THE

SUPER RADIOTRON

VALVE MANUAL

First Edition, November 1961

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AMALGAMATED WIRELESS VALVE CO. PTY. LTD.
47 YORK STREET, SYDNEY

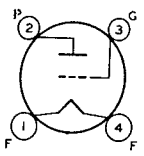
RECEIVING VALVE DATA

Receiving valves in this manual are classified according to the number of electrodes, as follows:

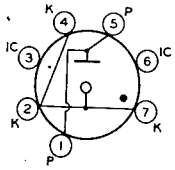
2 Diode	4B Beam Tetrode
2R Rectifier	5 Pentode
3 Triode	6 Hexode
4 Tetrode	7 Heptode

For valve equivalents, see page 98

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c2} volts	E_{c1} volts	I_b ma	I_{c2} ma	r_p MΩ	g_m μmhos	
0OA	3	Grid Leak Detector	5·0	0·25	45		0	1·5		0·03	666	$\mu = 20$
01A	3	Class A Amplifier	5·0	0·25	90	—	−4·5	2·5	—	0·011	725	$\mu = 8·0$
					135		−9·0	3·0		0·01	800	$\mu = 8·0$
0A2	2	Voltage Regulator			Starting Voltage = 155 volts Operating Voltage = 150 volts Operating Current = 5·0 to 30 ma							
0A3	2	Voltage Regulator			Starting Voltage = 100 volts Operating Voltage = 75 volts Operating Current = 5·0 to 40·0 ma							
0A4G	3	Relay Tube			Peak Cathode Current = 100 ma Starter Anode Drop = 60 volts DC Cathode Current = 25 ma max.							
0A5	5	Switching			750	Trigger Grid = 90 volts Trigger Grid Res. = 0·25 MΩ Trigger Pulse Voltage = 85 volts						
0B2	2	Voltage Regulator			Starting Voltage = 115 volts Operating Voltage = 108 volts Operating Current = 5·0 to 30 ma							
0B3	2	Voltage Regulator			Starting Voltage = 125 volts Operating Voltage = 90 volts Operating Current = 10·0 to 30 ma							
0C2	2	Voltage Regulator			Starting Voltage = 105 volts Operating Voltage = 75 volts Operating Current = 5·0 to 30 ma							
0C3	2	Voltage Regulator			Starting Voltage = 135 volts Operating Voltage = 105 volts Operating Current = 5·0 to 40 ma							
0D3	2	Voltage Regulator			Starting Voltage = 180 volts Operating Voltage = 150 volts Operating Current = 5·0 to 40 ma							
0G3	2	Voltage Regulator			Starting Voltage = 125 volts Operating Voltage = 85 volts Operating Current = 1·0 to 8·0 ma							
0Y4 0Y4G	2R	Half-wave Rectifier			Max. PIV = 300 volts Max. DC Starting Voltage = 95 volts AC Voltage/Plate = 117 volts (rms)							Max. Peak I_b = 500 ma Max. DC Output = 75 ma
0Z4	2R, 2R	Full-wave Rectifier			Starting Supply Voltage/Plate = 300 min. peak volts Peak Plate Current = 200 ma max. DC Output Current = 75 ma max. 30 ma min. DC Output Voltage = 300 volts max.							
0Z4A	2R, 2R	Full-wave Rectifier			Starting Supply Volts/Plate = 300 volts (rms) DC Output Current = 110 ma max. 30 ma min.							
0Z4G	2R, 2R	Rectifier			*See* 0Z4 Characteristics							
1A3	2	Detector Rectifier	1·4	0·15	Max. PIV = 330 volts Max. Peak Plate Current = 5·0 ma							Max. DC Output = 0·5 ma Max. DC H-K Voltage = 140 v
1A4P	5	Amplifier	2·0	0·06	*See* 1D5GP Characteristics							
1A5GT	5	Class A Amplifier	1·4	0·05	85	85	−4·5	3·5	0·7	0·3	800	R_L = 25KΩ, W_o = 0·10 watts
					90	90	−4·5	4·0	0·8	0·3	850	R_L = 25 KΩ, W_o = 0·115 watts
1A6	7	Converter	2·0	0·06	135	67·5	−3·0	1·2	2·5	0·4	275	R_{g1} = 50KΩ
					180	G_{3+5} 67·5	G_4 −3·0	1·3	2·4	0·5	g_c 300	I_{c1} = 0·2 ma
1A7GT	7	Converter	1·4	0·05	90	G_{3+5} 45	G_4 0		0·7		g_c 250	E_{c2} = 90 v, 1·2 ma R_{g1} = 200 KΩ I_{c1} = 0·035 ma



00-A
01-A



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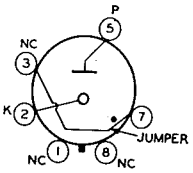

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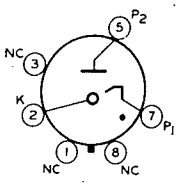

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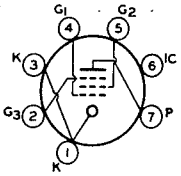

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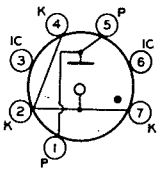

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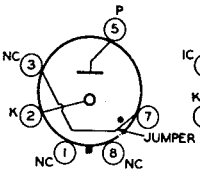

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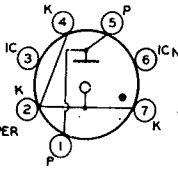

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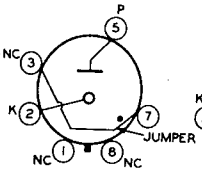

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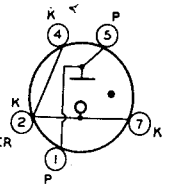

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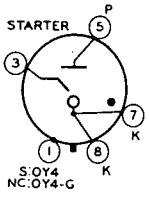

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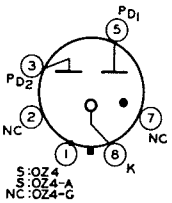
0Y4-G



0Z4
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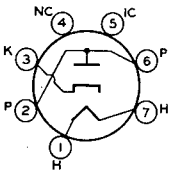
0Z4-G



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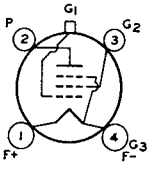

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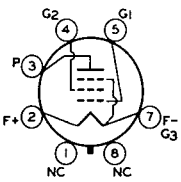

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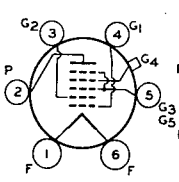

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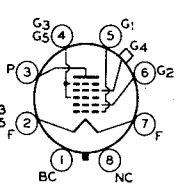
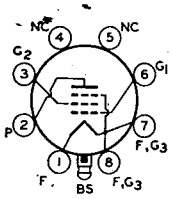


1A7-GT

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c2} volts	E_{c1} volts	I_b ma	I_{c2} ma	r_p MΩ	g_m μmhos	
1AB5	5	RF Amplifier	1·2	0·13	90 150	90 150	0 −1·5	3·5 6·8	0·8 2·0	0·275 0·125	1100 1350	
1AB6	7	Converter	1·4	0·025	85	G_4 65	G_2 0	0·65	G_4 0·17		g_c 300	E_{c2} = 35 v, 1·5 ma R_{g1} = 27 KΩ I_{c1} = 85 μa
1AC6	7	Converter	1·4	0·05	85	G_4 60	G_3 0	0·65	0·14	1·0	g_c 325	E_{c2} = 30 v, 1·65 ma R_{g1} = 27 KΩ I_{c1} = 0·13 ma
1AE4	5	RF Amplifier	1·25	0·1	90	90	0	3·5	1·2	0·5	1550	
1AF5	2, 5	Detector Amplifier	1·4	0·025	90	90	0	1·1	0·4	2·0	600	
1AH5	2, 5	Detector Amplifier	1·4	0·025	90	90	0	1·1	0·4	1·6	400	
1AJ4	5	RF Amplifier	1·4	0·025	90	90	0	1·65	0·55	1·0	750	
1AM4	5	RF Amplifier	1·4	0·025	90	67·5	0	2·4	0·9	0·5	350	G_1 voltage for 10 μmhos = −16 volts
1AQ5	7	Converter	1·4	0·025	90	G_{2+4} 45	G_3 0	0·64	0·8		g_c 250	R_{g1} = 0·1 MΩ I_{c1} = 0·14 ma
1AR5	2, 5	Amplifier	1·4	0·025	67·5	67·5	0	0·9	0·25	0·8‡	500	
1AS5	2, 5	Amplifier	1·4	0·025	67·5	67·5	0	0·9	0·25	0·8‡	500	
1AX2	2R	EHT Rectifier	1·4	0·65	Max. PIV = 25,000 volts Max. Peak Plate Current = 11 ma							Max. Average Plate Current = 1 ma
1B3GT	2R	EHT Rectifier	1·25	0·2	Max. PIV = 30,000 volts Max. Peak Plate Current = 17 ma							Max. Average Plate Current = 2 ma Max. Supply Freq. = 300 Kc
1B4P	5	Amplifier	2·0	0·06	*See* 1E5GP Characteristics							
1B7GT	7	Converter	1·4	0·10	90	G_4 45	G_3 0	1·5	G_4 1·3	0·35	g_c 350	E_{c2} = 90 v, 1·6 ma R_{g1} = 0·2 MΩ
1C3	3	Amplifier	1·4	0·05	90 90	—	0 −3·0	4·5 1·4	—	·0112‡ ·019‡	1300 760	μ = 14·5 μ = 14·5
1C4	5	RF Amplifier	2·0	0·12	*See* 1M5G Characteristics							
1C5GT	7	Class A Amplifier	1·4	0·10	83 90	83 90	−7·0 −7·5	7·0 7·5	1·6 1·6	0·11 0·115	1500 1550	R_L = 9·0 KΩ, W_o = 0·2 watts, μ = 165 R_L = 8·0 KΩ, W_o = 0·24 watts, μ = 180
1C6	7	Converter	2·0	0·12	*See* 1C7G Characteristics							
1C7G	7	Converter	2·0	0·12	135 180	67·5 G_{3+5} 67·5	−3·0 G_4 −3·0	1·3 1·5	2·5 2·0	0·6 0·7	300 g_c 325	E_{c2} = 180 v, 4·0 ma R_{g1} = 50 KΩ I_{c1} = 0·2 ma

‡ Approx.



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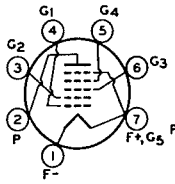

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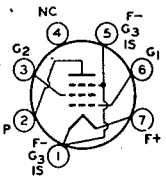

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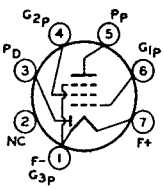

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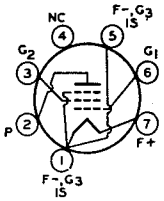

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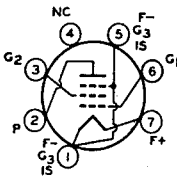

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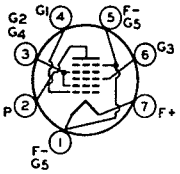

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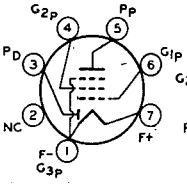

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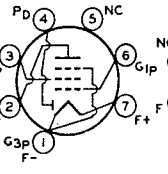

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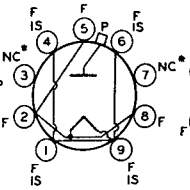
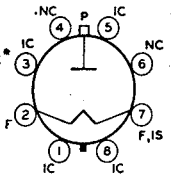


1AX2

*May be connected to filament, otherwise do not use.



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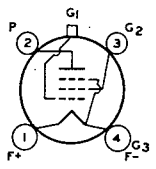

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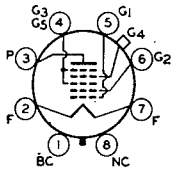

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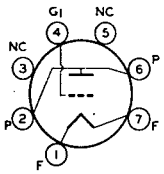

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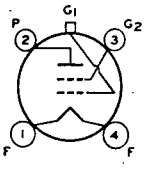

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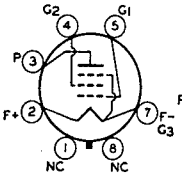

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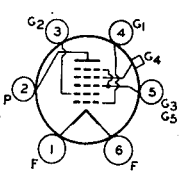

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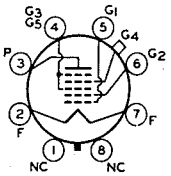
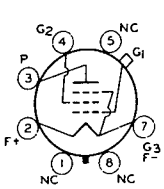


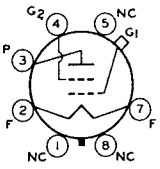
1C7-G

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
1D5GP	5	Class A Amplifier	2·0	0·06	90	67·5	−3·0 min.	2·2	0·9	0·6	720	
					180	67·5		2·3	0·8	1·0	750	
1D5GT	4	Class A Amplifier	2·0	0·06	180	67·5	−3·0	2·2	0·7	0·6	650	
1D7G	7	Converter	2·0	0·06	*See* 1A6 Characteristics							
1D8GT	2, 3, 5	Pentode Amplifier	1·4	0·10	90	90	−9·0	5·0	1·0	0·2	925	R_L = 12·0 KΩ, W_o = 0·2 watts
		Triode Amplifier			45	—	0	0·3	—	0·077	325	μ = 25
					90		0	1·1		0·0435	575	μ = 25
1DN5	2, 5	Class A Amplifier	1·4	0·5	67·5	67·5	0	2·1	0·55	0·6	630	
1E3	3	UHF Amplifier	1·25	0·2	150		−3·5	20			3500	W_o = 0·45 watts at 470 Mc, μ = 14
1E5GP	5	Class A Amplifier	2·0	0·06	90	67·5	−3·0	1·6	0·7	1·0	600	
					180	67·5	−3·0	1·7	0·6	1·5	650	
1E7GT	5, 5	Class A Amplifier	2·0	0·24	135	135	−7·5	7·0	2·0			R_L = 24 KΩ, W_o = 0·575 watts
1F4	5	Amplifier	2·0	0·12	*See* 1F5G Characteristics							
1F5G	5	Class A Amplifier	2·0	0·12	90	90	−3·0	4·0	1·1	0·24	1400	R_L = 20·0 KΩ, W_o = 0·11 watts
					135	135	−4·5	8·0	2·4	0·2	1700	R_L = 16·0 KΩ, W_o = 0·31 watts
1F6	2, 2, 5	Pentode Amplifier	2·0	0·06	*See* 1F7G Characteristics							
1F7G	2, 2, 5	Pentode RF Amplifier	2·0	0·06	180	67·5	−1·5	2·2	0·7	1·0	650	R_L = 24·0 KΩ, W_o = 0·57 watts
		Pentode AF Amplifier			135●	135	−2·0					R_{g_2} = 0·8 MΩ, R_p = 0·25 MΩ, μ_g = 46
1G3GT/ 1B3GT	2R	TV Damper Diode	1·25	0·2	Max. PIV = 26,000 volts (Abs.) Max. Average Plate Current = 0·5 ma Max. Peak Plate Current = 50 ma							
		HV Rect. (RF)			Max. PIV = 33,000 volts (Abs.) Max. Average Plate Current = 1·0 ma Max. Peak Plate Current = 30 ma							
1G4GT	3	Class A Amplifier	1·4	0·05	90	—	−6·0	2·3	—	0·0107	825	μ = 8·8
1G5G	5	Class A Amplifier	2·0	0·12	90	90	−6·0	8·5	2·5	0·133	1500	R_L = 8·5 KΩ, W_o = 0·25 watts
					135	135	−13·5	8·7	2·5	0·16	1550	R_L = 9·0 KΩ, W_o = 0·55 watts
1G6GT	3, 3	Class B Amplifier	1·4	0·10	90	—	0	1·0	—	0·045	675	R_L = 12,000 Ω†, μ = 33, W_o = 0·35 watts
1H2	2R	Flyback Half-wave Rectifier	1·4	0·55	Max. PIV = 24,000 volts Max. Peak Plate Current = 50 ma Max. Average Plate Current = 0·5 ma							
1H4G	3	Class A Amplifier	2·0	0·06	90		−4·5	2·5		0·011	850	μ = 9·3
					180		−13·5	3·1		0·0103	900	μ = 9·3
		Class B Amplifier			157·5		−15·0	1·0▼	R_L = 8·0 KΩ, W_o = 2·1 watts ▼			
1H5GT	2, 3	Triode Class A Amplifier	1·4	0·05	90	—	0	0·15		0·24	275	μ = 65
1H6G	2, 2, 3	Triode Class A Amplifier	2·0	0·06	135	—	−3·0	0·8	—	0·035	575	μ = 20

▼ Two valves. ● Plate supply voltage. †Plate-to-plate.



