	110	7·0	8·0	30·0	9·5	3000	4·3	10·0	Line Time Base Amplifier	11	U.S.A.	
DL21	1·4	0·05	120	5·0	120	0·9	4·8	350·0	1·4	24000	0·27	10·0	Line Time Base Amplifier	20	European	
DL36	1·4	0·1	90	9·5	90	1·3	4·5	75·0	2·2	8000	0·27	6·0	Line Time Base Amplifier	21	European	
EL34	6·3	1·5	265	100·0	250	14·0	13·5	15·0	11·0	2000	12·0	10·0	Line Time Base Amplifier	9	Mul.-Eupn.	
UBL1	55·0	0·1	200	55·0	200	11·0	11·5	20·0	8·5	3500	5·2	10·0	Line Time Base Amplifier	22	European	
1W4	1·4	0·05	90	5·0	90	1·0	9·0	250·0	0·9	12000	0·2	—	Line Time Base Amplifier	23	U.S.A.	
2E30	3·0	1·3	250	40·0	250	3·3	20·0	63·0	3·7	4500	4·5	—	Line Time Base Amplifier	24	U.S.A.	
3C4	2·8	0·025	1·4	0·05	85	5·0	85	1·0	5·2	1·4	14000	0·2	—	Line Time Base Amplifier	25	U.S.A.
3E5																
6AS5	6·3	0·8	150	36·0	110	6·5	8·5	—	5·6	4500	2·2	10·0	Line Time Base Amplifier	26	U.S.A.	
6BF5	6·3	1·2	110	49·0	110	4·0	7·5	10·0	7·5	2500	1·9	—	Line Time Base Amplifier	27	U.S.A.	
6BJS	6·3	0·64	250	35·0	250	5·5	5·0	46·0	10·5	7000	4·0	—	Line Time Base Amplifier	28	U.S.A.	
6BM5	6·3	0·45	250	30·0	250	3·0	6·0	60·0	7·0	7000	3·5	—	Line Time Base Amplifier	27	U.S.A.	
9BM5	9·5	0·3	250	30·0	250	3·0	6·0	60·0	7·0	7000	3·5	—	Line Time Base Amplifier	27	U.S.A.	
12AS5	12·6	0·4	150	36·0	110	6·5	8·5	—	5·6	4500	2·2	10·0	Line Time Base Amplifier	26	U.S.A.	
5618	6·0	0·23	1·3·0	0·46	250	20·5	75	4·5	8·0	3·6	12000	1·4	—	Line Time Base Amplifier	29	U.S.A.
5812																
6005	6·3	0·45	250	46·0	250	6·0	12·5	52·0	4·1	5000	4·5	—	Line Time Base Amplifier	27	U.S.A.	
BPMO4	6·3	0·45	250	47·0	250	7·0	12·5	52·0	4·1	5000	4·5	—	Line Time Base Amplifier	27	European	
DL96	2·8	0·025	1·4	0·05	85	5·0	85	1·0	5·2	1·4	14000	0·2	—	Line Time Base Amplifier	25	European
DL97																
EL90	6·3	0·45	250	47·0	250	7·0	12·5	52·0	4·1	5000	4·5	—	Line Time Base Amplifier	27	European	

OUTPUT VALVES—Contd

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
HL90	19.0	0.15	250	47.0	250	7.0	12.5	5.2	4.1	5000	4.5	—	B7G	27	European
QA2402	6.3	0.2	250	16.0	250	—	12.5	130.0	2.6	16000	1.4	10.0		28	Osram
67PT	6.3	0.7	250	36.0	250	5.2	7.0	40.0	10.0	7000	4.2	10.0	B8A	30	Cossor
BF61	6.3	0.7	250	36.0	250	5.2	7.0	40.0	10.0	7000	4.2	10.0		30	European
BF62	6.3	0.2	225	26.0	225	4.1	10.8	90.0	3.2	9000	2.5	10.0		30	European
DL41	1.4	0.10	120	10.0	120	1.65	5.6	80.0	2.55	12000	0.6	11.7		31	European
	2.8	0.05	120	9.0	120	1.45	5.45	95.0	2.45	13500	0.54	12.5			
