

**APPENDIX C
VALVE RATINGS AND CHARACTERISTICS**

AMPLIFYING VALVES

Type	Equivalents		Description	Cathode Type	Filament or Heater		Maximum Ratings			Characteristics						
	U.S.	European			V _b	V _{g2}	p _a (W)	V _b	V _{g2}	I _b	-V _{g1}	μ	r _a (kΩ)	g _m (mA/V)		
B65	6SN7GT	—	Double triode	Heater	6-3	0-6	250	—	2-5	250	—	—	8	20	7-7	2-6
B309	12A77	ECC81	Double triode	Heater	12-6/6-3	0-15/0-3	300	—	2-5	250	—	—	2-5	55	10-0	5-5
B329	12AU7	ECC82	Double triode	Heater	12-6/6-3	0-15/0-3	300	—	2-75	250	—	—	8-5	17	7-7	2-2
B339	12AX7	ECC83	Double triode	Heater	12-6/6-3	0-15/0-3	300	—	1	250	—	—	2	100	62-5	1-6
B719	6AQ8	ECC85	Double triode	Heater	6-3	0-435	300	—	2-5	250	—	—	2	58	9-7	6-0
DA42	—	—	Class B triode	Heater	7-5	1-2	1250	—	40	1250	—	40	—	72	24-0	3-0
DA100	—	—	Class AB triode	Filament	6-0	2-0	1250	—	100	1000	—	100	—	5-5	1-41	3-9
DH77	6AT6	EBC90	Double diode triode ...	Heater	6-3	0-3	250	—	2-5	250	—	—	3	70	58-0	1-2
KT33C	—	—	Beam pentode	Heater	25/13	0-3/0-6	200	200	13	175	175	—	7	—	22-0	10-0
KT55	—	—	Beam pentode	Heater	52	0-3	400	300	25	200	175	125	—	—	5-0	19-0
KT61	6AG6G	—	Beam pentode	Heater	6-3	0-95	275	275	10	250	250	40	—	—	70-0	10-5
KT66	—	—	Beam pentode	Heater	6-3	1-27	500	400	25	250	250	—	15	—	22-5	6-3
KT88	—	—	Beam pentode	Heater	6-3	1-8	600	600	35	250	250	140	—	—	12-0	11-0
L63	6J5GT	—	Triode	Heater	6-3	0-3	250	—	2-5	250	—	—	8	20	7-7	2-6
LN309	—	PCL83	Triode-pentode {Triode : Pentode :	Heater	12-6	0-3	250 250	—	3-5 5-4	250 165	—	—	8-5 9	17 45-0	7-7 4-7	2-2 4-7
N709	6BQ5	EL84	Output pentode	Heater	6-3	0-76	300	300	12	250	250	48	—	—	38-0	11-3
V1505	—	—	Class AB triode	Filament	14	6-5	3000	—	275	2000	—	150	—	16	2-0	8-0
Z729	6267	EF86	Low noise pentode ...	Heater	6-3	0-2	300	200	—	250	140	—	2	—	2-0	1-85

RECTIFIERS

Type	Equivalents		Description	Cathode Type	Filament or Heater		PIV	V _{a(rms)}	I _{a(pk)} (mA)	I _{out} (mA)	t _{on} (seconds)
	U.S.	European			Voltage	Current					
GXU1	3B28	—	Xenon half-wave	Filament	2-5	5-0	10000	—	1000	250	5
GXU50	—	—	Xenon half-wave	Filament	4-0	3-0	5200	1750	1000	250	30
U19	—	—	Vacuum half-wave	Filament	4-0	3-3	7100	2500	1500	250	20*
U31	—	—	Vacuum half-wave	Heater	26-0	0-3	710	250	720	120	—
U50	5Y3G	—	Vacuum bi-phase half-wave ...	Filament	5-0	2-0	1000	350	370	120	—
U52	5U4G	—	Vacuum bi-phase half-wave ...	Filament	5-0	2-25	1430	500	770	250	—
U54	—	—	Vacuum bi-phase half-wave ...	Heater	5-0	2-8	1250	500	1500	250	—
U78	6X4	EZ90	Vacuum bi-phase half-wave ...	Heater	6-3	0-6	1250	325	210	70	—
U709	—	EZ81	Vacuum bi-phase half-wave ...	Heater	6-3	0-95	1000	350	450	150	—

*Only when PIV exceeds 5kV.

BARRETTERS (Base : E.S. ; Max. length : 123.5 mm ; Max. diameter : 57 mm)

303 : 0.3A, 86-129V.

304 : 0.3A, 95-165V.

305 : 0.3A, 40-90V.

<p>B65 Base : Octal</p>	<p>B309, B329, B339 Base : B9A</p>	<p>B719 Base : B9A</p>
<p>DA42 Base : Med. 4-pin Bayonet</p>	<p>DA100 Base : Special</p>	<p>DH77 Base : B7G</p>
<p>KT33C Base : Octal</p>	<p>KT55 Base : Octal</p>	<p>KT61, KT66 Base : Octal</p>
<p>KT88 Base : Octal</p>	<p>L63 Base : Octal</p>	<p>LN309 Base : B9A</p>

<p>N709 Base : B9A</p>	<p>V1505 Base : Special</p>	<p>Z779 Base : B9A</p>
<p>GXU1 Base : Med. 4-pin (UX4)</p>	<p>GXU50, U19 Base : B4</p>	<p>U31 Base : Octal</p>
<p>U50, U52 Base : Octal</p>	<p>U54 Base : Octal</p>	<p>U78 Base : B7G</p>
<p><i>Viewed from underside of base</i></p>		<p><i>B4 : British 4-pin B7G: All glass (Button) B9A: All glass (Nival)</i></p>
<p>U709 Base : B9A</p>		