1D5-GP



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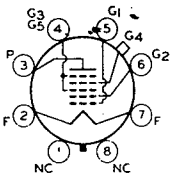

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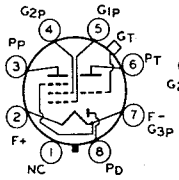
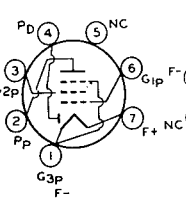


1D8-GT



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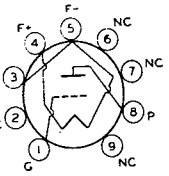

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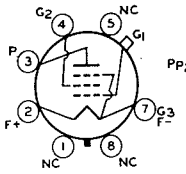

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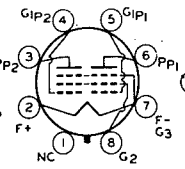

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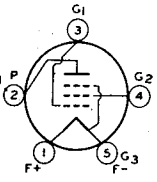
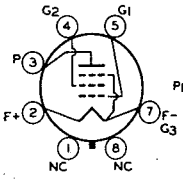
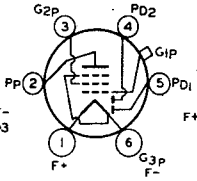


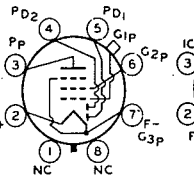
1F4



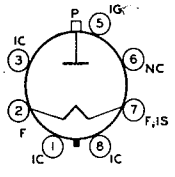
1F5-G



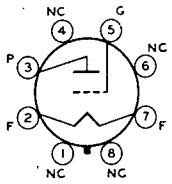
1F6



1F7-G



1G3-GT/1B3-GT



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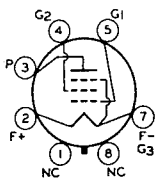
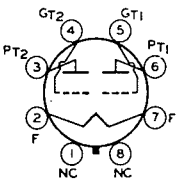


1G5-G



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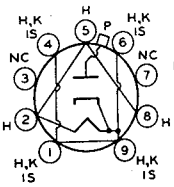
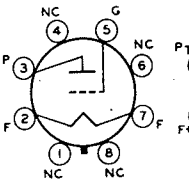
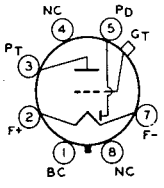


1H2



1H4-G



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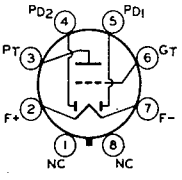
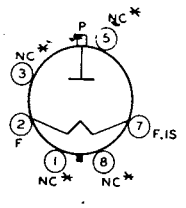


1H6-GT

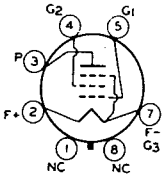
TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c2} volts	E_{c1} volts	I_b ma	I_{c2} ma	r_p MΩ	g_m μmhos	
1J3	2R	Flyback Half-wave Rectifier	1·25	0·2	Max. PIV = 26,000 volts Max. Average Plate Current = 0·5 ma Max. Peak Plate Current = 50 ma							
1J5G	5	Class A Amplifier	2·0	0·12	135	135	−16·5	7·0	2·0	0·105	950	R_L = 13·5 KΩ, W_o = 0·45 watts
1J6G 1J6GT	3, 3	Class B Amplifier	2·0	0·24	135 135		0 −3·0	10·0 3·4				R_L = 10·0 KΩ,† W_o = 2·1 watts R_L = 10·0 KΩ,† W_o = 1·9 watts
1K3	2R	Flyback Half-wave Rectifier	1·25	0·2	Max. PIV = 26,000 volts Max. Peak Plate Current = 50 ma Max. Average Plate Current = 0·5 ma							
1L4	5	Class A Amplifier	1·4	0·05	90 90	67·5 90	0 0	2·9 4·5	1·2 2·0	0·6 0·35	925 1025	
1L6	7	Converter	1·4	0·05	90	G_{3+5} 45	G_4 0	0·5	0·6	0·65	g_c 300	E_{c2} = 90 v, 1·2 ma R_{g1} = 0·2 MΩ
1LA4	5	Amplifier	1·4	0·05	*See* 1A5GT Characteristics							
1LA6	7	Converter	1·4	0·05	90	G_{3+5} 45	G_4 0	0·55	0·6	0·75	g_c 250	E_{c2} = 90 v, 1·2 ma R_{g1} = 0·2 MΩ I_{c1} = 35 μa
1LB4	5	Class A Amplifier	1·4	0·05	*See* 1D8GT Characteristics							
1LC5	5	Class A Amplifier	1·4	0·05	45 90	45 45	0 0	1·10 1·15	0·35 0·30	0·7 1·0	750 775	
1LC6	7	Converter	1·4	0·05	90	G_{3+5} 35	G_4 0	0·75	0·7	0·65	g_c 275	E_{c2} = 45 v, 1·4 ma R_{g1} = 0·2 MΩ I_{c1} = 35 μa
1LD5	2, 5	Pentode Class A Amplifier	1·4	0·05	90	45	0	0·6	0·1	0·75	575	
1LE3	3	Class A Amplifier	1·4	0·05	90 90	— —	0 −3	4·5 1·4	 —	0·012 0·019	1300 760	μ = 14·5 μ = 14·5
1LF3	3	Amplifier	1·4	0·05	90		−3	1·4			760	μ = 14·5
1LG5	5	Class A Amplifier	1·4	0·05	90 90	45 90	0 −1·5	1·7 3·7	0·4 0·9	1·0 0·5	800 1150	
1LH4	2, 3	Triode Class A Amplifier	1·4	0·05	*See* 1H5GT Characteristics							
1LN5	5	Class A Amplifier	1·4	0·05	90	90	0	1·6	0·35	1·1	800	
1N5GT	5	Class A Amplifier	1·4	0·05	90	90	0	1·2	0·3	1·5	750	
1N6G	2, 5	Pentode Class A Amplifier	1·4	0·05	90	90	−4·5	3·4	0·7	0·3	800	R_L = 25 KΩ, W_o = 0·1 watts

† Plate to plate.

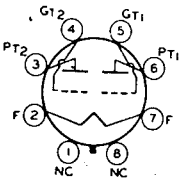


1J3

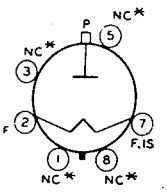
*May be connected to filament, otherwise do not use.



1J5-G

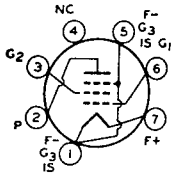


1J6-G
1J6-GT

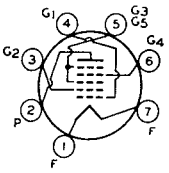


1K3

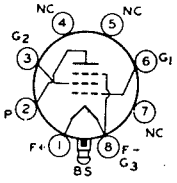
*May be connected to filament, otherwise do not use.
Pins 4 and 6 included on some of this type



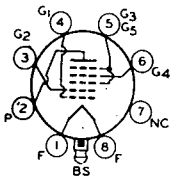
1L4



1L6



1LA4



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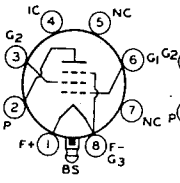

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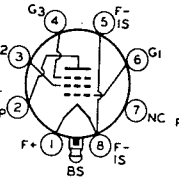

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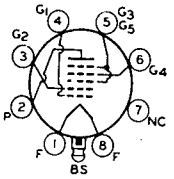

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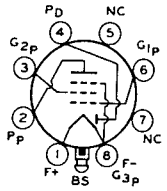
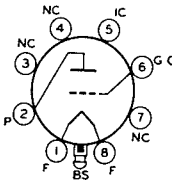
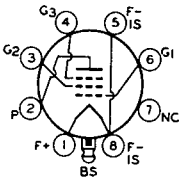


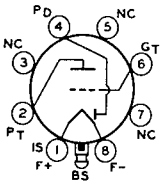
1LD5



1LE3
1LF3



1LG5



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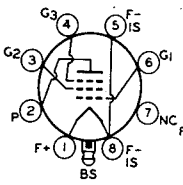
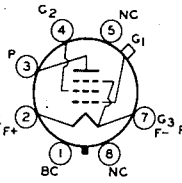
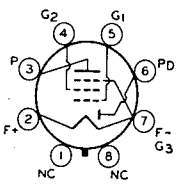


1LN5



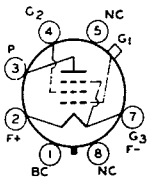
1N5-GT



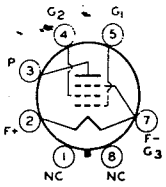
1N6-G

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
1P5GT	5	Class A Amplifier	1·4	0·05	90	90	0	2·3	0·7	0·8	750	
1Q5GT	5	Class A Amplifier	1·4	0·1	90	90	−4·5	9·5	1·3	0·09	2200	R_L = 8 KΩ, W_o = 0·27 watts
1R5	7	Converter	1·4	0·05	90 67·5	67·5 G_{2+4} 67·5	0 G_3 0	1·6 1·4	3·2 G_{2+4} 3·2	0·6 0·5	300 g_c 280	R_{g_1} = 100 KΩ I_{c_1} = 0·25 ma
1S2 **1S2A**	2R	Pulsed Rectifier	1·4	0·55	Max. PIV = 27,000 volts (Abs.) Average Plate Current = 0·8 ma Peak Plate Current = 40 ma							
1S4	5	Class A Amplifier	1·4	0·1	45 90	45 67·5	−4·5 −7·0	3·8 7·4	0·8 1·4	0·1 0·1	1250 1570	R_L = 8·0 KΩ, W_o = 0·065 watts R_L = 8·0 KΩ, W_o = 0·27 watts
1S5	2, 5	Pentode Class A Amplifier	1·4	0·05	67·5	67·5		1·6	0·4	0·6	625	R_{g_1} = 10 MΩ R_{g_2} = 3·1 MΩ
1T4	5	Class A Amplifier	1·4	0·05	45 90	45 67·5	0 0	1·7 3·5	0·7 1·4	0·35 0·5	700 900	
1T5GT	5	Power Amplifier	1·4	0·05	90	90	−6·0	6·5	0·8	0·25	1150	R_L = 14 KΩ, W_o = 0·17 watts
1T6	2, 5	Pentode Class A Amplifier	1·25	0·04	30 45 67·5	30 45 67·5	0 0 0	0·33 0·75 1·6	0·10 0·21 0·4	0·5 0·5 0·4	330 475 600	
1U4	5	Class A Amplifier	1·4	0·05	90	90	0	1·0	0·5	1·0	900	
1U5	2, 5	Pentode Class A Amplifier	1·4	0·05	67·5	67·5	0	1·6	0·4	0·6	625	R_{g_1} = 10 MΩ R_{g_2} = 3·1 MΩ
1U6	7	Converter	1·4	0·025	90	G_{3+5} 45	G_4 0	0·55	G_{3+5} 0·55	0·6	g_c 275	E_{c_2} = 90 v, 1·1 ma R_{g_1} = 0·2 MΩ I_{c_1} = 35 μa
1V	2R	Half-wave Rectifier	6·3	0·3	Max. AC Plate Voltage = 325 volts (rms) Max. DC Output Current = 45 ma							
1V2	2R	Half-wave Rectifier	0·625	0·3	Max. PIV = 7500 volts Max. Peak Plate Current = 10 ma Max. Average Plate Current = 0·5 ma							
1W4	5	Power Amplifier	1·4	0·05	90	90	−9·0	5·0	1·0	0·25	925	R_L = 12·0 KΩ, W_o = 0·2 watts
1X2	2R	Rectifier	1·25	0·2	Max. PIV = 15,000 volts Max. Average Plate Current = 1 ma							
1X2A	2R	EHT Rectifier	1·25	0·2	Max. PIV = 18,000 volts Max. Peak Plate Current = 10 ma Max. Average Plate Current = 1 ma							
1X2B	2R	EHT Rectifier	1·25	0·2	Max. PIV = 22,000 volts Max. Peak Plate Current = 45 ma Max. Average Plate Current = 0·5 ma							
1Y2	2R	Half-wave Rectifier	1·5	0·29	Max. PIV = 50,000 volts Output Plate Current = 2·0 ma							
1Z2	2R	Half-wave Rectifier	1·5	0·3	Plate Voltage = 7800 volts (rms) DC Output Current = 2·0 ma							
2A3	3	Class A Amplifier	2·5	2·5	250		−45·0	60·0	—	800	5250	R_L = 2·5 KΩ, W_o = 3·5 watts, μ = 4·2
		P.P. Class AB1 Amplifier			300 300		* −62▽	80·0▼ 80·0▼				R_L=5·0 KΩ, W_o=10·0w▼ R_k=780Ω R_L=3·0 KΩ, W_o=15·0w▼

*See quoted value of R_k ▽ Fixed bias ▼ Two valves



1P5-GT



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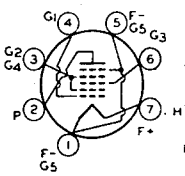
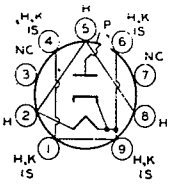
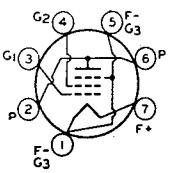


1R5



1S2
1S2-A



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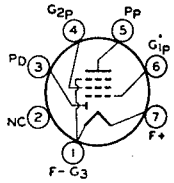

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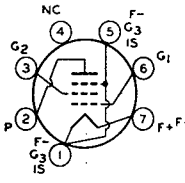
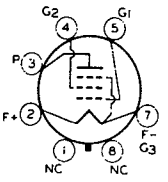


1T4



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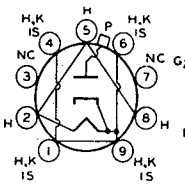

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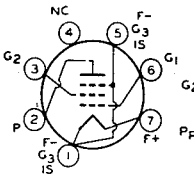
1S2-A



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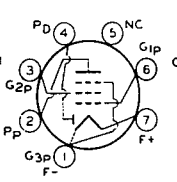

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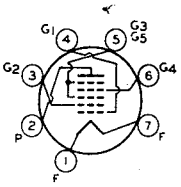

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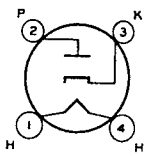
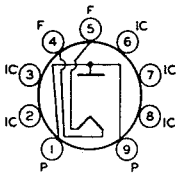
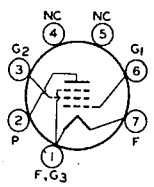


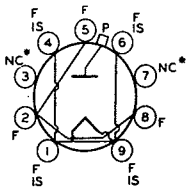
1-v



1V2

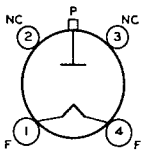


1W4

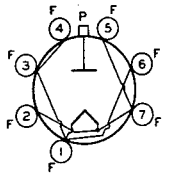


1X2
1X2-A,B

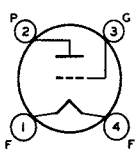
*May be connected to filament, otherwise do not use.



