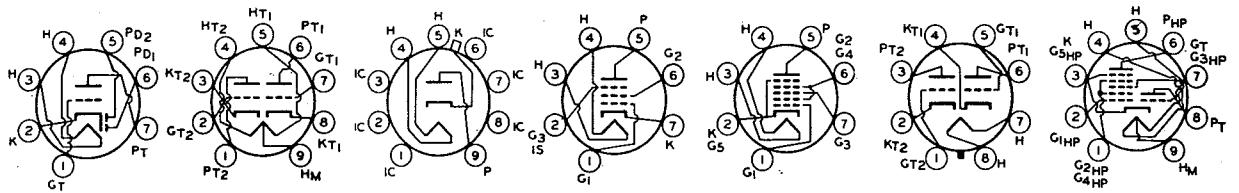
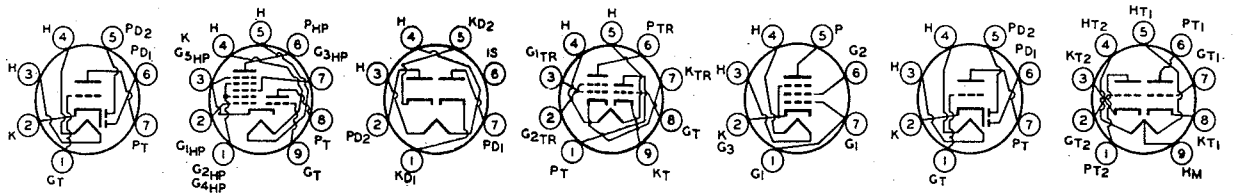


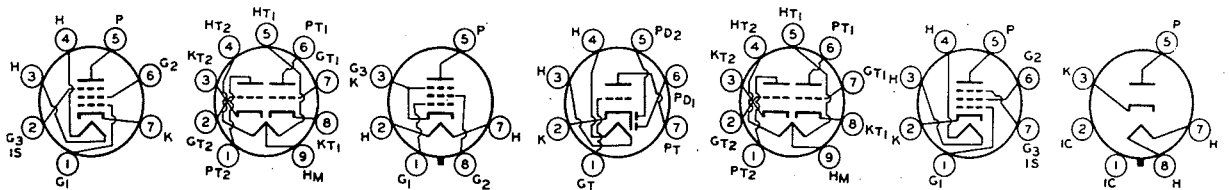
12AC5 - 12AC6      12AD5      12AD6      12AD7



12AE6  
12AE6-A      12AE7      12AF3      12AF6      12AG6      12AH7-GT      12AH8



12AJ6      12AJ7      12AL5      12AL8      12AQ5      12AT6      12AT7

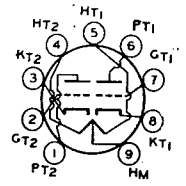


12AU6      12AU7  
12AU7-A      12AV5-GA      12AV6      12AV7      12AW6      12AX4-GT  
12AX4-GTA

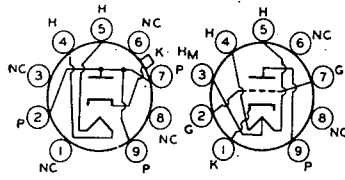
For 12AX7, 12AX7A, see next page

TYPE	Class	Use	E <sub>r</sub> volts	I <sub>r</sub> amp	E <sub>b</sub> volts	E <sub>c2</sub> volts	E <sub>c1</sub> volts	I <sub>b</sub> ma	I <sub>c2</sub> ma	r <sub>p</sub> MΩ	g <sub>m</sub> μmhos		
12AY7	3, 3	Class A Amplifier	12-6	0-15	250	—	-4	3	—	0-02	1750	μ = 40	
12AZ7	3, 3	Class A Amplifier	6-3	0-45	100	—	*	3-7	—	0-015	4000	R <sub>k</sub> = 270 Ω, μ = 60	
			12-6	0-225	250	—	*	10-0	—	0-0109	5500	R <sub>k</sub> = 200 Ω, μ = 60	
12B3	2	TV Damper Diode	12-6	0-6	See 6B3 Characteristics								
12B4 12B4A	3	Vertical Deflection Amplifier	6-3	0-6	Max. DC Plate Voltage = 550 volts Max. DC Cathode Curr. = 30 ma Max. Peak Pos.-Pulse Plate Voltage = 1000 volts (Abs.) Max. Plate Dissipation = 5-5 w								
			12-6	0-3									
12B6M	2, 3	Amplifier	12-6	0-15	250	—	-2-0	0-9	—	0-091	1100	μ = 100	
12B7	5	Amplifier	12-6	0-15	See 14A7/12B7 Characteristics								
12B8GT	3, 5	Tri. Amplifier	12-6	0-3	90	—	0	2-8	—	0-037	2400	μ = 90	
		Pent. Amplifier			90	90	-3-0	7-0	2-0	0-2	1800		
12BA6	5	Class A Amplifier	12-6	0-15	See 6BA6 Characteristics								
12BA7	7	Converter	12-6	0-15	See 6BA7 Characteristics								
12BD6	5	Class A Amplifier	12-6	0-15	See 6BD6 Characteristics								
12BE6	7	Converter	12-6	0-15	See 6BE6 Characteristics								
12BF6	2, 2, 3	Class A Amp.	12-6	0-15	250	—	-9-0	9-5	—	0-0085	1900	μ = 16 W <sub>o</sub> = .3 watts	
12BH7 12BH7A	3, 3	Vertical Deflection Amplifier	12-6	0-3	Max. DC Plate Volts = 450 volts						Abs. Max. Peak Positive Pulse Plate Voltage = 1500 volts		
			6-3	0-6	Max. DC Cathode Current = 20 ma						Max. Plate Dissipation = 3-5 watts/plate		
12BK5	5	Power Amplifier	12-6	0-6	See 6BK5 Characteristics								
12BK6	2, 2, 3	Det. Amplifier	12-6	0-5	100	—	-1-0	0-5	—	0-08	1250	μ = 100	
					250	—	-2-0	1-2	—	0-062	1600	μ = 100	
12BL6	5	Class A Amplifier	12-6	0-15	12-6	12-6	0	1-35	0-5	0-5	1350		
12BN6	5	Limiter Discriminator	12-6	0-15	65	60	-1-3	0-23	5-0				
12BQ6GA 12BQ6GT 12BQ6GTA	5	Horizontal Deflection Amplifier	12-6	0-6	See 6BQ6GA Characteristics								
12BQ6- GTB/12CU6	5	Horizontal Deflection Amplifier	12-6	0-6	Max. DC Plate Voltage = 600 volts Max. Plate Dissipation = 11 w Max. DC Cathode Current = 112-5 ma Max. Peak Pos.-Pulse Plate Voltage = 6000 volts (Abs.)								
12BR7 12BR7A	2, 2, 3	Class A Amplifier	12-6	0-225	100	—	*	3-7	—	0-015	4000	R <sub>k</sub> = 270 Ω, μ = 60	
			6-3	0-45	250	—	*	10	—	0-0109	5500	R <sub>k</sub> = 200 Ω, μ = 60	
12BT6	2, 2, 3	Detector Amplifier	12-6	0-15	100	—	-1-0	0-8	—	0-054	1300	μ = 70	
					250	—	-3-0	1-0	—	0-058	1200	μ = 70	
12BU6	2, 2, 3	Detector Amplifier	12-6	0-15	250	—	-3-0	3-9	—	0-011	1500	R <sub>L</sub> = 10 KΩ, W <sub>o</sub> = 0-3 watts	
					100	—	-9-0	9-5	—	0-0085	1900	μ = 16-5	
12BV7	5	Class A Amplifier	6-3	0-6	250	150	*	27	6-0	0-085	1300	R <sub>k</sub> = 68 Ω	
			12-6	0-3	250	180	-8-0	0-5 min.	—	—	—	—	
12BY7 12BY7A	5	Class A Amplifier	12-6 6-3	0-3 0-6	250	150	*	25	6-0	0-11	12,000	R <sub>k</sub> = 68 Ω	

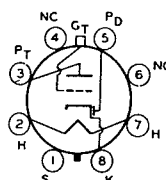
\*See quoted value of R<sub>k</sub>



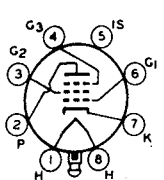
**12AX7  
12AX7-A  
12AY7  
12AZ7**



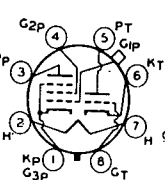
**12B3**



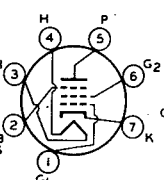
**12B4  
12B4-A**



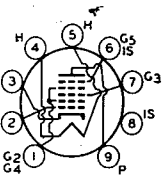
**12B6-M**



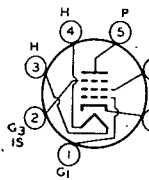
**12B7**



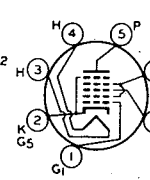
**12B8-GT**



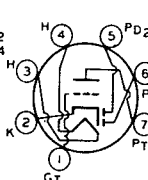
**12BA6  
12BA7**



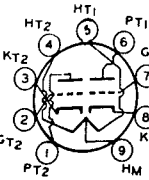
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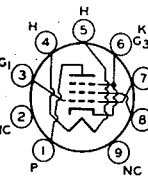
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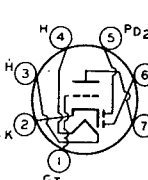
**12BF6**



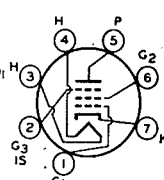
**12BH7  
12BH7-A**



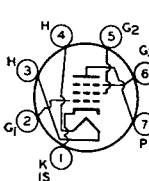
**12BK5**



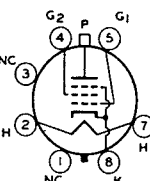
**12BK6**



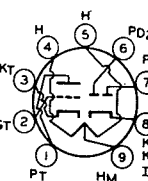
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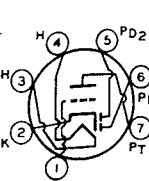
**12BN6**



