

**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/-

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A Comprehensive
RADIO VALVE
GUIDE



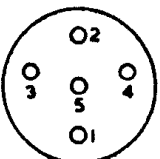
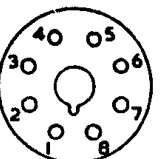
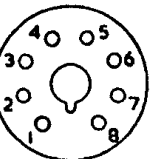
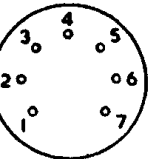
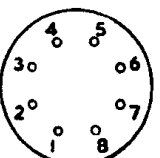
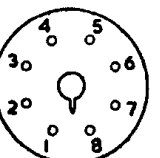
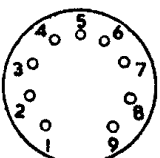
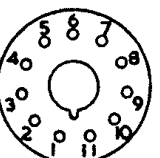
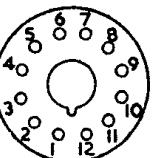
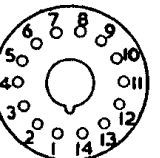
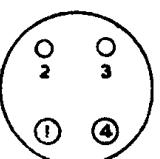
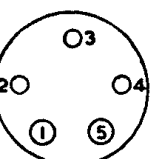
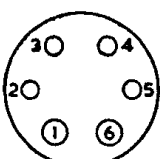
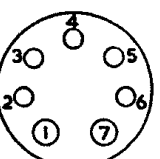
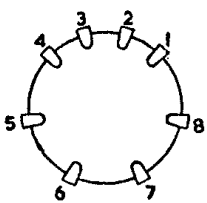
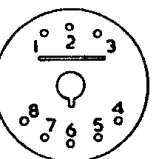
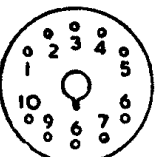
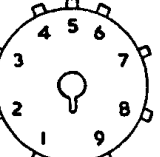
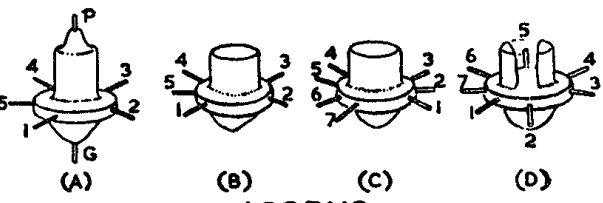
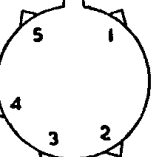
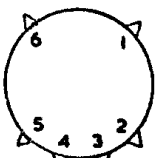
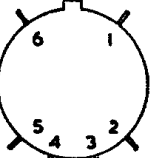
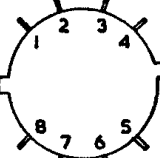
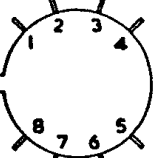
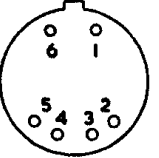
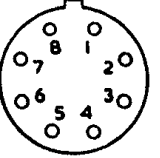
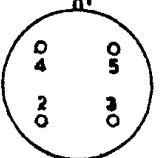
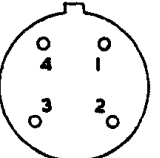
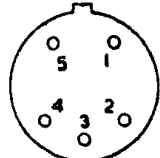
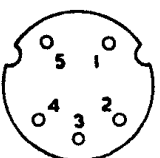
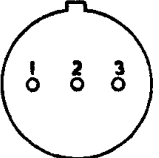
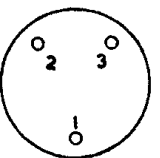
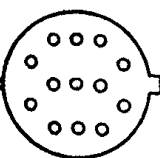
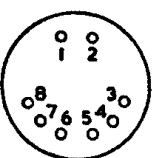
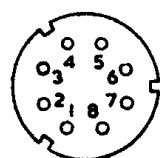
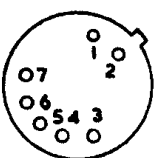
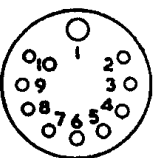
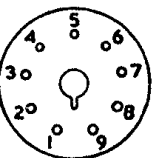
BOOK 2

by

B. B. BABANI

LONDON: BERNARDS (Publishers) LIMITED

VALVE BASE KEY

 B2A	 B3G	 B5	 I.O.	 M.O.	 B7G
 B8A	 B8G	 B9A	 B11A	 B12A	 B14A
 UX4	 UX5	 UX6	 UX7	 P	 G8A
 G10A	 G9	 ACORNS			 WC5
 WA6	 W6	 W8	 WB8	 WB6	 WA8
 BC4	 W4	 WA5	 WB5	 W3	 WA3
 W13	 WF8	 WC8	 W7	 G10G	 B9G

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 thyatron. 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

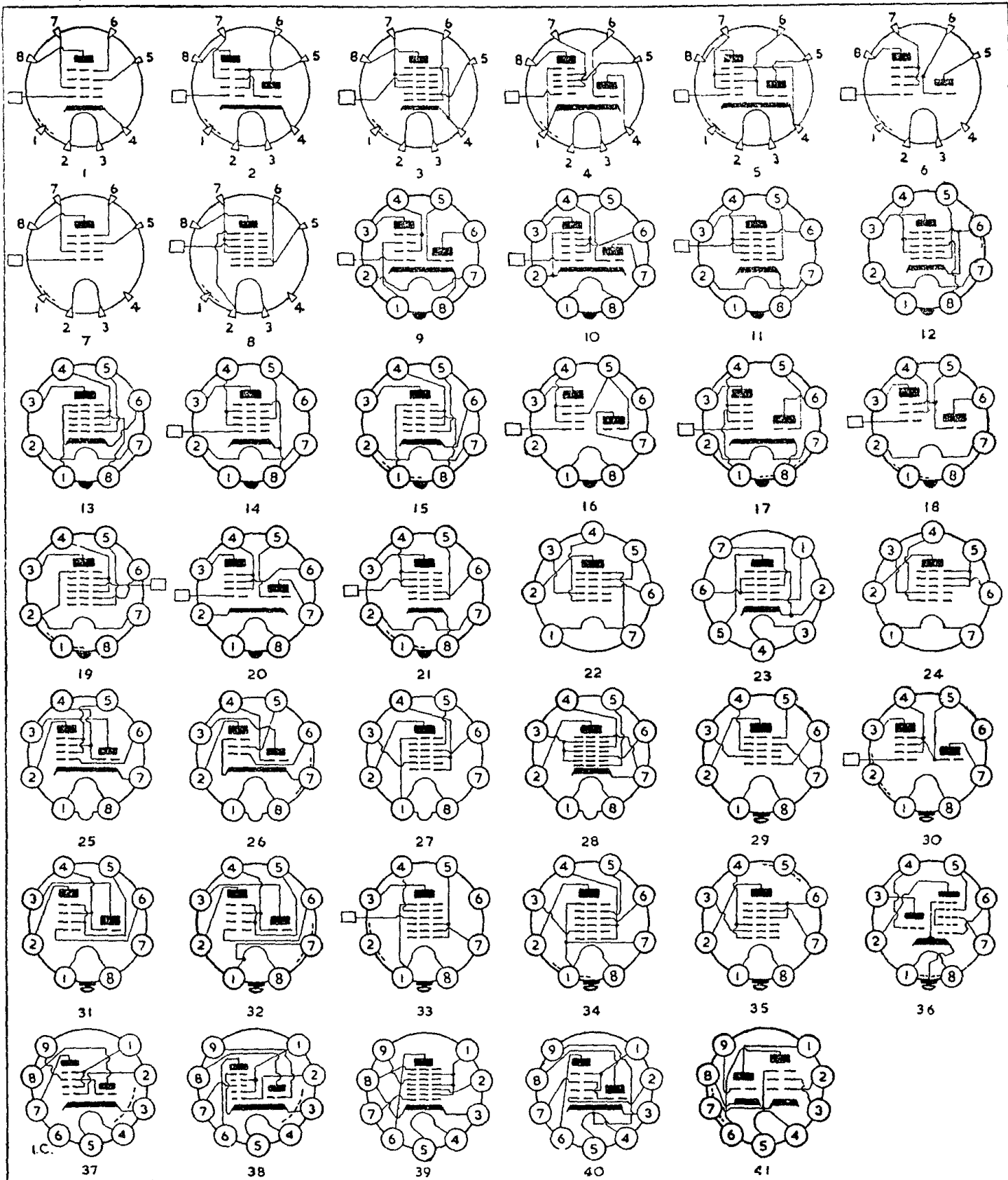
ACC	Accelerator	k	Kilo-ohms
Am.-Brit.	American and British	mA/V	Milli-amps per volt
CR	Current-regulator	MG	Magnetic
d/tri	Diode-triode	MOD	Modulator grid
Dia.	Diameter	M.O.V.	Marconi and Osram
Dis. %	Distortion percentage	mW	Milli-watts
Eng.-Elec.	English Electric	M	Megohms
ES	Electro-static	Mul.-Eupn.	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 μ
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/hex)	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	European
X18	(hep)	1-4	0-05	85	0-65	60	0-15	30	16-5	0	0-65	0-325		22	M.O.V.
6C10	(t/hex)	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/hex)	6-3	0-3	250	3-0	85	3-0	100	4-8	2-0	1-0	0-75		25	Cossor
CF61	(t/hex)	6-3	0-225	250	3-0	105	2-2	100	4-9	2-0	2-0	0-5		25	European
CF141	(t/hex)	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/hex)	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/hex)	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/hex)	1-25	0-15	120	0-9	60	1-9	120	1-7	0	1-0	0-45		30	European
DCH22	(t/hex)	1-25	0-1	90	0-75	50	1-1	60	1-4	0	1-0	0-28		31	European
DCH25	(t/hex)	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/hex)	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	—	—	—	—	—	—	—	—	—		—	—
		6-3	0-3	250	2-6	100	4-4	100	5-7	3-0	1-5	0-55		40	Brimar
ECH80	(t/hex)	6-3	0-23	250	3-0	85	3-0	82	5-1	2-0	1-0	0-75		37	Mul.-Eu
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

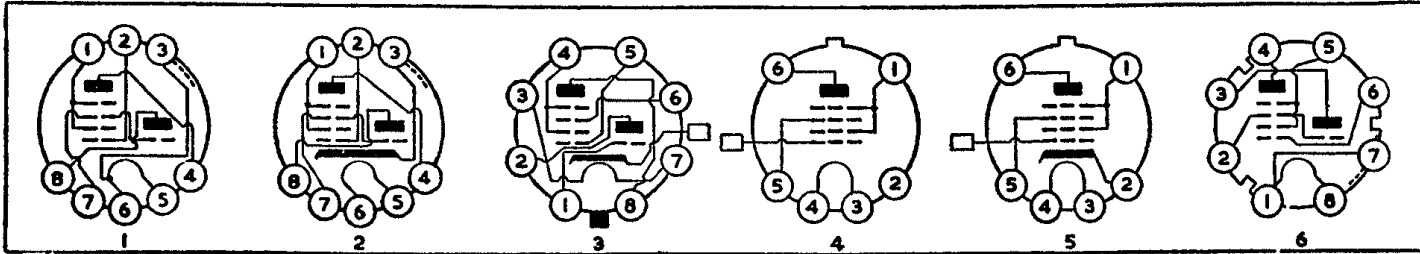
FREQUENCY CHANGERS—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	ra MΩ	ec 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.



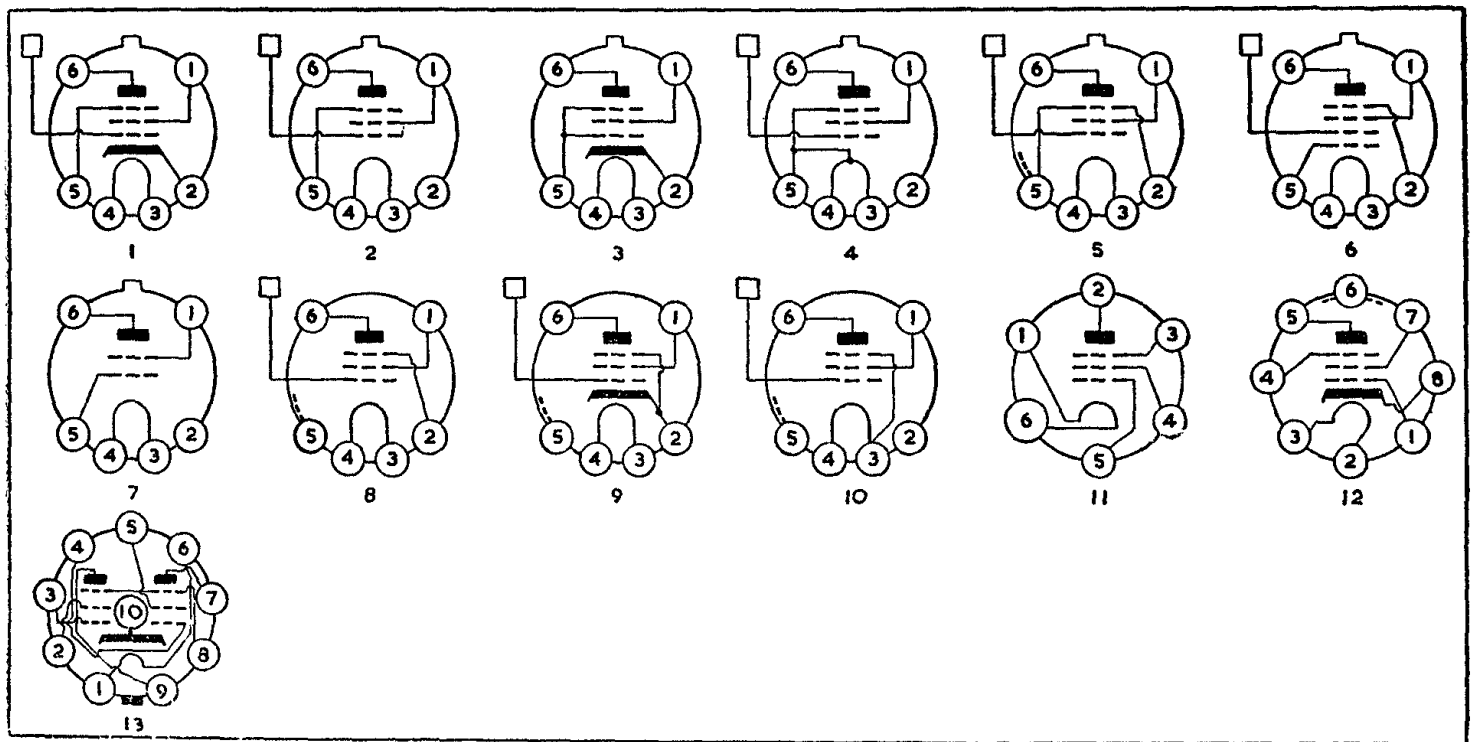
FREQUENCY CHANGERS—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		OSC. ANODE		Neg. Grid Volts	ra M.Ω	gc mA/V	BASE		Make:
	Volts	Amps	Volts	I/mA	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	ra kΩ	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