1Y2



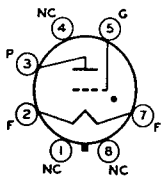
1Z2



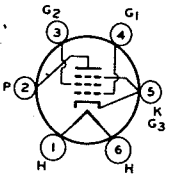
2A3

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
2A4-G	3	Relay Tube	2·5	2·5	Max. PIV = 200 volts Max. Plate Voltage = 200 volts Max. Peak Plate Current = 1·25 amps Max. Average Plate Current = 0·1 amp.							
2A5	5	Amplifier	2·5	1·75	*See* 6F6G Characteristics							
2A6	2, 2, 3	Triode Amp.	2·5	0·8	*See* 6SQ7 Characteristics							
2A7	7	Converter	2·5	0·8	*See* 6A8 Characteristics							
2AF4 2AF4-A 2AF4-B	3	Class A Amp.	2·35	0·6	80 100		*	16 20		·00227 ·00213	6600 7500	R_k = 150 Ω
		UHF Oscillator			100		−4	22	R_{g1} = 10 KΩ, W_o = 160 mw I_{c1} = 400 μa, R_{g1} = 10 KΩ			
2B3	2R	Rectifier			Max. PIV = 27,000 volts Max. Output Current = 50 ma							
2B4	3	Relay Tube	2·5	1·4	Tube drop = 19 volts Max. Plate Voltage = 300 volts Max. Peak Plate Current = 300 ma							
2B7	2, 2, 5	Pentode Amplifier	2·5	0·8	*See* 6B8-G Characteristics							
2BN4	3	VHF Amplifier	2·3	0·6	150		*	9·0		·0063	6800	R_k = 220 Ω, μ = 43
2BN4A	3	VHF Amplifier	2·35	0·6	*See* 6BN4-A Characteristics							
2CY5	4	Class A Amplifier	2·4	0·6	125	80	−1·0	10·0	1·5	0·1	8000	
2E5		Tuning Indicator	2·5	0·8	*See* 6E5 Characteristics							
2EA5	4	VHF Amplifier	2·4	0·6	*See* 6EA5 Characteristics							
2EN5	2, 2	Phase Comparator	2·1	0·45	Diode current for continual operation = 5·0 ma each plate							
2G5		Tuning Indicator	2·5	0·8	Target Voltage = 250 volts Target Current = 4·0 ma							
2T4	3	UHF Oscillator	2·35	0·6	*See* 6T4 Characteristics							
2V3-G	2R	Rectifier	2·5	5·0	AC Plate Voltage = 6000 volts (rms) PIV = 16,500 volts DC Output Current = 2·0 ma							
2X2 2X2A	2R	Half-wave Rectifier	2·5	1·75	AC Plate Voltage = 5500 volts (rms) Max. Peak Plate Current = 60 ma DC Output Current = 7·5 ma Max. PIV = 12,500 volts							
2X3G	2R	Rectifier	2·5	2·0	Max. PIV = 1400 volts Max Peak Plate Current = 375 ma							
2Y2	2R	Half-wave Rectifier	2·5	1·75	Max. PIV = 12,000 volts Max. DC Output Current = 5·0 ma							
2Z2	2R	Rectifier	2·5	1·5	Max. AC Plate Voltage = 350 volts (rms) per plate Max. Output Current = 50 ma							
3A2	2R	Half-wave Rectifier	3·15	0·22	Max. PIV = 18,000 volts Max. Peak Plate Current = 80 ma Max. Average Plate Current = 1·5 ma							
3A3	2R	Half-wave Rectifier	3·15	0·22	Max. PIV = 30,000 volts Max. Peak Plate Current = 80 ma Max. Average Plate Current = 1·5 ma							
3A4	5	Power Amplifier	1·4 2·8	0·2 0·1	150	90	−8·4	13·3	2·2	0·1	1900	R_L = 8·0 KΩ, W_o = 0·7 watts
3A5	3, 3	HF Amplifier	1·4 2·8	0·22 0·11	90	—	−2·5	3·7	—	0·0083	1800	At E_b = 135 v, I_b = 30 ma, Class C W_o = 2 w

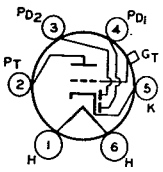
* See quoted value of R_k.



2A4-G



2A5



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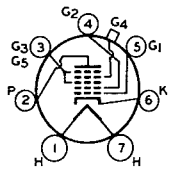
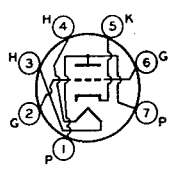
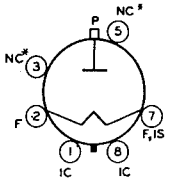


2A7

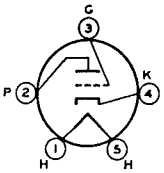


2AF4
2AF4-A
2AF4-B

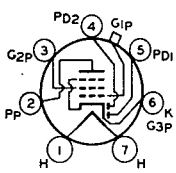


2B3

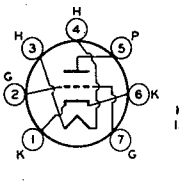
*May be connected to filament, otherwise do not use.



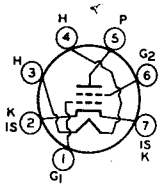
2B4



2B7



2BN4
2BN4-A



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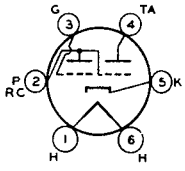

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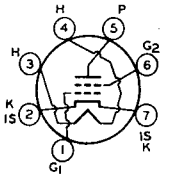

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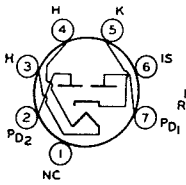

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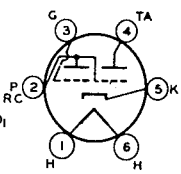

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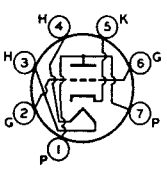

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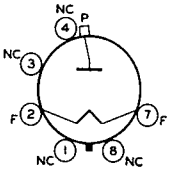
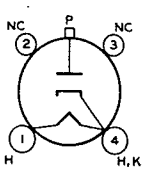
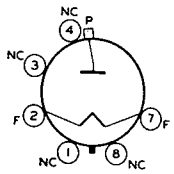


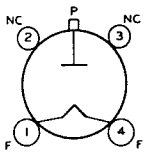
2V3-G



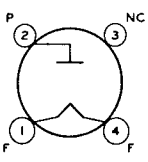
2X2
2X2-A



2X3-G



2Y2



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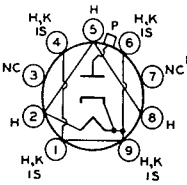
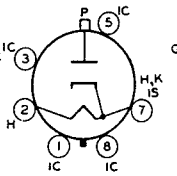


3A2



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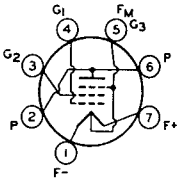
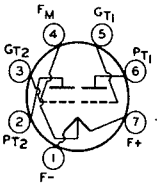


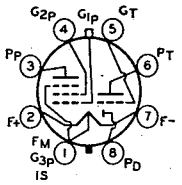
3A4



3A5

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
3A8GT	2, 3, 5	Triode Amplifier	1·4	0·1	90	—	0	0·2	—	0·2	325	μ = 65
		Pentode Amplifier	2·8	0·05	90	90	0	1·5	0·5	0·8	750	
3AF4A	3	Amplifier	3·2	0·45	100	—	*	16	—	·00227	6600	R_k = 150 Ω
								20	—	·00213	7500	
		Oscillator			100	—	−4	22	R_{g_1} = 10 KΩ I_{c_1} = 400 μa Useful W_o = 160 mw			
3AL5	2, 2	Detector Rectifier	3·15	0·6	Max. PIV = 330 volts Max. DC Output Current/Plate = 9·0 ma Max. Peak H-K=330 volts Max. Peak Plate Current/Plate = 54 ma							
3AU6	5	Class A Amplifier	3·15	0·6	100	100	*	5·0	2·1	0·5	3900	R_k = 150 Ω
					250	150		10·6	4·3	1·0	5200	R_k = 68Ω
3AV6	2, 2, 3	Triode Amplifier	3·15	0·6	100	—	−1·0	0·5	—	0·08	1250	μ = 100
					250		−2·0	1·2		0·0625	1600	μ = 100
3B2	2R	EHT Rectifier	3·15	0·22	Max. PIV = 35,000 volts Max. Average Plate Current Max. DC Inverse Voltage = 25,000 volts = 1·1 ma Max. Peak Plate Current = 80 ma							
3B4	5	VHF Power Amp.	2·5	0·165	150	135	−75	—	—	—	1700	W_o = 1·25 watts
			1·25	0·330								
3B5GT	5	Power Amplifier	1·4	0·10	45	45	−4·5	4·4	0·3	0·1	1400	R_L = 8·0 KΩ, W_o = 0·07 watts
			2·8	0·05	67·5	67·5	−7·0	6·7	0·5	0·1	1500	R_L = 5·0 KΩ, W_o = 0·18 watts
3BA6	5	RF Amplifier	3·15	0·6	*See* 6BA6 Characteristics							
3BC5	5	Class A Amplifier	3·15	0·6	250	150	*	7·5	2·1	0·8	5700	R_k = 180 Ω
3BE6	7	Converter	3·15	0·6	*See* 6BE6 Characteristics							
3BN4	3	VHF Amplifier	3·0	0·45	150	—	*	9·0		0·0063	6800	R_k = 220 μ = 43
3BN4A	3	VHF Amplifier	3·0	0·45	*See* 6BN4A Characteristics							
3BN6	5	Limiter and Disciminator	3·15	0·6	Max. DC Plate Voltage = 300 volts Max. Pos. Peak G_1 Voltage Max. G_2 Voltage = 100 volts = 55 volts Max. Peak H-K Voltage = 90 volts Max. Cathode Current = 11·5 ma							
3BU8	5, 5	Class A Amplifier	3·15	0·6	100	67·5	■	2·2	3·3		180	E_{c_3} = 0
3BY6	7	Sync. Sep. and Sync. Clipper	3·15	0·6	10	25	0	1·4	3·5	E_{c_3} = 0		
3BZ6	5	Class A Amplifier	6·3	0·3	200	150	*	11	2·6	0·6	6100	R_k = 180 Ω
3C2	2R	Half-wave Rectifier	3·5	0·21	Max. PIV = 33,000 volts Max. Peak Output Current = 80 ma Max. Average Plate Current = 1·1 ma							
3C4	5	Power Amplifier	1·4	0·05	85	85	−5·2	5·0	1·1	0·125	1350	R_L = 13 KΩ, W_o = 0·2 watts
3C5GT	5	Power Amplifier	1·4	0·1	90	90	−9·0	6·0	1·4		1550	R_L = 8·0 KΩ, W_o = 0·24 watts
			2·8	0·05	90	90	−9·0	6·0	1·4		1450	R_L = 10·0 KΩ, W_o = 0·26 watts
3CB6	5	Class A Amplifier	3·15	0·6	200	150		9·5	2·8	0·6	6200	R_k = 180 Ω
3CE5	5	RF Amplifier	3·15	0·6	*See* 6CE5 Characteristics							
3CF6	5	Class A Amplifier	3·15	0·6	200	150	−6·5	9·5	2·8	0·6	6200	R_k 180 Ω

* See quoted value of R_k. ■ Adjusted for I_{g_1} = 100 μa dc.



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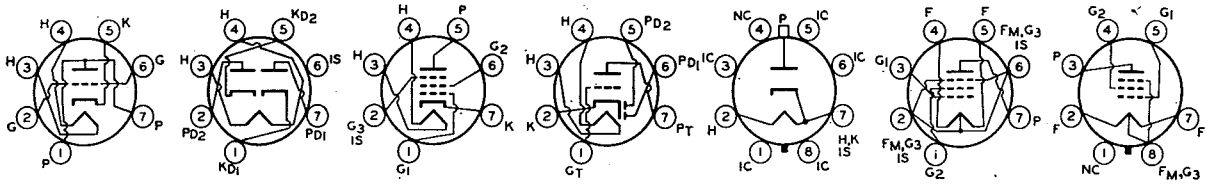
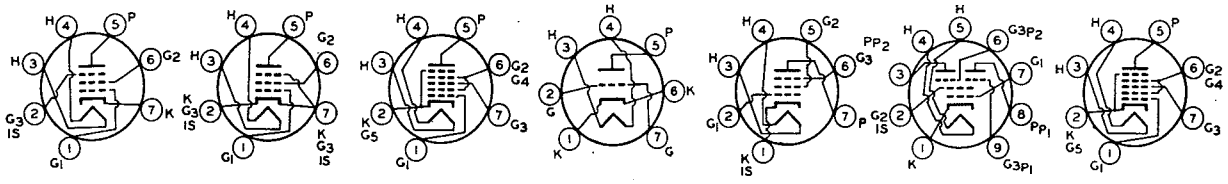
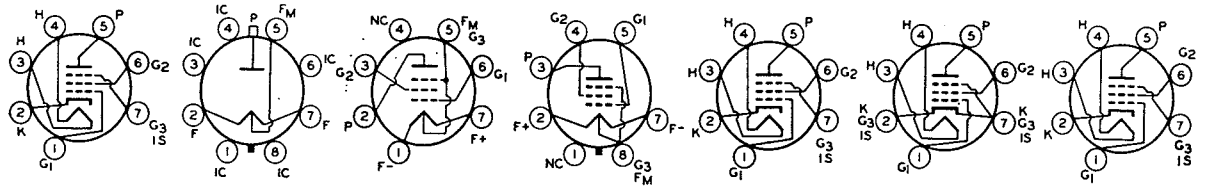


3AF4-A 3AL5 3AU6 3AV6 3B2 3B4 3B5-GT



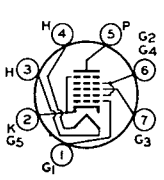
3BA6 3BC5 3BE6 3BN4 3BN4-A 3BN6 3BU8 3BY6