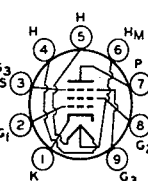
**12BQ6-GA  
12BQ6-GT, -GTA  
12BQ6-GTB/12CU6**



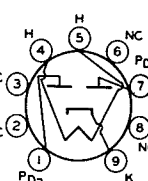
**12BR7  
12BR7-A**



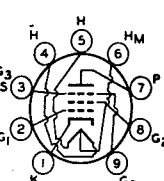
**12BT6  
12BU6**



**12BV7**



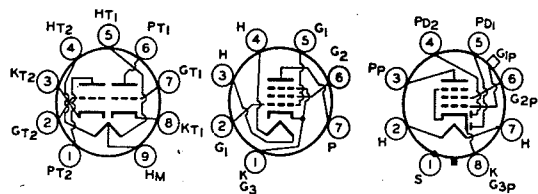
**12BW4**



**12BY7  
12BY7-A**

TYPE	Class	Use	E <sub>r</sub> volts	I <sub>r</sub> amps	E <sub>b</sub> volts	E <sub>c2</sub> volts	E <sub>c1</sub> volts	I <sub>b</sub> ma	I <sub>c2</sub> ma	r <sub>p</sub> MΩ	g <sub>m</sub> μmhos	
12BZ7	3, 3	Class A Amplifier	6.3 12.6	0.6 0.3	250	—	-2.0	2.5	—	0.0318	3200	μ = 100
12C5	5	Power Amplifier	12.6	0.6	110	110	-7.5	49	4.0	0.01	7500	R <sub>L</sub> = 2.5 KΩ, W <sub>o</sub> = 1.9 watts
12C8	2, 2, 5	Class A Amplifier	12.6	0.15	250	125	-3.0	10.0	2.3	0.6	1325	
12CA5	5	Class A Amplifier	12.6	0.6	110 125	110 125	-4.0 -4.5	32 37	3.5 4.0	0.016 0.015	8100 9200	R <sub>L</sub> = 3.5 KΩ, W <sub>o</sub> = 1.1 watts R <sub>L</sub> = 4.5 KΩ, W <sub>o</sub> = 1.5 watts
12CM6	5	Power Amplifier	12.6	0.225	See 6CM6 Characteristics							
12CN5	5	Class A Amplifier	12.6	0.45	12.6	12.6	0	4.5	0.35	0.04	3800	
12CR5	5	Horiz. Defl. Amplifier	12.6	0.6	See 6CR5 Characteristics							
12CR6	2, 5	Det. Amplifier	12.6	0.15	250	100	-2.0	9.6	2.6	0.8	2200	
12CS5	5	Power Amplifier	12.6	0.6	See 6CS5 Characteristics							
12CS6	7	Sync. Sep.	12.6	0.15	100 100	30 30	0 -1.0	0.8 0.75	4.0 1.1	0.7 1.0	950 1250	E <sub>cs</sub> = -1 E <sub>cs</sub> = 0
12CT8	3, 5	Triode Amplifier Pentode Amplifier	12.6	0.3	150 200		* *	9.0 15.0		0.0082 0.15	4900 7000	R <sub>k</sub> = 152 μ = 40 R <sub>k</sub> = 82
12CU5	5	Class A Amplifier	12.6	0.6	120	110	-8.0	49	4	0.01	7500	R <sub>L</sub> = 2.5 KΩ, W <sub>o</sub> = 2.3 watts
12CU5/12C5	5	Class A Amplifier	12.6	0.6	See 6CU5 Characteristics							
12CU6	5	Horiz. Amplifier	12.6	0.6	See 6BQ6G Characteristics							
12CX6	5	Class A Amplifier	12.6	0.15	12.6	12.6		3.0	1.4	0.04	3100	R <sub>g1</sub> = 2.2 MΩ
12CY6	5	Class A Amplifier	12.6	0.2	12.6	12.6		1.6	0.4	0.14	3250	R <sub>g1</sub> = 2.2 MΩ
12D4	2R	Half-wave Rectifier	12.6	0.6	Max. PIV = 4400 volts Peak Plate Current = 900 ma Max. Output Current = 155 ma Plate Dissipation = 5.5 w							
12DB5	5	Power Amplifier	12.6	0.2	110	110	-7.5	49	4.0	0.013	8000	R <sub>L</sub> = 2.0 KΩ
12DE8	2, 5	Class A Amplifier	12.6	0.2	12.6	12.6	-80	1.3	0.5	0.3	1500	
12DF5	2R, 2R	Full-wave Rectifier	12.6 6.3	0.45 0.9	Max. AC Voltage/Plate = 450 volts (rms) Max. Peak Plate Curr./Plate = 350 ma Max. Output Current = 60 ma Max. PIV = 1275 volts							
12DF7	3, 3	Class A Amplifier	12.6 6.3	0.15 0.3	See 12AX7 Characteristics (Special Low Noise)							
12DK5	5	Class A Amplifier	12.6	0.3	12.6	12.6		2.0	0.65	0.1	3300	R <sub>g1</sub> = 2.2 MΩ
12DK7	2, 2, 4	Det. Amplifier	12.6	0.5	12.6	12.6		6.0	1.0	0.004	5000	R <sub>g1</sub> = 2.2 MΩ
12DL8	2, 2, 4	Det. Amplifier	12.6	0.55	12.6	-2.0	+12.6	8.0	75	480 ohms	15,000	R <sub>L</sub> = 800 Ω, W <sub>o</sub> = 0.04 watts
12DM5	5	Power Amplifier	12.6	0.45	110	110	-7.5	49	4.0	0.014	7500	R <sub>L</sub> = 2.5 KΩ, W <sub>o</sub> = 1.9 watts
12DQ6	5	Horiz. Defl. Amplifier	12.6	0.6	See 6DQ6 Characteristics							