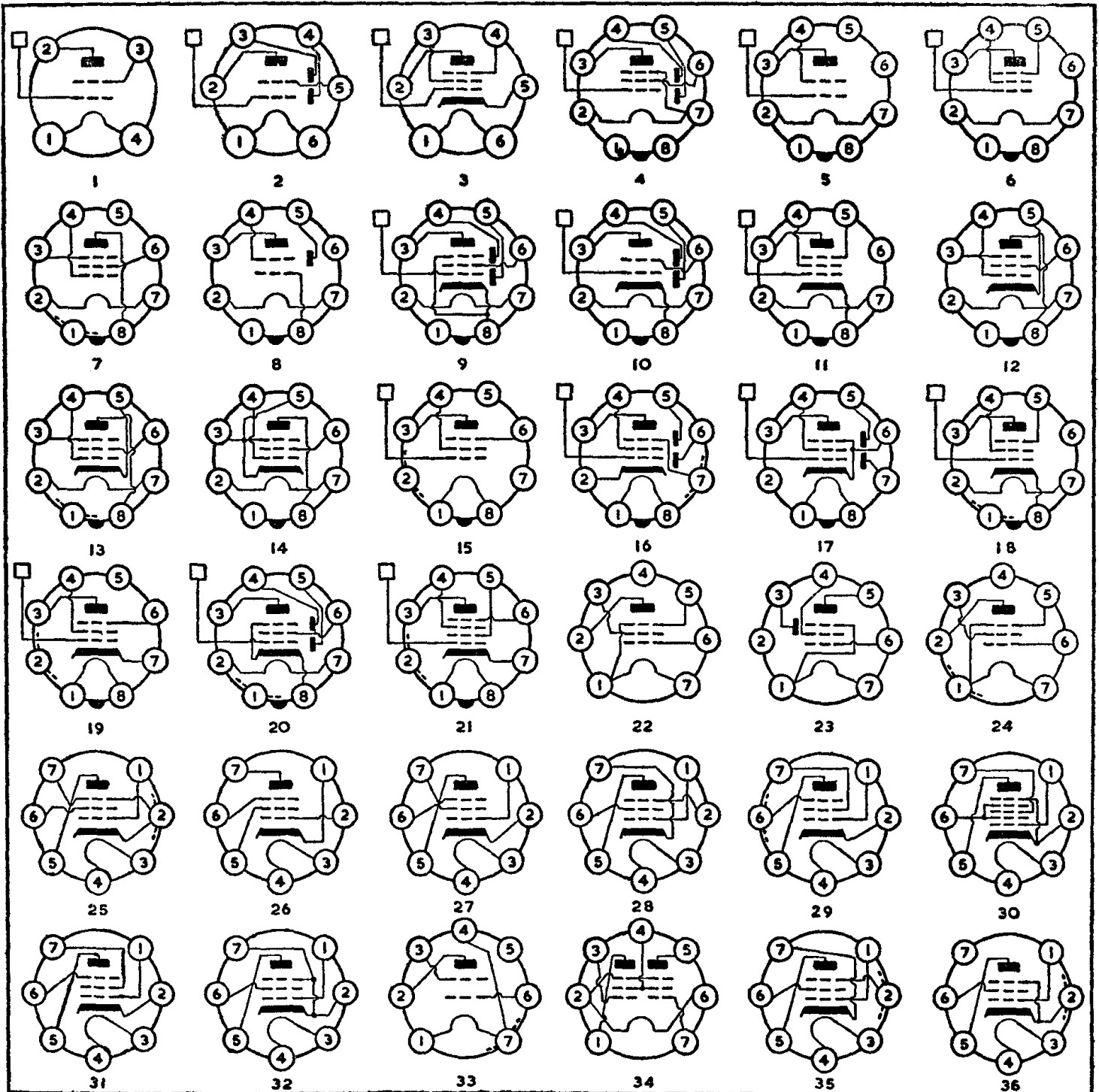


SCREENED TETRODES and PENTODES—Contd.

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	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	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	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	B7G	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	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	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
DF906	1.4	0.025	45	1.1	45	0.5	—	444	0.22		34	European
EF93	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	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	ra kΩ	gm 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						
1C4	Var. μ	2.0	0.12	135	1.5	90	0.5	3.0	1850	0.7	UX4	1	U.S.A.			
1K4		2.0	0.12	135	2.5	67.5	0.93	0	1000	1.05						
22		3.3	0.132	135	3.7	67.5	1.3	1.5	325	0.5						
34		2.0	0.06	180	2.8	67.5	1.0	3.0	1000	0.62						
1K6		2.0	0.12	135	1.5	135	0.5	4.5	1400	0.7						
1221		6.3	0.3	250	2.0	100	0.5	3.0	1000	1.2						
1603		6.3	0.3	250	2.0	100	0.5	3.0	1000	1.23						
7700		6.3	0.3	250	2.0	100	0.5	3.0	1500	1.23						
														UX6	2	U.S.A.
											3	U.S.A.				



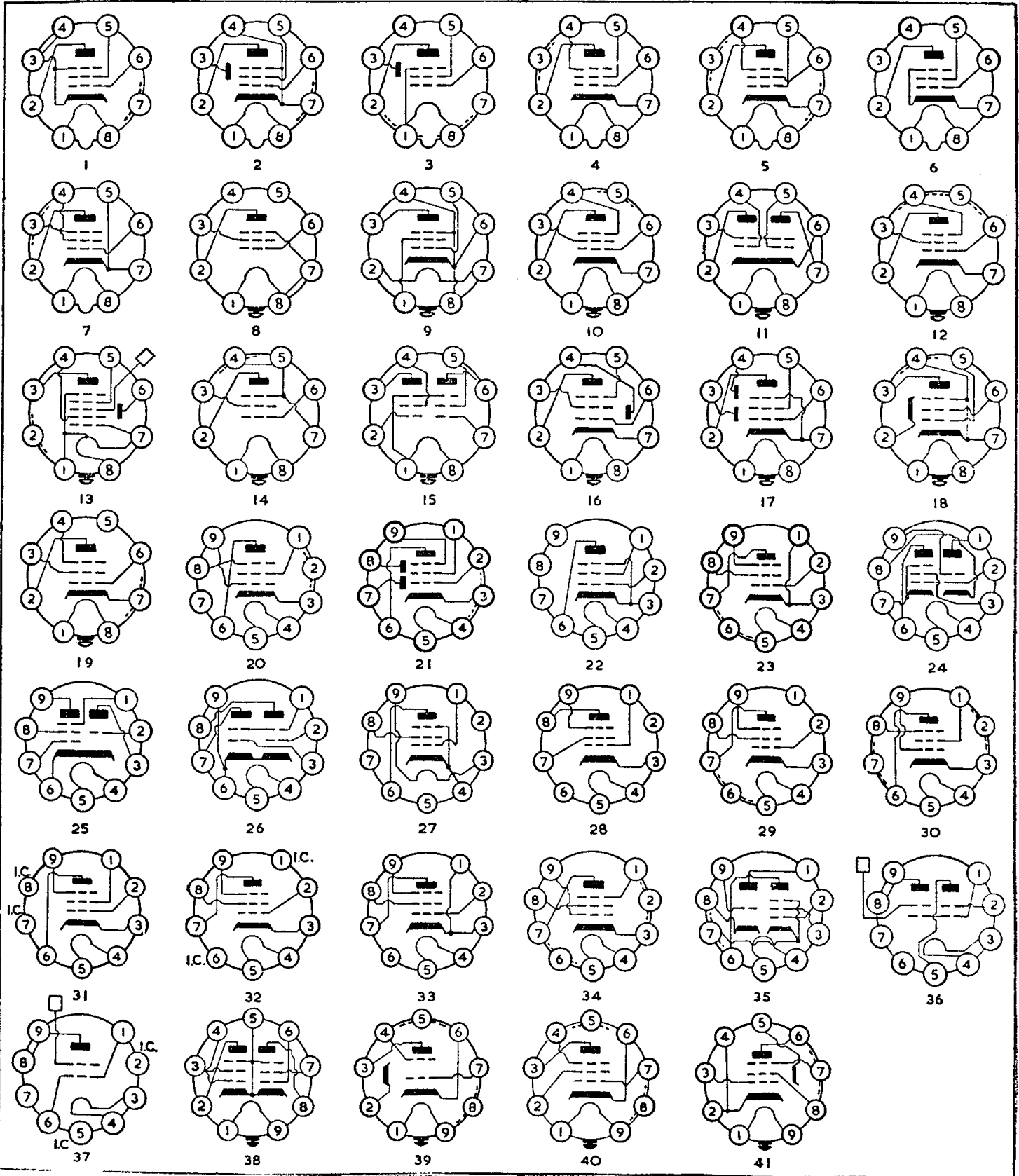
SCREENED TETRODES and PENTODES—Contd.

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	B8G	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	0.05	120	1.2	90	0.3	1.1	1400	0.75		14	European
DFF50		1.4	0.1	25	2.25	25	0.5	1.1	32.5	1.2		15	European
DFF51		1.4	0.05	25	2.1	25	0.4	0	55	0.7		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	B9A	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
EBF81		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	ra kΩ	gm mA/V	BASE		Maker
	Volts	Amps	Volts	I/mA	Volts	I/mA				Type	Ref.	
Z729	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	B9A	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

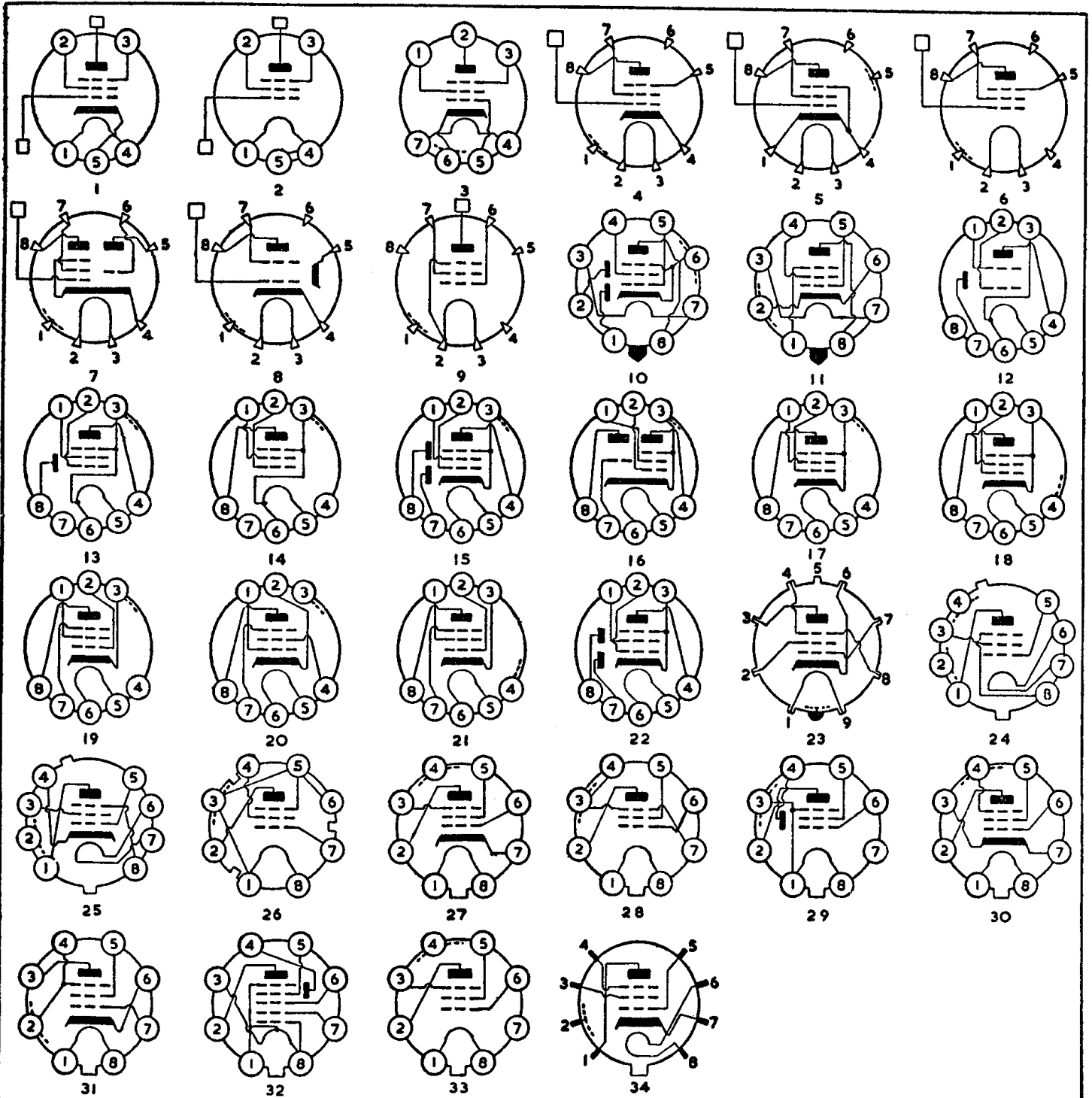


SCREENED TETRODES and PENTODES—Contd.