3BZ6 3C2 3C4 3C5-GT 3CB6 3CE5 3CF6

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c2} volts	E_{c1} volts	I_b ma	I_{c2} ma	r_p MΩ	g_m μmhos	
3CS6	7	Sync. Sep. and Sync. Clipper	3·15	0·6	10	30		2·0	4·5	G_3 Volts = 0 G_1 Volts = 0		
		Class A Amp.			100 100	30 30	−1·0 0	0·8 1·0	5·5 1·3	0·7 1·0	— 1100	
3CY5	4	Class A Amplifier	2·9	0·45	125	80	−1·0	10	1·5	0·1	8000	
3D6	5	Power Amplifier	2·8	0·110	150	90	−4·5	10·2	1·8		2400	R_L = 14·0 KΩ,
			1·4	0·220	150	135	−20·0	23·0	6·0			W_o = 0·6 watts
3DK6	5	IF Amplifier	3·15	0·6	125	125	*	12·0	3·8		9800	R_k = 56 Ω
3DT6	5	Class A Amp.	3·15	0·6	150	100	*	1·1	2·1	0·15	615	R_k = 560 Ω
		FM Detector			250	100	*	0·22	5·5	G_3 Volts = −6 R_L = 270 KΩ R_k = 560 Ω		
3E5	5	Power Amplifier	1·4	0·05	90	90	−8·0	6·0	1·5	0·14	1200	R_L = 8·0 KΩ, W_o = 0·2 watts
			2·8	0·025	90	90	−8·0	5·5	1·5	0·12	1100	R_L = 8·0 KΩ, W_o = 0·175 watts
3E6	5	Voltage Amplifier	1·4	0·1	90	90	0	4·2	1·7	0·25	2000	
			2·8	0·05	90	90	0	2·9	1·2	0·325	1700	
3EA5	4	VHF Amplifier	2·9	0·45	*See* 6EA5 Characteristics							
3LE4	5	Power Amplifier	2·8	0·05	90	90	−9·0	9·0	1·8	0·11	1600	R_L = 6·0 KΩ, W_o = 0·3 watts
			1·4	0·10	90	90	−9·0	10·0	2·0	0·10	1750	R_L = 6·0 KΩ, W_o = 0·325 w
3LF4	5	Class A Amplifier	1·4	0·1	*See* 3Q5GT Characteristics							
			2·8	0·05								
3Q4	5	Class A Amplifier	1·4	0·1	*See* 3V4 Characteristics							
			2·8	0·05								
3Q5G 3Q5GT	5	Class A Amplifier	1·4	0·1	110	110	−6·6	10·0	1·4	0·1	2200	R_L = 8·0 KΩ, W_o = 0·4 watts
			2·8	0·05	110	110	−6·6	8·5	1·1	0·11	2000	R_L = 8·0 KΩ, W_o = 0·33 watts
3S4	5	Class A Amplifier	1·4	0·1	90	67·5	−7·0	7·4	1·4	0·1	1575	R_L = 8·0 KΩ, W_o = 0·27 watts
			2·8	0·05	90	67·5	−7·0	6·1	1·1	0·1	1425	R_L = 8·0 KΩ, W_o = 0·235 watts
3V4	5	Power Amplifier	1·4	0·1	90	90	−4·5	9·5	2·1	0·1	2150	R_L = 10 KΩ, W_o = 0·27 watts
			2·8	0·05	90	90	−4·5	7·7	1·7	0·12	2000	R_L = 10 KΩ, W_o = 0·24 watts
3W4	5	Power Amplifier	1·4	0·05	85	85	−5·2	6·8	1·4	0·15	1700	R_L = 11·0 KΩ,
			2·8	0·025								W_o = 0·25 watts
3Z4	5	Power Amplifier	1·4	0·05	67·5	67·5	−7·0	6·5	1·3	0·1	1450	R_L = 8·0 KΩ,
			2·8	0·025								W_o = 0·21 watts
4AU6	5	Class A Amplifier	4·2	0·45	100	100	*	5·0	2·1	0·5	3900	R_k = 150 Ω
					250	150		10·6	4·3	1·0	5200	R_k = 68 Ω
4BA6	5	RF Amplifier	4·2	0·45	*See* 6BA6 Characteristics							
4BC5	5	Class A Amplifier	4·2	0·45	100	100	*	4·7	1·4	0·6	4900	R_k = 180 Ω
					250	150		7·5	2·1	0·8	5700	
4BC8	3, 3	Class A Amplifier	4·2	0·6	150		*	10·0		—	6200	R_k = 220 Ω, μ35
4BE6	7	Converter	4·2	0·45	*See* 6BE6 Characteristics							
4BN4	3	VHF Amplifier	4·2	0·3	*See* 6BN4 Characteristics							

*See quoted value of R_k



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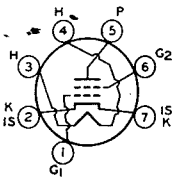

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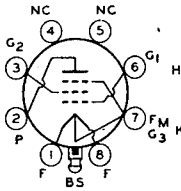

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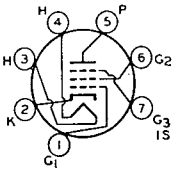

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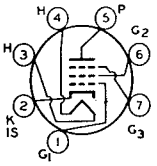

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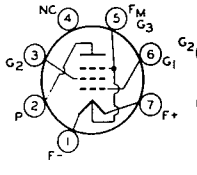

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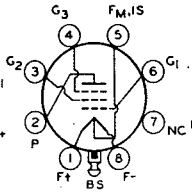

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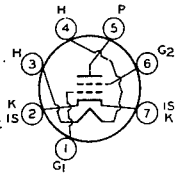

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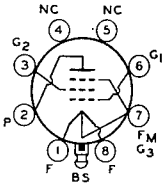
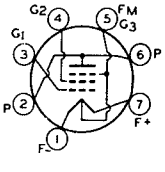


3LE4
3LF4



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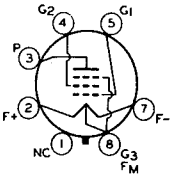

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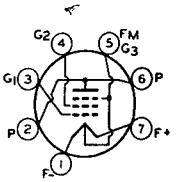
3Q5-GT



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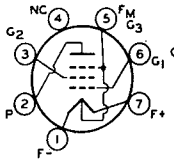

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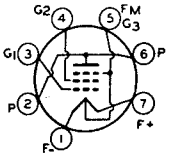

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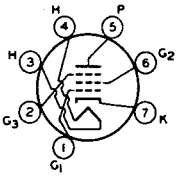

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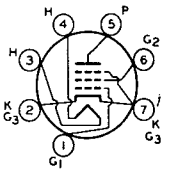

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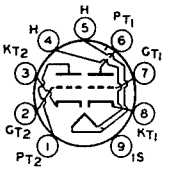

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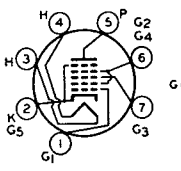

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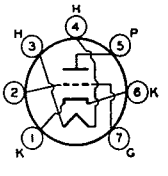
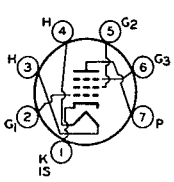


4BN4

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
4BN6	5	Quad. FM Det.	4·2	0·45	*See* 6BN6 Characteristics							
4BQ7A	3, 3	Class A Amplifier	4·2	0·6	150		*	9·0		6100	6400	R_k=220 Ω Cutoff Volts=−10
4BS8	3, 3	Cascode Amp.	4·5	0·6	250	—	−1·0	16		—	10,000	
		Class A Amplifier			150	—	*	10		0·005	7200	R_k = 220 Ω
4BU8	5, 5	Sync. AGC	4·2	0·45	100	67·5	■	2·2	3·3		180	E_{c_3} = 0
4BX8	3, 3	Cascode Amplifier	4·2	0·6	65		−1·0	9·0			6700	μ = 25
4BZ6	5	RF Amplifier	4·2	0·45	*See* 6BZ6 Characteristics							
4CB6	5	Class A Amp.	4·2	0·45	200	150	*	9·5	2·8	0·6	6200	R_k = 180 Ω
4CE5	5	RF Amplifier	4·2	0·45	125	125		11·0	2·8	0·3	7600	
4CS6	7	Sync. Sep.	4·2	0·45	*See* 6CS6 Characteristics							
4CX7	3, 3	Cascode Amp.	4·2	0·6	150		*	9·0			6400	R_k = 220 Ω, μ = 39
4CY5	4	Class A Amplifier	4·5	0·3	125	80	−1·0	10	1·5	0·1	8000	
4DE6	5	VHF Amplifier	4·2	0·5	*See* 6DE6 Characteristics							
4DK6	5	VHF Amplifier	4·2	0·45	*See* 6DK6 Characteristics							
4DT6	5	Class A Amp.	4·2	0·45	150	100	*	1·1	2·1	0·15	515	R_k = 560 Ω
		FM Det.			250	100	*	0·22	5·5			G_3 volts = −6, R_k = 560 Ω R_L = 270 KΩ
4ES8	3, 3	VHF Amplifier	4·0	0·6	*See* 6ES8 Characteristics							
5A6	5	Class B Amp.	5·0	0·23	150	139·5	−15	40	7·0			W_o = 2·8 watts
		Class C Amp.	2·5	0·46	150	150	−24	40	11·0			W_o = 3·1 watts
5AM8	2, 5	Amplifier Detector	4·7	0·6	200	150	*	11·5	2·7		7000	R_k = 120 Ω
					Diode Unit: Max. DC Plate Curr. = 5·0 ma							
5AN8	3, 5	Amplifier	4·7	0·6	*See* 6AN8 Characteristics							
5AQ5	5	Amplifier	4·7	0·6	*See* 6AQ5 Characteristics							
5AR4	2R, 2R	Full-wave Rectifier	5·0	1·9	Max. PIV = 1500 volts Peak Plate Current/Plate = 750 ma Max. DC Output Current = 250 ma							
5AS4 5AS4A	2R, 2R	Full-wave Rectifier	5·0	3·0	Max. AC Volts/Plate = 550 volts Max. DC Output = 275 ma Max. PIV = 1550 volts Max. Peak Ib./Plate = 1·0 amp							
5AS8	2, 5	Amplifier Detector	4·7	0·6	*See* 6AS8 Characteristics							
5AT8	3, 5	Triode Osc.	4·7	0·6	150			13	R_{g_1} = 2700 Ω, W_o = 0·5 watts‡			
		Pentode Mixer			150	150	−3·5	6·2	1·8	g_c = 2100 μmhos		
5AU4	2R, 2R	Full-wave Rectifier	5·0	4·5	Max. PIV = 1400 volts Peak Plate Current/Plate = 1075 ma DC Output Current = 325 ma							
5AV8	3, 5	Triode Amp.	4·7	0·6	200		−6·0	13	—	·00575	3300	μ = 19
		Pent. Amplifier			200	150	*	9·5	2·8	0·3	6200	R_k = 180 Ω
5AW4	2R, 2R	Full-wave Rectifier	5·0	4·0	Max. PIV = 1550 volts Peak Plate Current/Plate = 750 ma DC Output Current = 250 ma							
5AZ4	2R, 2R	Full-wave Rectifier	5·0	2·0	*See* 5Y3GT Characteristics							
5B8	3, 5	Triode Amp.	4·7	0·6	200		−6·0	13		·0057	3300	μ = 19
		Pent. Amplifier			200	150	*	9·5	2·8	0·3	6200	R_k = 180 Ω

*See quoted value of R_k. ‡Approx. ■Adjusted for I_{g_1} = 100 μa dc.



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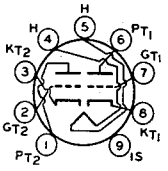

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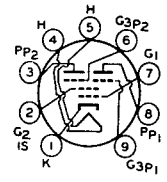

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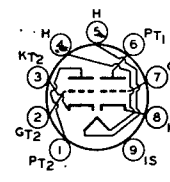
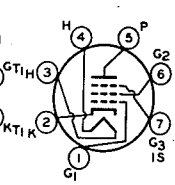


4BX8



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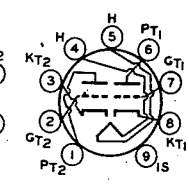

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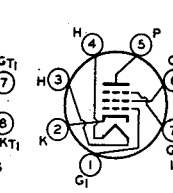

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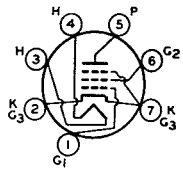

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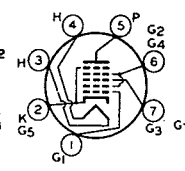

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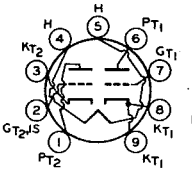

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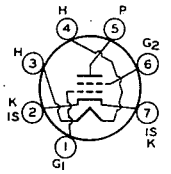

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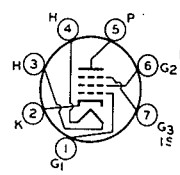

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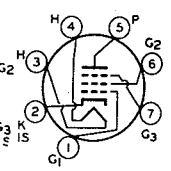

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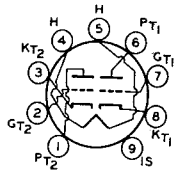

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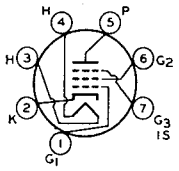

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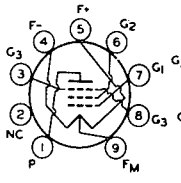

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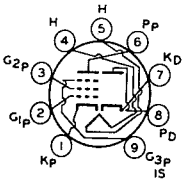

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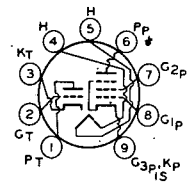

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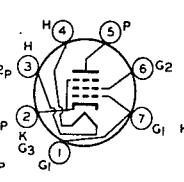

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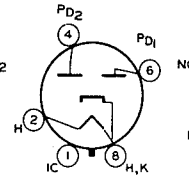

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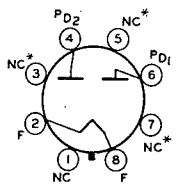

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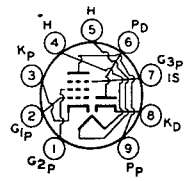
5AS4-A

*Pin omitted on some of these types.



