

CONDENSED DATA SECTION

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
00A	Triode	ST-14	4D	Fil.	5.0	0.25	Detector	45	....	0	1.5	....	30,000	20	.....	01A
01A	Triode	ST-14	4D	Fil.	5.0	0.25	Det. Amp.	90 135	.... ....	4.5 9.0	2.5 3.0	.... ....	11,000 10,000	8.0 8.0	..... .....	
0Y4	Gas Diode	Metal	4BU	Cold K	H-W Rectifier	117 A C Volts Per Plate, RMS, 75 Ma Max., 40 Ma Min. Output Current									
0Z4A	Gas Duodiode	T-7	4R	Ionic	F.W. Rectifier	300 A C Volts Per Plate, RMS, 110 Ma Max., 30 Ma Min. Output Current									
1A3	Diode	T-5½	5AP	Cath.	1.4	0.15	Detector	Single Diode, Cathode Type for H F Use									
1A4	Tetrode	ST-12	4K	Fil.	2.0	0.06	R F Amplifier	90 180	67.5 67.5	3.0 3.0	2.2 2.3	0.9 0.8	600,000 1.0 Meg.	720 750	..... .....	1A4P, 1A4T
1A4P	Pentode	ST-12	4M	Fil.	2.0 2.0	0.06 0.06	R F Amplifier	135 180	67.5 67.5	3.0 3.0	2.2 2.3	0.9 0.8	1 Meg. 1 Meg.	625 725	..... .....	
1A4T	Tetrode	ST-12	4K	Fil.	2.0 2.0	0.06 0.06	R F Amplifier	135 180	67.5 67.5	3.0 3.0	2.2 2.2	0.7 0.7	350,000 600,000	625 650	..... .....	
1A5GT	Pentode	GT	6X	Fil.	1.4	0.05	Pwr. Amplifier	85 90	85 90	4.5 4.5	3.5 4.0	0.7 0.8	300,000 300,000	800 850	100 115		
1A6	Heptode	ST-12	6L	Fil.	2.0 2.0	0.06 0.06	Converter	135 180	67.5 67.5	3.0 3.0	1.8 1.5	2.1 2.0	400,000 500,000	275▼ 300▼	G ₂ =135 V. at 2.0 Ma.■ G ₃ =180 V. at 2.5 Ma.■		
1A7GT,G	Heptode	GT, T-9	7Z	Fil.	1.4	0.05	Converter	90	45	0.0	0.55	0.60	600,000	250▼	E _{c2} =90, I _{c2} =1.2 Ma		
1AB5	Pentode	Lock-In	5BF	Fil.	1.2 1.2	0.13 0.13	R F Amplifier	90 150	90 150	0 1.5	3.5 6.8	0.8 2.0	275,000 120,000	1,100 1,350	..... .....	
1AF4	Pentode	T-5½	6AR	Fil.	1.4	0.025	R F Amplifier	67.5 90.0	67.5 90.0	0.0 0.0	1.0 1.65	0.3 0.5	2 Meg.♦ 1.8 Meg.♦	825 950	..... .....	1U4
1AF5	Diode Pentode	T-5½	6AU	Fil.	1.4	0.025	Detector Amplifier	67.5 90.0	67.5 90.0	0.0 0.0	0.7 1.1	0.25 0.4	2.3 Meg.♦ 2.0 Meg.♦	500 600	..... .....	1S5