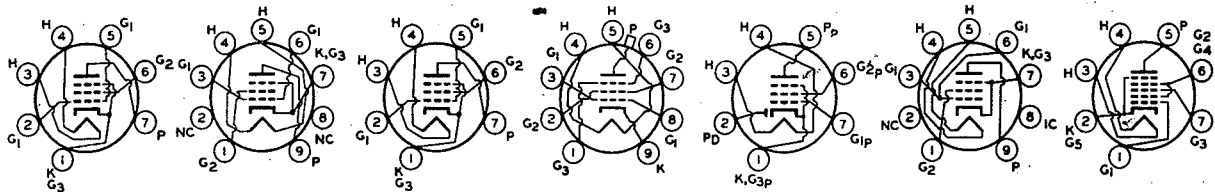
\*See quoted value of R<sub>k</sub>



12BZ7

12C5

12C8



12CA5

12CM6

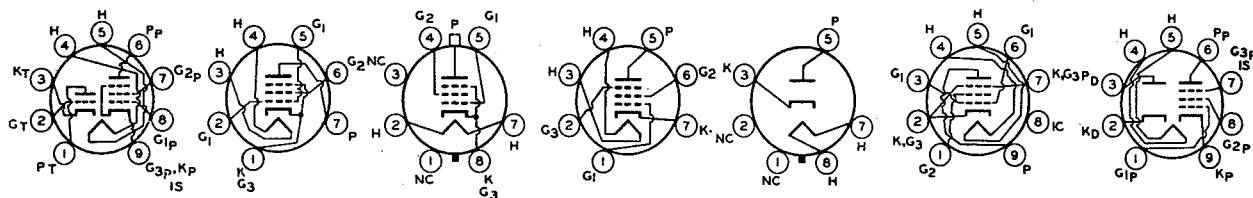
12CN5

12CR5

12CR6

12CS5

12CS6



12CT8

12CU5  
12CU5/12C5

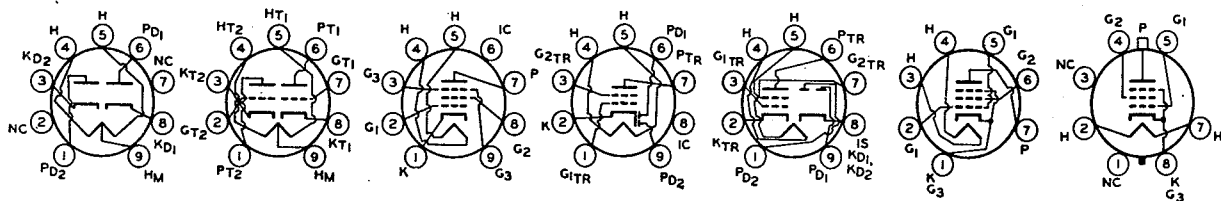
12CU6

12CX6  
12CY6

12D4

12DB5

12DE8



12DF5

12DF7

12DK5

12DK7

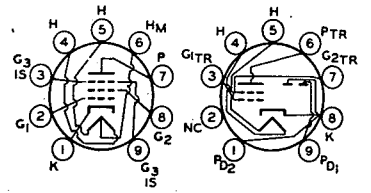
12DL8

12DM5

12DQ6  
12DQ6-A

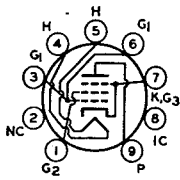
TYPE	Class	Use	E <sub>f</sub> volts	I <sub>f</sub> amps	E <sub>b</sub> volts	E <sub>c2</sub> volts	E <sub>c1</sub> volts	I <sub>b</sub> ma	I <sub>c2</sub> ma	r <sub>p</sub> MΩ	g <sub>m</sub> μmhos	
12DQ6A	5	Horiz. Defl. Amplifier	12.6	0.6	See 6DQ6A Characteristics							
12DQ7	5	Video Amplifier	12.6	0.6	200	125	*	26.0	5.6	0.053	10,500	R <sub>k</sub> = 68 Ω
12DS7	2, 2, 4	Class A Amplifier	12.6	0.4	12.6	-0.5	12.6	40	—	480 Ω	15,000	μ = 7.2, I <sub>c1</sub> = 75 ma
12DT5	5	Vert. Defl. Amplifier	12.6	0.6	See 6DT5 Characteristics							
12DT7	3, 3	Class A Amplifier	6.3 12.6	0.3 0.15	See 12AX7 Characteristics							
12DT8	3, 3	Class A Amplifier	12.6	0.15	See 6DT8 Characteristics							
12DU7	2, 2, 4	Det. Amplifier	12.6	0.25	12.6	12.6	—	12.0	1.5	0.006	6200	R <sub>L</sub> = 2.7 KΩ, R <sub>g1</sub> = 2.2 MΩ W <sub>o</sub> = 0.025 w
12DV7	2, 2, 3	Det. Amplifier	12.6	0.15	12.6	—	—	0.4	—	0.019	750	μ = 14, R <sub>g1</sub> = 2.2 MΩ
12DV8	2, 2, 4	Det. Amplifier	12.6	0.375	12.6	—	+12.6	6.8	53	900 ohms	8500	R <sub>k</sub> = 18 Ω μ = 7.6, R <sub>g2</sub> = 4.7 MΩ
12DW5	5	Vert. Defl. Amplifier	12.6	0.6	Max. Peak Pos. Plate Voltage = 2200 volts Max. Plate Dissipation = 11 watts Max. DC I <sub>k</sub> = 65 ma							
		Class A Amplifier			200	150	-22.5	55	2.0	0.015	5500	
12DW7	3, 3	Unit 1 AF Voltage Amplifier	6.3	0.3	100	—	-1.0	0.5	—	0.08	1250	μ = 100
					250	—	-2.0	1.2	—	0.0625	1600	μ = 100
		Unit 2 AF Phase Inverter	12.6	0.15	100	—	0	11.8	—	-0.065	3100	μ = 20
					250	—	-8.5	10.5	—	-0.077	2200	μ = 17
12DW8	2, 3, 3	Voltage Amp.	12.6	0.45	12.6	—	0	1.9	—	-0.0352	2700	μ = 9.5, R <sub>g1</sub> = 1.5 MΩ
		Driver			12.6	—	0	7.5	—	970 ohms	6500	μ = 6.4, R <sub>g1</sub> = 1 MΩ
12DZ6	5	RF Amplifier	12.6	0.19	12.6	12.6	—	4.5	2.2	0.025	3800	R <sub>g1</sub> = 10 MΩ
12DZ8	3, 5	Class A Amplifier	12.0	0.45	See 6DZ8 Characteristics							
12E5GT	3	Class A Amplifier	12.6	0.15	100	—	-5.0	2.5	—	0.012	1150	μ = 13.8
					250	—	-13.5	5.0	—	0.0095	1450	μ = 13.8
12EA6	5	Class A Amplifier	12.6	0.19	12.6	12.6	—	3.2	1.4	0.032	3800	R <sub>g1</sub> = 10 MΩ
12EC8	3, 5	FM Oscillator	12.6	0.225	12.6	—	0	2.4	—	0.006	4700	μ = 25, R <sub>g1</sub> = 4.7 KΩ
		FM Amplifier			12.6	12.6	0	0.66	0.28	0.75	2000	R <sub>g1</sub> = 33 KΩ
12ED5	5	Class A Amplifier	12.6	0.45	110	110	-4.0	32	4.0	0.014	8100	R <sub>L</sub> = 4.5 KΩ, W <sub>o</sub> = 1.1 watts
					125	125	-4.5	37	7.0	0.014	8500	R <sub>L</sub> = 4.5 KΩ, W <sub>o</sub> = 1.5 watts
12EF6	5	Vertical Defl. Amplifier	12.6	0.45	See 6EF6 Characteristics							
12EG6	7	Mixer Oscillator	12.6	0.15	12.6	12.6	—	0.04	0.24	0.15	800	R <sub>g1</sub> = 2.2 mΩ
12EH5	5	Class A Amplifier	12.6	0.6	See 6EH5 Characteristics							
12EK6	5	FM Amplifier	12.6	0.19	12.6	12.6	—	4.0	1.7	0.05	4200	R <sub>g1</sub> = 2.2 MΩ
12EL6	2, 2, 3	Det. Amplifier	12.6	0.15	12.6	—	—	0.75	—	0.045	1200	μ = 55, R <sub>g1</sub> = 1 MΩ

\*See quoted value of R<sub>k</sub>

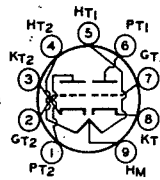


12DQ7

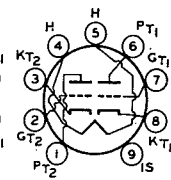
12DS7



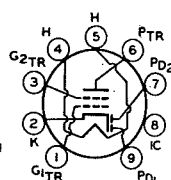
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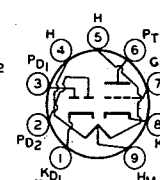
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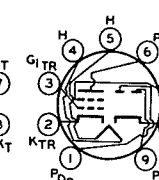
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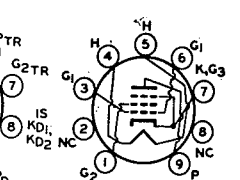
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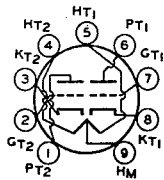
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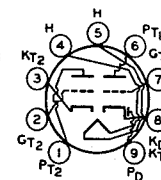
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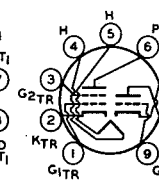
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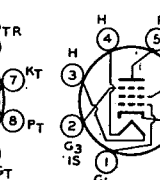
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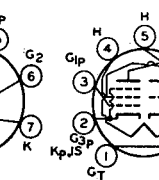
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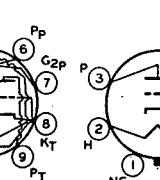
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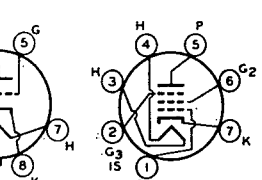
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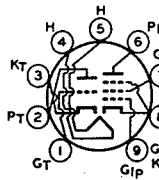
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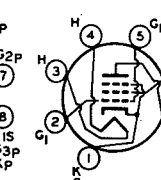
12E5-GT



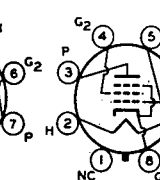
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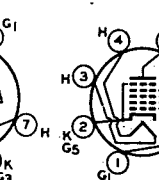
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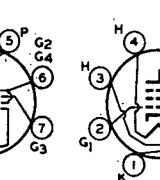
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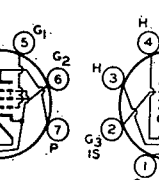
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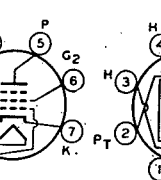
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12EH5



12EK6



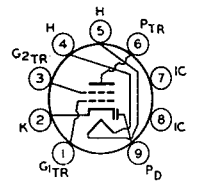
12EL6

For 12DQ6A, see previous page

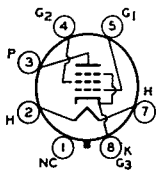
TYPE	Class	Use	$E_f$ volts	$I_f$ amps	$E_b$ volts	$E_{c2}$ volts	$E_{c1}$ volts	$I_b$ ma	$I_{c2}$ ma	$r_p$ $\Omega$	$g_m$ $\mu$ hos	
12EM6	2, 5	Det. Power Amplifier	12-6	0-5	12-6	12-6	—	6-0	1-0	0-004	5000	$R_L = 3-5 K\Omega$ , $R_{g1} = 15 M\Omega$ $W_o = 0-01$ watts
12EN6	5	Vert. Defl. Amplifier	12-6	0-6	Max. Peak Pos. Pulse Plate Voltage = 1200 volts Max. Plate Dissipation = 7-0 watts Max. DC $I_k = 50$ ma							
		Class A Amplifier			200	110	-9-5	50	2-2	0-028	8000	
12EZ6	5	Class A Amplifier	12-6	0-175	12-6	12-6	-0-7	1-9	0-7	0-4	2700	$R_{g1} = 2-2 M\Omega$
12F5GT	3	Class A Amplifier	12-6	0-15	See 6SF5 Characteristics							
12F8	2, 2, 5	Class A Amplifier	12-6	0-15	12-6	12-6	0	1-0	0-38	0-33	1000	
12FA6	7	Converter	12-6	0-15	12-6	12-6	-0-5	0-45	1-0	0-8	$g_c = 320 \mu$ hos	
12FK6	2, 2, 3	Det. Amplifier	12-6	0-15	12-6	—	—	1-3	—	0-0062	1200	$\mu = 7-4$ , $R_{g1} = 2-2 M\Omega$
12FM6	2, 2, 3	Det. Amplifier	12-6	0-15	12-6	—	—	1-0	—	0-0077	1300	$\mu = 10$ , $R_{g1} = 2-2 M\Omega$
12FT6	2, 2, 3	Det. Amplifier	12-6	0-15	12-6	—	—	0-6	—	0-013	1000	$\mu = 14$ , $R_{g1} = 2-2 M\Omega$
12G4	3	Amplifier	12-6	0-15	See 6SN7GT Characteristics (One Section)							
12G8	3, 3	AF Driver	12-6	0-4	12-6	—	0	7-2	—	0-0085	2600	$R_L = 2-0 K\Omega$ , $W_o = 0-025$ watts $\mu = 22$
			6-3	0-3	90	—	0	10	—	—	0-003	$\mu = 20$
12H4	3	Amplifier	12-6	0-15	250	—	-8-0	9-0	—	—	0-0026	$\mu = 20$
			12-6	0-15	90	—	0	10	—	—	0-003	$\mu = 20$
12H6	2, 2	F.W. Rectifier	12-6	0-15	See 6H6 Characteristics							
12J5	3	Class A Amplifier	12-6	0-15	See 6J5 Characteristics							
12J5GT			12-6	0-15	See 6J5 Characteristics							
12J6G	5	Det. Amplifier	12-6	0-15	See 6J7 Characteristics							
12J6GT			12-6	0-15	See 6J7 Characteristics							
12J8	2, 2, 4	Det. Amplifier	12-6	0-35	12-6	12-6		12	1-5	0-006	5500	$R_L = 2-7 K\Omega$ , $R_{g1} = 2-2 M\Omega$ $W_o = 0-02$ watts
12K5	4	Class A Amplifier	12-6	0-4	12-6	-2-0	12-6	40	$G_1$ 85	800 ohms	—	$I_{c1} = 75$ ma
12K7G	5	Class A Amplifier	12-6	0-15	See 6K7 Characteristics							
12K7GT			12-6	0-15	See 6K7 Characteristics							
12K8	3, 6	Converter	12-6	0-15	See 6K8 Characteristics							
12K8GT			12-6	0-15	See 6K8 Characteristics							
12L6GT	5	Class A Amplifier	12-6	0-6	110 200	110 125	-7-5 *	49 46	4-0 2-2	0-013 0-028	8000 8000	$R_L = 2-0 K\Omega$ , $W_o = 2-1$ watts $R_L = 4-0 K\Omega$ , $W_o = 3-8$ watts $R_k = 180 \Omega$
12L8GT	5, 5	Power Amplifier	12-6	0-15	180	180	-9-0	13-0	2-8	0-16	2150	$R_L = 10-0 K\Omega$ , $W_o = 1-0$ watts
12Q7G	2, 2, 3	Det. Amplifier	12-6	0-15	See 6Q7G Characteristics							
12Q7GT	2, 2, 3	Amplifier	12-6	0-15	See 6Q7GT Characteristics							
12R5	5	Vertical Deflection Amplifier	12-6	0-6	Max. DC Plate Voltage = 150 volts Max. DC Cathode Curr. = 155 ma Max. Screen Voltage = 150 volts Max. Plate Dissip. = 4-5 watts Abs. Max. Peak Pos. Pulse Voltage = 1500 volts							
12S7	2, 5	Det. Amplifier	12-6	0-1	200	85	-2-0	5-0	1-5	1-0	2000	