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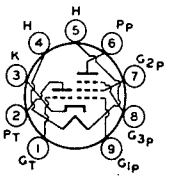

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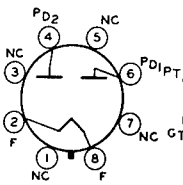

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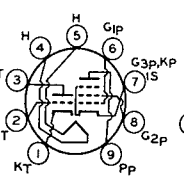

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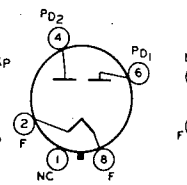

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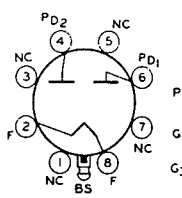

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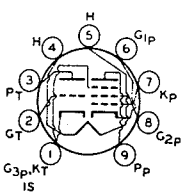
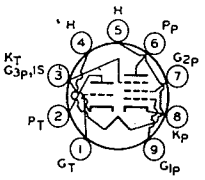


5B8

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
5BE8	3, 5	Triode Osc.	4·7	0·6	150		*	18		0·005	8500	R_k = 56 Ω
		Pent. Amplifier			250	110	*	10	3·5	0·4	5200	R_k = 68 Ω
5BK7A	3, 3	Class A Amplifier	4·7	0·6	150		*	18		0·0046	9300	R_k = 56 Ω, Cutoff Volts = −11
5BQ7A	3, 3	Class A Amplifier	5·6	0·45	150		*	9·0		·0061	6400	R_k = 220 Ω, μ = 39 Cutoff Volts = −10
5BR8	3, 5	Osc. Mixer	4·7	0·6	*See* 6BR8 Characteristics							
5BS8	3, 3	Amplifier	5·6	0·45	*See* 6BS8 Characteristics							
5BT8	2, 2, 5	Amp. Detector	4·7	0·6	*See* 6BT8 Characteristics							
5BW8	2, 2, 5	RF, IF Amp.	4·7	0·6	*See* 6BW8 Characteristics							
5BZ7	3, 3	RF Amplifier	5·6	0·45	150		*	10·0		·0056	6800	R_k = 220 Ω
5CG4	2R, 2R	Full-wave Rectifier	5·0	2·0	Max. PIV = 1400 volts Max. Peak Plate Current/Plate = 400 ma DC Output Current = 125 ma (Max.)							
5CG8	3, 5	Osc. Converter	4·7	0·6	*See* 6CG8 Characteristics							
5CL8	3, 4	Osc. Converter	4·7	0·6	*See* 6CL8 Characteristics							
5CL8A	3, 4	VHF Oscillator VHF Amplifier	4·7	0·6	*See* 6CL8A Characteristics							
5CM6	5	Power Amplifier	4·7	0·6	*See* 6CM6 Characteristics							
5CM8	3, 5	Class A Amplifier	4·7	0·6	*See* 6CM8 Characteristics							
5CQ8	3, 4	Tri. Osc. Pent. Amp.	4·7	0·6	*See* 6CQ8 Characteristics							
5CR8	3, 5	Triode Amplifier Pent. Amplifier	4·7	0·6	*See* 6CR8 Characteristics							
5CZ5	5	Vert. Defl. Amp.	4·7	0·6	*See* 6CZ5 Characteristics							
5DH8	3, 5	Triode Vert. Osc.	5·2	0·6	250		*	7·3		·012	4400	R_k = 390 Ω, μ = 53
		Pent. Vid. Amp.			125	125	*	13·5	3·8	·15	8600	R_k = 56 Ω
5EA8	3, 5	Triode VHF Amp. Pent. VHF Amp.	4·7	0·6	*See* 6EA8 Characteristics							
5J6	3, 3	Class A Amp.	4·7	0·6	100		*	8·5	—	0·0071	5300	R_k = 50 Ω
		PP Class C			150		−10	30				W_o = 3·5 watts
5R4G	2R, 2R	Full-wave Rectifier	5·0	2·0	Max. PIV = 2800 volts Max Peak Plate Current/Plate = 650 ma DC Output Current = 250 ma (max)							
5R4GY 5R4GYA 5R4GYB	2R, 2R	Full-wave Rectifier	5·0	2·0	Max. PIV = 2800 volts Max. Peak Plate Current/Plate = 650 ma DC Output Current = 150 ma (max.)							
5T4	2R, 2R	Full-wave Rectifier	5·0	2·0	Max. PIV = 1500 volts Max. Peak Plate Current/Plate = 675 ma Max. DC Output = 225 ma							
5T8	2, 2, 2, 3	Det. Amplifier	4·7	0·6	100	—	−1·0	0·8	—	0·054	1300	μ = 70
					250	—	−3·0	1·0	—	0·058	1200	μ = 70
5U4G	2R, 2R	Full-wave Rectifier	5·0	3·0	Max. PIV = 1550 volts Max. Peak Plate Current/Plate = 675 ma Max. DC Output = 225 ma							
5U4GB	2R, 2R	Full-wave Rectifier	5·0	3·0	Max. PIV = 1550 volts Max. Peak Plate Current/Plate = 1000 ma Max. DC Output Current = 250 ma							

*See quoted value of R_k



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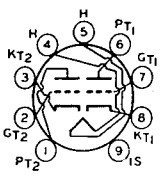

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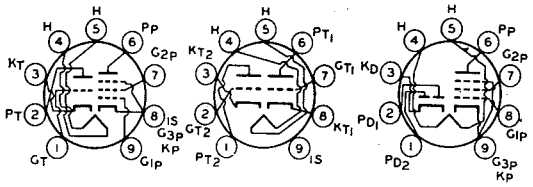
5BQ7-A



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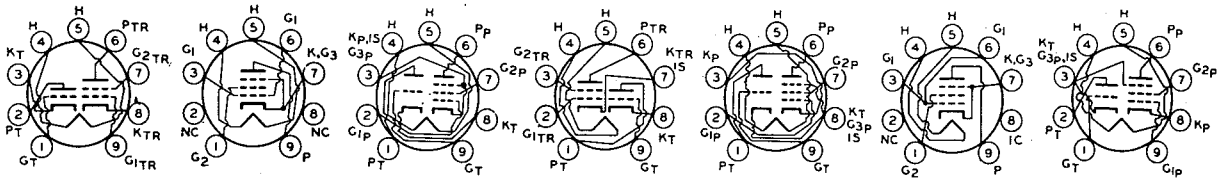

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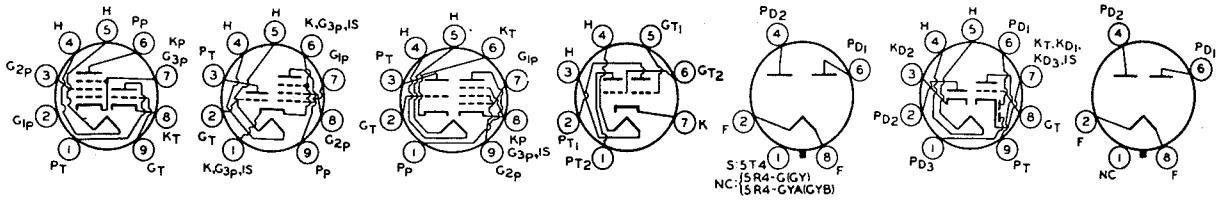
5CM6 5CM8 5CQ8 5CR8 5CZ5 5DH8



5EA8 5EH8 5EU8 5J6

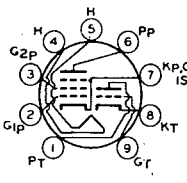
5R4-G,GY
5R4-GYA,GYB
5T4

5T8

5U4-G
5U4-GA
5U4-GB

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c2} volts	E_{c1} volts	I_b ma	I_{c2} ma	r_p MΩ	g_m μmhos	
5U8	3, 5	Triode Amplifier Pent. Amplifier	4·7	0·6	*See* 6U8 Characteristics							
5V3	2R, 2R	Full-wave Rectifier	5·0	3·8	Max. AC Voltage/Plate = 500 volts (rms) Max. PIV = 1400 volts Max. Output Current/Plate = 225 ma							
5V4G 5V4GA	2R, 2R	Full-wave Rectifier	5·0	2·0	Max. AC Voltage/Plate = 375 volts (rms) DC Output Current = 175 ma Max. PIV = 1400 volts — Max. Peak I_b/Plate = 525 ma							
5V6GT	5	Class A Amplifier	4·7	0·6	250	250	−12·5	45	4·5	0·052	4100	R_L = 5·0 KΩ, W_o = 4·5 watts
5W4 5W4G 5W4GT	2R, 2R	Full-wave Rectifier	5·0	1·5	Max. AC Voltage/Plate = 350 volts (rms) Max. PIV = 1400 volts Max. DC Output Current = 100 ma Max. Peak Plate Current/Plate = 300 ma							
5X4G	2R, 2R	Full-wave Rectifier	5·0	3·0	*See* 5U4G Characteristics							
5X4GA	2R, 2R	Full-wave Rectifier	5·0	3·0	Max. PIV = 1550 volts Peak Plate Current/Plate = 900 ma max. DC Output Current = 125 ma max.							
5X8	3, 5	Osc. Converter	4·7	0·6	*See* 6X8 Characteristics							
5Y3 5Y3G 5Y3GA 5Y3GT	2R, 2R	Full-wave Rectifier	5·0	2·0	Max PIV = 1400 Max. DC Output = 125 ma Max. Peak Plate Current/Plate = 400 ma							
5Y4G 5Y4GA 5Y4GT	2R, 2R	Full-wave Rectifier	5·0	2·0	*See* 5Y3GT Characteristics							
5Z3	2R, 2R	Full-wave Rectifier	5·0	3·0	*See* 5U4G Characteristics							
5Z4 5Z4G	2R, 2R	Full-wave Rectifier	5·0	2·0	Max. AC Voltage/Plate = 350 volts (rms) Max. DC Output = 125 ma Max. PIV = 1400 volts Max. Peak I_b/Plate = 375 ma							
6A3	3	Class A Amplifier	6·3	1·0	*See* 6B4G Characteristics							
6A4/LA	5	Class A Amplifier	6·3	0·3	100	100	−6·5	9·0	1·6	0·0833	1200	R_L = 11 KΩ, W_o = 0·31 watts
					180	180	−12·0	22·0	3·9	0·0455	2200	R_L = 8 KΩ, W_o = 1·4 watts
6A6	3, 3	Class A Amplifier	6·3	0·8	*See* 6N7GT Characteristics							
6A7 6A7S	7	Converter	6·3	0·3	*See* 6A8 Characteristics							
6A8 6A8G 6A8GT	7	Converter	6·3	0·3	100	G_{3+5}	G_4	3·5	2·7	0·36		E_{c2} = 250 v, 4·0 ma I_{c1} = 0·4 ma R_{g1} = 20 KΩ, g_c = 550 μmhos
					250	100	−3·0					
6AB4	3	Class A Amplifier	6·3	0·15	100	—	*	3·7	—	0·015	4000	R_k = 270 Ω, μ = 60
					250	—	*	10·0	—	0·0109	5500	R_k = 200 Ω μ = 60
6AB5/ 6N5		Visual Indicator	6·3	0·15	135	Target = 135 volts Target current = 2·0 ma Grid Bias = −10·0 v for 0° shadow, 0 v for 90° shadow R_p = 0·25 MΩ I_b = 0·5 ma							
6AB7 6AB7/ 1853	5	Class A Amplifier	6·3	0·45	300	200	−3·0	12·5	3·2	0·7	5000	
6AB8	3, 5	Triode Amplifier	6·3	0·3	100	—	−2·0	4	—	—	1350	R_L = 11 KΩ,
		Pent. Amplifier			200	200	−7·7	17·5	3·3	0·15	3400	W_o = 1·4 watts
6AC5G 6AC5GT	3	Class B Power Amplifier	6·3	0·4	250	—	+13	32·0	—	0·037	3400	I_{c1} = 5 ma
					250	—	0	5·0	—	—	—	R_L = 10·0 KΩ, (p − p) W_o = 8·0 watts

*See quoted value of R_k



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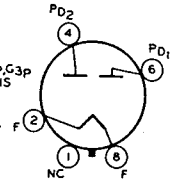

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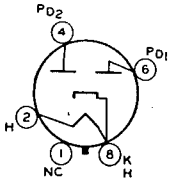
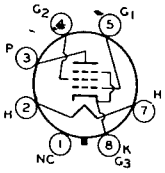


5V4-G
5V4-GA



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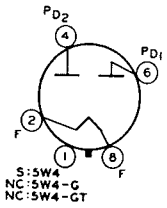
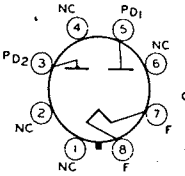
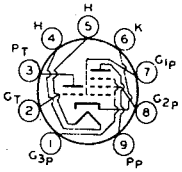


5W4
5W4-G
5W4-GT



5X4-G
5X4-GA



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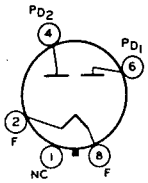
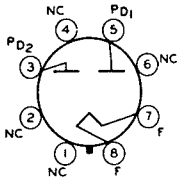


5Y3
5Y3-G
5Y3-GA
5Y3-GT



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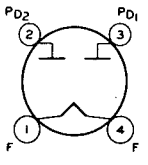

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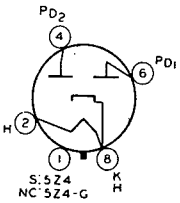

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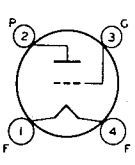
5Z4-G



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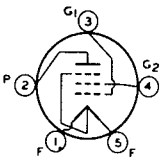
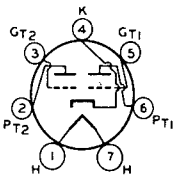


6A4/LA



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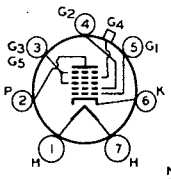

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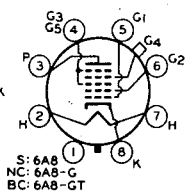

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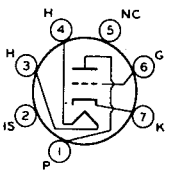
6A8-GT



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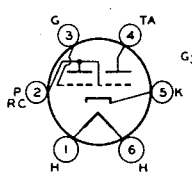
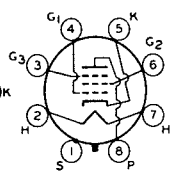


6AB5/6N5



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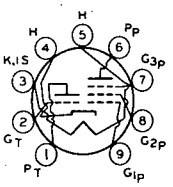

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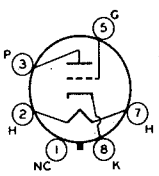
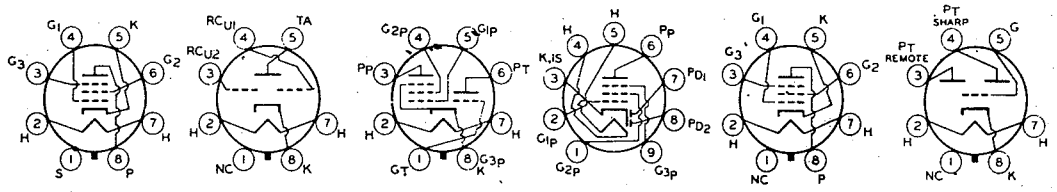


6AC5-G
6AC5-GT

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
6AC7 6AC7A	5	Class A Amplifier	6·3	0·45	300	150	*	10·0	2·5	1·0	9000	R_k = 160 Ω
6AD6G		Tuning Indicator	6·3	0·15	Target Voltage = 150 volts Target Current = 1·2 to 3·0 ma Ray Control Voltage = 75 v for 0° and −50 v for 135°							
6AD7G	3, 5	Triode Amplifier	6·3	0·85	250		−25·0	4·0		0·019	325	μ = 6
		Pent. Amplifier			250	250	−16·5	34·0	6·5	0·08	2500	R_L=7·0 KΩ, W_o=3·2 w
6AD8	2, 2, 5	Det. Amp.	6·3	0·3	250	85	*	6·7	2·3	1·0	1100	R_k = 225 Ω
6AE5G 6AE5GT	3	Class A Amplifier	6·3	0·3	95	—	−15·0	7·0	—	0·0035	1200	μ = 4·2
6AE7G 6AE7GT	3, 3	Class A Amplifier	6·3	0·5	250	—	−13·5	5·0	—	0·0093	1500	μ = 14
6AE8	3, 6	Triode Osc.	6·3	0·3	115	—	—	4·5	—	—	I_{c_1} = 300 ma, R_{g_1} = 30 KΩ	
		Hexode Mixer			250	G_{2+4}	−2	3·5	G_{2+4} 3·2	1·5	g_c = 750 μmhos	
6AF3	2	TV Damper Diode	6·3	1·2	Max. PIV = 4500 volts, Max. PC Plate Current = 185 ma Max. Plate Dissipation = 6·0 watts							
6AF4 6AF4A	3	Class A Amplifier	6·3	0·225	100	—	*	20	—	0·002	7500	μ = 16 R_k = 150 Ω
		Osc. at 950 Mc			100	—	−4·0	22	—			R_{g_1} = 10 KΩ, I_{c_1} = 400 μamp W_o = 160 mw
6AF6G		Tuning Indicator	6·3	0·15	Target Voltage = 250 volts, Target Current = 2·2 ma Ray Control Voltage = 160 volts for 0° shadow Ray Control Voltage = 0 volts for 95° shadow							
6AG5	5	Pent. Amplifier	6·3	0·3	100	100	*	4·5	1·4	0·6	4500	R_k = 180 Ω
					250	150		6·5	2·0	0·8	5000	R_k = 180 Ω
		Triode Amplifier			180	—	*	7·0	—	0·008	5700	R_k = 330 Ω
					250	—		5·5	—	0·01	3800	R_k = 820 Ω
6AG7	5	Amplifier	6·3	0·65	300	150	−3	30·0	7·0	0·13	11000	R_L = 10 KΩ, W_o = 3·0 watts
6AH4GT	3	Class A Amplifier	6·3	0·75	250	—	−23	30	—	0·002	4500	
6AH5G	4	Class A Amplifier	6·3	0·9	350	250	−18	54	2·5	0·033	5200	
6AH6 6AH6G	5	Class A Amplifier	6·3	0·45	300	150	*	10·0	2·5	0·5	9000	R_k = 160 Ω
6AH7GT	3, 3	Amplifier	6·3	0·3	*See* 12AH7GT Characteristics							
6AJ8	3, 7	Converter	6·3	0·3	250	103	−2·0	3·25	6·7	1·0	g_c = 775 μmhos Osc. R_{g_1} = 47 KΩ	
6AK5	5	Class A Amplifier	6·3	0·175	120	120	*	7·5	2·5	0·34	5000	R_k = 200 Ω
					180	120		7·7	2·4	0·69	5100	
6AK6	5	Class A Amplifier	6·3	0·15	180	180	−9·0	15	2·5	0·2	2300	R_L = 16 KΩ, W_o = 1·1 watts

*See quoted value of R_k.