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G_m μ MHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
1B4	Tetrode	ST-12	4K	Fil.	2.0	0.06	R F Amplifier	90 180	67.5 67.5	3.0 3.0	1.6 1.7	0.7 0.6	1.0 Meg. \downarrow 1.5 Meg. \downarrow	600 650	.....	1B4P 1B4T
1B4/951 1B4P	Tetrode Pentode	ST-12	4K 4M	Fil.	2.0 2.0	0.06 0.06	R F Amplifier	Same as Type 1B4								1B4 P or T
1B5/25S	Duodi Triode	ST-12	6M	Fil.	2.0	0.06	Det. Amplifier	135	.....	3.0	0.8	.....	35,000	20	.....	
1B7GT	Heptode	GT	7Z	Fil.	1.4	0.10	Converter	90	45	0	1.5	1.3	350,000	350 ∇	$G_2=90$ V. at 1.6 Ma.	1A7GT	
1C3	Triode	T-5½	5CF	Fil.	1.4	0.05	Amplifier	90 90	..... .....	0.0 3.0	4.5 1.4	..... .....	11,200 \diamond 19,000 \diamond	14.5 14.5	.....	
1C5GT	Pentode	GT	6X	Fil.	1.4	0.1	Pwr. Amplifier	83 90	83 90	7.0 7.5	7.0 7.5	1.6 1.6	0.11 Meg. 0.115 Meg.	1,500 1,550	200 240	1S4	
1C6	Heptode	ST-12	6L	Fil.	2.0 2.0	0.12 0.12	Converter	135 180	67.5 67.5	3.0 3.0	1.3 1.5	2.5 2.0	600,000 700,000	300 ∇ 325 ∇	$G_2=135$ V. at 3.1 Ma. \blacksquare $G_2=180$ V. at 4.0 Ma. \blacksquare		
1C7G	Heptode	ST-12	7Z	Fil.	2.0	0.12	Converter	Same as 1C6									
1D5G	Tetrode	ST-12	5R	Fil.	2.0	0.06	R F Amplifier	180	67.5	3.0	2.3	0.7	600,000	750	.....	1D5GP, 1D5GT
1D5GP	Pentode	ST-12	5Y	Fil.	2.0 2.0	0.06 0.06	R F Amplifier	135 180	67.5 67.5	3.0 3.0	2.2 2.3	0.9 0.8	1 Meg. 1 Meg.	625 725	.....	
1D5GT	Tetrode	ST-12	5R	Fil.	2.0 2.0	0.06 0.06	R F Amplifier	135 180	67.5 67.5	3.0 3.0	2.2 2.2	0.7 0.7	350,000 600,000	625 650	.....	
1D7G	Heptode	ST-12	7Z	Fil.	2.0 2.0	0.06 0.06	Converter	135 180	67.5 67.5	3.0 3.0	1.8 1.5	2.1 2.0	400,000 500,000	275 ∇ 300 ∇	$G_2=135$ V. at 2.0 Ma. \blacksquare $G_2=180$ V. at 2.5 Ma. \blacksquare		

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 ② Transconductance for Tetrodes, Pentodes, Etc.
 ∇ Conversion Transconductance

\diamond Approximate
 \blacktriangle Plate to Plate
 \blacksquare Through 20,000 Ohms