\*See quoted value of  $R_k$

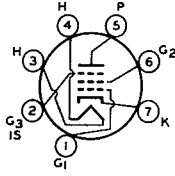




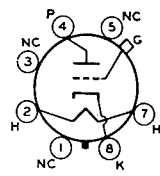
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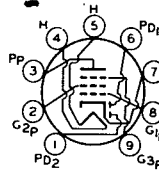
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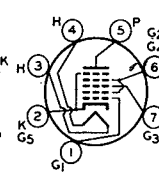
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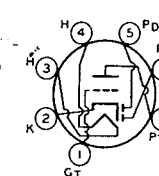
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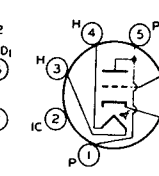
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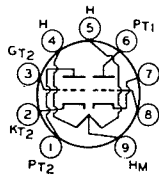
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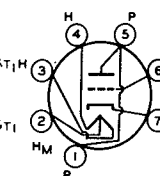
12FK6  
12FM6  
12FT6



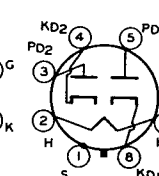
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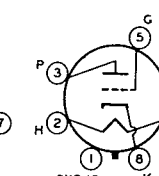
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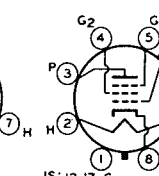
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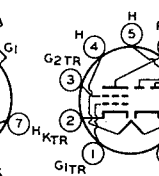
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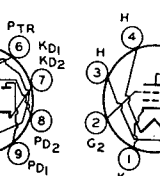
12J5  
12J5-GT



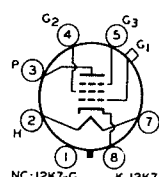
12J7-G  
12J7-GT



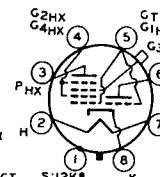
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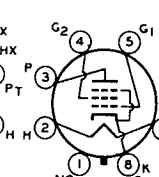
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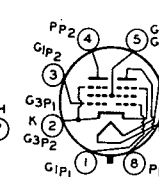
12K7-G  
12K7-GT



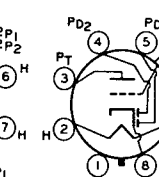
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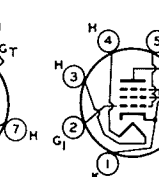
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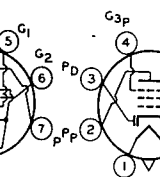
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12Q7-G  
12Q7-GT



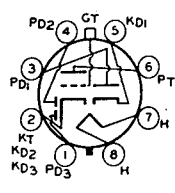
12R5



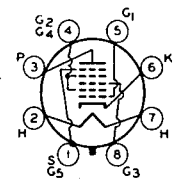
TYPE	Class	Use	$E_r$ volts	$I_r$ amps	$E_b$ volts	$E_{c2}$ volts	$E_{c1}$ volts	$I_b$ ma	$I_{c2}$ ma	$r_p$ M $\Omega$	$g_m$ $\mu$ mhos	
12S8GT	2, 2, 2, 3	Class A Amplifier	12-6	0-15	100 250	— —	-1-0 -2-0	0-4 0-9	— —	0-11 0-91	900 1100	$\mu = 100$ $\mu = 100$
12SA7 12SA7G 12SA7GT	7	Converter	12-6	0-15	See 6SA7 Characteristics							
12SC7	3, 3	Class A Amplifier	12-6	0-15	See 6SC7 Characteristics							
12SF5 12SF5GT	3	Class A Amplifier	12-6	0-15	See 6SF5 Characteristics							
12SG7	5	Class A Amplifier	12-6	0-15	See 6SG7 Characteristics							
12SH7	5	Class A Amplifier	12-6	0-15	See 6SH7 Characteristics							
12SJ7 12SJ7GT	5	Class A Amplifier	12-6	0-15	See 6SJ7 Characteristics							
12SK7 12SK7GT	5	Class A Amplifier	12-6	0-15	See 6SK7 Characteristics							
12SL7GT	3, 3	Class A Amplifier	12-6	0-15	See 6SL7GT Characteristics							
12SN7GT 12SN7GTA	3, 3	Class A Amplifier	12-6	0-3	See 6I5 Characteristics							
12SQ7 12SQ7GT	2, 2, 3	Class A Amplifier	12-6	0-15	See 6SQ7 Characteristics							
12SR7 12SR7GT	2, 2, 3	Class A Amplifier	12-6	0-15	See 6SR7 Characteristics							
12SW7	2, 2, 3	Det. Amplifier	12-6	0-15	250	—	-9-0	9-5	—	0-0085	1900	$\mu = 16$
12SX7GT	3, 3	Class A Amplifier	12-6	0-3	250	—	-8-0	9-0	—	0-0077	2600	$\mu = 20$
					26-5	—	●	1-8	—	0-0115	1800	$\mu = 21$ $R_g = 0-5$ M $\Omega$
12SY7 12SY7GT	7	Converter	12-6	0-15	250	100	-2-0	3-5	8-5	1-0	$g_c = 450$ $\mu$ mhos	
12U7	3, 3	Class A Amplifier	12-6	0-15	12-6	—	0	1-0	—	0-0125	1600	$\mu = 20$
12V6GT	5	Class A Amplifier	12-6	0-225	See 6V6 Characteristics							
12W6GT	5	Vert. Def. Amp.	12-6	0-6	See 6W6GT Characteristics							
12X3	2R	Rectifier	12-6	0-65	Max. PIV = 7000 volts Max. DC Output Current = 10 ma Max. Peak Plate Current = 200 ma Effective Plate Voltage = 250 v							
12X4	2R, 2R	Full-wave Rectifier	12-6	0-225	See 6X4 Characteristics							
12Z3	2R	Half-wave Rectifier	12-6	0-3	Max. AC Plate Voltage = 235 volts (rms) Max. DC Output = 55 ma							
13DE7	3, 3	Vert. Osc. Vert. Def. Amp.	13-0	0-45	See 6DE7 Characteristics							
13DR7	3, 3	Vert. Amp. Vert. Osc.	13-0	0-45	See 6DR7 Characteristics							
14A4	3	Class A Amplifier	12-6	0-15	See 6J5 Characteristics							
14A5	5	Class A Amplifier	12-6	0-15	250	250	-12-5	30	3-5	0-07	3000	$R_L = 7-5$ K $\Omega$ , $W_o = 2-8$ watts

\*See quoted value of  $R_k$ 

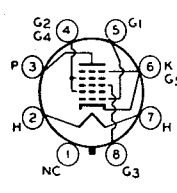
● Self excited



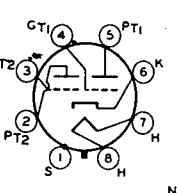
12S8-GT



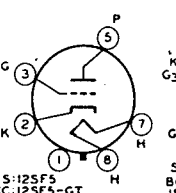
12SA7



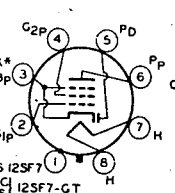
12SA7-G  
12SA7-GT



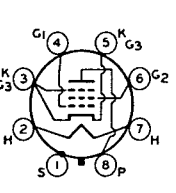
12SC7



12SF5  
12SF5-GT

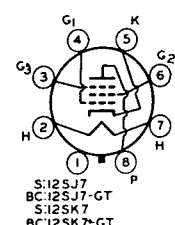


12SF7  
12SF7-GT

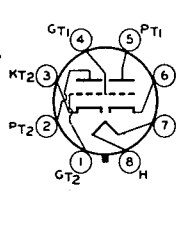


12SG7  
12SH7

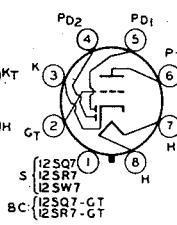
\* 12SF7-GT has an Internal Shield (IS).