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	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	13.0	0.2	200	3.0	100	0.9	2.0	700	3.2		4	European
CF2	13.0	0.2	200	4.5	100	1.4	2.0	1400	2.2		4	European
CF3	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	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	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	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	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	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	ra 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										
	1.2	0.05	15	0.8	15	0.2	0	90	0.65		32	European
RV2-4Pa	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

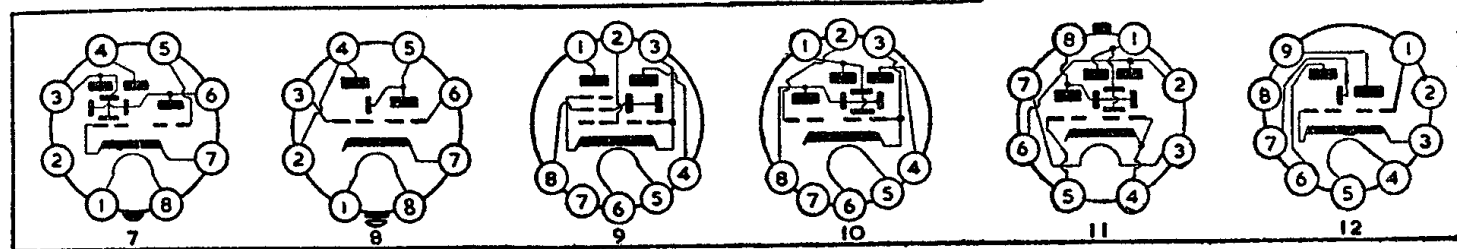
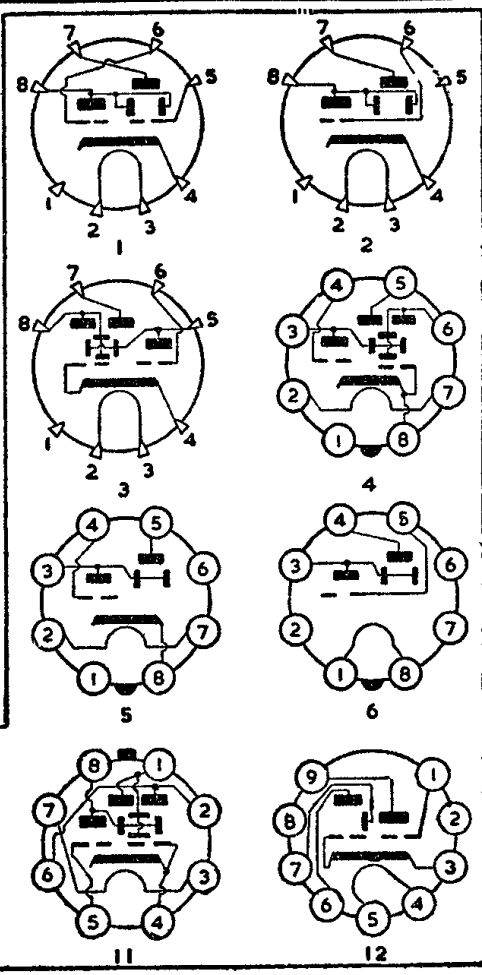


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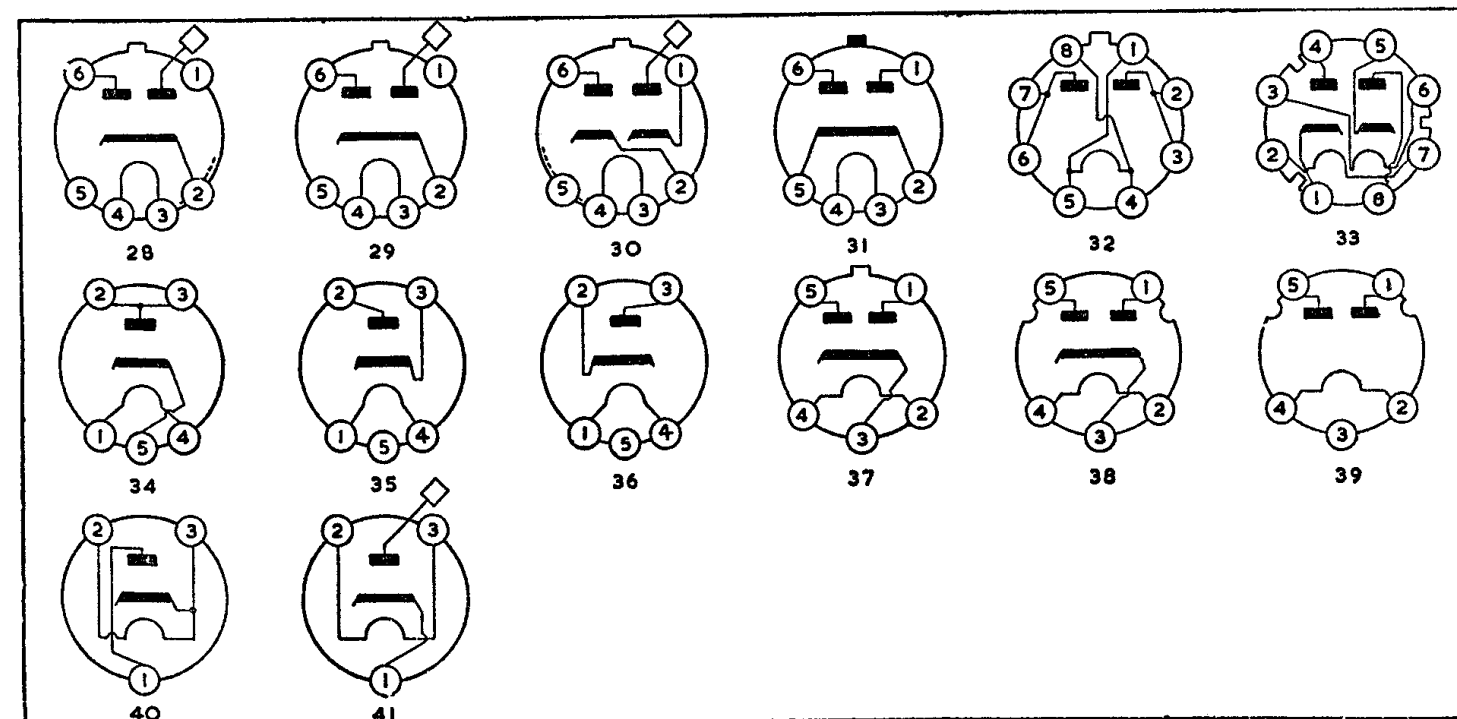
Type	FILAMENT or HEATER		Input Volts (RMS)	Max. I/mA	BASE		Maker
	Volts	Amps			Type	Ref.	
952F	6.3	0.15	200	2.0	Acorn B	34	European
9004	6.3	0.15	117	5.0		35	U.S.A.
9005	6.3	0.15	117	1.0		36	U.S.A.
SA1	4.0	0.21	30	0.2	WA3	40	European
SA100	1.9	0.32	100	0.1		41	European
SA102	1.9	0.35	100	0.1	WA5	41	European
LG1	12.6	0.24	100	2.0		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	W6	39	European
RG2-4D1	2.4	0.1	5	1.5		28	European
RG12D2	12.6	0.075	5	4.0		29	European
RG12D3	12.6	0.1	5	3.0	WB6	30	European
LG9	12.6	0.35	100	5.0		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	European
SD61	6.3	0.15	50	5.0	I.O.	15	Cossor
559	6.3	0.75	5	24.0		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	B7G	11	European
EB1	6.3	0.25	200	0.8		10	European
EB2	6.3	0.25	200	0.8	B7G	11	European
KB1	2.0	0.065	50	0.4		12	European
KB2	2.0	0.095	200	0.8	B7G	13	European
PAB1	6.3	0.3	200	0.8		14	European
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	B7G	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	B7G	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	B7G	7	Marconi
DA101	1.25	0.05	125	0.2		8	European
EAA91	6.3	0.3	150	9.0	B7G	7	European
QA2404	6.3	0.3	200	5.0		7	Osram
UAA91	12.6	0.15	117	9.0	7	European	

TUNING INDICATORS

Type	HEATER		TARGET		Grid Volts	BASE		Maker
	Volts	Amps	Volts	l/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	1	European
C/EM2	6.3	0.2	250	0.9	6.0	1	1	European
EM2	6.3	0.2	200	0.9	5.0	2	2	European
EM5	6.3	0.2	250	0.45	20.0	3	3	European
6CD7	6.3	0.2	250	0.75	16.0	I.O.	4	U.S.A.
6S5	6.3	0.3	250	3.0	8.0	5	5	U.S.A.
DM21	1.25	0.025	120	0.26	4.0	6	6	European
OM5	12.6	0.15	200	0.63	15.0	7	7	European
PM5	6.3	0.3	200	0.63	15.0	7	7	European
UM4	12.6	0.1	250	0.75	4.2	7	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	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	12	European
UM85	18.9	0.1	250	2.1	18.0	12	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	10	European
UFM11	15.0	0.1	200	0.50	18.0	9	9	European
UM11	15.0	0.1	200	0.4	20.0	10	10	European
EM171	6.3	0.2	250	—	18.0	G8G	11	European
UM171	15.0	0.1	200	—	20.0	11	11	European

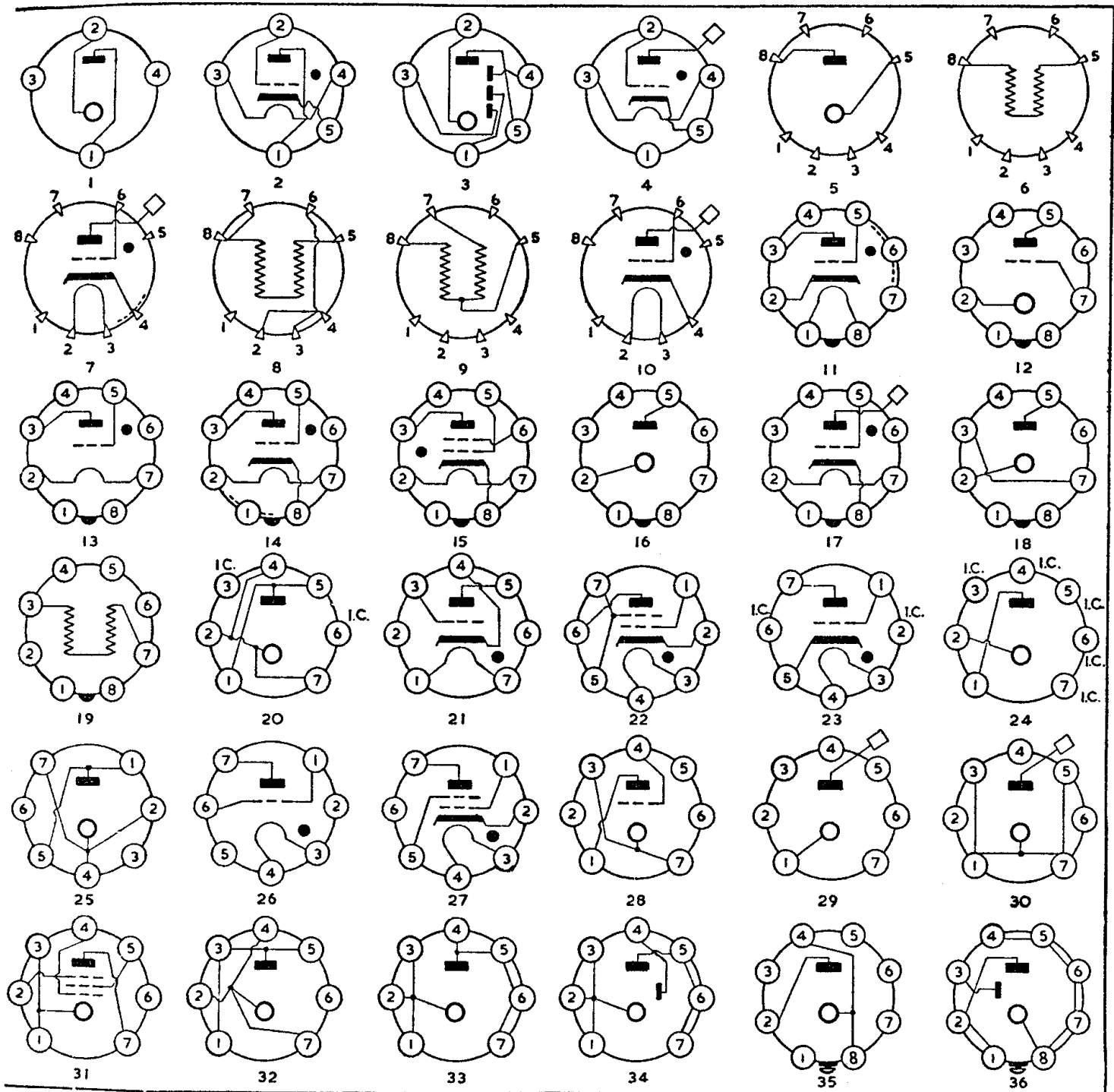


DIODE BASES—Contd.