ECL113	6.3	0.6	250	25.0	250	3.5	3.5	40.0	8.5	12500	2.25	—		32	European
EL43	6.3	0.71	250	36.0	250	4.1	2.9	100.0	10.0	—	Video	Amplifier		33	European
EL44	6.3	0.72	250	20.0	250	3.3	—	—	5.0	—	Video	Amplifier		34	European
UL43	50.0	0.1	250	36.0	250	4.0	2.6	—	10.0	—	—	—		33	European
EL60	6.3	1.5	265	100.0	250	14.0	13.5	15.0	11.0	2000	12.0	10.0	B9G	35	European

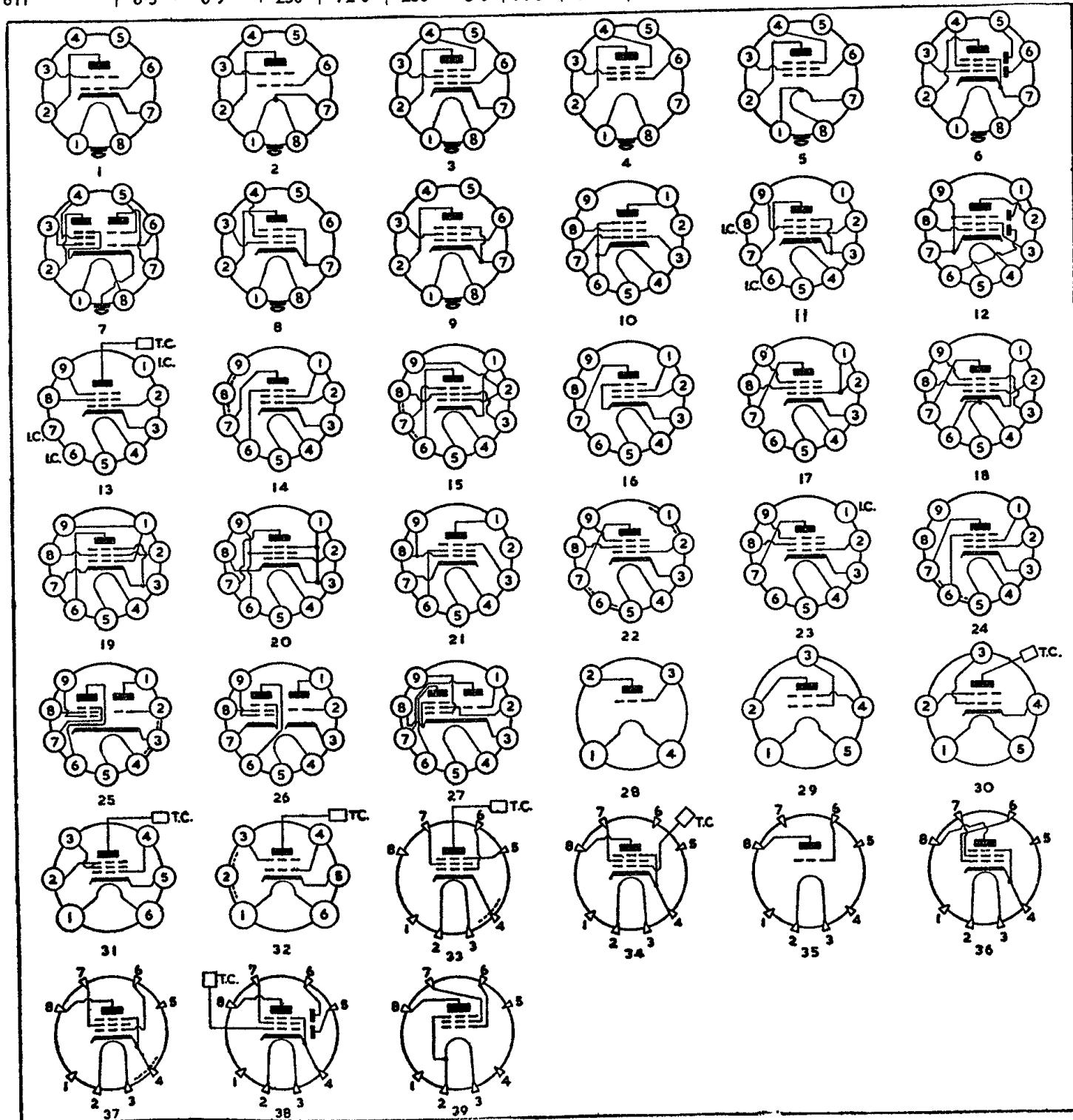


OUTPUT VALVES—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	B, Type		Maker:		
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.			
2C50	12.6	0.3	300	12.5	—	—	24.0	5.5	1.75	—	—	—	—	B8G	1	U.S.A.	
1299	1.4	0.22	135	9.8	90	1.2	4.5	—	2.4	12000	0.5	—	—		2	U.S.A.	
	2.8	0.11	90	9.5	90	1.6	4.5	—	2.4	8000	0.27	—	—				
6145	6.3	0.6	150	34.0	100	8.0	0	100.0	10.0	Video	Amplifier	—	—		3	U.S.A.	
DL22	1.25	0.1	120	7.0	120	1.3	4.0	350.0	1.9	15000	0.36	—	—		4	European	
DL25	1.2	0.1	90	4.5	90	0.75	2.8	300.0	2.0	20000	0.18	—	—		4	European	
DL26	1.2	0.1	120	4.5	120	0.8	4.7	300.0	2.1	25000	0.26	7.0	—		5	European	
EBL71	6.3	0.8	250	36.0	250	4.5	6.0	50.0	9.0	7000	4.5	10.0	—		6	European	
EEL71	6.3	0.73	250	24.0	250	4.0	6.5	70.0	6.5	9000	2.3	—	—		7	European	
EL20	6.3	0.9	250	12.5	300	5.2	38.0	25.0	—	6500	—	—	—		8	European	
N148	6.3	0.95	250	40.0	250	7.5	4.3	—	10.8	6000	4.3	8.0	—		9	M.O.V.	
UBL71	55.0	0.1	200	55.0	200	9.5	13.0	25.0	8.0	3500	4.8	10.0	—		6	European	
UEL71	45.0	0.1	250	24.0	250	4.0	6.5	70.0	6.5	9000	2.3	—	—		7	European	
UL21	45.0	0.1	200	55.0	200	8.4	13.0	20.0	8.0	3500	5.0	—	—		9	European	
UL71	45.0	0.1	200	22.0	200	3.5	5.1	—	6.5	9000	2.0	—	—		8	European	
6BK5	6.3	1.2	250	37.0	250	10.0	5.0	100.0	8.5	6500	3.5	—	—		10	U.S.A.	
6BN5	6.3	0.2	225	26.0	225	4.1	10.8	90.0	3.2	9000	2.5	10.0	—		11	U.S.A.	
6BV7	6.3	0.8	250	—	—	—	—	—	10.0	—	4.5	—	—		12	U.S.A.	
6CJ6	6.3	1.05	130	45.0	180	3.0	23.5	—	6.5	Line	Time	Base	Amplifier		13	U.S.A.	
6CK6	6.3	0.71	180	36.0	180	4.6	2.9	100.0	10.0	Video	Amplifier	—	—		14	U.S.A.	
6CL6	6.3	0.65	250	31.0	150	7.2	3.0	150.0	11.0	Video	Amplifier	—	—		15	U.S.A.	
6M5	6.3	0.71	250	36.0	250	5.2	170*	40.0	10.0	7000	3.9	—	—		16	U.S.A.	
9BW6	9.5	0.3	315	35.0	225	6.0	13.0	77.0	3.75	8500	5.5	—	—		17	U.S.A.	
12BY7	12.6	6.3	0.3/0.6	250	25.0	150	6.0	68*	110.0	12.0	Video	Amplifier	—	—		18	U.S.A.
16A5	16.5	0.3	170	53.0	170	10.0	10.4	20.0	9.5	3000	4.2	10.0	—		11	U.S.A.	
25BK5	25.2	0.3	250	37.0	250	10.0	5.0	100.0	8.5	6500	3.5	—	—		10	U.S.A.	