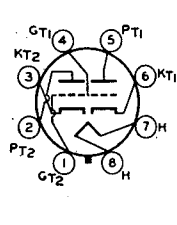
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12SK7  
12SK7-GT



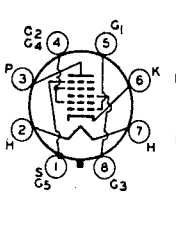
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12SN7-GT



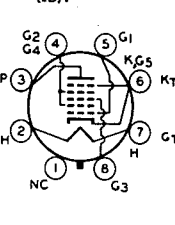
12SQ7-GT  
12SR7-GT  
12SW7



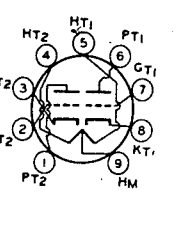
12SX7-GT



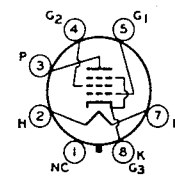
12SY7



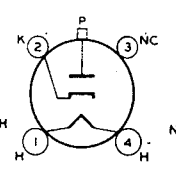
12SY7-GT



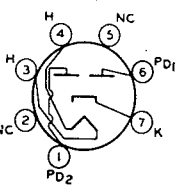
12U7



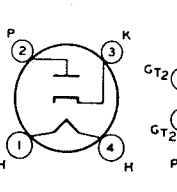
12V6-GT  
12W6-GT



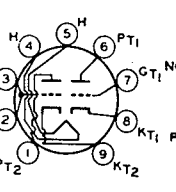
12X3



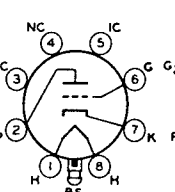
12X4



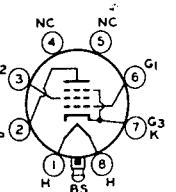
12Z3



13DE7  
13DR7



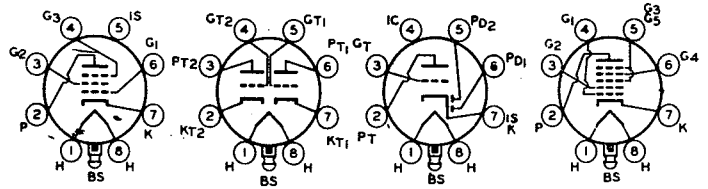
14A4



14A5

TYPE	Class	Use	E <sub>r</sub> volts	I <sub>r</sub> amps	E <sub>b</sub> volts	E <sub>c2</sub> volts	E <sub>c1</sub> volts	I <sub>b</sub> ma	I <sub>c2</sub> ma	r <sub>p</sub> MΩ	g <sub>m</sub> μmhos	
14A7	5	Class A Amplifier	12-6	0-15	See 6SK7 Characteristics							
14A7/ 12B7	5	Class A Amplifier	12-6	0-15	250	100	-3-0	9-2	2-6	0-8	2000	
					100	100	-1-0	13-0	4-0	0-12	2350	
14AF7	3, 3	Class A Amplifier	12-6	0-15	See 7AF7 Characteristics							
14B6	2, 2, 3	Class A Amplifier	12-6	0-15	See 6SQ7 Characteristics							
14B8	7	Converter	12-6	0-15	See 6A8 Characteristics							
14C5	5	Class A Amplifier	12-6	0-225	180	180	-8-5	29	3-0	0-05	3700	
					315	225	-13	34	2-2	0-077	3750	
14C7	5	Class A Amplifier	12-6	0-15	See 6SJ7 Characteristics							
14E6	2, 2, 3	Class A Amplifier	12-6	0-15	See 6SR7 Characteristics							
14E7	2, 2, 5	Class A Amplifier	12-6	0-15	100	100	*	10-0	2-7	0-15	1600	R <sub>k</sub> = 80 Ω
					250	100	*	7-5	1-6	0-7	1300	R <sub>k</sub> = 330 Ω
14F7	3, 3	Class A Amplifier	12-6	0-15	See 6SL7GT Characteristics							
14F8	3, 3	Class A Amplifier	12-6	0-15	250	—	*	6-0	—	—	3300	μ = 48, R <sub>k</sub> = 500 Ω
14G6	2, 2, 3	Det. Amplifier	14-0	0-1	100	—	-1-0	0-8	—	0-05	1400	μ = 70
14H7	5	Class A Amplifier	12-6	0-15	See 7H7 Characteristics							
14J7	3, 7	Converter	12-6	0-15	See 7J7 Characteristics							
14K7	3, 6	Converter	14-0	0-1	200	85	-2-0	3-0	3-0	>1-0	g <sub>c</sub> = 750 μmhos	
14L7	2, 2, 3	Det. Amplifier	14-0	0-1	170	—	-1-55	1-5	—	0-042	1650	μ = 70
14N7	3, 3	Class A Amplifier	12-6	0-3	See 6J5 Characteristics							
14Q7	7	Converter	12-6	0-15	See 6SA7 Characteristics							
14R7	2, 2, 5	Class A Amplifier	12-6	0-15	See 7R7 Characteristics							
14S7	3, 7	Mixer Oscillator	12-6	0-15	See 7S7 Characteristics							
14W7	5	Class A Amplifier	12-6	0-225	See 7V7 Characteristics							
14X7	2, 2, 3	Det. Amplifier	12-6	0-15	See 7X7 Characteristics							
14Y4	2R, 2R	Full-wave Rectifier	12-6	0-3	Max. AC Voltage/Plate = 325 volts (rms) Max. Peak Plate Current = 210 ma Output Current = 70 ma							
14Y7	3, 6	Triode Oscillator	14-0	0-1	100	—	0	10	—	—	2800	μ = 22
	Hex. Amplifier	100			43	-1-0	1-2	1-46	1-0	—	g <sub>c</sub> = 530 μmhos	
14Z3	2R	Rectifier	12-6	0-3	Max. AC Voltage/Plate = 250 volts (rms) Max. Output Current = 60 ma							
15	5	Class A Amplifier	2-0	0-22	67-5	67-5	-1-5	1-85	0-3	0-63	710	
					135	67-5	-1-5	1-85	0-3	0-8	750	
15A6	5	Video Amplifier	15-0	0-3	180	180	-2-9	36	4-6	0-1	10,000	
17AV5GA	5	Class A Amplifier	16-8	0-45	250	150	-22-5	55	2-1	0-02	5500	
17AX4GT	2R	TV Damper Diode	16-8	0-45	Max. PIV = 4400 volts Max. DC Plate Curr. = 125 ma Max. Peak Plate Curr. = 750 ma							
17BQ6GTB	5	Horiz. Defl. Amplifier	16-8	0-45	Max. DC Screen Voltage = 200 volts Max. DC Cathode Curr. = 112-5 ma				Max. Peak Pos.-Pulse Plate Voltage = 6000 volts (Abs). Max. Plate Dissipation = 11 watts			
17C5	5	Power Amplifier	16-8	0-45	See 12C5 Characteristics							