\ddagger Per Tube or Section—No Signal
 \S Plate and Target Supply
 \blacktriangle Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE RESISTANCE OHMS	AMP. FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
1D8GT	Diode Triode Pentode	GT	8AJ	Fil.	1.4	0.1	Det. Amplifier	67.5	....	0	0.6	....	55,500	25	.....
							Pwr. Amplifier	90	....	0	1.1	....	43,500	25	.....
								67.5	67.5	6.0	3.8	0.8	200,000♦	875	100	
								90	90	9.0	5.0	1.0	200,000♦	925	200	
1E4	Triode	T-9	5S	Fil.	1.4	0.05	Det. Amplifier	Same Characteristics as Type 1LE3								
1E5G	Tetrode	ST-12	5R	Fil.	2.0	0.06	R F Amplifier	180	67.5	3.0	1.7	0.6	.....	650	.....	1E5GP, 1E5GT
1E5GP	Pentode	ST-12	5Y	Fil.	2.0	0.06	R F Amplifier	135	67.5	3.0	1.6	0.7	1.5 Meg.	560	.....
						0.06		180	67.5	3.0	1.7	0.6	1.5 Meg.	650	.....
1E5GT	Tetrode	ST-12	5R	Fil.	2.0	0.06	R F Amplifier	Same as Type 1E5G								1E5GP
1E7GT	Pentode	ST-12	8C	Fil.	2.0	0.24	Pwr. Amplifier	90	90	3.0	3.8	1.1	340,000	1,150	110	
						0.24		135	135	4.5	7.5	2.2	260,000	1,425	290	
						0.24	Push Pull Max. Signal	135	135	7.5	10.5♦	3.5♦	24,000↓	.....	575	
1F4	Pentode	ST-14	5K	Fil.	2.0	0.12	Pwr. Amplifier	90	90	3.0	4.0	1.1	20,000	1,400	110	
					2.0	0.12		135	135	4.5	8.0	2.4	16,000	1,700	310	
1F5G	Pentode	ST-14	6X	Fil.	2.0	0.12	Pwr. Amplifier	Same as 1F4								
1F6	Duodi Pentode	ST-12	6W	Fil.	2.0	0.06	R F Amplifier	180	67.5	1.5	2.2	0.7	1 Meg.♦	650	.....
1F7G	Duodi Pentode	ST-12	7AD	Fil.	2.0	0.06	R F Amplifier	Same as 1F6								
1F7GV	Duodi Pentode	ST-12	7AF	Fil.	2.0	0.06	R F Amplifier	Same as 1F7G except diodes one above the other								
1G4GT, G	Triode	GT, T-9	5S	Fil.	1.4	0.05	Amplifier	90	6.0	2.3	10,700	8.8	

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 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
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 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

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		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
1G5G	Pentode	ST-14	6X	Fil.	2.0	0.12	Pwr. Amplifier	90	90	6.0	8.7	3.0	8,500	1,500	250		
					2.0	0.12		124	124	11.0	10.7	8,000	1,500	600			
					2.0	0.12		135	135	13.5	9.7	9,000	1,550	550			
1G6GT, G	Duo Triode	GT, T-9	7AB	Fil.	1.4	0.10	Class A Amp. Class B Pwr. Amplifier	90	....	0.0	1.0‡	....	45,000	30	675	
								90	....	0.0	1.0‡	....	....	....	....
1H4G, GT	Triode	ST-12	5S	Fil.	2.0	0.06	Amplifier	90	....	4.5	2.5	....	11,000	9.3	....	
					2.0	0.06		135	....	9.0	3.0	....	10,300	9.3		
					2.0	0.06		180	....	13.5	3.1	....	10,300	9.3		
1H6G, GT	Duodi Triode	ST-12,GT	7AA	Fil.	2.0	0.06	Amplifier	135	....	3.0	0.8	....	35,000	20	....	
1J5G	Pentode	ST-14	6X	Fil.	2.0	0.12	Pwr. Amplifier	135	135	16.5	7.0	1.8	13,500	1,000	450		
1J6GT, G	Duo Triode	T-9 ST-12	7AB	Fil.	2.0	0.24	Amplifier	Characteristics same as Type 19									
1LA4	Pentode	Lock-In	5AD	Fil.	1.4	0.05	Pwr. Amplifier	85	85	4.5	3.5	0.7	0.3 Meg.	800	100		
								90	90	4.5	4.0	0.8	0.3 Meg.	850	115		
1LC5	Pentode	Lock-In	7AO	Fil.	1.4	0.05	RF Amplifier	45	45	0.0	1.1	0.35	0.7 Meg.♦	750	....	
								90	45	0.0	0.15	0.30	1.5 Meg.♦	775	....	
1LC6	Heptode	Lock-In	7AK	Fil.	1.4	0.05	Converter	45	35	0.0	0.7	0.75	0.3 Meg.	250▼	E _{c2} = 45 V. Max I _{c2} = 1.4 Ma		
								90	35	0.0	0.75	0.70	0.65 Meg.	275▼			
1LD5	Diode Pentode	Lock-In	6AX	Fil.	1.4	0.05	Det. Amplifier	45	45	0	0.55	0.12	0.9 Meg.	550	....	
								90	45	0	0.6	0.1	0.75 Meg.	575	....	
1LE3	Triode	Lock-In	4AA	Fil.	1.4	0.05	Amplifier	90	0.0	4.5	11,200	14.5		
								90	3.0	1.4	19,000	14.5		