35QL6	35.0	0.15	180	56.0	180	22.5	11.5	18.0	9.5	3000	—	—	—		19	European	
63TP	6.3	0.3	170	15.0	170	2.8	6.3	150.0	3.3	11000	1.0	—	—		25	Cossor	
213Pen	21.5	0.3	170	36.0	170	5.0	2.3	100.0	10.0	Video	Amplifier	—	—		13	Cossor	
5686	6.3	0.35	250	27.0	250	5.0	12.5	—	3.1	9000	2.7	—	—		20	U.S.A.	
5763	6.3	0.75	250	45.0	250	4.7	7.25	27.0	7.0	—	—	—	—		21	U.S.A.	
6061	6.3	0.45	315	34.0	225	2.2	13.0	77.0	3.75	8500	5.5	12.0	—		23	Brimar	
6062	6.3	0.75	250	45.0	250	4.7	7.25	27.0	7.0	—	—	—	—		21	Brimar	
6227	6.3	0.75	200	30.0	200	4.2	4.5	—	9.0	7000	2.5	10.0	—		22	U.S.A.	
18045	18.0	0.15	210	20.0	210	5.3	120*	250.0	11.0	15000	0.9	5.0	—		22	European	
18046	20.0	0.135	210	20.0	210	5.3	120*	250.0	11.0	15000	0.9	5.0	—		22	European	
E80L	6.3	0.75	200	30.0	200	4.2	4.5	—	9.0	7000	2.5	10.0	—		22	European	
E81L	6.3	0.45	210	20.0	210	5.3	3.0	—	11.0	15000	2.1	10.0	—		22	European	
EF82	6.3	0.75	250	40.0	250	6.0	4.5	50.0	11.0	Video	Amplifier	—	—		23	Mul.-Eupn.	
EL80	6.3	0.71	250	36.0	250	5.2	170*	40.0	10.0	7000	3.9	—	—		16	Mul.-Eupn.	
EL81	6.3	1.05	130	45.0	180	3.0	23.5	—	Line	Time	Base	Amplifier	—	13	Mul.-Eupn.		
EL83	6.3	0.71	180	36.0	180	4.6	2.9	100.0	10.0	Video	Amplifier	—	—		14	Mul.-Eupn.	
EL84	6.3	0.76	250	48.0	250	5.4	140*	47.5	11.5	5200	5.7	10.0	—		11	Mul.-Eupn.	
EL85	6.3	0.2	225	26.0	225	4.1	10.8	90.0	3.2	9000	2.5	10.0	—		11	Mul.-Eupn.	
EL803	6.3	0.71	200	36.0	200	5.0	3.5	100.0	10.5	—	—	4.0	—		24	European	
LN152	6.3	0.3	170	15.0	170	2.8	6.3	150.0	3.3	11000	1.0	—	—		25	M.O.V.	
LN309	12.6	0.3	250	21.6	250	4.8	9.0	45.0	4.7	—	—	—	—		26	M.O.V.	
N152	21.5	0.3	170	45.0	170	3.0	22.0	10.0	6.2	Line	Time	Base	Amplifier		13	Marconi	
N309	15.0	0.3	170	36.0	170	5.0	2.3	100.0	10.0	Video	Amplifier	—	—		14	Marconi	
N329	16.5	0.3	170	—	170	—	—	—	9.0	—	—	—	—		11	Osram	
N339	20.0	0.3	170	40.0	170	15.0	0	30.0	8.5	Line	Time	Base	Amplifier		13	Marconi	
PCL81	12.6	0.3	180	30.0	180	4.8	5.5	15.0	8.75	6000	2.4	—	—		27	Mul.-Eupn.	
4654P	6.3	1.35	250	72.0	275	8.0	14.0	22.0	8.5	3500	8.6	—	—		33	European	
4682	4.0	1.0	375	29.0	250	4.0	540*	—	—	15000	14.0	5.2	—		34	European	
4683	4.0	0.95	350	46.0	—	—	840*	—	—	8000	15.6	2.3	—		35	European	
4688	4.0	2.0	375	62.0	275	9.0	165*	—	—	6500	28.5	2.3	—		36	European	
4689	6.3	1.35	375	62.0	275	9.0	165*	—	—	6500	28.5	2.3	—		37	European	
4694	6.3	0.9	375	30.0	250	5.0	145*	—	—	13000	12.0	2.3	—		37	European	
4699	6.3	1.0	250	72.0	250	8.0	7.2	20.0	14.5	3500	8.0	10.0	—		37	European	
ABL1	4.0	2.4	250	36.0	250	4.0	6.0	50.0	9.0	7000	4.5	—	—		38	European	