\*See quoted value of R<sub>k</sub>

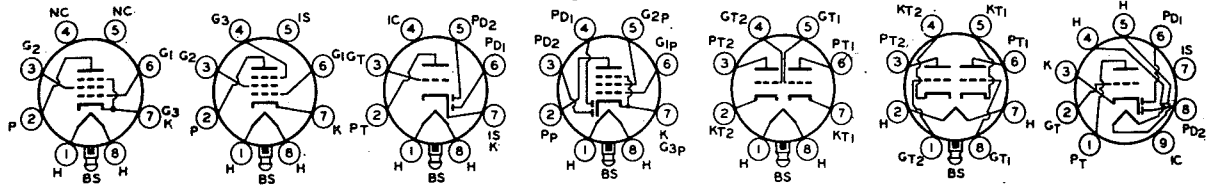


14A7  
14A7/12B7

14AF7

14B6

14B8



14C5

14C7

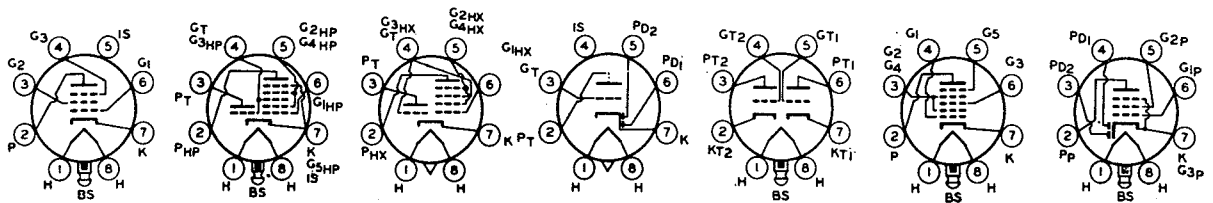
14E6

14E7

14F7

14F8

14G6



14H7

14J7

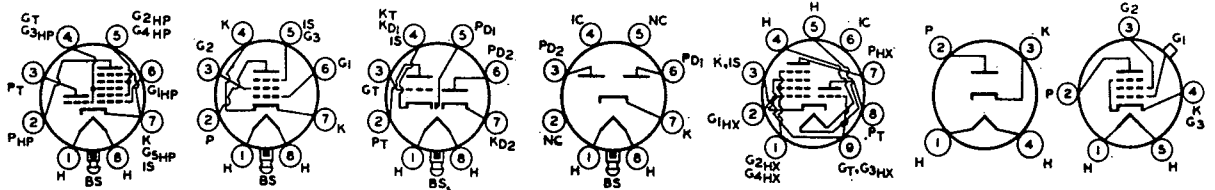
14K7

14L7

14N7

14Q7

14R7



14S7

14W7

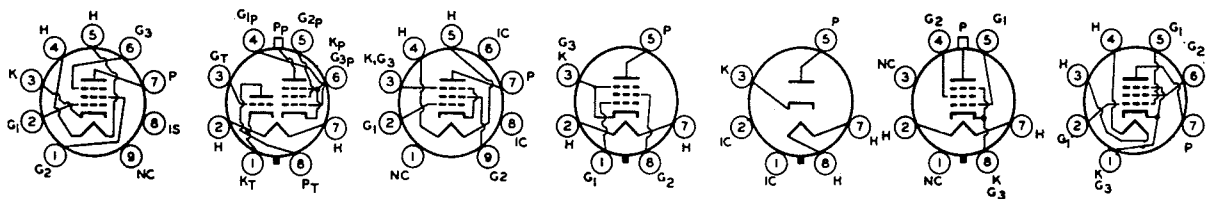
14X7

14Y4

14Y7

14Z3

15



15A6

15A8

16A5

17AV5-GA

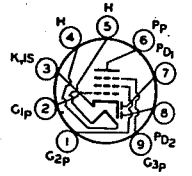
17AX4-GT

17BQ6-GTB

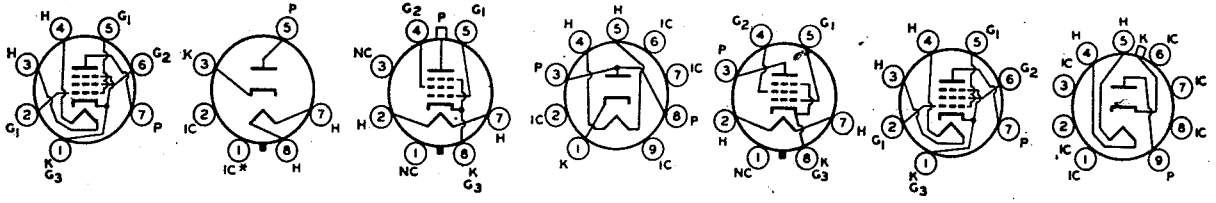
17C5

TYPE	Class	Use	E <sub>f</sub> volts	I <sub>f</sub> amps	E <sub>b</sub> volts	E <sub>c2</sub> volts	E <sub>c1</sub> volts	I <sub>b</sub> ma	I <sub>c2</sub> ma	r <sub>p</sub> MΩ	g <sub>m</sub> μmhos	
17C8	2, 2, 5	Det. Amplifier	17.0	0.1	200	200	-2.0	5.0	1.75	1.0	2200	
17CA5	5	AF Amplifier	16.8	0.45	125	125	-4.5	36	4.0	0.015	9200	R <sub>L</sub> = 4.5 KΩ
17CU5	5	Power Amplifier	16.8	0.45	120	110	-8.0	49	4.0	0.01	7500	W <sub>o</sub> = 2.3 watts
17D4	2	TV Damper Diode	16.8	0.45	Max. PIV = 4400 volts Max. DC Plate Current = 155 ma Max. Peak Plate Curr. = 900 ma			Max. DC Plate Current = 155 ma Max. Plate Dissip. = 5.5 w				
17DE4	2	TV Damper Diode	17.0	0.6	See 6DE4 Characteristics							
17DQ6 17DQ6A	5	Horizontal Deflection Amplifier	16.8	0.45	Max. DC Plate Voltage = 700 volts Max. Peak Pos.-Pulse Plate Voltage = 6000 volts (Abs.) Max. DC Cath. Curr. = 140 ma			Max. Plate Dissip. = 15 watts				
17H3	2	Damper Diode	17.5	0.3	Max. PIV = 2000 volts Max. Peak Plate Current = 450 ma Max. Output Current = 75 ma							
17L6GT	5	Class A Amplifier	16.8	0.45	200	125	—	46	2.2	0.03	8000	R <sub>L</sub> = 4.0 KΩ, W <sub>o</sub> = 3.8 watts
17R5	5	Power Amplifier	16.8	0.45	110	110	-8.5	40	3.3	0.013	7000	
17Z3	2R	Half-wave Rectifier	17.0	0.3	Max. PIV = 4500 volts			Max. DC Output Current = 150 ma				
18A5	5	Power Amplifier	18.5	0.3	200	125	-17.0	40	1.1	0.027	4800	
18DZ8	3, 5	Class A Amplifier	18.0	0.3	See 6DZ8 Characteristics							
18FW6	5	Class A Amplifier	18.0	0.10	100	100	*	11.0	4.4	0.25	4400	R <sub>k</sub> = 68 Ω
18FX6	7	Converter	18.0	0.10	100	100	-1.5	2.3	6.2	0.4	480	
18FY6	2, 2, 3	Class A Amplifier	18.0	0.10	100	—	-1.0	0.6	—	0.077	1300	μ = 100
19	3, 3	Class A Amplifier	2.0	0.26	See 1J6G Characteristics							
19AQ5	5	Power Amp.	18.9	0.15	See 6AQ5 Characteristics							
19AU4 19AU4GT 19AU4GTA	5	TV Damper Diode	18.9	0.6	See 6AU4GT Characteristics							
19BG6G 19BG6GA	5	Horizontal Deflection Amplifier	18.9	0.3	Max. DC Plate Voltage = 700 volts Max. Peak Pos.-Pulse Plate Voltage = 6600 volts (Abs.) Max. DC Plate Current = 110 ma			Max. Plate Dissipation = 20 w				
19C8	2, 2, 2, 3	Det. Amplifier	18.9	0.15	100	—	-1.0	0.5	—	0.08	1250	μ = 100
19D8	3, 7	Converter	19.0	0.1	200	119	-2.6	3.7	8.1	1.0	g <sub>c</sub> = 775, R <sub>k</sub> = 150 Ω	
19DE7	3, 3	Tri. VHF Amp. Pent. Amp.	19.4	0.3	See 6DE7 Characteristics							
19J6	3, 3	Class A Amplifier	18.9	0.15	100	—	*	8.5	—	0.007	5300	μ = 38, R <sub>k</sub> = 50 Ω
19T8	2, 2, 2, 3	Class A Amplifier	18.9	0.15	See 6T8 Characteristics							
19V8	2, 2, 2, 3	Det. Amplifier	18.9	0.15	100	—	-1.0	0.8	—	0.054	1300	μ = 70
					250	—	-3.0	1.0	—	0.058	1200	μ = 70
19X3	2R	Half-wave Rectifier	19.0	0.3	Max. PIV = 4000 volts			Max. DC Output Curr. = 180 ma				
19X8	3, 5	Det. Amplifier	18.9	0.15	See 6X8 Characteristics							
19Y3	2R	Half-wave Rectifier	19.0	0.3	Max. PIV = 700 volts			Max. DC Output Current = 180 ma				
20	3	Class A Amplifier	3.3	0.132	90	—	-16.5	3.0	—	0.009	—	μ = 3.5
					135	—	-22.5	6.5	—	0.006	—	
21A6	5	Class A Amplifier	21.5	0.3	180	180	-23	45	3.0	—	6500	
21A7	6, 3	Mixer	21.0	0.16	See 7D7 Characteristics							

\*See quoted value of R<sub>k</sub>



17C8



17CA5  
17CU5

17D4  
17DE4

17DQ6  
17DQ6-A

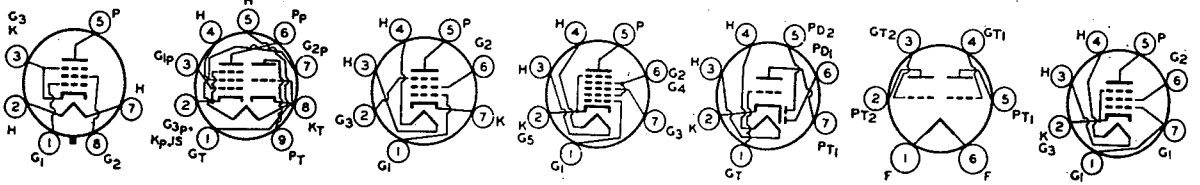
17H3

17L6-GT

17R5

17Z3

\*Pin omitted on some of these types.