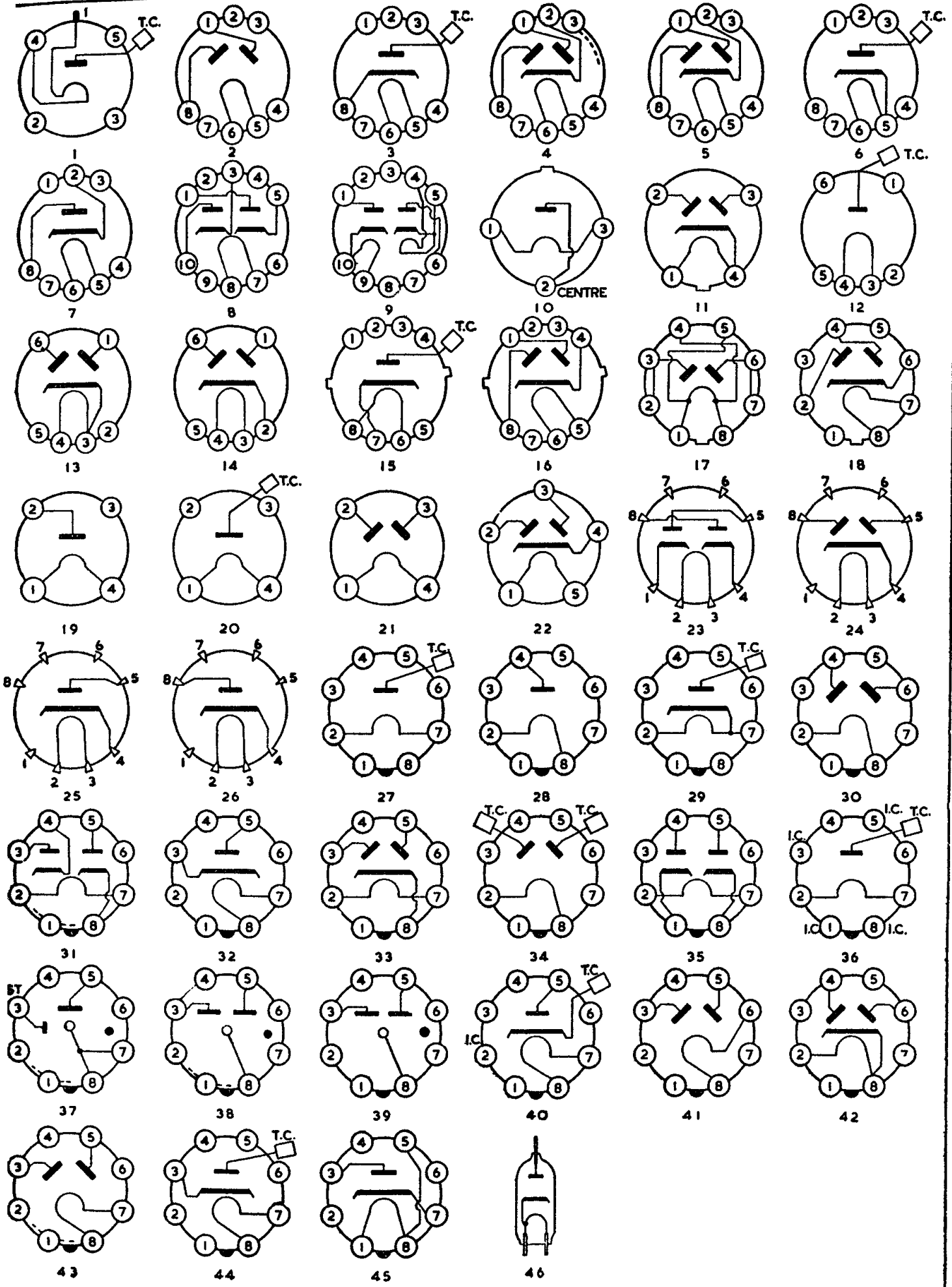
REGULATORS and THYRATRONS

Type	Used as	HEATER		STABILISED SUPPLY		STRIKING VOLTS	VOLTAGE DROP	TUBE CURRENT mA		Max. Anode	Max. Peak Current	Control Ratio	BASE		Maker
		Vf	If	Volts	Amps	Volts	Amps	Volts	Min.	Max.	Volts		Amps	Type	
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	
STV280/40	VR	—	—	280	—	420	—	35	60	—	—	—	—	3	
STV280/80	VR	—	—	280	—	420	—	70	100	—	—	—	—	3	
T31	Relay	4.0	1.5	—	—	—	40	—	—	200	0.5	20	—	4	
150A1	VR	—	—	150-170	—	205	—	1	8	—	—	—	P	5	
150C1P	VR	—	—	146-166	—	205	—	5	40	—	—	—	—	5	
1945	CR	—	—	—	0.275	—	80-120	—	—	—	—	—	—	6	
4690	Relay	4.0	1.3	—	—	—	—	—	—	500	0.75	35	—	7	
C8	CR	—	—	—	0.2	—	80-200	—	—	—	—	—	—	6	
C10	CR	—	—	—	0.2	—	35-100	—	—	—	—	—	—	8	
C12	CR	—	—	—	0.2	—	80-200	—	—	—	—	—	—	9	
							35-100								
EC50	Relay	6.3	1.3	—	—	—	35	—	—	1000	0.75	35	—	10	Mul.-Eupr
T41	Relay	4.0	1.5	—	—	—	40	—	—	400	0.5	20	M.O.	11	
1C21	Relay	Cold	—	—	—	—	—	—	—	145	0.1	—	I.O.	12	
2A4	Relay	2.5	2.5	—	—	—	15	—	—	200	1.25	100	—	13	
6K25	Relay	6.3	0.95	—	—	—	4	—	—	400	0.5	20	—	14	
6Q5	Relay	6.3	0.6	—	—	—	19	—	—	300	0.3	—	—	14	
20A2	Relay	6.3	1.0	—	—	—	9	—	—	600	1.25	—	—	15	
150C1K	VR	—	—	146-166	—	205	—	5	40	—	—	—	—	16	
502A	Relay	6.3	0.6	—	—	—	11	—	—	400	0.5	—	—	15	
884	Relay	6.3	0.6	—	—	—	100	—	—	300	0.3	—	—	14	
1267	Relay	—	—	—	—	—	76	—	—	225	0.225	—	—	12	
2050	Relay	6.3	0.6	—	—	—	—	—	—	650	—	—	—	15	
2051	Relay	6.3	0.6	—	—	—	16	—	—	350	0.375	—	—	15	
4687K	VR	—	—	90-100	—	130	—	10	40	—	—	—	I.O.	16	
EN31	Relay	6.3	1.3	—	—	—	35	—	—	1000	0.75	—	—	17	
OA4	Relay	—	—	—	—	—	76	—	—	225	0.225	—	—	12	
QS150/40	VR	—	—	150	—	160	—	5	40	—	—	—	—	18	
STV70/60	VR	—	—	70	—	105	—	5	60	—	—	—	—	18	
U30	CR	—	—	—	0.1	—	70-122	—	—	—	—	—	—	19	
1B46	VR	—	—	82	—	250	—	1	2	—	—	—	B7G	20	
2C4	Relay	2.5	0.65	350v. Anode	—	50v. Grid	5mA	—	—	—	—	—	—	21	
2D21	Relay	6.3	0.6	400v. Peak	—	—	—	—	—	—	—	—	—	22	
6D4	Relay	6.3	0.25	350 Anode Volts	—	50v. Grid	25mA	—	—	—	—	—	—	23	
20A3	Relay	6.3	0.6	—	—	—	8	—	—	650	.5	—	—	22	
90C1	VR	—	—	90	—	125	—	1	40	—	—	—	—	20	
150B2	VR	—	—	143-147	—	180	—	5	15	—	—	—	—	24	
5651	VR	—	—	87	—	115	—	1.5	3.5	—	—	—	—	25	
5662	Relay	6.3	0.15	—	—	—	—	—	—	200	20	—	—	26	
5663	Relay	6.3	0.15	500v. Peak	100mA	Peak	20mA	Average	—	—	—	—	—	27	
5696	Relay	6.3	0.15	—	—	—	—	—	—	500	100	250	—	22	
5727	Relay	6.3	0.6	—	—	—	—	—	—	650	500	—	—	22	
5823	Relay	—	—	—	—	—	—	—	—	200	100	—	—	28	
5962	VR	—	—	700	—	730	—	.005	.055	—	—	—	—	29	
6073	VR	—	—	150	—	185	—	5	30	—	—	—	—	25	
6074	VR	—	—	108	—	133	—	5	30	—	—	—	—	25	
CK1017	VR	—	—	700	—	800	—	.005	.055	—	—	—	—	30	
CK1022	VR	—	—	1000	—	1100	—	.005	.055	—	—	—	—	30	
OA5	Relay	—	—	750v. Anode	—	90v. Screen +	3v. Grid	85v. Pulse	—	—	—	—	—	31	
OG3	VR	—	—	85	—	125	—	1	10	—	—	—	—	32	
PL21	Relay	6.3	0.6	400v. Peak	—	—	—	—	—	—	—	—	—	22	
QS70/20	VR	—	—	70	—	95	—	2	20	—	—	—	—	33	
QS83/3	VR	—	—	83	—	130	—	1	5	—	—	—	—	20	
QS95/10	VR	—	—	95	—	110	—	2	10	—	—	—	—	34	
QS150/15	VR	—	—	150	—	177	—	2	15	—	—	—	—	34	
SM150-30	VR	—	—	150	—	185	—	5	30	—	—	—	—	20	
TXM100	Relay	6.3	0.6	400v. Peak	—	—	—	—	—	—	—	—	—	22	
305	CR	—	—	—	0.3	—	40-90	—	—	—	—	—	E.Sw.	—	
OE3	VR	—	—	85	—	125	—	1	8	—	—	—	B8G	35	
QS105/45	VR	—	—	105	—	150	—	5	45	—	—	—	—	36	
QS150/45	VR	—	—	150	—	180	—	5	45	—	—	—	—	36	