6AC7
6AC7-A

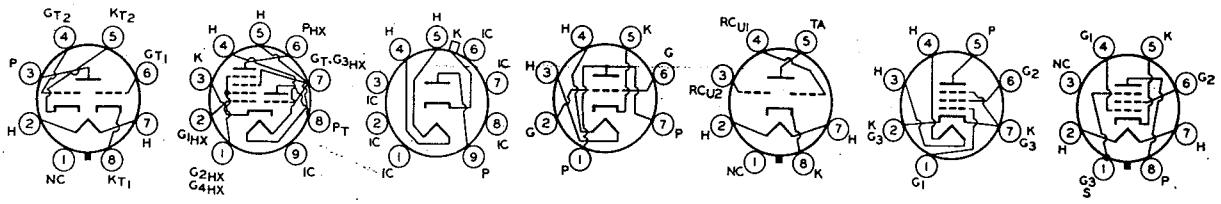
6AD6-G

6AD7-G

6AD8

6AE5-G
6AE5-GT

6AE6-G



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6AE7-GT

6AE8

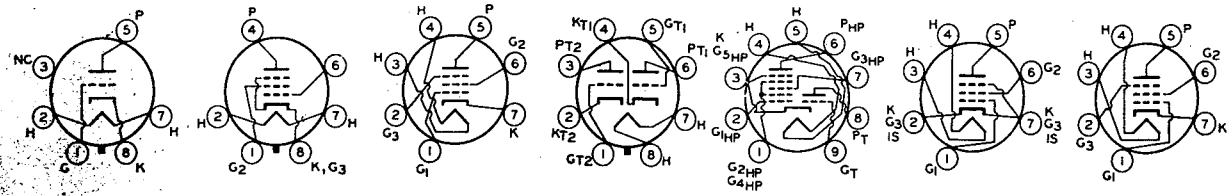
6AF3

6AF4
6AF4-A

6AF6-G

6AG5

6AG7



6AH4-GT

6AH5-G

6AH6
6AH6-G

6AH7-GT

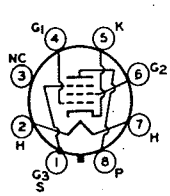
6AJ8

6AK5

6AK6

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
6AK7	5	Class A Amplifier	6·3	0·65	300	150	−3·0	30·0	7·0	0·13	11000	
6AK8	2, 2, 2, 3	Class A Amplifier	6·3	0·45	100		−1·0	0·8		0·048	1450	μ = 70
					250		−3·0	1·0		0·05	1400	μ = 70
6AL5	2, 2	Detector Rectifier	6·3	0·3	Max. PIV = 330 volts Max. DC Output/Plate = 9 ma Max. Peak H-K volts = 330 volts Max. Peak Plate Current/Plate = 54 ma							
6AL6G	5	Power Amplifier	6·3	0·9	*See* 6L6G Characteristics							
6AL7GT		Tuning Indicator	6·3	0·15	Target Voltage = 315 volts, Grid Voltage = 0 v R_k = 3·3 KΩ							
6AM4	3	Class A Amplifier	6·3	0·225	150	—	*	7·5	—	0·0095	9000	R_k = 100 Ω, μ = 85
6AM5	5	Class A Amplifier	6·3	0·2	250	250	−13·5	16	2·4	0·13	2600	R_L = 16·0 KΩ, W_o = 1·4 watts
6AM6	5	RF Amplifier	6·3	0·3	250	250	−2·0	10	2·5	1·0	7500	
6AM8 6AM8A	2, 5	Class A Amplifier	6·3	0·45	200	150	*	11·5	2·7	—	7000	R_k = 120 Ω
6AN4	3	Class A Amplifier	6·3	0·225	200	—	*	13	—	—	10000	R_k = 100 Ω, μ = 70
6AN5	5	Power Amplifier	6·3	0·45	120	120	−6·0	35·0	12·0	·0125	8000	R_L = 2·5 KΩ, W_o = 1·3 w
6AN6	2, 2, 2, 2	Rectifier	6·3	0·2	Max. PIV = 210 volts Max. Peak Plate Current/Plate = 45 ma Max. H-K volts = 90 v DC Output/Plate = 8 ma							
6AN7	3, 6	Triode Osc.	6·3	0·23	250	—	—	5·1	—	—	R_{g_1} = 22·0 KΩ	
		Hexode Mixer			250	G_{2+4} 85	−2	3·0	G_{2+4} 3·0	1·0	g_c = 750 μmhos	
6AN8 6AN8A	3, 5	Triode Amplifier Pent. Amplifier	6·3	0·45	200	—	−6·0	13·0	—	0·0057	3300	R_k = 180 Ω
					200	150	*	9·5	2·8	0·3	6200	
6AQ4	3	RF Amplifier	6·3	0·3	250	—	−1·5	10	—	—	8500	μ = 100
6AQ5 6AQ5A	5	Class A Amplifier P.P. Amplifier†	6·3	0·45	180 250	180 250	−8·5 −12·5	29·0 45·0	3·0 4·5	·058 ·052	3700 4100	R_L = 5·5 KΩ, W_o = 2·0 watts
					250	250	−15·0	70·0▼	5·0▼	0·06	R_L = 10 KΩ, W_o = 10·0 w▼	
6AQ6	2, 2, 3	Triode Amplifier	6·3	0·15	100	—	−1·0	0·8	—	0·061	1150	μ = 70
					250	—	−3·0	1·0	—	0·058	1200	μ = 70
6AQ7GT	2, 2, 3	Triode Amplifier	6·3	0·3	250	—	−2·0	2·3	—	0·044	1600	μ = 70
6AQ8	3, 3	RF Amplifier Self-Osc. Mixer	6·3	0·435	250	—	−2·0	10·0	—	·0097	6000	
					250	—	—	5·2	—	·022	—	g_c = 2300
6AR5	5	Class A Amplifier	6·3	0·4	250	250	−16·5	34·0	5·7	0·065	2400	R_L = 7·0 KΩ, W_o = 3·2 w
					250	250	−18	32·0	5·5	0·068	2300	R_L = 7·6 KΩ, W_o = 3·4 w
6AR6	4	Tet. Amplifier Triode Amplifier	6·3	1·2	250	250	−22·5	75	5·0	·021	5400	μ = 113
					200	—	−12·5	90	—	·001	6000	μ = 6
6AR7GT	2, 2, 5	Det. RF Amp.	6·3	0·3	250	100	−2·0	7·0	1·8	1·0	2500	
6AR8	8	Sync. Detector	6·3	0·3	250	250	*	10	0·4	—	4000	R_k = 390 Ω
6AS5	5	Class A Amplifier	6·3	0·8	150	110	−8·5	35	2·0	—	5600	R_L = 4·5 KΩ, W_o = 2·2 watts

*See quoted value of R_k ▼Two valves †Class AB.



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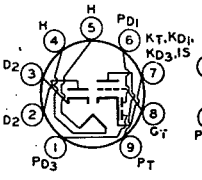

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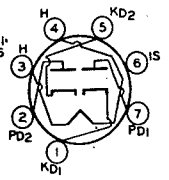

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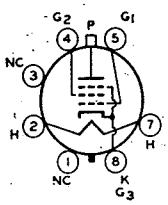

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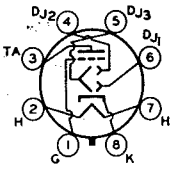

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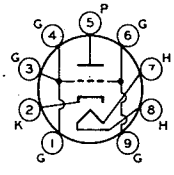

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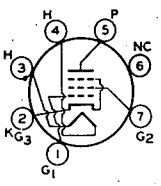

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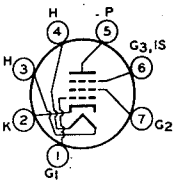

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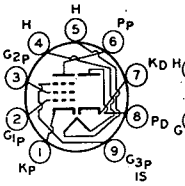

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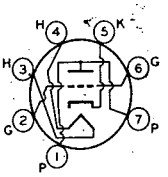
6AM8-A



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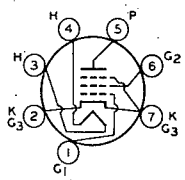

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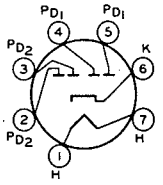

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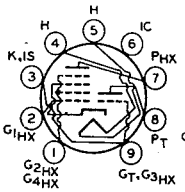

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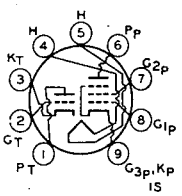

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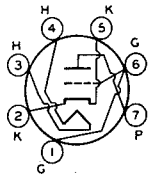

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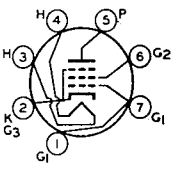

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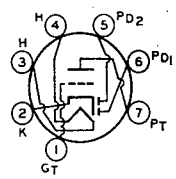

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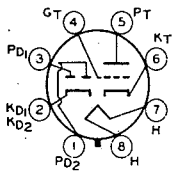

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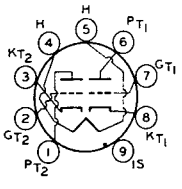

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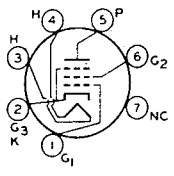
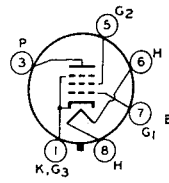


6AR5



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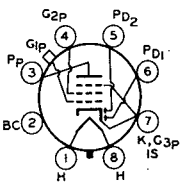

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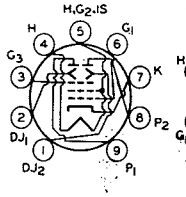

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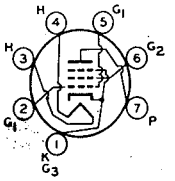
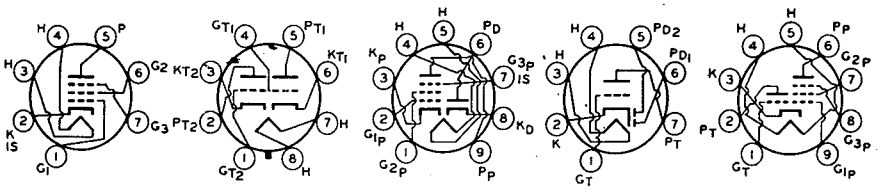


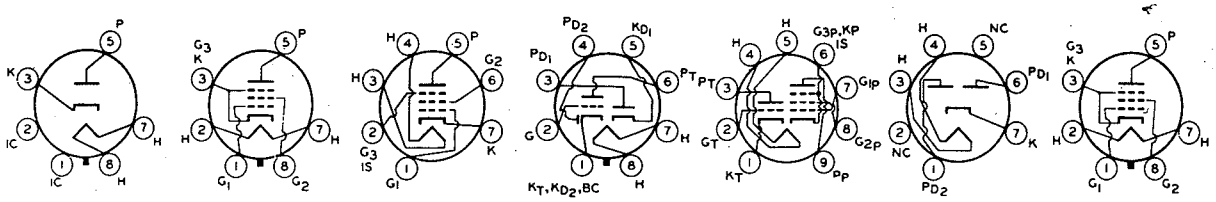
6AS5

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
6AS6	5	Voltage Amplifier	6·3	0·175	120	120	−2·0	5·2	3·5	0·15	3200	
6AS7G **6AS7GA**	3, 3	Power Amplifier	6·3	2·5	135	—	*	125	—	280 ohms	7000	R_k = 250 Ω, μ = 2·1
6AS8	2, 5	Diode Unit	6·3	0·45	Max. PIV = 330 volts Max. Peak Plate Curr. = 50 ma Max. DC Plate Current = 5·0 ma							
		Pent. Amplifier			200	150	*	9·5	3·0	0·3	6200	R_k = 180 Ω
6AT6	2, 2, 3	Triode Amplifier	6·3	0·3	100	—	−1·0	0·8	—	0·054	1300	μ = 70
					250		−3·0	1·0		0·058	1200	μ = 70
6AT8 **6AT8A**	3, 5	Triode/Pentode Converter	6·3	0·45	*See* 6X8 Characteristics							
6AU4GT	2R	TV Damper Diode	6·3	1·8	Max. PIV = 4500 volts (Abs.) Max. DC Plate Current = 175 ma Max. Peak Plate Curr. = 1050 ma Max. Plate Dissip. = 6·0 w							
6AU4GTA	2R	TV Damper Diode	6·3	1·8	Max. PIV = 4500 volts Max. Plate Dissip. = 6·5 w Max. Peak Plate Curr. = 1300 ma DC Plate Current = 210 ma							
6AU5GT	5	Horiz. Amplifier	6·3	1·25	Max. Peak Pos. Pulse Plate Voltage = 5500 volts (Abs.) Max. DC Cathode Current = 110 ma Max. DC Screen Voltage = 200 volts Max. Plate Dissipation = 10 watts Max. Screen Dissipation = 2·5 w							
6AU6 **6AU6A**	5	Class A Amplifier	6·3	0·3	250	150	*	10·6	4·3	1·0	5200	R_k = 68 Ω
6AU7	3, 3	Class A Amplifier	3·15	0·6	100	—	0	13	—	0·0063	3500	μ = 22·0
			6·3	0·3	250		−8·5	10·5		0·008	2200	μ = 17·5
6AU8 **6AU8A**	3, 5	Triode Amplifier	6·3	0·6	150	—	*	9·0	—	0·008	4900	μ = 40, R_k = 150 Ω
		Pent. Amplifier			200	125	*	15	3·4	0·15	7000	R_k = 82 Ω
6AV4	2R, 2R	Full-wave Rectifier	6·3	0·95	Max. PIV = 1250 volts Max. DC Output Current = 90 ma Max. Peak Plate Current/Plate = 250 ma							
6AV5GA **6AV5GT**	5	Horizontal Deflection Amplifier	6·3	1·2	Max. DC Voltage = 550 volts Max. Peak Pos. Pulse Voltage = 5500 volts Max. DC Cathode Current = 110 ma Max. Plate Dissipation = 11 watts							
6AV6	2, 2, 3	Class A Amplifier	6·3	0·3	250	—	−2·0	1·2	—	0·06	1600	μ = 100
6AW7GT	2, 2, 3	Det. Amplifier	6·3	0·3	100		0	1·4			1200	μ = 80
6AW8	3, 5	Triode Amplifier	6·3	0·6	200	—	−2·0	4·0	—	0·0175	4000	μ = 70
		Pentode Amp.			200	150	*	13	3·5	0·4	9000	R_k = 180 Ω
6AW8A	3, 5	Triode Amplifier	6·3	0·6	200	—	−2·0	4·0	—	0·0175	4000	μ = 70
		Pentode Amplifier			200	150	*	13	3·5	0·4	9000	R_k = 180 Ω
6AX4GT	2R	TV Damper Diode	6·3	1·2	Max. PIV = 4400 volts (Abs.) Max. Peak Plate Current = 750 ma Max. DC Plate Current = 125 ma							
6AX5GT	2R, 2R	Full-wave Rectifier	6·3	1·2	Max. PIV = 1250 volts Max. DC Output = 80 ma Max. Peak Plate Current/Plate = 375 ma							
6AX7	3, 3	Voltage Amplifier	6·3	0·3	250		−2·0	1·2			1600	μ = 100
					100		−1·0	0·5			1250	
6AX8	3, 5	Triode Amplifier	6·3	0·45	150		*	18		0·005	8500	μ = 40 R_k = 56 Ω
		Pent. Amplifier			250	110	*	10	3·5	0·4	4800	R_k = 120 Ω