18A5

18DZ8

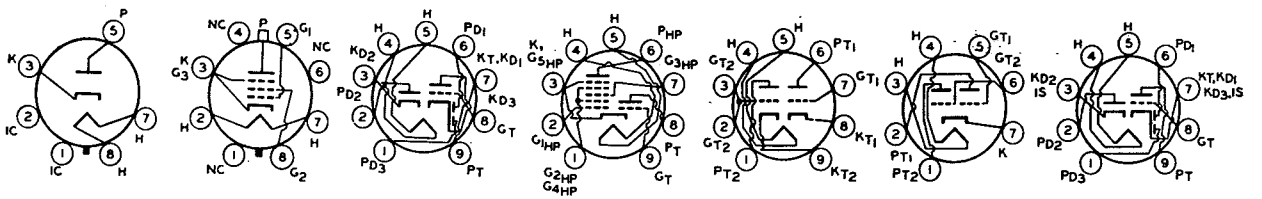
18FW6

18FX6

18FY6

19

19A05



19AU4  
19AU4-GT  
19AU4-GTA

19BG6-G  
19BG6-GA

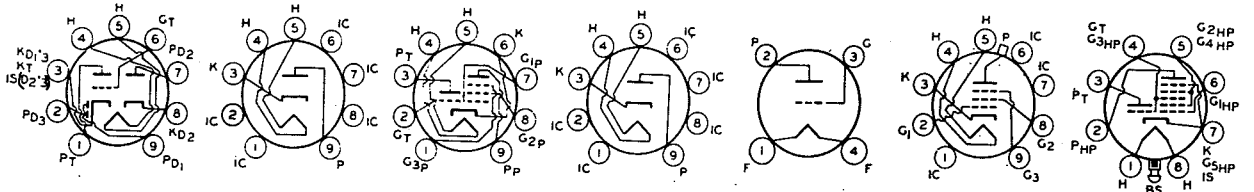
19C8

19D8

19DE7

19J6

19T8



19V8

19X3

19X8

19Y3

20

21A6

21A7

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	
21B6	5	Class A Amplifier	21.5	0.3	180	180	-23	45	3.0		6500	
22	4	Class A Amplifier	3.3	0.132	135	45	-1.5	1.7	0.6	0.725	375	
					135	67.5	-1.5	3.7	1.3	0.325	500	
24A	4	Class A Amplifier	2.5	1.75	180	90	-3.0	4.0	1.7	0.4	1000	
					250	90	-3.0	4.0	1.7	0.6	1050	
25A6 25A6GT	5	Class A Amplifier	25.0	0.3	95	95	-15.0	20	4.0	0.045	2000	$R_L = 4.5 \text{ K}\Omega$ , $W_o = 0.9 \text{ watts}$
					160	120	-18.0	33	6.5	0.042	2375	$R_L = 5.0 \text{ K}\Omega$ , $W_o = 2.2 \text{ watts}$
25A7G	2R,	Pent. Amplifier	25.0	0.3	100	100	-15.0	20.5	4.0	0.05	1800	$R_L = 4.5 \text{ K}\Omega$ , $W_o = 0.77 \text{ watts}$
25A7GT	5	Half-wave Rectifier			Max. DC Output Current = 75 ma Max. Peak Plate Current = 450 ma Max. PIV = 350 volts							
25AC5G 25AC5GT	3	Class B Amplifier	25.0	0.3	180	—	0	4.0	—	—	—	$R_L = 4.8 \text{ K}\Omega$ , $W_o = 6.0 \text{ watts}$
25AV5GA	5	Class A Amplifier	25.0	0.3	250	150	-22.5	55	2.1	0.0145	5900	
25AV5GT		Horiz. Defl. Amplifier	25.0	0.3	Max. Peak Pos. Pulse Plate Voltage = 5,500 volts Max. DC Cathode Current = 110 ma      Max. Plate Dissip. = 11 watts							
25AX4GT	2R	TV Damper Diode	25.0	0.3	Max. PIV = 4400 volts Max. Peak Plate Current = 750 ma Max. DC Plate Current = 125 ma							
25B5	3, 3	Class A Amplifier	25.0	0.3	See 25N6G Characteristics							
25B6G	5	Class A Amplifier	25.0	0.3	105	105	-16.0	48	2.0	0.0155	4800	$R_L = 1.7 \text{ K}\Omega$ , $W_o = 2.4 \text{ watts}$
					200	135	-23.0	62	1.8	0.018	5000	$R_L = 2.5 \text{ K}\Omega$ , $W_o = 7.1 \text{ watts}$
25B8GT	5, 3	Tri. Amplifier	25.0	0.15	100	—	-1.0	0.6	—	0.075	1500	$\mu = 12$
		Pent. Amplifier			100	100	-3.0	7.6	2.0	0.185	2000	
25BK5	5	Power Amplifier	25.0	0.3	250	250	-5.0	35	3.5	0.1	8500	$R_L = 6.5 \text{ K}\Omega$ , $W_o = 3.5 \text{ watts}$
25BQ6GA 25BQ6GT	5	Horiz. Defl. Amplifier	25.0	0.3	See 6BQ6GA Characteristics							
25BQ6- GTB/25CU6	5	Horiz. Defl. Amplifier	25.0	0.3	See 6BQ6GTB/6CU6 Characteristics							
25C5	5	Power Amplifier	25.0	0.3	110	110	-7.5	49	4.0	0.01	7500	$R_L = 2.5 \text{ K}\Omega$ , $W_o = 1.9 \text{ watts}$
25C6G 25C6GA	5	Class A Amplifier	25.0	0.3	See 6Y6G Characteristics							
25CA5	5	Class A Amplifier	25.0	0.3	See 6CA5 Characteristics							
25CD6G 25CD6GA 25CD6GB	5	Horiz. Defl. Amplifier	25.0	0.6	See 6CD6GA Characteristics							
25CR5	5	Horiz. Defl. Amplifier	25.0	0.3	See 6CR5 Characteristics							

■ Maximum

▼ Two valves





TYPE	Class	Use	E <sub>f</sub> volts	I <sub>f</sub> amps	E <sub>b</sub> volts	E <sub>c2</sub> volts	E <sub>c1</sub> volts	I <sub>b</sub> ma	I <sub>c2</sub> ma	r <sub>p</sub> MΩ	g <sub>m</sub> μmhos	
25CU6	5	Horiz. Defl. Amplifier	25.0	0.3	See 6CU6 Characteristics							
25D4	2	TV Damper Diode	25.0	0.3	See 6DA4 Characteristics							
25DN6	5	Amplifier	25.0	0.6	See 6DN6 Characteristics							
25DQ6	5	Amplifier	25.0	0.3	See 6DQ6 Characteristics							
25DQ6A	5	Amplifier	25.0	0.3	See 6DQ6A Characteristics							
25DT5	5	Amplifier	25.0	0.3	See 6DT5 Characteristics							
25E5	5	Horiz. Defl. Amplifier	25.0	0.3	See 6CM5 Characteristics							
25EC6	5	Class A Amplifier	25.0	0.6	135	135	-22.5	70	4.5	0.0047	7500	
25EH5	5	Class A Amplifier	25.0	0.3	See 6EH5 Characteristics							
25L6	5	Amplifier	25.0	0.3	110	110	-7.5	49.0	4.0	0.013	9000	R <sub>L</sub> = 2.0 KΩ, W <sub>o</sub> = 2.1 watts
25L6G					200	110	-8.0	50.0	2.0	0.03	9500	R <sub>L</sub> = 3.0 KΩ, W <sub>o</sub> = 4.3 watts
25L6GT	5	Amplifier	25.0	0.3	See 50L6GT Characteristics							
25N6G	3, 3	Output Triode	25.0	0.3	18G	—	—	46	—	—	—	R <sub>L</sub> = 4.0 KΩ, W <sub>o</sub> = 3.8 watts
		Tri. Amplifier			100	—	0	5.8	—	—	Peak AF Signal = 29.7 volts	
25U4GT	2	Damper Diode	25.0	0.3	Max. PIV = 3850 volts      Max. DC Output Current = 125 ma Max. Peak Current = 660 ma							
25W4GT	2R	Half-wave Rectifier	25.0	0.3	Max. AC Plate Voltage = 350 volts (rms) Max. DC Output = 125 ma      Max. Peak Plate Curr. = 600 ma Max. PIV = 1250 volts							
25W6GT	5	Power Amplifier	25.0	0.3	110	110	-7.5	50	4.0	0.013	8000	R <sub>L</sub> = 2.0 KΩ, W <sub>o</sub> = 2.1 watts
25X6GT	2R, 2R	Half-wave Rectifier Doubler	25.0	0.15	Max. AC Voltage/Plate = 125 volts (rms)      DC Output Curr. = 60 ma							
25Y4GT	2R	Half-wave Rectifier	25.0	0.15	Max. AC Voltage = 125 volts (rms)      DC Output Curr. = 75 ma							
25Y5	2R, 2R	Half-wave Rectifier Doubler	25.0	0.3	Max. AC Voltage/Plate = 235 volts (rms) Max. DC Output/Plate = 75 ma							
25Z4GT	2R	Half-wave Rectifier	25.0	0.3	Max. AC Plate Voltage = 250 volts (rms) Max. DC Output Current = 100 ma (rms)							
25Z5	2R, 2R	Rectifier Doubler	25.0	0.3	See 25Z6 Characteristics							
25Z6 25Z6G 25Z6GT	2R,	Voltage Doubler	25.0	0.3	Max. AC Voltage/Plate = 117 volts (rms) Max. DC Output Current = 75 ma Max. Peak Plate Current = 450 ma							
	2R	Half-wave Rectifier			Max. AC Voltage/Plate = 235 volts (rms) Max. DC Output Current = 75 ma							
26	3	Class A Amplifier	1.5	1.05	90	—	-7.0	2.9	—	0.0089	935	μ = 8.3
					180	—	-14.5	6.2	—	0.0073	1150	μ = 8.3
26A6	5	Class A Amplifier	26.5	0.07	250	250	*	10.5	4.0	1.0	4000	R <sub>k</sub> = 125 Ω
26A7GT	5, 5	Power Amplifier	26.5	0.6	26.5	26.5	-4.5	20.0	1.9	0.0015	5700	R <sub>L</sub> = 1.5 KΩ, W <sub>o</sub> = 0.18 watts

\* See quoted value of R<sub>k</sub>.