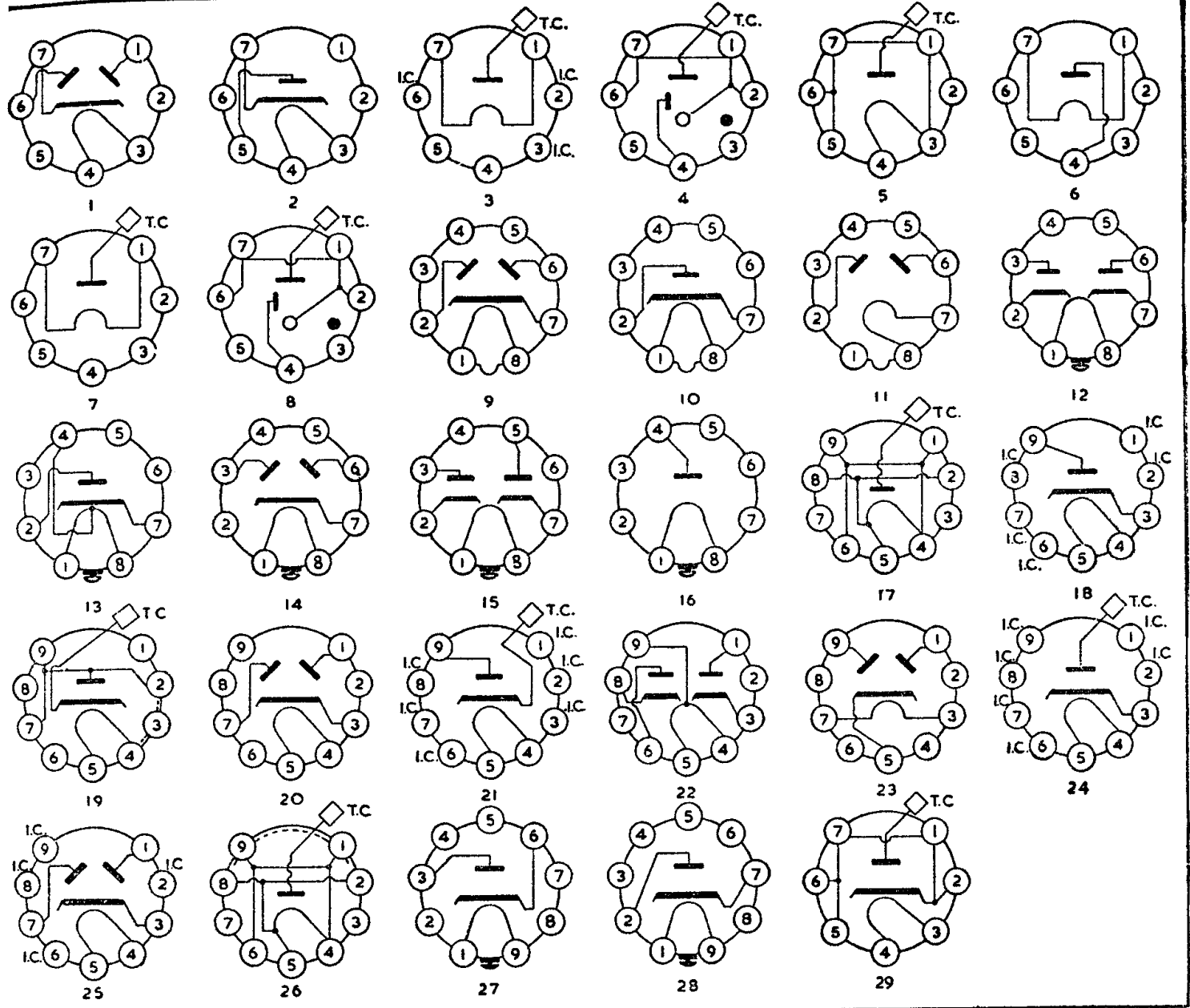
RECTIFIERS

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
5934	2.5	6.0	—	25.0	20000	—	—	BC4	1	U.S.A.
5695	2.5	3.0	—	150.0	5000	—	—	UX4	19	U.S.A.
5825	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	—	—		21	U.S.A.
6AW4	6.3	0.6	450	60.0	1250	—	—	UX5	22	European
CY2	30.0	0.2	250	120.0	—	32	125	P	23	European
EZ1	6.3	0.5	250	50.0	—	—	—		24	European
FZ1	13.0	0.25	250	50.0	—	—	—		24	European
UY2	26.0	0.1	250	45.0	—	—	—		25	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	—	—	—		26	European
VY2	30.0	0.05	250	20.0	—	—	—		25	European
VY2N	30.0	0.05	250	30.0	—	—	—		25	European
RG2-4D10	2.4	0.15	700	5.0	—	—	—		13	European
RG12D60	12.6	0.2	300	60.0	—	—	—	I.O.	14	European
2V3	2.5	5.0	5500	2.0	16500	—	—		27	U.S.A.
2W3	2.5	1.5	350	55.0	—	—	—		28	U.S.A.
2X3	2.5	2.0	500	125.0	—	—	—		28	U.S.A.
3B26	2.5	4.75	—	20.0	15000	—	—		29	U.S.A.
5AX4	5.0	2.5	350	175.0	1400	—	—		30	U.S.A.
6AW5	6.3	0.6	450	70.0	1250	—	—		31	U.S.A.
6AX4	6.3	1.2	—	125.0	4000	—	—		32	U.S.A.
6AX5	6.3	1.2	350	125.0	1250	—	50	TV Damp	33	U.S.A.
6AX6	6.3	2.5	350	250.0	1250	—	145	Diode	31	U.S.A.
6BY5	6.3	1.6	375	175.0	1400	—	100		35	U.S.A.
6W4	6.3	1.2	350	125.0	1250	20	—		32	U.S.A.
6Z6	6.3	0.5	350	50.0	—	—	—		31	U.S.A.
12AX4	12.6	0.6	—	125.0	4000	—	—		32	U.S.A.
19H4	2.5	1.7	—	5.0	20000	0.5	18000		27	Mazda
25W4	25.0	0.3	350	125.0	1250	20	—		32	U.S.A.
25X6	25.0	0.15	125	60.0	—	—	—		31	U.S.A.
50AX6	50.0	0.3	350	250.0	1250	—	—		31	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	—	150		33	U.S.A.
5931	5.0	3.0	450	225.0	1550	40	75		30	U.S.A.
6004	5.0	3.0	—	300.0	1400	—	—		34	U.S.A.
6215	1.25	0.2	—	1.0	18000	—	—		36	U.S.A.
8016	1.25	0.2	—	2.0	40000	—	—		29	U.S.A.
CK1003	—	—	—	110.0	880	—	—		39	U.S.A.
CK1005	6.3	0.1	160	70.0	450	—	—		41	U.S.A.
CK1007	1.0	1.2	285	110.0	980	—	—		43	U.S.A.
CK1024	—	—	—	175.0	1000	—	—		39	U.S.A.
DY30	1.25	0.2	—	2.0	40000	—	—		27	European
EZ33	6.3	0.65	400	100.0	—	—	—		33	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		42	European
OY4	—	—	117	75.0	300	—	—		37	U.S.A.
OZ4-A	—	—	—	110.0	880	—	—		38	U.S.A.
U41	1.25	0.2	—	2.0	35000	—	—		36	M.O.V.
U282	28.0	0.2	—	120.0	—	—	—		44	Mazda
U301	30.0	0.2	—	150.0	4500	—	—	TV Damp	40	Mazda
UY1N	50.0	0.1	250	140.0	—	60	175	Diode	45	European
LG3	12.6	0.18	5000	2.0	—	—	—	W8	15	European
RG12D300	12.6	0.8	500	300.0	—	—	—		16	European
LG5	1.2	0.5	300	40.0	—	—	—	WA8	17	European
AZ11	4.0	1.1	500	70.0	—	32	—	G8A	2	European
AZ12	4.0	2.3	500	120.0	—	60	—		2	European
EA111	6.3	1.4	250	80.0	—	—	—		3	European
EZ11	6.3	0.29	250	60.0	—	—	600		4	European
EZ12	6.3	0.85	500	100.0	—	—	300		5	European
RFG5	6.3	0.2	5500	2.0	—	—	—		6	European
UY11	50.0	0.1	250	140.0	—	60	175		7	European
EYY53	6.3	1.4	400	150.0	—	—	—	G10A	9	European
EZ150	6.3	3.0	500	560.0	—	32	—		8	European



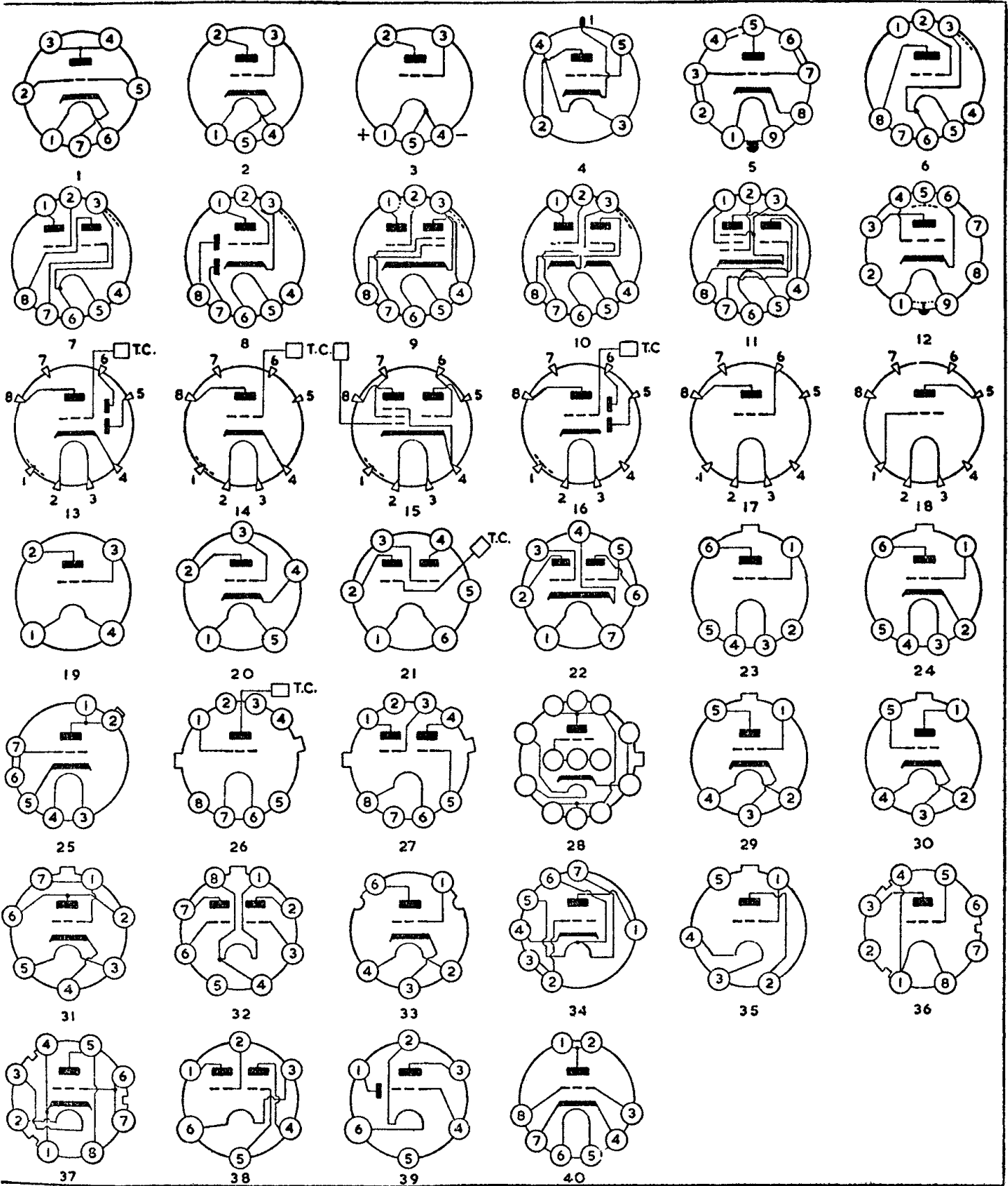
RECTIFIERS—Contd.

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	—	—	—		9	European
UY42	31.0	0.1	110	100.0	—	50	—		10	European
V41	4.0	0.75	500	60.0	—	—	—		11	European
V51	5.0	0.75	350	90.0	—	—	—		9	European
V61	6.3	0.6	350	90.0	—	50	300		9	European
7X6	6.3	1.2	235	75.0	700	—	100	B8G	12	U.S.A.
35Y4	35.0	0.15	235	100.0	700	—	—		13	U.S.A.
1274	6.3	0.5	350	70.0	1250	—	150		14	U.S.A.
EZ22	6.3	0.9	450	100.0	—	—	—		14	European
LG6	12.6	0.63	400	100.0	—	—	—		15	European
PY71	21.5	0.3	—	140.0	6000	TV Damp er Diode	—		16	European
1AX2	1.4	0.65	—	1.0	25000	—	—	B9A	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	—	—		17	U.S.A.
6U3	6.3	0.9	220	180.0	4000	TV Damp er Diode	—		18	U.S.A.
6V3	6.3	1.75	350	125.0	6000	20	145		19	U.S.A.
6V4	6.3	0.6	350	90.0	—	50	300		20	U.S.A.
17Z3	17.0	0.3	—	150.0	4500	TV Damp er Diode	—		21	U.S.A.
19BD	19.0	0.3	—	180.0	4000	TV Damp er Diode	—		18	Cossor
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	U.S.A.
6157	6.3	0.8	500	75.0	1400	32	50		24	Brimar
DY80	1.25	0.2	—	1.0	15000	—	—		17	European
EY80	6.3	0.9	220	180.0	4000	TV Damp er Diode	—		18	European
EY84	6.3	1.0	625	125.0	2000	24	250		24	Mullard
EZ80	6.3	0.6	350	90.0	—	50	300		25	European
PY81	17.0	0.3	—	150.0	4500	TV Damp er Diode	—		21	Mulld. Eu
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