AD1	4.0	0.95	250	60.0	—	—	45.0	0.67	6.0	2300	4.2	—	—		35	European	
AL1	4.0	1.1	250	36.0	250	6.8	15.0	43.0	2.8	7000	3.1	—	—		39	European	
AL2	4.0	1.0	250	36.0	250	5.0	25.0	60.0	2.6	7000	3.8	—	—		34	European	
AL3	4.0	1.75	250	36.0	250	4.0	6.0	50.0	9.0	7000	4.5	—	—		34	European	
AL4	4.0	1.75	250	36.0	250	5.0	6.0	50.0	9.5	7000	4.3	—	—		36	European	
ALS	4.0	2.0	250	72.0	250	7.5	16.0	22.0	8.5	3500	8.8	—	—		36	European	
CL1	13.0	0.2	250	20.0	250	2.0	23.0	80.0	1.9	12500	1.7	—	—		34	European	
CL2	24.0	0.2	200	40.0	100	5.0	19.0	23.0	3.1	5000	3.0	—	—		34	European	
EL1	6.3	0.4	250	32.0	250	4.5	18.5	48.0	2.6	7000	2.8	10.0	—		34	European	
EL8	6.3	0.5	250	20.0	250	3.2	7.5	60.0	5.5	12500	2.0	—	—		36	European	
EL53	6.3	0.9	375	24.0	250	2.5	7.7	7.0	8.0	—	—	—	—		36	European	
EL54	6.3	1.3	300	55.0	325	6.25	12.2	28.0	13.0	—	—	—	—		36	European	
KL1	2.0	0.15	90	8.0	90	1.2	4.5	80.0	1.7	14000	0.2	—	—		39	European	
KL2	2.0	0.265	90	8.0	90	0.9	7.5	30.0	1.8	7000	0.35	—	—		39	European	

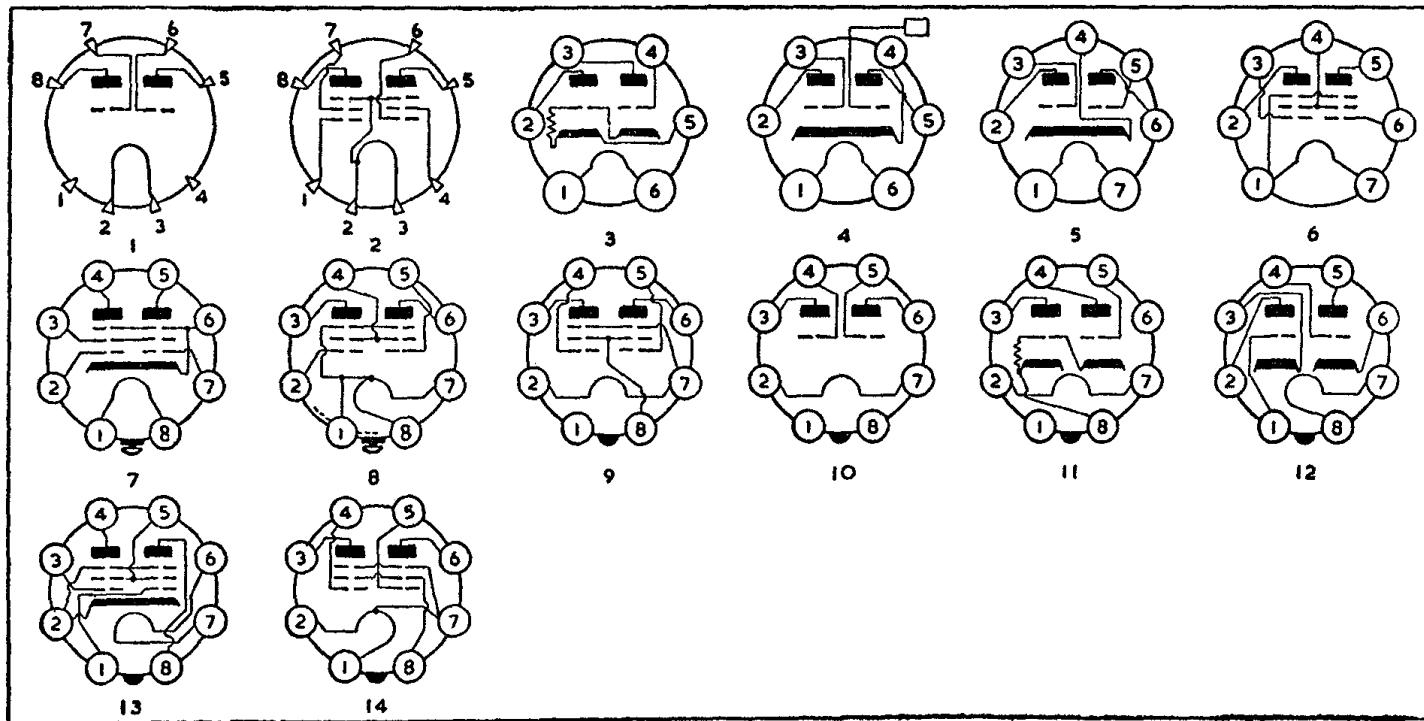
OUTPUT VALVES—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r_a kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA							Type	Ref.	
KL4	2.0	0.15	135	7.0	135	1.1	5.0	130.0	2.1	19000	0.44	—	P	39	European
KL5	2.0	0.1	90	4.8	90	0.9	4.0	180.0	1.4	19000	0.2	—		39	European
UBL3	55.0	0.1	200	55.0	200	11.0	11.5	20.0	8.5	3500	5.2	10.0		38	European
UL1	60.0	0.1	200	52.0	200	5.0	11.0	21.0	8.4	3500	5.6	—		34	European
UL2	35.0	0.1	200	20.0	200	3.0	5.0	65.0	5.5	10000	1.5	—		36	European
VL1	55.0	0.05	200	25.0	200	3.5	14.0	50.0	2.2	8000	1.6	—		34	European
VL4	110.0	0.05	200	45.0	200	6.0	8.5	45.0	8.0	4500	4.0	—		34	European
20	3.3	0.132	135	6.0	—	—	22.5	5.85	0.6	6500	0.13	—	UX4	28	U.S.A.
5930	2.5	2.5	250	60.0	—	—	45.0	0.8	5.25	2500	3.5	5.0	UX5	28	U.S.A.
1D4	2.0	0.24	180	9.5	180	2.3	6.0	137.0	2.4	15000	0.75	—		29	U.S.A.
5933	6.3	0.9	300	83.0	250	8.0	14.0	20.0	6.5	2850	6.7	—	UX6	30	U.S.A.
6P6	6.3	0.7	250	34.0	150	17.0	8.0	—	—	—	5.0	—		31	U.S.A.
6T	6.3	0.45	250	45.0	250	4.5	12.5	52.0	4.1	5000	4.5	8.0		32	European
6TP	6.3	0.9	250	72.0	250	5.0	14.5	22.5	6.0	2500	6.5	10.0		32	European



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.	
KDD1	2.0	0.22	90	1.6	—	—	0	10000	0.72	6	B1	P	1	European
KLL3	2.0	0.465	135	16.0	135	6.8	12.0	20000	1.3	—	—	—	2	European
1E7	2.0	0.24	135	6.5	135	2.0	7.5	24000	0.65	—	A	I.O.	9	U.S.A.
1G6	1.4	0.1	90	7.0	—	—	0	12000	0.675	—	B1	—	10	U.S.A.
6AB6	6.3	0.5	250	34.0	—	—	0	8000	3.5	—	A	—	11	U.S.A.