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		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
3B7/1291	Duo Triode	Lock-In	7BE	Fil.	2.8	.110	Pwr. Amplifier	135	0	22.0	Class AB ₂	20	1,500		
					1.4	.220	Oscillator	180	0	25.0						Class C R F Pwr. Amplifier 2800 Mw. at 25 Mc. 1400 Mw. at 125 Mc.
3BA6	Pentode	T-5½	7CC	Cath.	3.15	0.6	R F Amplifier	Characteristics Same as Type 6BA6 for Series String Use									
3BY6	Heptode	T-5½	7CH	Cath.	3.15	0.6	Sync. Separator	Characteristics Same as 6BY6 for Series String Use									
3C6/XXB	Duo Triode	Lock-In	7BW	Fil.	1.4	0.10	Det. Amplifier	90	.....	0	4.5	.....	11,200	14.5	.....	3B7
					2.8	0.05		90	.....	0	3.2	.....	12,800	14.1	.....	
3D6	Beam Power	Lock-In	6BB	Fil.	1.4	0.220	Amplifier	150	90	4.5	9.9	1.0	14,000	2400	600		
3E5	Pentode	T-5½	6BX	Fil.	1.4	.050	Pwr. Amplifier	67.5	67.5	5.0	5.0	1.0	120,000	1,300	100	3V4	
					2.8	.025	Pwr. Amplifier	90	90	8.0	6.0	1.5	140,000	1,200	200		
							Pwr. Amplifier	67.5	67.5	5.0	4.5	1.0	110,000	1,200	90		
					2.8	.025	Pwr. Amplifier	90	90	8.0	5.5	1.5	120,000	1,100	175		
3E6	Pentode	Lock-In	7CJ	Fil.	1.4	0.1	R F Amplifier	90	90	0	4.2	1.7	.25 Meg.	2000	.....	
					2.8	.050		90	90	0	2.9	1.2	.325 Meg.	1700	.....	
3LE4	Pentode	Lock-In	6BA	Fil.	2.8	0.05	Pwr. Amplifier	90	90	9.0	9.0	1.8	110,000	1,600	300	3LF4, 3V4	
					1.4	0.10		90	90	9.0	10.0	2.0	100,000	1,750	325		
3LF4	Beam Pentode	Lock-In	6BB	Fil.	1.4	0.10	Pwr. Amplifier	90	90	4.5	9.5	1.3	90,000	2,200	270	3LE4, 3V4	
					2.8	0.05		Pwr. Amplifier	110	110	6.6	10.0	1.4	100,000	2,200		400
							Pwr. Amplifier	90	90	4.5	8.0	1.0	80,000	2,000	230		
					2.8	0.05	Pwr. Amplifier	110	110	6.6	8.5	1.1	110,000	2,000	330		
3Q5GT, G	Beam Amplifier	T-9	7AP	Fil.	1.4	0.10	Pwr. Amplifier	Characteristics Same as Type 3LF4									3V4
					2.8	0.05											
4A6G	Duo Triode	ST-12	8L	Fil.	2.0	0.12	Pwr. Amplifier	Class B Amp.	P to P Load 8,000	20	1,000		
					4.0	0.06		90	1.5	10.8						