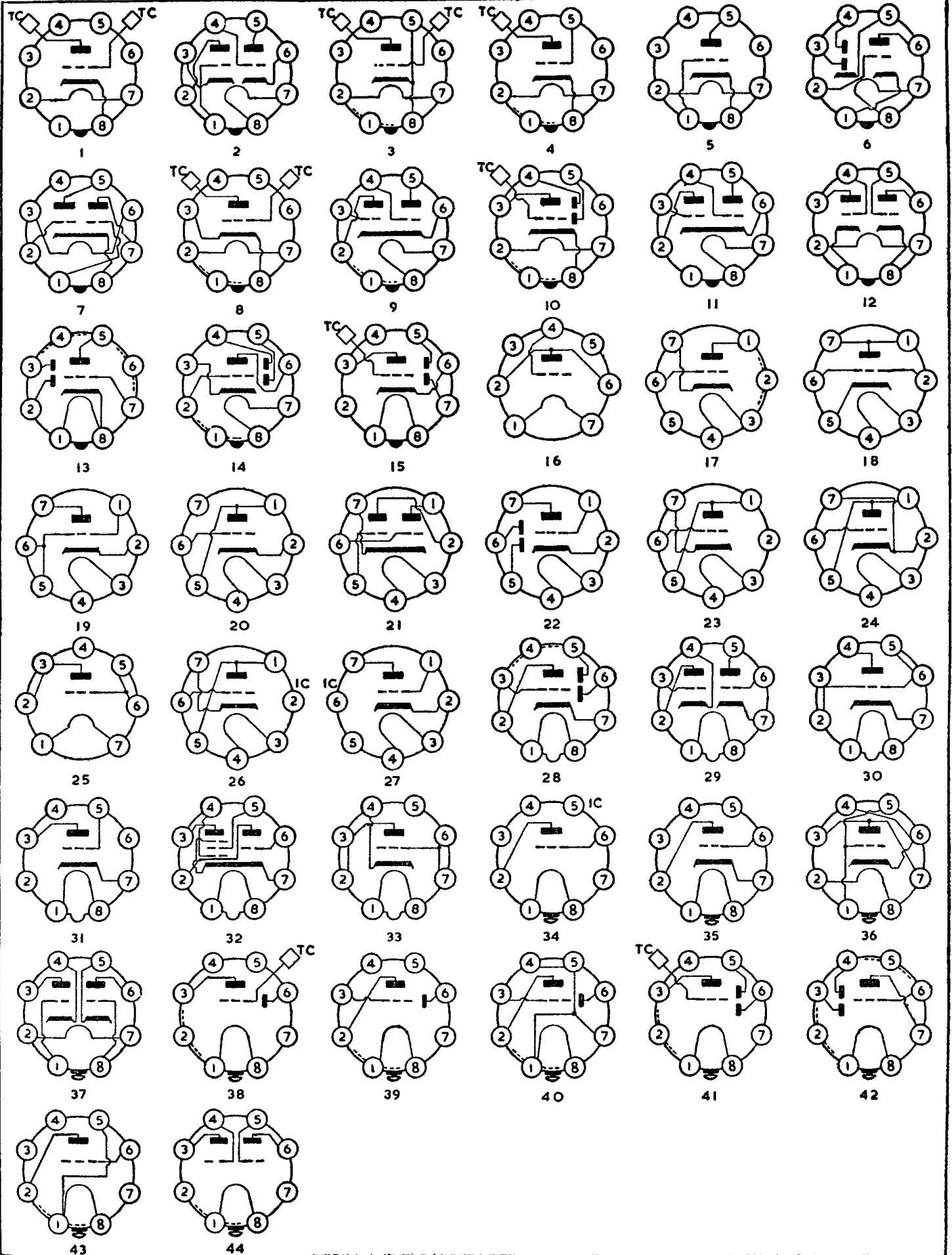
TRIODE AMPLIFIERS

Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	r _k 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	AcornD	1	U.S.A.
6L4	6.3	0.225	80	9.5	—	4.4	6.4	28	150		1	U.S.A.
955	6.3	0.15	250	6.3	7.0	11.4	2.2	25	—	Acorn B	2	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	—	—		4	European
DC11	1.25	0.025	120	2.0	4.5	15.0	1.0	15	—	BC4	6	European
DDD11	1.2	0.1	120	1.5	4.5	20.0	0.85	17	—	G8A	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
5893	6.3	0.33	200	25.0	—	4.5	6.0	27	100	Pencil	—	U.S.A.
DC41W	1.2	0.025	90	2.0	4.0	—	0.85	—	—	WC8	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	—		20	U.S.A.
5674	3.8	0.09	5.0	0.02	3.5	Electrometer	—	—	—	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.

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.	
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	—	B8A	28	Cossm
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	

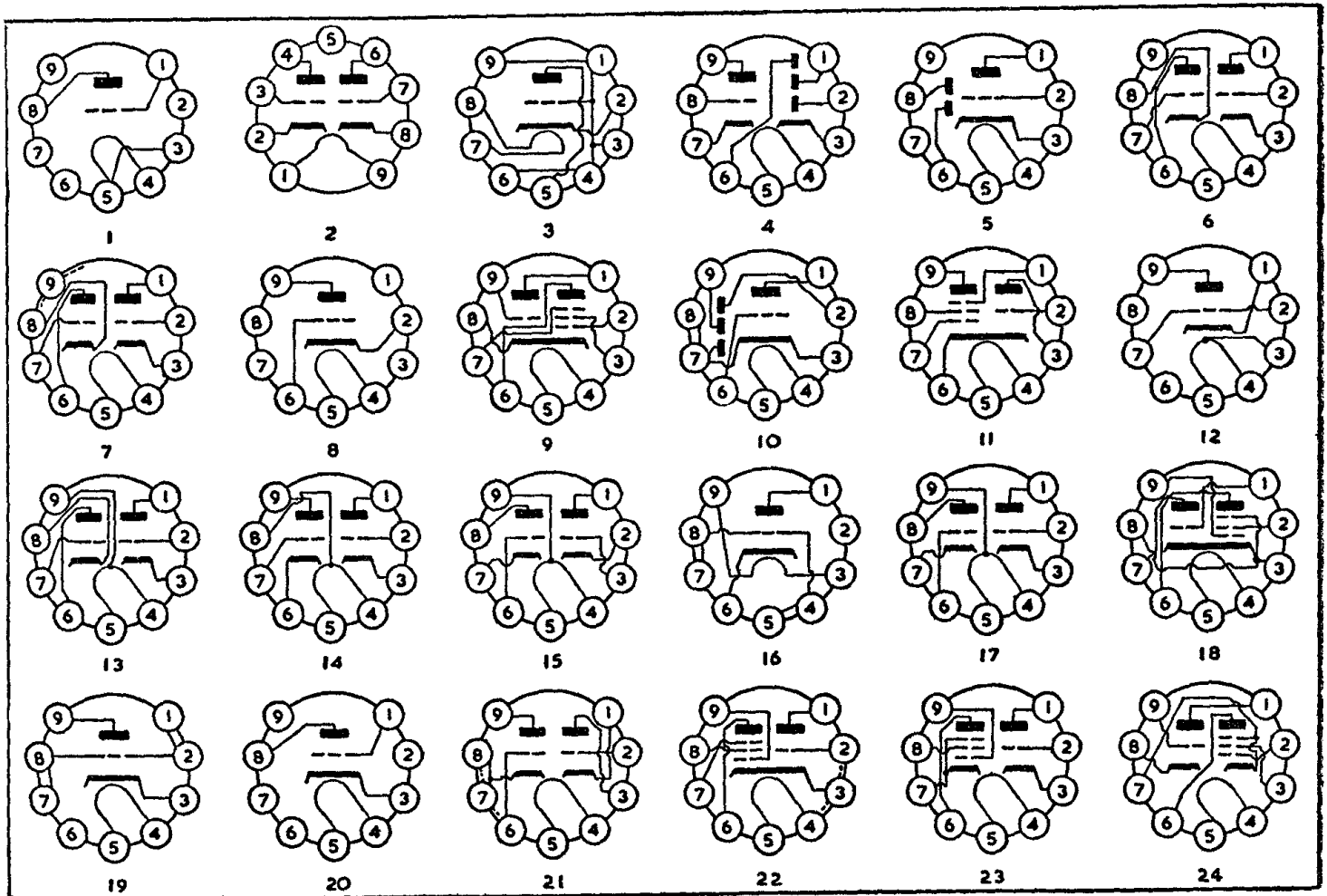


TRIODE AMPLIFIERS—Contd.

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	U.S.A.		
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.

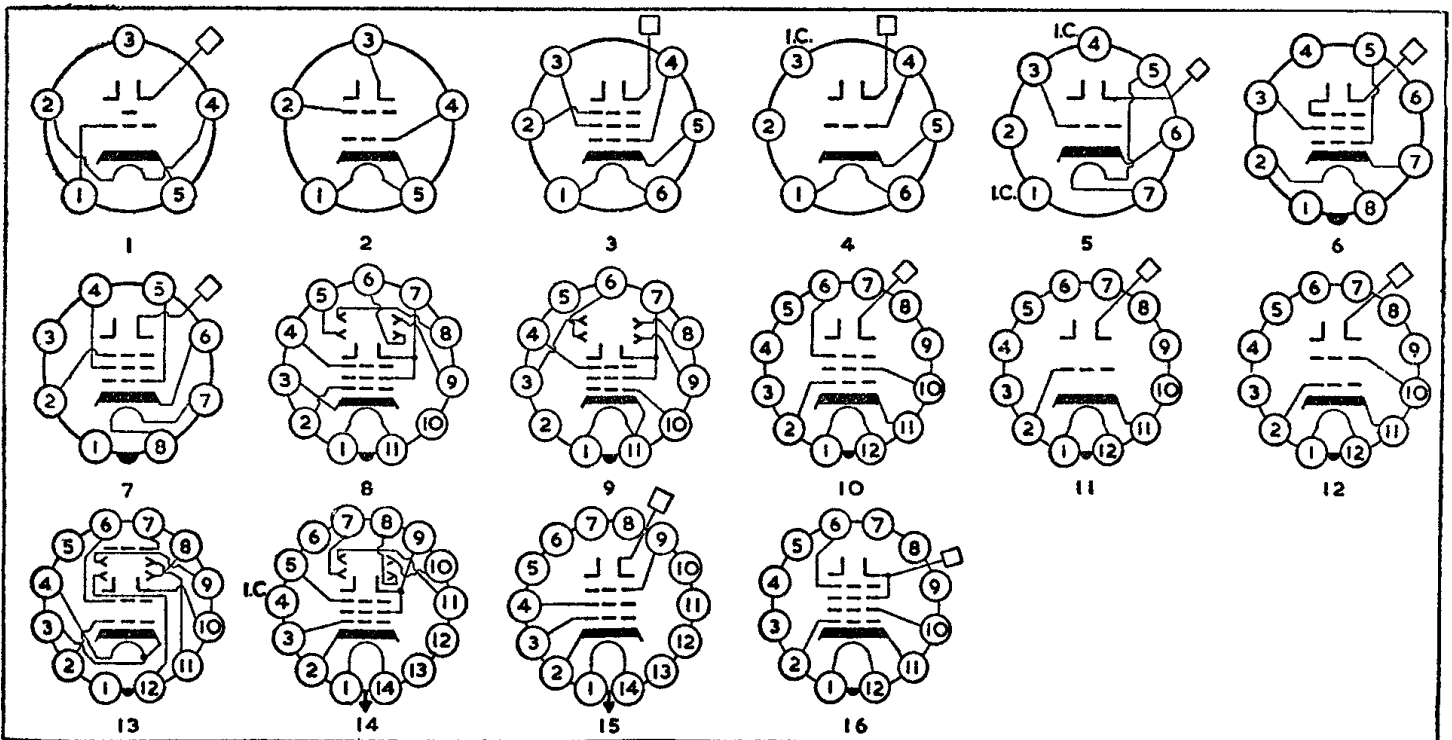
Type	FILAMENT or HEATER		ANODE		Negative Grid Volts	ra kΩ	gm mA/V	Amp Factor	Rk Ω	BASE		Maker
	Volts	Amps	Volts	I/mA						Type	Ref.	
ECC84	6.3	0.4	90	12.0	1.5	3.7	6.2	23	—	B9A	21	European Mul.-Eupn.
ECC85	6.3	0.45	200	11.0	2.0	7.0	6.8	48	—		7	
HABC80	19.0	0.15	250	1.0	3.0	58.0	1.2	70	—	4	European	
LN152	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	
	6.3	0.3										
UABC80	28.0	0.1	250	1.0	3.0	58.0	1.2	70	—	4	Mul.-Eupn.	



TELEVISION C.R.T.'s—Contd.

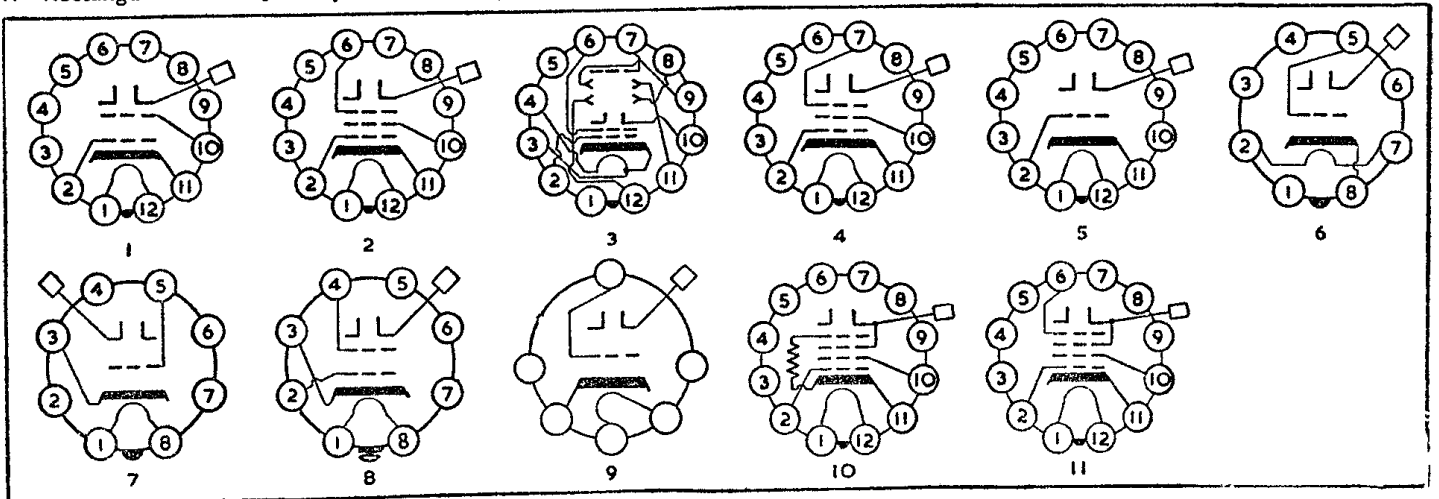
Type	Dia. in inches	Remarks	HEATER		2ND or FINAL ANODE		Focus Anode	ACC	MODULATOR		Focus A/T or Focus/Def. Method	Def. Angle	BASE		Maker	
			Volts	Amps	Volts	I/μA			Volts Swing	Volts Cut Off			Type	Ref.		
16CP4	Tetrode	16	ϕ	6.3	0.6	12000	—	—	250	—	27-63	MG/MG	52	B12A	12	U.S.A.
16DP4	Tetrode	16	ϕ	6.3	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	RG¶*	6.3	0.6	14000	—	—	300	—	33-77	MG/MG	70		12	U.S.A.
16KP4-A	Tetrode	16	RGA¶*	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	RG¶*	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.