6AS7G	6.3	2.5	250	106.0	—	—	26.5	6000	13.0	—	A	—	12	U.S.A.
6N6	6.3	0.8	300	45.0	300	8.0	0.0	7000	4.0	—	—	—	11	U.S.A.
12L8	12.6	0.15	180	13.0	180	2.9	9.0	10000	1.0	—	—	—	13	U.S.A.
25N6	25.0	0.3	180	46.0	100	5.8	0.0	4000	3.8	—	—	—	11	U.S.A.
26A7	26.5	0.6	26.5	20.0	26.5	1.6	4.5	1500	0.18	—	—	—	13	U.S.A.
1644	12.6	0.15	180	13.0	180	4.6	9.0	10000	1.0	—	A	—	13	U.S.A.
A1834	6.3	2.5	250	106.0	—	—	26.5	6000	13.0	—	A	—	12	M.O.V.
DLL31	2.8	0.1	—	—	—	—	—	—	—	—	—	—	—	—
	1.4	0.2	90	6.0	90	1.8	5.0	30000	0.3	—	—	—	14	European
6B5	6.3	0.8	400	40.0	—	4.5	13.0	10000	20.0	—	—	UX6	3	U.S.A.
25B5	25.0	0.3	110	45.0	110	7.0	0	2000	2.0	—	A	—	3	U.S.A.
79	6.3	0.6	250	10.5	—	—	0	14000	8.0	—	B1	—	4	U.S.A.
6E6	6.3	0.6	250	36.0	—	—	27.5	14000	1.6	—	A	UX7	5	U.S.A.
DLL101	1.4	0.1	90	4.5	60	2.3	—	8000	0.35	—	—	B7G	6	European
DLL102	2.8	0.025	40	1.3	40	1.0	—	—	0.01	—	—	—	6	European
28D7	28.0	0.4	28	18.0	28	1.2	3.5	6000	0.175	—	A	B8G	7	U.S.A.
	2.8	0.2	—	—	—	—	—	—	—	—	—	—	—	—
DLL21	1.4	0.1	135	17.6	135	4.6	9.4	15000	1.5	—	—	—	8	European
DLL25	1.4	0.2	135	17.6	135	4.6	9.4	15000	0.5	—	—	—	8	European



NUMERICAL/ALPHABETICAL INDEX

1AB5—25BK5

Type	Base	Page	Type	Base	Page	Type	Base	Page	Type	Base	Page	Type	Base	Page
I/5			6			6N6	I.O.	37	12BN6	B7G	5	I7/I9		
1AB5	B8G	7	6A6	UX7	19	6PK7	I.O.	5	12BY7	B9A	35	17AP4	B12A	27
1AB6	B7G	1	6AB4	B7G	21	6PZ8	I.O.	33	12CP4	UX6	25	17BP4	B12A	27
1AC5	—	29	6AB6	I.O.	37	6Q5	I.O.	13	12DP4	I.O.	25	17BP4-A	B12A	27
1AC6	B7G	1	6AC6	I.O.	33	6R	I.O.	5	12EA7	I.O.	1	17BP4-B	B12A	27
1AD4	—	29	6AD4	—	29	6RV	I.O.	5	12JP4	B12A	25	17CP4	B12A	27
1AD5	—	29	6AD8	B9A	7	6S4	B9A	23	12KP4-A	B12A	25	17CP4-A	B12A	27
1AE4	B7G	5	6AE8	B9A	1	6S5	I.O.	12	12L8	I.O.	37	17FP4	B12A	27
1AE5	—	29	6AF4	B7G	21	6T	UX6	{ 21	12LP4	B12A	25	17FP4-A	B12A	27
1AF4	B7G	5	6AH4	I.O.	21	6T4	B7G	21	12LP4-A	B12A	25	17GP4	B12A	27
1AF5	B7G	5	6AH5	I.O.	33	6TE8	I.O.	1	12NK7	I.O.	5	17HP4	B12A	27
1AG4	—	29	6AK4	—	29	6U3	B9A	17	12QP4	B12A	25	17KP4	B12A	27
1AG5	—	29	6AK8	B9A	23	6U8	B9A	{ 7	12RP4	B12A	25	17LP4	B12A	27
1AH4	—	29	6AM4	B9A	23	6V3	B9A	17	12SY7	I.O.	1	17QP4	B12A	27
1AH5	B7G	5	6AN4	B7G	21	6V4	B9A	17	12SY7GT	I.O.	1	17RP4	B12A	27
1AJ4	B7G	5	6ASS	B7G	33	6V5	I.O.	33	12TE8	I.O.	1	17SP4	B12A	27
1AX2	B9A	17	6AS7G	I.O.	37	6V8	B9A	21	12TP4	B12A	25	17TP4	B12A	27
1B46	B7G	13	6AV4	B7G	17	6V9	WB8	9	12UP4	B12A	25	17UP4	B12A	27
1C2	B7G	1	6AV5	I.O.	33	6W2	B2A	15	12UP4A	B12A	25	17VP4	B12A	27
1C3	B7G	21	6AW5	I.O.	15	6W4	I.O.	15	12UP4-B	B12A	25	17YP4	B12A	27
1C4	UX4	6	6AW7	I.O.	21	6X2	B2A	15	12V6	I.O.	33	17Z3	B9A	17
1C21	I.O.	13	6AX4	I.O.	15	6X8	B9A	{ 7	12VP4	B12A	25	19AP4	B12A	27
1D3	—	29	6AX5	I.O.	15	6Z6	I.O.	15	12XP4	B12A	25	19AP4-A	B12A	27
1D4	UX4	36	6AX6	I.O.	15				12YP4	B12A	25	19AP4-B	B12A	27
1D13	B7G	11	6AY8	I.O.	33							19BD	B9A	17
1E3	B9A	23	6AZ5	—	29							19DP4	B12A	27
1E7	I.O.	37	6AZ6	I.O.	33							19DP4-A	B12A	27
1E8	—	29	6B4	I.O.	33							19EP4	B12A	27
1G5	I.O.	33	6B5	UX6	37							19FP4	B12A	27
1G6	I.O.	37	6BA5	—	29							19G6	B7G	17
1K4	UX4	6	6BC5	B7G	5							19GP4	B12A	27
1K5	I.O.	5	6BD5	I.O.	33							19H4	I.O.	15
1K6	UX6	6	6BD7	B9A	23							19JP4	B12A	27
1K7	I.O.	5	6BE7	B9A	1							19QP4	B12A	27
1L5	I.O.	33	6BF5	B7G	33							19V8	B9A	23