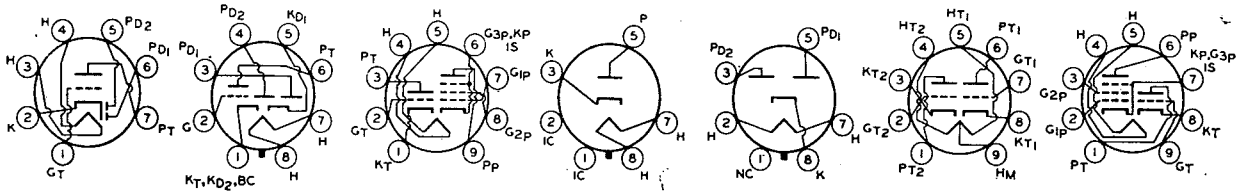
*See quoted value of R_k



6AS6 | 6AS7-G, 6AS7-GA | 6AS8 | 6AT6 | 6AT8, 6AT8-A



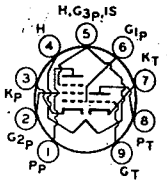
6AU4-GT, 6AU4-GTA | 6AU5-GT | 6AU6, 6AU6-A | 6AU7 | 6AU8, 6AU8-A | 6AV4 | 6AV5-GA, 6AV5-GT



6AV6 | 6AW7-GT | 6AW8, 6AW8-A | 6AX4-GT | 6AX5-GT | 6AX7 | 6AX8

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
6AZ8	3, 5	Triode Amplifier	6·3	0·45	200	—	−6·0	13	—	0·006	3300	$\mu = 19$
		Pent. Amplifier			200	150	*	9·5	3·0	0·3	6000	$R_k = 180\,\Omega$
6B3	2	TV Damper Diode	6·3	1·2	Max. PIV = 4400 volts Max. DC Plate Current = 150 ma							
6B4G	3	Class A Amplifier	6·3	1·0	250	—	−45	60	—	800 ohms	5250	$R_L = 2{\cdot}5\ K\Omega$, $W_o = 3{\cdot}2$ w, $\mu = 4{\cdot}2$
		P.P. Amplifier†			325	—	*	80▼	—	—	—	$R_L = 5\ K\Omega$, $W_o = 10$ w▼, $R_k = 850\,\Omega$
6B5	3, 3	Class A Amplifier	6·3	0·8	*See* 6N6G Characteristics							
6B6G	2, 2, 3	AF Amplifier	6·3	0·3	250	—	−2·0	0·9	—	0·091	1100	$\mu = 100$
6B7	2, 2, 5	RF Amplifier	6·3	0·3	*See* 6B8G Characteristics							
6B7S	2, 2, 5	RF Amplifier	6·3	0·3	*See* 6G8G Characteristics							
6B8 6B8G 6B8GT	2, 2, 5	RF Amplifier	6·3	0·3	250	125	−3·0	9·0	2·3	0·6	1125	
6BA6	5	RF Amplifier	6·3	0·3	250	100	*	11·0	4·2	1·0	4400	$R_k = 68\,\Omega$
6BA7	7	Converter	6·3	0·3	100	100	−1·0	3·6	10·2	0·5		$R_{g_1} = 20\ K\Omega$
					250	100	−1·0	3·8	10·0	1·0		$g_c = 950\ \mu$mhos
6BA8 6BA8A	3, 5	Triode Amplifier	6·3	0·6	200	—	−8·0	8·0	—	0·0067	2700	$\mu = 18$
		Pent. Amplifier			200	150	*	13	3·5	0·4	9000	$R_k = 180\,\Omega$
6BC4	3	Class A Amplifier	6·3	0·225	150	—	*	14·5	—	0·0048	10000	$R_k = 100\,\Omega$, $\mu = 48$
6BC5	5	Class A Amplifier	6·3	0·3	250	150	*	7·5	2·1	0·8	5700	$R_k = 180\,\Omega$
6BC7	2, 2, 2	FM Detector	6·3	0·45	Max. PIV = 330 volts Max. Peak Plate Current = 54 ma Max. DC Output Current = 12 ma							
6BC8	3, 3	Class A Amplifier	6·3	0·4	150	—	*	10	—	—	6200	$\mu = 35$, $R_k = 220\,\Omega$
6BD4	3	Voltage Regulator	6·3	0·6	Max. DC Plate Voltage = 20 Kv Max. Unregulated DC Supply Voltage = 40 Kv					Max. DC Plate Current = 1·5 ma Max. Plate Dissip. = 20 watts		
6BD4A	3	Voltage Regulator	6·3	0·6	Max. DC Plate Voltage = 27 Kv Max. Unregulated DC Supply Voltage = 55 Kv					Max. DC Plate Current = 1·5 ma Max. Plate Dissip. = 25 watts		
6BD5GT	5	Horiz. Amplifier	6·3	0·9	Max. Peak Pos. Pulse Plate Voltage = 4000 volts Max. DC Cathode Current = 100 ma Max. Plate Dissipation = 10 watts							
6BD6	5	Class A Amplifier	6·3	0·3	100	100	−1·0	13·0	5·0	0·15	2550	
					250	100	−3·0	9·0	3·0	0·8	2000	
6BD7	2, 2, 3	Det. Amplifier	6·3	0·23	250	—	−3·0	1·0	—	0·058	1200	$\mu = 70$
6BE6	7	Converter	6·3	0·3	250	100	−1·5	2·9	6·8	1·0		$R_{g_1} = 20\ K\Omega$, $g_c = 475\ \mu$mhos
6BE7	9	FM Det. and Limiter	6·3	0·2	250‡	20	—	0·69	1·5	5·0	—	Phase Angle $E_{c_3}-E_{c_5} = 90°$ $R_L = 0{\cdot}47\ M\Omega$
6BE8 6BE8A	3, 5	Triode Amplifier	6·3	0·45	150	—	*	18·0	—	0·005	8500	$\mu = 40$ $R_k = 56\,\Omega$
		Pent. Amplifier			250	110	*	10·0	3·5	0·4	5200	$R_k = 68\,\Omega$
6BF5	5	Vertical Deflection Amplifier	6·3	1·2	Max. DC Plate Voltage = 250 volts Abs. Peak Pos. Pulse Plate Voltage = 900 volts Max. DC Cath. Current = 40 ma Max. Plate Dissip. = 5 watts							

*See quoted value of R_k ▼Two valves †Class AB ‡Supply Voltage.



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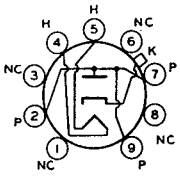

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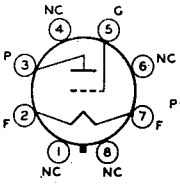
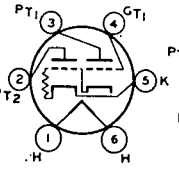
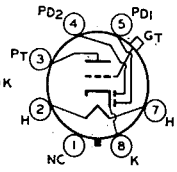


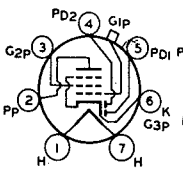
6B4-G



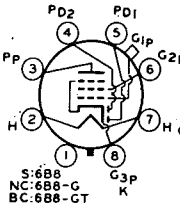
6B5



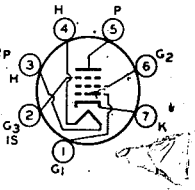
6B6-G



6B7
6B7-S



6B8
6B8-G
6B8-GT



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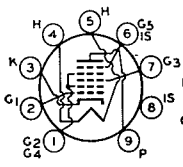

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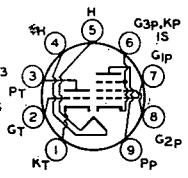

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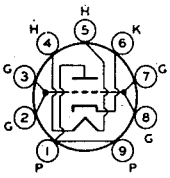
6BA8-A



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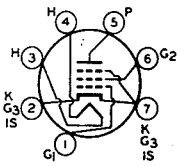

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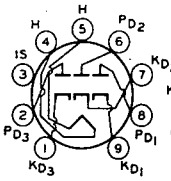

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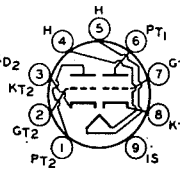

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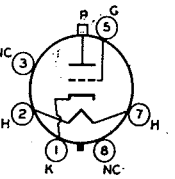

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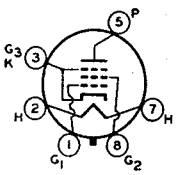

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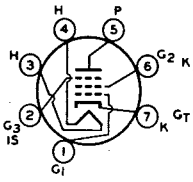

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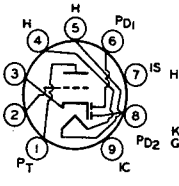

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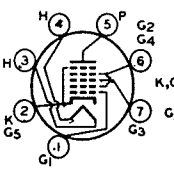

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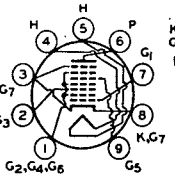

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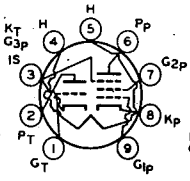

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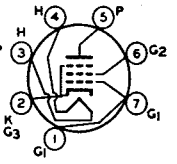
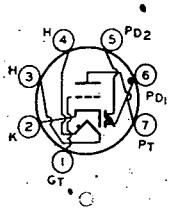
6BE8-A



6BF5

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
6BF6	2,2,3	Triode Amplifier	6·3	0·3	250	—	−9·0	9·5	—	0·0085	1900	R_L = 10 KΩ, W_o = 0·3 watts, μ = 16
6BG6G 6BG6GA	5	Horizontal Deflection Amplifier	6·3	0·9	Max. DC Screen Voltage = 350 volts Max. DC Cathode Current = 110 ma Max. Peak Pos. Pulse Plate Voltage = 6000 volts (Abs.) Max. Plate Dissip. = 20 w							
6BH8	3, 5	Triode Amplifier	6·3	0·6	150	—	−5·0	9·5	—	0·005	3300	μ = 17
		Pent. Amplifier			200	125	*	15	3·4	0·15	7000	R_k = 82 Ω
6BJ5	5	Power Amplifier	6·3	0·64	250	250	−5·0	35	5·5	0·04	10,500	R_L=7 KΩ, W_o=4 watts
6BJ6	5	Class A Amplifier	6·3	0·15	100	100	−1·0	9·0	3·5	0·25	3650	
					250	100	−1·0	9·2	3·3	1·3	3600	
6BJ6A	5	Class A Amplifier	6·3	0·15	Same as 6BJ6 except for controls on formation of interface impedance							
6BJ7	2,2,2	DC Restorer	6·3	0·45	Max. PIV = 330 volts Max. Peak Plate Curr./Plate = 10 ma DC Output Current/Plate = 1·0 ma							
6BK8	2,2,3	Class A Amplifier	6·3	0·6	90	—	0	13·5	—	·0047	4700	μ = 22
6BK4	3	Voltage Regulator	6·3	0·2	Max. DC Plate Voltage = 25 Kv Max. DC Plate Current = 1·5 ma Max. Unregulated DC Supply Voltage = 55 Kv Max. Plate Dissip. = 25 w							
6BK5	5	Class A Amplifier	6·3	1·2	250	250	−5·0	35	3·5	0·1	8500	R_L = 6·5 Ω, W_o = 3·5 watts
6BK6	2,2,3	Det. Amplifier	6·3	0·3	100	—	−1·0	0·5	—	0·08	1250	μ = 100
					250	—	−2·0	1·2	—	0·06	1600	μ = 100
6BK7	3, 3	Class A Amplifier	6·3	0·45	100	—	*	9·0	—	·0061	6100	R_k = 120, μ = 37
					150	—	*	18	—	·0047	8500	R_k = 56, μ = 40
6BK7A 6BK7B	3, 3	Class A Amplifier	6·3	0·45	150	—	*	18	—	·0046	9300	R_k = 56, μ = 43
6BK8	5	Low Ncise AF Amplifier	6·3	0·2	250‡	140	−2·0	3·0	0·55	2·5	1850	
6BL4	2R	Half-Wave Rect.	6·3	3·0	Max. PIV = 4500 volts (Abs.) Max. Peak Plate Current = 1200 ma Max. DC Plate Current = 200 ma							
6BL7GT	3, 3	Vertical Deflection Amplifier	6·3	1·5	Max. DC Cathode Current = 60 ma Max. Peak Pos. Pulse Plate Voltage = 1800 volts Max. Plate Dissip. = 10 w							
6BL7GTA	3, 3	Vertical Deflection Amplifier	6·3	1·5	Max. Peak Pos. Pulse Plate Voltage = 2000 volts Max. DC Cathode Current = 60 ma Max. Plate Dissipation = 10 w							
6BL8	3, 5	Pent. Amplifier	6·3	0·45	170	170	−2·0	10·0	2·8	0·4	6200	
		Triode Amplifier			100	—	−2·0	14·0	—	0·004	5000	
6BM5	5	Power Amplifier	6·3	0·45	250	250	−6·0	30	3·0	0·06	7000	R_L = 7 KΩ, W_o = 3·5 watts
6BM8	3, 5	Pent. Amplifier	6·3	0·76	170	170	−11·5	41·0	8·0	0·016	7500	
		Triode Amplifier			100	—	0	3·5	—	0·028	2500	μ = 70
6BN4	3	Class A Amplifier	6·3	0·2	150	—	*	9·0	—	0·006	6800	R_k=150 Ω, μ=43
6BN4A	3	Class A Amplifier	6·3	0·2	150	—	*	9·0	—	0·008	5400	R_k=220 Ω, μ=43
6BN5	5	Class A Power Amplifier	6·3	0·2	225	225	*	26	4·1	0·09	3200	R_L = 9 KΩ, R_k = 360 Ω, W_o = 2·8 watts

*See quoted value of R_k. ‡Supply voltage.