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/ftA			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	—		6	Brimar
C12FM	Tetrode	12	¶*	6.3	0.3	7000	175	—	200	25	40	600	63	B12A	1	Brimar
C14BM	Triode	14	AR¶	6.3	0.6	12000	250	—	—	30	50-100	800	70		5	Brimar
C14FM	Tetrode	14	RA¶*	12.6	0.3	12000	150	—	300	30	33-77	800	70		1	Brimar
C14GM	Hexode	14	RA*¶¶	12.6	0.3	12000	—	0	300	30	33-77	ES/MG	70		11	Brimar
C17BM	Triode	17	AR¶	6.3	0.6	15000	150	—	—	30	40-70	850	70		5	Brimar
C17FM	Tetrode	17	RA¶*	12.6	0.3	14000	150	—	300	30	33-77	850	70		1	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	B12A	1	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	—	—	33	59-127	MG/MG	70		5	Mazda
CRM153	Tetrode	15	—	12.6	0.3	15000	—	—	400	33	59/127	MG/MG	70		1	Mazda
CRM171	Tetrode	17	—	12.6	0.3	16000	—	—	400	33	59/127	MG/MG	70		1	Mazda
MW31-7	Tetrode	12	—	6.3	0.6	9000	100	—	350	—	40	750	63	B8G	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	—	33-77	MG/MG	70		1	Eupn.Mul.
MW36-44	Pentode	14	R*	6.3	0.3	14000	—	—	250	—	65	1075	70		4	Eupn.-Mul
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		1	Mullard
MW43-43	Pentode	17	RG¶*	6.3	0.3	14000	—	—	300	—	40-86	1065	70		4	Eupn.-Mul
MW43-61	Tetrode	17	R*	6.3	0.3	14000	—	—	400	—	43-103	MG/MG	70		1	European
MW43-64	Pentode	17	RG*	6.3	0.3	14000	—	—	300	—	43-77	MG/MG	65		4	Mul.-Eupn
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		2	European
T12/71U	Triode	12	—	8.0	0.3	9000	150	—	—	32	60	800	—	I.O.	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	—	—	32	70	800	—		6	Ferranti
T12/404	Triode	12	A	4.0	0.95	9000	150	—	—	30	55	800	—		6	Ferranti
T12/449	Triode	12	—	4.0	0.95	9000	150	—	—	30	54	800	—		6	Ferranti
T12/504	Triode	12	A¶	4.0	0.95	9000	150	—	—	30	55	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	B12A	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. φ=Double ion trap. ¶¶=Metal Cone
 R=Rectangular tube. §=Projection tube. ‡=Intended for cathode modulation.



SUB-MINIATURE VALVES

Type		FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r _a (kΩ)	g _m (mA/V)	Anode Load Ω	Output (in W)
		Volts	Amps	Volts	I/mA	Volts	I/mA					
IAC5	L.F. Pentode	1.25	0.04	67.5	2.0	67.5	0.4	4.5	150	0.75	25000	50
IAD1	Pentode	1.25	0.1	45	2.8	45	0.8	—	500	2.0	—	—
IAD5	Pentode	1.25	0.04	67.5	1.85	67.5	0.75	0	700	0.735	—	—
IAE5	Converter	1.25	0.06	45	0.9	45	2.0	—	200	0.2	—	—
IAG4	L.F. Pentode	1.25	0.04	41.5	2.4	41.5	0.6	3.6	180	1.0	12000	35
IAG5	Diode Pen.	1.25	0.03	45	0.8	45	0.25	—	260	0.35	—	—
IAH4	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	0.13	90	2.6	—	—	1.0	18.7	1.15	—	—
		1.2	0.26									
6AD4	Triode	6.3	0.15	100	1.4	—	—	820*	26	2.7	—	—
6AK4	Triode	6.3	0.15	200	9.5	—	—	680*	5.3	3.8	—	—
6AZ5	Rectifier	6.3	0.15	150 Volts RMS		D.C.I. = 4 mA.		420 P.I.V.				
6AZ6	Rectifier	6.3	0.15	200 Volts RMS		D.C.I. = 20 mA.		450 P.I.V.				
6BA5	Pentode	6.3	0.15	100	4.8	100	1.25	270*	1500	3.3	—	—
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	—	—	—	—	—	—
5798	Twin Triode	26.5	0.09	26.5	15	—	—	—	21	—	—	—
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 μA. Operating	Current.					
5851	L.F. Pentode	2.5	0.055	5.5	125	0.9	7.5	7.5	175	1.6	—	—
		1.25	0.1									
5854	L.F. Pentode	1.25	0.03	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.

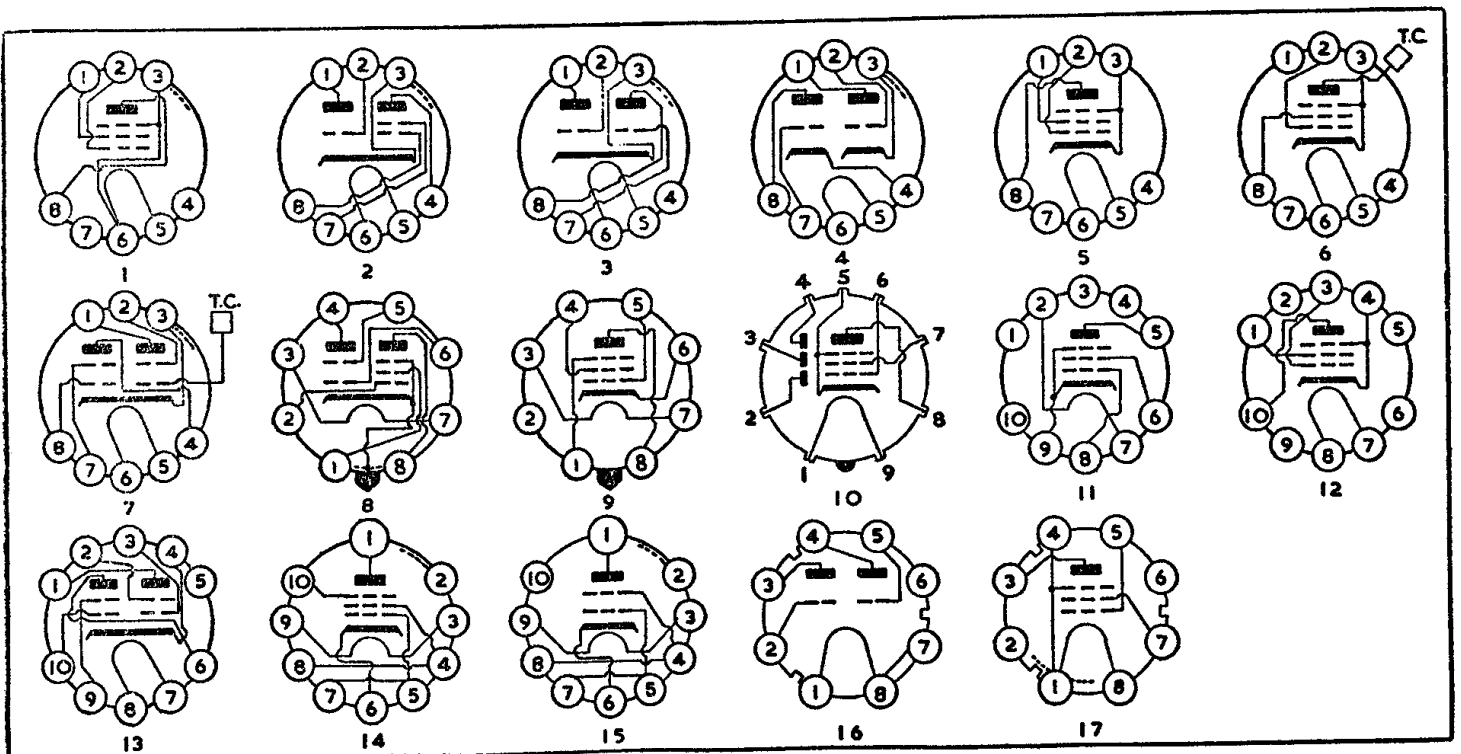
Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra (kΩ)	gm (mA/V)	Anode Load Ω	Output (mW)
	Volts	Amps	Volts	I/mA	Volts	I/mA					
5886	Pentode	1.25	0.01	10.5	0.2	—	—	—	0.16	—	—
5889	Pentode	1.25	0.007	12	0.005	4.5	0.005	2	18000	0.014	—
5896	Twin Diode	6.3	0.3	460 V. P.I.V. D.C.I. = 10 mA.				—	—	—	—
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.				—	—	—	—
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.				—	—	—	—
6055	Triode	26.5	0.045	26.5	3.0	—	—	—	3.8	5.0	—
6056	Pentode	26.5	0.045	26.5	2.7	26.5	1.1	—	125	3.0	—
6088	L.F. Pentode	1.25	0.02	22.5	0.3	22.5	0.08	0	—	0.45	1.2
6092	L.F. Pentode	1.25	0.05	67.5	2.9	67.5	0.8	6.5	—	0.75	20000
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	—
		1.2	0.12								
6148	Pentode	6.3	0.2	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.				—	—	—	—
6190	Triode	6.3	0.2	250	4.0	—	—	500*	—	5.0	—
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	—
		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	—
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

SUB-MINIATURE VALVES—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	r _a (kΩ)	g _m (mA/V)	Anode Load Ω	Output (mW)		
	Volts	Amps	Volts	I/mA	Volts	I/mA							
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	Thyratron	—	—	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.				—	—	—	—	—	—
EC53	Triode	6.3	0.25	200	7.5	—	—	3.3	11.5	2.9	—	—	
EC70	Triode	6.3	0.15	200	11.5	—	—	680*	4.65	3.45	—	—	
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	—	—	+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.				—	—	—	—	—	—
SN1016	Pentode	6.3	0.15	100	7.5	100	3.0	150*	200	5.0	—	—	
SN1039A	Pentode	6.3	0.15	100	7	100	2.2	150*	300	5.0	—	—	
X8066	Pentode	6.3	0.2	100	7	100	2.2	—	180	3.0	—	—	

OUTPUT VALVES

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE		Maker
	Volts	Amps	Volts	l/mA	Volts	l/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	European
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

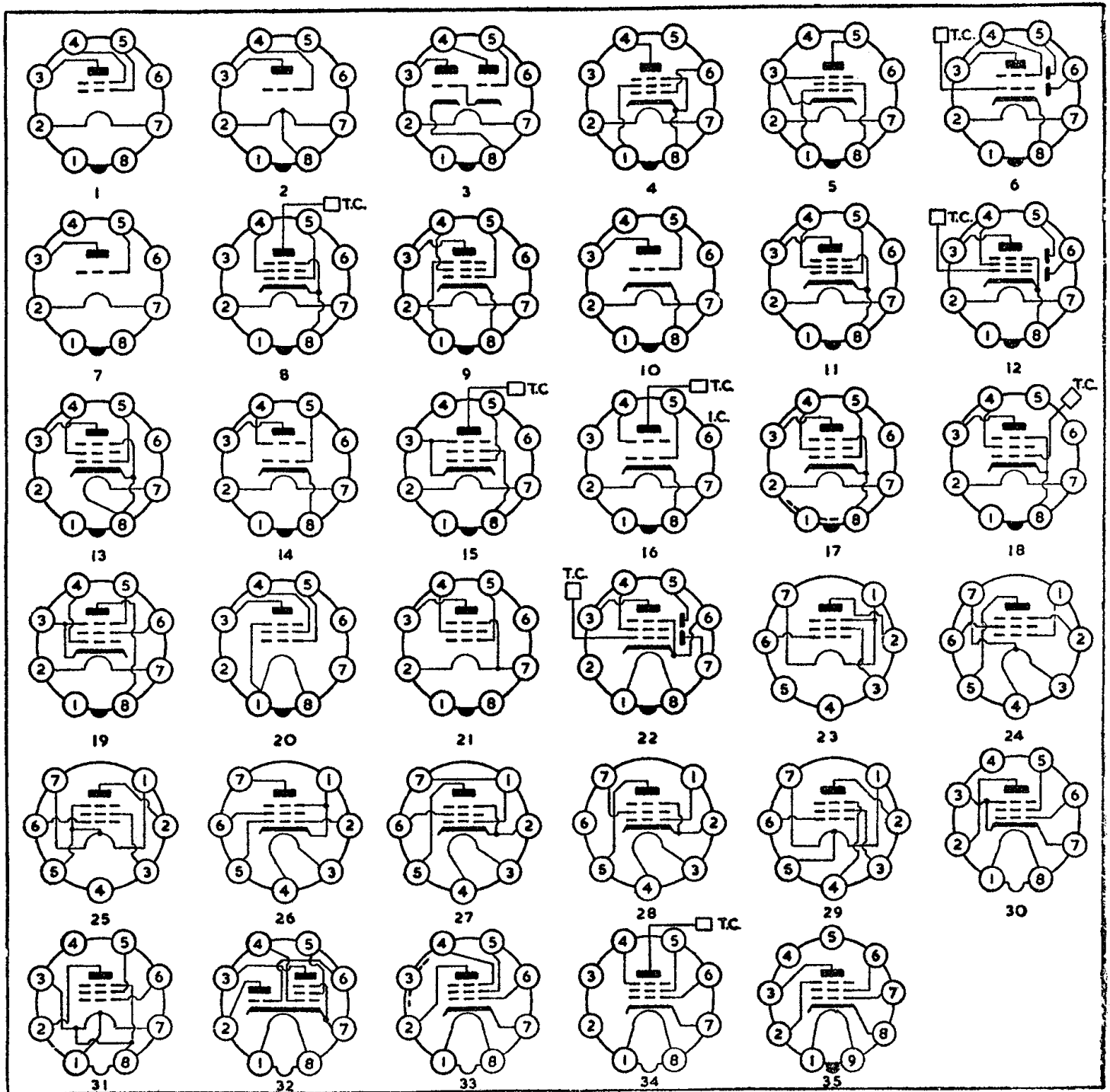


OUTPUT VALVES—Contd.