1L6	B7G	1	6BF7	—	29							19X3	B9A	17
1LB6	B8G	1	6BG7	—	29							19X8	B9A	{ 7
1LF3	B8G	21	6BH5	B9A	7							19Y3	B9A	17
1M3	—	29	6BJ5	B7G	33									
1M5	I.O.	5	6BK5	B9A	35									
1Q6	—	29	6BK7	B9A	23									
1R	I.O.	5	6BL7	I.O.	21									
1S6	—	29	6BM5	B7G	33									
1SA6	I.O.	5	6BN5	B9A	35									
1SB6	I.O.	5	6BN6	B7G	5									
1T	I.O.	33	6BN8	I.O.	5									
1T6	—	29	6BQ6	I.O.	33									
1U6	B7G	1	6BQ7	B9A	23									
1V6	—	29	6BQ7-A	B9A	23									
1W4	B7G	33	6BV7	B9A	35									
1X2	B9A	17	6BW7	B9A	7									
1X2A	B9A	17	6BX7	I.O.	21									
1X2B	B9A	17	6BY5	I.O.	15									
2A4	I.O.	13	6BY7	B9A	7									
2B5	—	29	6BY8	I.O.	33									
2C4	B7G	13	6BZ7	B9A	23									
2C22	I.O.	21	6C9	WB8	9									
2C35	I.O.	21	6C10	B8A	1									
2C44	I.O.	21	6C11	B8A	1									
2C50	B8G	35	6CA7	I.O.	33									
2C51	B9A	23	6CB6	B7G	5									
2C52	I.O.	21	6CD7	I.O.	12									
2D21	B7G	13	6CG6	B7G	5									
2E30	B7G	33	6CJ6	B9A	35									
2V3	I.O.	15	6CK6	B9A	35									
2W3	I.O.	15	6CL6	B9A	35									
2X3	I.O.	15	6CQ6	B7G	5									
3/18	B7B	25	6D3	B7G	11									
3/31	B7B	25	6D4	B7G	13									
3/32	B7B	25	6D5	I.O.	33									
3B26	I.O.	15	6DR4	B3G	11									
3C4	B7G	33	6E6	UX7	37									
3E5	B7G	33	6EA7	I.O.	1									
3KP4	B11A	25	6F4	Acorn D 19	12A4									
3NP4	UX5	25	6F16	B8A	7									
5AX4	I.O.	15	6G8	I.O.	5									
5BP4	B11A	25	6J4	B7G	21									
5FP4A	I.O.	25	6K25	B7G	13									
5QP4	I.O.	25	6L4	Acorn D 19	12AZ7									
5TP4	B12A	25	6M5	B9A	35									

25BQ6—CK532DX

Type	Base	Page	Type	Base	Page	Type	Base	Page	Type	Base	Page	Type	Base	Page
25BQ6	I.O.	33	1639	I.O.	21	5800	—	29	6029	—	30	A1714	B7G	21
25CD6	I.O.	33	1644	I.O.	37	5801	—	29	6042	I.O.	21	A1834	I.O.	37
25N6	I.O.	37	1649	I.O.	5	5802	—	29	6050	—	30	AA61	B8A	21
25W4	I.O.	15	1650	Acorn B	19	5803	—	29	6051	—	30	AA81	P	11
25W6	I.O.	33	1654	B7G	17	5812	B7G	33	6052	—	30	AB2	P	11
25X6	I.O.	15	1655	I.O.	21	5814	B9A	23	6053	—	30	ABC1	P	19
			1664	I.O.	5	5818	B7G	13	6056	—	30	ABC91	B7G	21
			1945	P	13	5823	B7G	13	6057	B9A	23	ABL1	P	35
26/959														
2005/5799														
26	UX4	19	2005	I.O.	13	5824	I.O.	33	6058	B9A	7	AC2	P	19
26A7	I.O.	37	2050	I.O.	13	5825	UX4	15	6059	B9A	23	ACH1	P	35
26BQ6	I.O.	33	2051	I.O.	13	5829/WA	—	29	6060	B9A	35	AD1	P	9
26CG6	B7G	5	4055	—	29	5838	I.O.	15	6061	B9A	35	AF3	P	9
26Z5W	B9A	17	4671	Acorn B	19	5839	I.O.	15	6062	B7G	17	AF7	P	9
27AP4	B12A	27	4654P	P	35	5840	—	29	6064	B7G	5	AF100	WB8	9
27EP4	B12A	27	4673	P	9	5841	B9A	23	6065	B7G	21	AH1	P	1
28D7	B8G	37	4682	P	35	5842	B7G	21	6066	B9A	23	AH100	P	1
30BP4	E12A	27	4683	P	35	5844	B7G	11	6067	B9A	23	AK2	P	35
34	UX6	6	4687K	I.O.	13	5845	B7G	11	6072	B9A	23	AL1	P	35
35QL6	B9A	35	4688	P	35	5847	B9A	7	6073	B7G	13	AL2	P	35
35X4	B7G	17	4689	P	35	5851	—	29	6074	B7G	13	AL3	P	35
35Y4	B8G	17	4690	P	13	5852	I.O.	15	6080	I.O.	21	AL4	P	35
37	UX5	19	4694	P	35	5854	—	29	6082	I.O.	21	AL5	P	35
40	UX4	19	4699	P	35	5861	Disc Seal	19	6084	B9A	7	AM1	P	12
50AX6	I.O.	15	5517	B7G	17	5873	I.O.	33	6085	B9A	23	AM2	P	12
50CD6	I.O.	33	5693	I.O.	33	5875	—	29	6086	B9A	7	AZ11	G8A	15
56	UX5	19	5608A	UX7	19	5876	—	29	6088	—	30	AZ12	G8A	15