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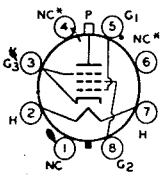

6BG6-G
6BG6-GA
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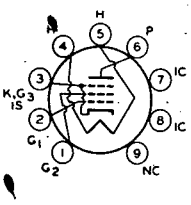

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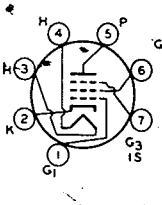

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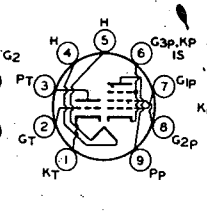

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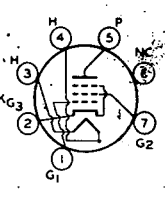

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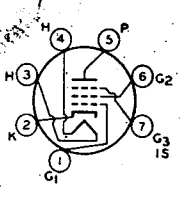

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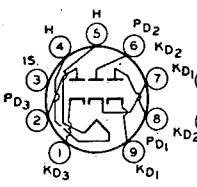

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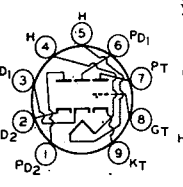

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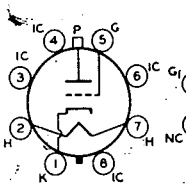

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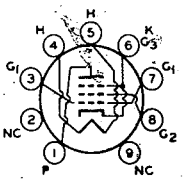

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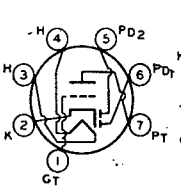

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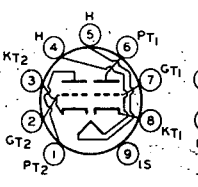

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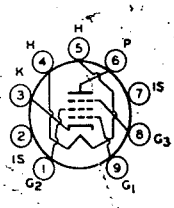
6BK7-A
6BK7-B



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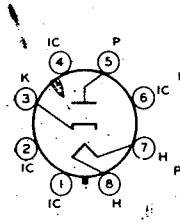

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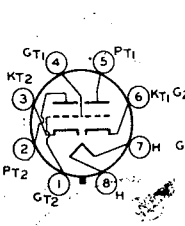

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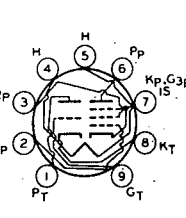

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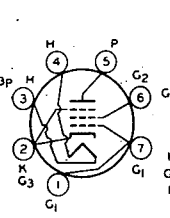

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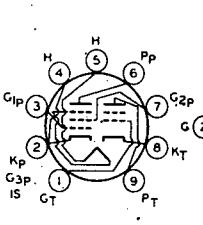

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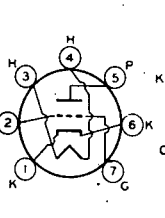

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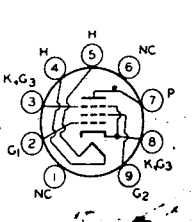
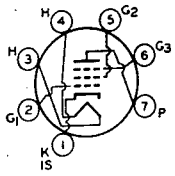


6BN5

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩ	g_m μmhos	
6BN6	5	Limiter Discriminator	6·3	0·3	80	60	*	0·23	5·0	—	—	R_k = 300 Ω
6BN7	3, 3	Oscillator (Unit 1)	6·3	0·75	120	—	−1·0	5·0	—	0·014	2000	μ = 28
		Amplifier (Unit 2)			250	—	−15·0	24	—	0·0022	5500	μ = 12
6BN8	2, 2, 3	Triode Amplifier	6·3	0·6	100	—	−1·0	1·5	—	0·021	3500	
					250		−3·0	1·6		0·028	2500	
6BQ5	5	Class A Power Amplifier	6·3	0·76	250	250	−7·3	48	5·5	0·038	11,300	R_L = 5·2 KΩ
6BQ6G **6BQ6GA** **6BQ6GT** **6BQ6GTA**	5	Horiz. Deflection Amplifier	6·3	1·2	Max. Peak Pos. Plate Voltage = 5500 volts Max. DC Cathode Current = 112·5 ma Max. Plate Dissipation = 11 watts Max. DC Screen Voltage = 200 volts							
		Class A Amplifier			250	−22·5	150	55	2·1	0·02	5500	
6BQ6GTB/ **6CU6**	5	Horiz. Deflection Amplifier	6·3	1·2	Max. Plate DC Voltage = 600 volts Max. DC Cathode Current = 112·5 ma Max. Plate Dissip. = 11 watts					Max. Peak Pos. Plate Voltage = 6000 v Max. DC Screen Voltage = 200 volts		
6BQ7	3, 3	Class A Amplifier	6·3	0·4	150	—	*	9·0	—	0·0058	6000	R_k = 220 Ω μ = 35
6BQ7A	3, 3	Class A Amplifier	6·3	0·4	150	—	*	9·0	—	0·006	6400	R_k = 220 Ω μ = 39
6BR5		Tuning Indicator	6·3	0·3	Target Voltage = 250 volts Target Current = 2·0 ma E_{c_1} for shadow angle of 5° = −1 volt							
6BR7	5	Low Noise AF Amplifier	6·3	0·15	250	100	−3·0	2·1	0·6	2·4	1250	
					100	100	−3·0	2·0	0·7	1·5	1100	
6BR8	3, 5	Triode Amplifier	6·3	0·4	150	—	*	18	—	0·005	8500	R_k = 56 Ω
6BR8A		Pent. Amplifier			250	110	*	10	3·5	0·4	5200	R_k = 68 Ω
6BS5	5	Vertical Defl. Amplifier	6·3	0·75	250	250	−7·5	50	6	0·017	7000	R_L = 5 KΩ, W_o = 4·5 watts μ = 120, R_k = 140 Ω
6BS7	5	Class A Amplifier	6·3	0·15	250	100	−3·0	2·1	0·6	2·4	1250	
6BS8	3, 3	Cascode Amplifier	6·3	0·4	250	—	−1·0	16	—		10,000	R_k = 220 Ω
		Class A Amplifier			150	—	*	10	—	0·005	7200	
6BT4	2R, 2R	Full-wave Rectifier	6·3	0·6	Max. Plate Voltage/Plate = 350 volts (rms) Max. DC Output Current = 90 ma							
6BT6	2, 2, 3	Detector Amplifier	6·3	0·3	100	—	−1·0	0·8	—	0·054	1300	μ = 70
					250	—	−3·0	1·0	—	0·058	1200	μ = 70
6BT8	2, 2, 5	Detector Amplifier	6·3	0·45	200	150	*	9·5	2·8	0·3	6200	R_k = 180
6BU4	3	Voltage Regulator	6·3	0·45	25,000	—	−8·4	1·0	—	8·2‡	185	μ = 1515
6BU5	5	Voltage Regulator	6·3	0·15	20,000	70	−2·4	1·0	0·5	—	—	
6BU6	2, 2, 3	Detector Amplifier	6·3	0·3	250	—	−9·0	9·5	—	·008	1900	μ = 16
6BU8	5, 5	Class A Amplifier	6·3	0·3	100	67·5	☆	2·2	3·3	E_{c_3} = 0		
					100	67·5	☆	—	6·5	E_{c_3} = −10		
6BV7	2, 2, 5	Detector Amplifier	6·3	0·8	180	180	−4·0	20	3·5	0·13	8000	R_L = 8·0 KΩ, W_o = 2·0 watts
					250	250	−5·0	38	6·0	0·1	10,000	R_L = 8·0 KΩ, W_o = 4·0 watts
6BV8	2, 2, 3	Sync. Detector	6·3	0·6	200		*	11		·0059	5600	R_k = 330 Ω
6BW4	2R, 2R	Full-wave Rectifier	6·3	0·9	Max. AC Coltage/Plate = 450 volts (rms) Max. PIV = 1275 volts Max. Peak Plate Current/Plate = 350 ma							

*See quoted value of R_k ‡Approx. ☆E_{c_1} adjusted for I_{c_1} = 100 μa



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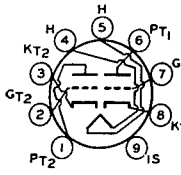

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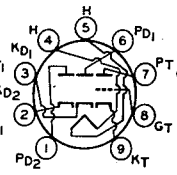

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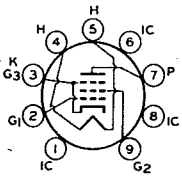

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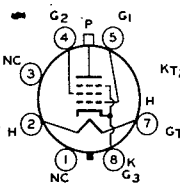
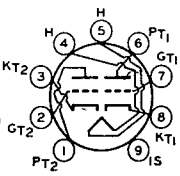


6BQ6-G
6BQ6-GT,-GA
6BQ6-GTA
6BQ6-GTB/6CU6



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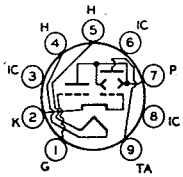

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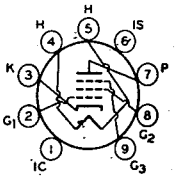

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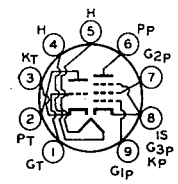

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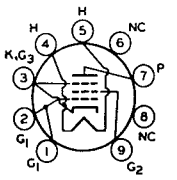

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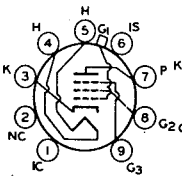

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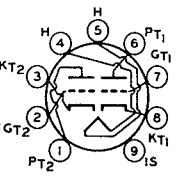

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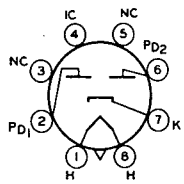

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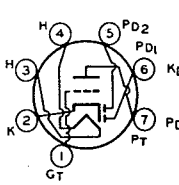

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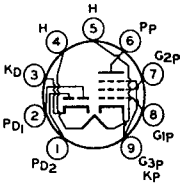

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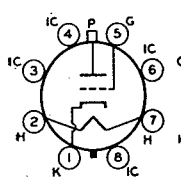

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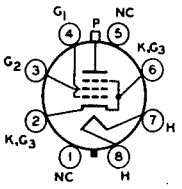

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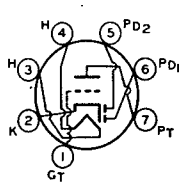

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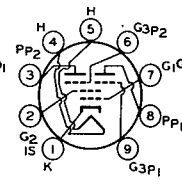

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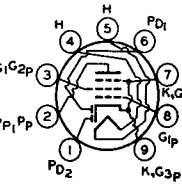
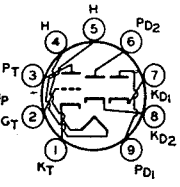
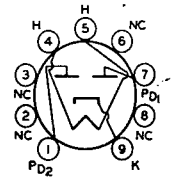


6BV7



6BV8



6BW4

TYPE	Class	Use	E_f volts	I_f amps	E_b volts	E_{c_2} volts	E_{c_1} volts	I_b ma	I_{c_2} ma	r_p MΩμ	g_m mhos	
6BW6	5	Class A Amplifier	6·3	0·45	180	180	−8·5	29	3·0	0·058	3700	R_L = 5·5 KΩ, W_o = 2·0 watts
					250	250	−12·5	45	4·5	0·052	4100	R_L = 5·0 KΩ, W_o = 4·5 watts
6BW7	5	RF Amplifier	6·3	0·3	250	250	*	9·5	3·5	0·75	8500	R_k = 180 Ω
6BW8	2, 2, 5	RF Amplifier	6·3	0·45	250	110	*	10·0	3·5	0·25	5200	R_k = 68 Ω
6BX4	2R, 2R	Full-wave Rectifier	6·3	0·6	Max. PIV = 1350 volts Max. Peak Plate Current = 270 ma Max. DC Output Current = 90 ma							
6BX6	5	RF Amplifier	6·3	0·3	170	170	−2·0	10	2·5	0·4	7200	
6BX7GT	3, 3	Class A Amplifier	6·3	1·5	250	—	*	42	—	·0013	7600	μ = 10, R_k = 390 Ω
6BX8	3, 3	Cascode Amplifier	6·3	0·4	65	—	−1·0	9·0	—	—	6700	μ = 25
6BY5G	2, 2	TV Damper Diode	6·3	1·6	Max. PIV = 3000 volts, Max. DC Output Current = 175 ma Max. Peak Plate Current/Plate = 525 ma							
6BY5GA	2, 2	TV Damper Diode	6·3	1·6	Max. PIV = 3000 volts (Abs.) Max. Peak Plate Current Plate = 525 ma Max. DC Plate Current = 175 ma							
6BY6	7	Sync. Separator and Clipper	6·3	0·3	10	25	0	1·4	3·5	—	—	E_{c_3} = 0 volts
6BY7	5	RF Amplifier	6·3	0·3	250	100	−2·0	10·0	2·5	0·5	6000	
6BY8	2, 5	Detector Amplifier	6·3	0·6	100	100	*	5·0	2·1	0·5	3900	R_k = 150
					250	150	*	10·6	4·3	1·0	5200	R_k = 68
6BZ6	5	IF Amplifier	6·3	0·3	200	150	*	11	2·6	0·6	6100	R_k = 180 Ω
6BZ7	3, 3	Class A Amplifier	6·3	0·4	150	—	*	10	—	0·0056	6800	R_k = 220 Ω, μ = 38 Cutoff volts = −11 volts
6BZ8	3, 3	Cascode Amplifier	6·3	0·4	125	—	*	10	—	0·0056	8000	R_k = 100 Ω
6C4	3	Power Triode	6·3	0·15	250	—	−8·5	10·5	—	0·0077	2200	μ = 17
					100	—	0	11·8	—	0·0062	3100	μ = 19·5
6C5 6C5G 6C5GT	3	Class A Amplifier	6·3	0·3	250	—	−8·0	8·0	—	0·010	2000	μ = 20
6C6	5	AF Amplifier	6·3	0·3	*See* 6J7G Characteristics							
6C7	2, 2, 3	Triode Amplifier	6·3	0·3	250	—	−9·0	4·5	—	0·016	1250	
6C8G	3, 3	Amplifier	6·3	0·3	250	—	−4·5	3·2	—	0·022	1600	
6CA4	2R, 2R	Full-wave Rectifier	6·3	1·0	Max. Peak Plate Current/Plate = 450 ma Max. DC Output Current = 150 ma Max. PIV = 1000 volts							
6CA5	5	Class A Amplifier	6·3	1·2	110	110	−4·0	32	3·5	0·016	8100	
					125	125	−4·5	37	4·0	0·015	9200	
6CA7	5	Power Amp.	6·3	1·5	250	150	−14·5	70	10·0	·018	9000	W_o = 8·0 watts
6CB5	5	Class A Amplifier	6·3	2·5	175	175	−30	90	6·0	·005	8800	
6CB5A		Horiz. Deflection Amplifier			Max. Peak Pos. Plate Voltage = 6800 volts Max. Plate Dissipation = 23 watts Max. DC Screen Voltage = 200 volts Max. DC Cathode Current = 220 ma							
6CB6 6CB6A	5	Class A Amplifier	6·3	0·3	200	150	*	9·5	2·8	0·6	6200	R_k = 180 Ω

*See quoted value of R_k