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	—		1	U.S.A.
1T	2.8	0.05													
6AC6	1.4	0.1	90	9.9	90	1.4	4.5	128.0	2.1	8000	0.27	7.5		2	European
6AH5	6.3	1.1	180	45.0	180	7.0	0	18.0	3.0	3500	3.6	—		3	U.S.A.
6AU5	6.3	0.9	350	54.0	250	2.5	18.0	33.0	5.2	4200	10.8	—		4	U.S.A.
6AV5	6.3	1.25	315	59.0	150	9.0	250*	Line Time Base Amplifier					5	U.S.A.	
6AY8	6.3	1.2	250	55.0	150	2.1	22.5	—	5.8	Line Time Base Amplifier				5	U.S.A.
6B4	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
6BD5	6.3	1.0	250	60.0	—	—	45.0	0.8	5.2	2500	3.2	5.0		7	U.S.A.
6BQ6	6.3	0.9	310	—	310	(Max. lk=100 MA.)	—	—	—	mA) Line Time Base Amplifier			I.O.	5	U.S.A.
6BY8	6.3	1.2	250	55.0	150	2.1	22.5	—	5.5	Line Time Base Amplifier			I.O.	8	U.S.A.
6CA7	6.3	1.25	250	44.0	250	2.4	4.0	100.0	12.0	6000	4.5	9.0		6	European
6D5	6.3	1.5	265	100.0	250	14.0	13.5	15.0	11.0	2000	12.0	10.0		9	U.S.A.
6PX6	6.3	0.7	275	71.0	—	—	40.0	2.3	2.1	7200	1.4	—		10	U.S.A.
6PZ8	6.3	0.9	250	35.0	250	5.0	6.0	65.0	9.0	6000	4.5	—		11	European
6V5	6.3	1.25	250	35.0	250	5.0	6.0	65.0	9.2	6000	4.5	—		12	European
12V6	6.3	0.45	250	45.0	250	4.5	12.5	—	—	—	4.5	—		13	U.S.A.
20P3	12.6	0.225	250	47.0	250	7.0	12.5	52.0	4.1	5000	4.5	8.0		11	U.S.A.
20P4	20.0	0.2	195	51.0	210	12.7	11.5	—	7.4	3700	4.5	7.0		14	Mazda
25AC5	38.0	0.2	400	—	250	(Max. lk=100 MA.)	—	—	—	Line Time Base Amplifier				16	U.S.A.
25AV5	25.0	0.3	110	45.0	—	—	+15	15.2	3.8	2000	2.0	—		10	U.S.A.
25CD6	25.0	0.3	250	45.0	150	2.1	22.5	—	5.8	Line Time Base Amplifier				5	U.S.A.
25W6	25.0	0.6	200	64.0	150	3.0	30.0	Line Time Base Amplifier					15	U.S.A.	
26BQ6	25.0	0.3	110	50.0	110	10.0	7.5	130.0	8.0	2000	2.1	—		11	U.S.A.
50CD6	25.0	0.3	250	55.0	150	2.1	22.5	—	5.8	Line Time Base Amplifier				16	U.S.A.
1611	50.0	0.3	200	64.0	150	3.0	30.0	Line Time Base Amplifier					15	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		11	U.S.A.
1614	6.3	0.7	285	38.0	285	12.0	20.0	78.0	2.5	7000	4.8	9.0		17	U.S.A.
1621	6.3	0.9	350	66.0	250	7.0	18.0	33.0	5.2	4200	10.8	15.0		11	U.S.A.
1622	6.3	0.7	285	38.0	285	12.0	20.0	78.0	2.5	7000	4.8	9.0		17	U.S.A.
1624	6.3	0.9	350	66.0	250	7.0	18.0	33.0	5.2	4200	10.8	15.0		11	U.S.A.
1631	2.5	2.0	300	45.0	250	5.0	10.0	—	4.5	8800	3.0	—		14	U.S.A.
1632	12.6	0.45	350	66.0	250	7.0	18.0	33.0	5.2	4200	10.8	15.0		11	U.S.A.
1637	12.6	0.6	200	55.0	110	7.0	8.0	30.0	9.5	3000	4.3	10.0		11	U.S.A.
5603	6.3	0.2	250	32.0	250	5.0	18.0	70.0	2.8	8000	3.6	10.0		18	U.S.A.
5659	6.3	0.5	135	50.0	135	4.0	230*	17.0	5.4	2500	2.2	—		19	U.S.A.
5824	12.6	0.15	250	32.0	250	5.5	12.5	—	—	7500	3.4	—		17	U.S.A.
5871	25.0	0.3	135	61.0	135	2.5	22.0	15.0	5.0	1700	4.3	—		11	U.S.A.
5881	6.3	0.45	315	34.0	225	2.2	13.0	77.0	3.75	8500	5.5	—		11	U.S.A.
5932	6.3	0.9	350	53.0	250	2.5	18.0	48.0	5.2	4200	11.3	—		11	U.S.A.
5992	6.3	0.9	350	66.0	250	7.0	18.0	33.0	5.2	4200	10.8	15.0		11	U.S.A.
6046	6.3	0.6	250	47.0	250	7.0	12.5	45.0	4.0	5000	4.0	8.0		11	U.S.A.
DL21	25.0	0.3	200	55.0	110	7.0	8.0	30.0	9.5	3000	4.3	10.0		11	U.S.A.
DL36	1.4	0.05	120	5.0	120	0.9	4.8	350.0	1.4	24000	0.27	10.0		20	European
EL34	1.4	0.1	90	9.5	90	1.3	4.5	75.0	2.2	8000	0.27	6.0		21	European
UBL1	6.3	1.5	265	100.0	250	14.0	13.5	15.0	11.0	2000	12.0	10.0		9	Mul.-Eupn.
1W4	55.0	0.1	200	55.0	200	11.0	11.5	20.0	8.5	3500	5.2	10.0		22	European
2E30	1.4	0.05	90	5.0	90	1.0	9.0	250.0	0.9	12000	0.2	—	B7G	23	U.S.A.
3C4	6.0	0.65													
3E5	3.0	1.3	250	40.0	250	3.3	20.0	63.0	3.7	4500	4.5	—		24	U.S.A.
6AS5	2.8	0.025													
6BF5	1.4	0.05	85	5.0	85	1.0	5.2	—	1.4	14000	0.2	—		25	U.S.A.
6BJ5	2.8	0.025													
6BM5	1.4	0.05	90	8.0	90	1.6	7.0	100.0	1.55	8000	0.25	—		25	U.S.A.
9BM5	6.3	0.8	150	36.0	110	6.5	8.5	—	5.6	4500	2.2	10.0		26	U.S.A.
12AS5	6.3	1.2	110	49.0	110	4.0	7.5	10.0	7.5	2500	1.9	—		27	U.S.A.
5618	6.3	0.64	250	35.0	250	5.5	5.0	46.0	10.5	7000	4.0	—		28	U.S.A.
5812	6.3	0.45	250	30.0	250	3.0	6.0	60.0	7.0	7000	3.5	—		27	U.S.A.
6005	9.5	0.3	250	30.0	250	3.0	6.0	60.0	7.0	7000	3.5	—		27	U.S.A.
BPMO4	12.6	0.4	150	36.0	110	6.5	8.5	—	5.6	4500	2.2	10.0		26	U.S.A.
DL96	6.0	0.23													
DL907	3.0	0.46	250	20.5	75	4.5	8.0	—	3.6	12000	1.4	—		29	U.S.A.
EL90	6.3	0.65	250	40.0	250	1.8	23.0	55.0	4.1	—	—	—		24	U.S.A.
	6.3	0.45	250	46.0	250	6.0	12.5	52.0	4.1	5000	4.5	—		27	U.S.A.
	6.3	0.45	250	47.0	250	7.0	12.5	52.0	4.1	5000	4.5	—		27	European
	2.8	0.025													
	1.4	0.05	85	5.0	85	1.0	5.2	—	1.4	14000	0.2	—		25	European
	1.2	0.2	120	15.0	120	3.5	5.8	60.0	2.7	—	—	—		23	European
	6.3	0.45	250	47.0	250	7.0	12.5	52.0	4.1	5000	4.5	—		27	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.	
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

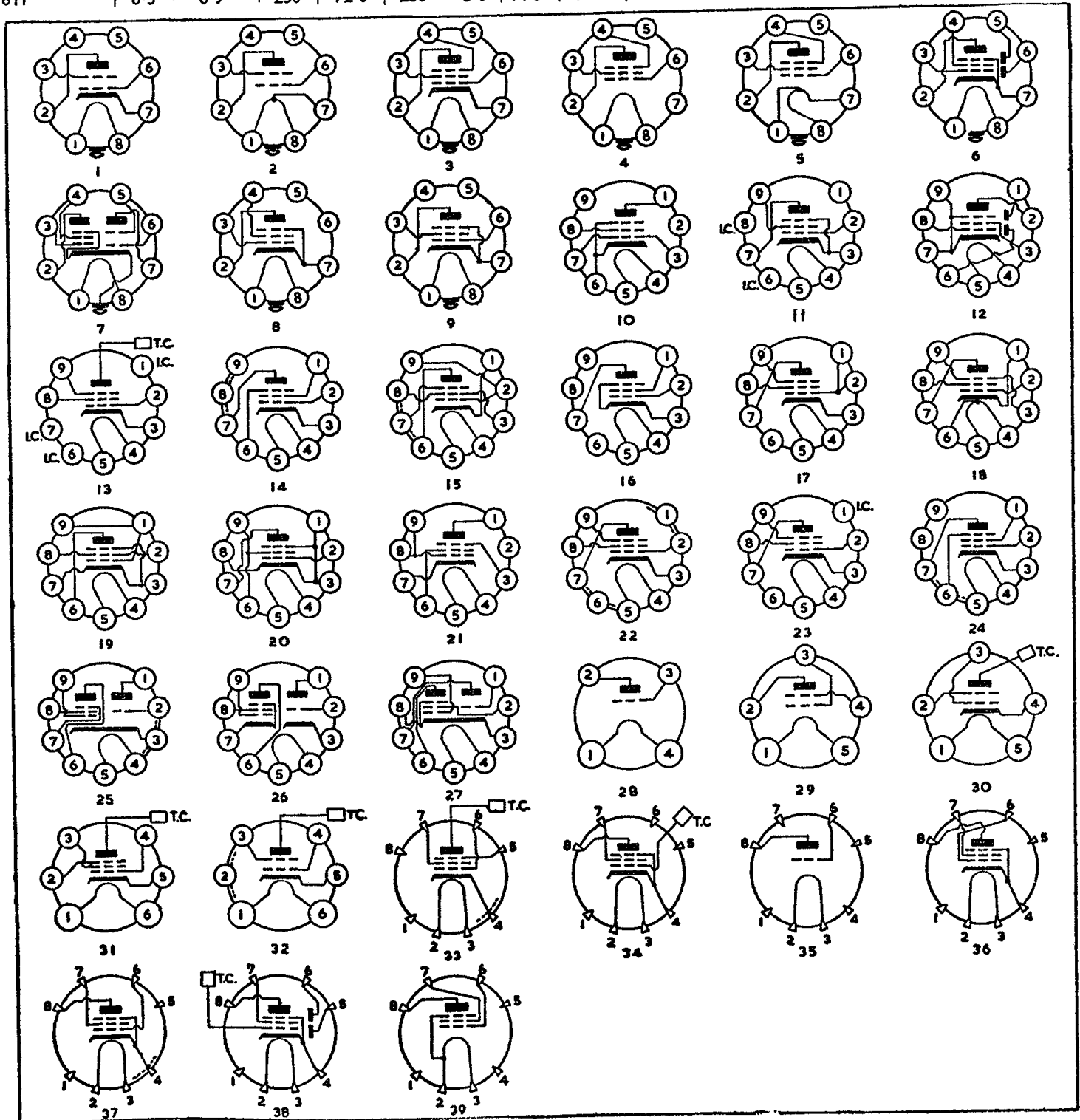


OUTPUT VALVES—Contd.

Type	FILAMENT or HEATER		ANODE		SCREEN		Neg. Grid Volts	ra kΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	B.		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	—	B9A	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	180	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	—	—	B9A	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	—	P	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	
AL5	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	ra 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	UX4	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	—	UX5	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	—	UX6	34	European
20	3.3	0.132	135	6.0	—	—	22.5	5.85	0.6	6500	0.13	—		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	UX6	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