62DDT	B8A	21	5610	B7G	21	5879	B9A	7	6092	—	30	AZ41	B8A	17
62TH	B8A	1	5618	B7G	33	5881	I.O.	33						
62VP	B8A	7	5635	—	29	5884	—	29						
63TP	B9A	{ 23	5636	—	29	5885	—	29						
64SPT	B9A	7	5639	—	29	5886	—	30						
66KU	B8A	17	5642	—	29	5889	—	30						
67PT	B8A	34	5643	—	29	5893	—	19						
70B1	—	29	5644	—	29	5896	—	30						
79	UX6	37	5646	—	29	5897	—	30						
90C1	B7G	13	5647	—	29	5898	—	30						
100E1	B4	13	5651	B7G	13	5899	—	30						
150A1	P	13	5654	B7G	5									
150B2	B7G	13	5656	B9A	7									
150C1K	I.O.	13	5659	I.O.	33									
150C1P	P	13	5660	I.O.	5									
171K	B12A	27	5661	I.O.	5	5900	—	30	6110	—	30	B309	B9A	23
172K	B12A	27	5662	B7G	13	5901	—	30	6111	—	30	BF61	B8A	34
213PEN	B9A	35	5663	B7G	13	5902	—	30	6112	—	30	BF62	B8A	34
305	ES	13	5670	B9A	23	5903	—	30	6113	I.O.	21	Bm31-1	G6	27
446A/B	I.O.	21	5672	—	29	5904	—	30	6132	B9A	7	Bm35R-1	B12A	27
464A	I.O.	21	5674	UX6	19	5905	—	30	6133	B7G	21	Bm35R-2	B12A	27
502A	I.O.	13	5675	—	29	5906	—	30	6137	B7G	5	Bm35R-2	B12A	28
559	I.O.	11	5676	—	29	5907	—	20	6151	I.O.	5	Bm42/2	B12A	28
884	I.O.	13	5677	—	29	5908	—	30	6152	B9A	17	Bm42R-3	B7G	33
952F	Acorn B	11	5678	—	29	5910	B7G	5	6157	B9A	23	Bm42R-3	B12A	28
954	Acorn A	9	5679	B8G	11	5915	B7G	5	6158	B9A	23	C12BM	I.O.	28
955	Acorn B	19	5686	B9A	35	5916	—	30	6169	—	30	C12DM	B12A	28
956	Acorn A	9	5687	B9A	23	5920	B7G	21	6174	B7G	17	C12FM	B12A	28
957	Acorn B	19	5691	I.O.	21	5930	UX4	36	6176	B9A	23	C14FM	B12A	28
958/A	Acorn B	19	5692	I.O.	21	5931	I.O.	15	6180	I.O.	21	C14GM	B12A	28
559	Acorn A	9	5693	I.O.	5	5932	I.O.	33	6184	B7G	21	C17FM	B12A	28
			5694	I.O.	21	5933	UX5	36	6185	B7G	5	C17GM	B12A	28
			5695	UX4	15	5934	BC4	15	6190	—	30	CABL21	G9	32
			5696	B7G	13	5935	—	30	6191	—	30	CB1	P	11
			5697	—	29	5950	—	30	6192	—	30	CB2	P	11
									6193	—	30	CC1	P	19
												CC2	P	19
1201/1945														
1201	B8G	21	5702/WA	—	29	5961	I.O.	1	6195	—	30	CCH1	P	13
1203/A	B8G	11	5703/WA	—	29	5962	B7G	13	6196	B9A	7	CCH2	P	1
1204	B8G	7	5704	—	29	5963	B9A	23	6201	B9A	23	C/E12	P	12
1206	B8G	7	5718	—	29	5964	B7G	21	6211	B9A	23	CF1	P	9
1221	UX6	6	5719	—	29	5965	B9A	23	6213	B9A	23	CF2	P	9
1223	I.O.	5	5722	B7G	11	5967	—	30	6215	I.O.	15	CF3	P	9
1232	B8G	7	5725	B7G	5	5968	—	30	6227	B9A	35	CF7	P	9
1267	I.O.	13	5726	B7G	11	5969	—	30	6250	B9A	7	CF50	P	9
1274	B8G	17	5727	B7G	13	5970	—	30	6267	B9A	7	CF51	P	9
1280	B8G	7	5731	Acorn B	19	5971	—	30	6705A	I.O.	27	CF61	BBA	1
1284	B8G	7	5732	I.O.	5	5972	—	30	6706A	I.O.	27	CF141	B8A	1
1299	B8G	35	5734	—	29	5975	—	30	6901A	B12A	27	CH1	P	1
1603	UX6	6	5744/WA	—	29	5977	—	30	7000	I.O.	5	CK1	P	1
1611	I.O.	33	5749	B7G	5	5987	I.O.	33	7102A	B12A	27	CK3	P	1
1612	I.O.	1	5750	B7G	1	5992	B9A	17	7201A	B12A	27	CK500	P	30
1613	I.O.	33	5751	B9A	23	5993	B9A	17	7700	UX6	6	CK511X	P	30
1614	I.O.	33	5755	B9A	23	5995	—	30	8016	I.O.	15	CK516AX	P	30
1620	I.O.	5	5763	B9A	35	5997	I.O.	33	9001	B7G	5	CK518AX	P	30
1621	I.O.	33	5768	—	29	5998	I.O.	21	9002	B7G	21	CK523AX	P	30
1622	I.O.	33	5783/WA	—	29	6004	I.O.	15	9004	Acorn B	11	CK524AX	P	30
1624	I.O.	33	5784/WA	—	29	6005	B7G	33	9005	Acorn B	11	CK525AX	P	30
1631	I.O.	33	5785	—	29	6006	I.O.	5	9006	B7G	11	CK526AX	P	30
1632	I.O.	33	5787	—	29	6007	—	30	18040	B8G	7	CK527AX	P	31