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		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
5AU4	Duo Diode	T-12	5T	Fil.	5.0	4.5	Full Wave Pwr. Rectifier	40 μf Cap. Input—400 V. RMS Plate, 325 Ma. D C Output 10 Henrys Choke Input—500 V. RMS Plate, 325 Ma. D C Output									
5AW4	Duo Diode	T-12	5T	Fil.	5.0	4.0	F.W. Rectifier	450 Volts Per Plate RMS, 250 Ma. Output Current with Cap. Input to Filter, Peak Current = 750 Ma. Per Plate								5U4GB	
5A X4GT	Duo Diode	GT	5T	Fil.	5.0	2.5	F.W. Rectifier	350 V. RMS Plate, 175 Ma. D C Output, Cond. Input 500 V. RMS Plate, 175 Ma. D C Output, Choke Input									
5AZ4	Duo Diode	Lock-In	5T	Fil.	5.0	2.0	F.W. Rectifier	Characteristics Same as Type 5Y3GT									
5T4	Duo Diode	Metal	5T	Fil.	5.0	2.0	F.W. Rectifier	450 V. RMS Per Plate, 225 Ma. D C Output, Cond. Input Filter 550 V. RMS Per Plate, 225 Ma. D C Output, Choke Input Filter								5U4G	
5U4GA	Duo Diode	T-11	5T	Fil.	5.0	3.0	F.W. Rectifier	40 μf Cap. Input—450 V. RMS Per Plate, 250 Ma. Output, 460 V. D C Output 10H Choke Input—550 V. RMS Per Plate, 250 Ma. Output, 440 V. D C Output								5U4GB	
5W4, G, GT	Duo Diode	Metal, GT	5T	Fil.	5.0	1.50	F.W. Rectifier	350 Volts RMS Per Plate, 110 Ma. D C Output Current, Capacitor Input to Filter									5Y4G
5X3	Duodiode	ST-14	4C	Fil.	5.0	2.0	Rectifier	400 V. Per Plate, RMS, 110 Ma. Output Current, Choke or Cond. Input to Filter 1275 V. Per Plate, RMS, 30 Ma. Output Current, Choke or Cond. Input to Filter									
5X4G	Duo Diode	ST-16	5Q	Fil.	5.0	3.00	F.W. Rectifier	Characteristics Same as Type 5U4G									5U4G
5Z4	Duo Diode	Metal	5L	Fil.	5.0	2.0	F.W. Rectifier	350 V. RMS Plate, 125 Ma. D C Output, Cond. Input 500 V. RMS Plate, 125 Ma. D C Output, Choke Input									
6A3	Triode	ST-16	4D	Fil.	6.3	1.00	Pwr. Amplifier	250	45.0	60.0	Fixed Bias 850▲	2,500	4.2	3,200		
					6.3	1.00		325	68.0	40.0‡		3,000♠	15,000		
					6.3	1.00		325	40.0‡		5,000♠	10,000		