TYPE	Class	Use	$E_r$ volts	$I_r$ amps	$E_b$ volts	$E_{c2}$ volts	$E_{c1}$ volts	$I_b$ ma	$I_{c2}$ ma	$r_p$ M $\Omega$	$g_m$ $\mu$ mhos	
26BK6	2, 2, 3	Det. Amplifier	26.5	0.07	100	—	-1.0	0.5	—	0.08	1250	$\mu = 100$
					250	—	-2.0	1.2	—	0.0625	1600	$\mu = 100$
26C6	2, 2, 3	Class A Amplifier	26.5	0.07	26.5	—	—	1.1	—	0.0155	1190	$R_{g1} = 2.0 \text{ M}\Omega$ $\mu = 17$
					250	—	-9.0	9.5	—	0.008	1900	$\mu = 16$
26CG6	5	Class A Amplifier	26.5	0.07	See 6CG6 Characteristics							
26D6	7	Converter Oscillator	26.5	0.07	250	100	-1.5	3.0	7.8	1.0	$g_c = 475 \mu$ mhos	
					100	100	0	27.0			7200	$\mu = 22.0$
27	3	Class A Amplifier	2.5	1.75	135	—	-9.0	4.5	—	0.009	1000	$\mu = 9.0$
					250	—	-21.0	5.2	—	0.0092	975	$\mu = 9.0$
28D7	5, 5	Class A Amplifier	28.0	0.4	28	28	-3.5	12.5	1.0	0.003	3000	$R_L = 4.0 \text{ K}\Omega$ , $W_o = 0.1 \text{ watts}$
28Z5	2R, 2R	Full-wave Rectifier	28.0	0.24	Max. AC Voltage/Plate = 325 volts (rms) Max. DC Output Current = 100 ma							
					See 1H4G Characteristics							
30	3	Class A Amplifier	2.0	0.06	See 1H4G Characteristics							
30A5	5	Class A Amplifier	30	0.15	100	100	-6.7	43	3.0	0.022	9200	$R_L = 2.4 \text{ K}\Omega$ , $W_o = 1.9 \text{ watts}$
31	3	Class A Amplifier	2.0	0.13	135	—	-22.5	8.0	—	0.0041	925	$R_L = 7 \text{ K}\Omega$ , $W_o = 0.185 \text{ w}$
					180	—	-30.0	12.3	—	0.0036	1050	$R_L = 5.7 \text{ K}\Omega$ , $W_o = 0.375 \text{ watts}$
31A3	2R	Rectifier	31.0	0.1	Max. Plate Voltage = 250 volts (rms) Max. DC Output Current = 100 ma							
32	4	Class A Amplifier	2.0	0.06	135	67.5	-3.0	1.7	0.4	0.95	640	
					180	67.5	-3.0	1.7	0.4	1.2	650	
32ET5	5	Power Amplifier	32	0.1	110	110	-7.5	30	2.8	0.0215	5500	$R_L = 2.8 \text{ K}\Omega$ , $W_o = 1.2 \text{ watts}$
32L7GT	2R, 5	Class A Amplifier	32.5	0.3	90	90	-5.0	38.0	3.0	0.015	6000	$R_L = 2.6 \text{ K}\Omega$ , $W_o = 0.8 \text{ watts}$
					90	90	-7.0	27.0	2.0	0.017	4800	$R_L = 2.6 \text{ K}\Omega$ , $W_o = 1.0 \text{ watts}$
		Half-wave Rectifier			Max. AC Plate Voltage = 125 volts (rms) Max. DC Output Curr. = 60 ma							
33	5	Class A Amplifier	2.0	0.26	180	180	-18.0	22.0	5.0	0.055	1700	$R_L = 6.0 \text{ K}\Omega$ , $W_o = 1.5 \text{ watts}$
34	5	Class A Amplifier	2.0	0.06	135	67.5	(-3.0) { min. }	2.8	1.0	0.6	600	
					180	67.5		2.8	1.0	1.0	620	
35 35/51	4	Class A Amplifier	2.5	1.75	250	90	-3.0	6.5	2.5	0.4	1050	
35A5 35A5LT	5	Class A Amplifier	35.0	0.15	See 35L6GT Characteristics							
35B5	5	Class A Amplifier	35.0	0.15	See 35C5 Characteristics							
35C3	2R	Half-wave Rectifier	35.0	0.15	Max. AC Plate Voltage = 117 volts (rms) Max. DC Output Current = 100 ma							
35C5	5	Class A Amplifier	35.0	0.15	110	110	-7.5	40.0	3.0	0.013	5800	$R_L = 2.5 \text{ K}\Omega$ , $W_o = 1.5 \text{ watts}$

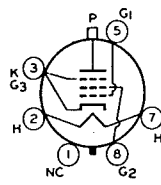
\*See quoted value of  $R_k$



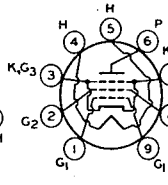
TYPE	Class	Use	$E_c$ volts	$I_f$ amps	$E_b$ volts	$E_{c2}$ volts	$E_{c1}$ volts	$I_b$ ma	$I_{c2}$ ma	$r_p$ M $\Omega$	$g_m$ $\mu$ mhos	
35CD6GA	5	Def. Amplifier	35-0	0-45	See 6CD6GA Characteristics							
35D5	5	Class A Amplifier	35-0	0-15	110 170	110 170	-6-5 -10-5	34-5 58	2-5 3-0	0-018 0-02	8000 9500	$R_L = 2.5 K\Omega$ , $W_o = 1.7$ watts $R_L = 2.5 K\Omega$ , $W_o = 4.8$ watts
35DZ8	3, 5	Class A Amplifier	35-0	0-15	See 6DZ8 Characteristics							
35L6G 35L6GT	5	Class A Amplifier	35-0	0-15	110 200	110 125	-7-5 *	40 43	3-0 2-0	0-014 0-034	5800 6100	$R_L = 2.5 K\Omega$ , $W_o = 1.5$ watts $R_L = 5.0 K\Omega$ , $W_o = 3.0$ watts $R_k = 180 \Omega$
35W4	2R	Half-wave Rectifier	35-0	0-15	Max. PIV = 330 volts      Max. DC Output Curr. = 100 ma Max. Peak Plate Current = 609 ma							
35Y4	2R	Half-wave Rectifier	35-0	0-15	See 35W4 Characteristics							
35Z3 35Z3LT	2R	Half-wave Rectifier	35-0	0-15	See 35Z4GT Characteristics							
35Z4GT	2R	Half-wave Rectifier	35-0	0-15	Max. PIV = 700 volts      Max. Peak Plate Curr. = 600 ma Max. DC Output Current = 100 ma							
35Z5G 35Z5GT	2R	Half-wave Rectifier	35-0	0-15	Max. Peak Plate Current = 600 ma Max. DC Output Current = 100 ma Max. PIV = 700 volts							
36 36A	4	Class A Amplifier	6-3	0-3	100 250	55 90	-1-5 -3-0	1-8 3-2	— 1-7†	0-55 0-55	850 1080	$\mu = 470$ $\mu = 595$
36AM3	2R	Half-wave Rectifier	36-0	0-1	Max. AC Voltage = 117 volts (rms)      Max. Output Current = 75 ma							
37, 37A	3	Class A Amplifier	6-3	0-3	250	—	-18-0	7-5	—	0-0084	1100	$\mu = 9-2$
38	5	Class A Amplifier	6-3	0-3	250	250	-25-0	22-0	3-8	0-10	1200	$R_L = 10 K\Omega$ , $W_o = 2.5$ watts
38A3	2R	Half-wave Rectifier	38	0-1	Max. AC Plate Voltage = 250 volts (rms) Max. Output Current = 110 ma Max. PIV = 700 volts							
39 39/44	5	Class A Amplifier	6-3	0-3	90 250	90 90	$\left. \begin{matrix} -3-0 \\ \text{min.} \end{matrix} \right\}$	5-6 5-8	1-6 1-4	0-4 1-0	1000 1050	
40	3	Class A Amplifier	5-0	0-25	135 180	—	-1-5 -3-0	0-2 0-2	—	0-15 0-15	200 200	$\mu = 30$ $\mu = 30$
40B2		Horiz. Reg.			Avg. Operating Current = 140 ma at 20 volts; 150 ma at 40 volts							
41	5	Class A Amplifier	6-3	0-4	See 6K6GT Characteristics							
42	5	Class A Amplifier	6-3	0-7	See 6F6J Characteristics							
43	5	Class A Amplifier	25-0	0-3	See 25A6 Characteristics							
45	3	Class A Amplifier	2-5	1-5	180 275	— —	-31-5 -56-0	31-0 31-0	— —	0-0016 0-0017	2125 2050	$R_L = 2.7 K\Omega$ , $W_o = 0.82$ watts $R_L = 4.6 K\Omega$ , $W_o = 2.0$ watts
45A	3	Class A Amplifier	2-5	1-5	325	—	-68	43	—	0-0032		$\mu = 3-5$
45A5	5	Class A Amplifier	45-0	0-1	170 110	170 110	-10-4 -6-4	53 32	10-0 6-0	0-02 0-018		$R_L = 3.0 K\Omega$ , $W_o = 4.25$ watts $R_L = 3.0 K\Omega$ , $W_o = 1.7$ watts

\*See quoted value of  $R_k$ 

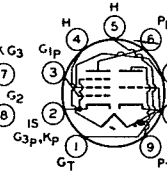
†Maximum



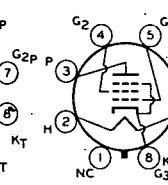
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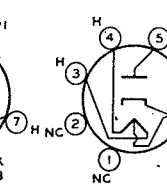
35D5



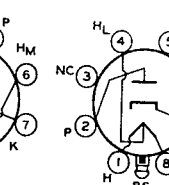
35DZ8



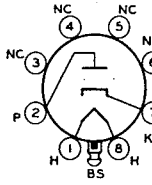
35L6-G  
35L6-GT



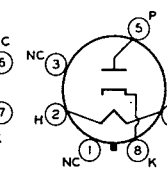
35W4



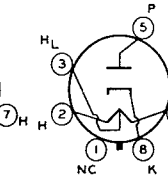
35Y4



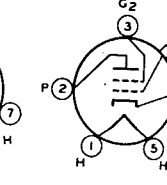
35Z3  
35Z3-LT



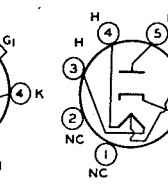
35Z4-GT



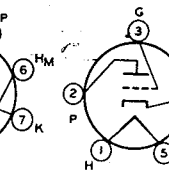
35Z5-G  
35Z5-GT



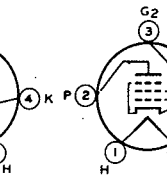
36  
36-A



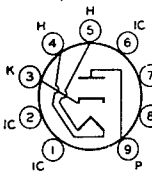
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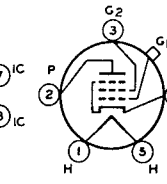
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37-A



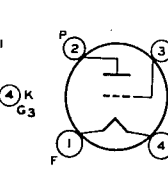
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38-A



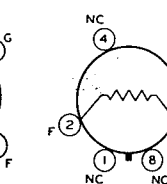
38A3



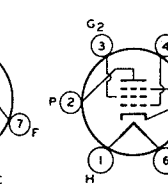
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39/44  
39-A



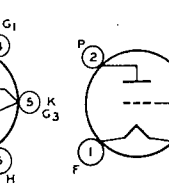
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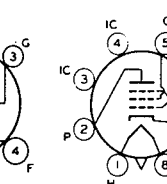
40B2



41  
42  
43



45  
45-A



45A5