1633	I.O.	21	5787/WA	—	29	6008	—	30	18042	B9A	7	CK528AX	P	31
1634	I.O.	21	5797	—	29	6021	—	30	18043	B9A	7	CK529AX	P	31
1637	I.O.	33	5798	—	29	6026	—	30	18045	B9A	35	CK531DX	P	31
1638	I.O.	11	5799	—	29	6028	B7G	5	18046	B9A	35	CK532DX	P	31

PM04—ZD152

Type	Base	Page	Type	Base	Page	Type	Base	Page
PM04	B7G	5	SN953D	—	31	UL12	G8A	32
PM05	B7G	5	SN956B	—	31	UL21	B8G	35
PM07	B7G	5	SN1016	—	31	UL43	B8A	34
PY71	B8G	17	SN1039A	—	31	UL71	B8G	35
PY81	B9A	17	STV70/60	I.O.	13	UL171	G8G	32
QA2400	B7G	6	STV280/40	B5	13	UL172	G8G	32
QA2401	B7G	21	STV280/80	B5	13	UM4	I.O.	12
QA2402	B7G	34	T2M05	B7G	21	UM11	G8A	12
QA2403	B7G	5	T12/71U	I.O.	28	UM85	B9A	12
QA2404	B7G	11	T12/72U	I.O.	28	UM171	G8G	12
QA2406	B9A	24	T12/81U	I.O.	28	UQ80	B9A	2
QA2407	B7G	17	T12/82U	I.O.	28	UY1N	I.O.	15
QA2408	I.O.	21	T12/91	I.O.	28	UY2	P	15
QS70/20	B7G	13	T12/92	I.O.	28	UY3	P	15
QS83/3	B7G	13	T12/404	I.O.	28	UY4	P	15
QS95/10	B7G	13	T12/449	I.O.	28	UY11	G8A	15
QS105/45	B8G	13	T12/504	I.O.	28	UY42	B8A	17
QS150/15	B7G	13	T12/549	I.O.	28			
QS150/40	I.O.	13	T31	B5	13			
QS150/45	B8G	13	T41	M.O.	13			
			T901B	B12A	28			
			TM12	B7G	21			
R								
R17	B9A	17	TP400-A	I.O.	28	V2M70	B7G	17
R18	B9A	17	TR14/1	B12A	28	V41	B8A	17
R19	B9A	17	TR14/2	B12A	28	V51	B8A	17
R42	B12A	28	TXM100	B7G	13	V61	B8A	17
R50	B12A	28				VBF11	G8A	9
RD2-4Ga	WB5	11				VC1	P	19
RD2-4Gc	WB5	11				VCH11	G8A	3
RD2-4Pd	WA8	10				VCL11	G8A	{ 19
RD2-4Ta	WB5	19	U30	I.O.	13	VEL11	G8A	32
RD12Ga	WB5	11	U41	I.O.	15	VF3	P	9
RD12Pb	WA8	10	U43	B2A	15	VF7	P	9
RD12Ta	WB5	19	U151	B2A	15	VF14	G8A	9
RD12Te	WC8	19	U152	B9A	17	VL1	P	36
RD12Tf	W13	19	U282	I.O.	15	VL4	P	36
RGF5	G8A	15	U301	I.O.	15	VM1	B7G	17
RG2D1	—	31	U309	B9A	17	VX8066	—	31
RG2-4D1	W6	11	U319	B9A	17	VY1	P	15
RG2-4D10	W6	15	U329	B9A	17	VY2	P	15
RG12D2	W6	11	UAA11	G8A	11	VY2N	P	15
RG12D3	W6	11	UAA91	B7G	11	W142	B8A	7
RG12D60	W6	15	UAA171	WC8	11	X18	B7G	1
RG12D300	W8	15	UABC80	B9A	24	X6030	B8G	11
RL1P1	W6	4	UAF21	B8G	7	Z145	B8A	7
RL2P3	WA6	4	UBC1	I.O.	21	Z152	B9A	7
RL2T2	WC5	19	UBF2	I.O.	5	Z309	B9A	7
RL2-4P2	W6	4	UBF11	G8A	9	Z719	B9A	7
RL2-4P3	W6	4	UBF15	G8A	9	Z729	B9A	8
RL2-4T1	W6	19	UBF171	G8G	9	ZD152	B9A	8
RL2-4T4	W8	19	UBL1	I.O.	33			
RL12P2	W6	4	UBL3	P	36			
RL12T1	W6	19	UBL71	B8G	35			
RL12T2	W6	19	UC92	B7G	21			
RL12T15	BC4	19	UCF12	G8A	{ 9			
RL12T75	WF8	19			19			
RV1PG1	WA8	10	UCH4	I.O.	1			
RV2P700	W6	4	UCH5	P	1			
RV2P800	WA6	4	UCH11	G8A	3			
RV2-4H300	W6	3	UCH43	B8A	1			
RV2-4P45	W6	4	UCH71	E8G	1			
RV2-4P700	W6	4	UCH81	E9A	2			
RV2-4P701	W6	4	UCH171	G8G	3			
RV2-4P710	W6	4	UCL11	G8A	{ 19			
RV2-4P711	W6	4			32			
RV2-4P1400	W8	10	UEL11	G8A	32			
RV2-4Pa	WA8	10	UEL51	G10A	32			
RV2-4T3	W6	4	UEL71	B8G	35			
RV12H300	W6	3	UEL171	G8G	32			
RV12P2000	W6	4	UF5	P	9			
RV12P2001	W6	4	UF6	P	9			
RV12P3000	W8	10	UF8	I.O.	5			
RV12P4000	WA6	4	UF9	I.O.	5			
RV12Pa	WA8	10	UF10	P	9			
			UF11	G8A	9			
			UF14	G8A	9			
S/T								
SA1	WA3	11	UF43	B8A	7			
SA100	WA3	11	UF80	B9A	7			
SA102	WA3	11	UF85	B9A	7			
SD1A	W6	19	UF172	G8G	9			
SD61	B3G	11	UF174	G8G	9			
SM150/30	B7G	13	UF175	G8G	9			
SN946B	—	31	UFM11	G8A	12			
SN947D	—	31	UL1	P	36			
SN94BC	—	31	UL2	P	36			
SN953A	—	31	UL11	G8A	32			