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		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
1LG5	Semi Remote Cutoff Pentode	Lock-In	7A0	Fil.	1.4	0.05	R F Amplifier	45	45	0	1.5	0.45	0.35 Meg.♦ >1.0 Meg. 0.5 Meg.♦	800	
								90	45	0	1.7	0.4		800	.....
								90	90	1.5	3.7	0.9		1,150	.....
1N6G	Diode Pentode	T-9	7AM	Fil.	1.4	0.05	Pwr. Amplifier	90	90	4.5	3.1	0.6	25,000	800	100	
1P5GT, G	Remote Cutoff Pentode	T-9	5Y	Fil.	1.4	0.05	R F Amplifier	90	90	0.0	2.3	0.7	800,000	750	.....	1N5, 1T4
1Q5GT, G	Beam Amplifier	T-9	6AF	Fil.	1.4	0.10	Pwr. Amplifier	90	90	4.5	9.5	1.6	.....	2,200	270	1A5
1Q6	Diode Pentode	T-3	8C0	Fil.	1.25	0.04	Det. Amplifier	30	30	0	0.33	0.09	500,000	330	.....
								67.5	67.5	0	1.60	0.40	400,000	600	.....
1R4	H F Diode	Lock-In	4AH	Cath.	1.4	0.15	Detector	117 V. RMS			1.0	Resonant Frequency 1,500 Mc.				
1S4	Pentode	T-5½	7AV	Fil.	1.4	0.10	Pwr. Amplifier	45	45	4.5	3.8	0.8	100,000♦	1,250	65	3S4
								90	67.5	7.0	7.4	1.4	100,000♦	1,575	270	
1SA6GT	Pentode	GT	6BD	Fil.	1.4	0.05	R F Amplifier	45	45	0	1.1	0.3	700,000	750	.....	1N5GT
								67.5	67.5	0	2.4	0.7	600,000	950	.....
								90	67.5	0	2.45	0.68	800,000	970	.....
1SB6GT	Diode Pentode	GT	6BE	Fil.	1.4	0.05	Det. Amplifier	45	45	0	0.6	0.16	900,000	500	.....	1LD5
								90	67.5	0	1.45	0.38	700,000	665	.....
1T5GT	Pentode	T-9	6X	Fil.	1.4	0.05	Pwr. Amplifier	90	90	6.0	6.5	0.8	0.25 Meg.♦	1,150	170	1C5, 1Q5
1U6	Heptode	T-5½	7DC	Fil.	1.4	0.025	Converter	67.5	45	0	0.5	0.6	550,000	260▼	(Ga=67.5 V., 0.95 Ma)	
								90	45	0	0.55	0.55	600,000	275▼	(Ga=90 V., 1.1 Ma)	
1V	Diode	ST-12	4G	Cath.	6.3	0.30	H.W. Rectifier	350 V. RMS Plate, 45 Ma. D C Output								6Z3
1W4	Pentode	T-5½	5BZ	Fil.	1.4	.050	Pwr. Amplifier	90	90	9.0	5.0	1.0	0.25 Meg.	925	200	
2A3	Triode	ST-16	4D	Fil.	2.5	2.5	Pwr. Amplifier	250	.....	45.0	60	.....	2,500	4.2	3,500	2A3H
								300	.....	62.0	40 per tube	3,000▲	.....	15,000		
2A3H	Triode	ST-16	4D	Cath.	2.5	2.5	Pwr. Amplifier	Same as Type 2A3								2A3

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 ▲ Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② OR Gm μMHOS	POWER OUTPUT M.W.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
2A5, KR25	Pentode	ST-14	6B	Cath.	2.5	1.75	Pwr. Amplifier	250 285	250 285	16.5 20.0	34 38	6.5 7.0	7,000 7,000	.....	3,200 4,800		
2A6	Duodi Triode	ST-12	6G	Cath.	2.5	0.80	Det. Amplifier	250	.....	2.0	0.9	.....	91,000	100	.....	
2A7, 2A7S	Heptode	ST-12	7C	Cath.	2.5	0.80	Converter	Same Characteristics as Types 6A7 or 6A8G									
2B7, 2B7S	Diode Pentode	ST-12	7D	Cath.	2.5	0.80	Det. Amplifier	100 250	100 100	3.0 3.0	5.8 6.0	1.7 1.5	300,000 800,000	950 1,000	.....	
2E5	Electron Ray	T-9	6R	Cath.	2.5	0.80	Indicator	Same Characteristics as Type 6E5									
2G5	Electron Ray	T-9	6R	Cath.	2.0	0.8	Indicator	Characteristics Same as Type 6U5									2E5
2S/4S	Duo Diode	ST-12	5D	Cath.	2.5	1.35	Detector	Approximate 40 Ma. Per Plate, 50 Ma. D C Output									
2V2	Diode	T-11	8FV	Fil.	2.5 1.25	0.2 0.4	High Voltage Rectifier	TV Service Peak Inverse Volts D C=15 Kv. Peak Current=80 Ma. Average Current D C=2.0 Ma. Peak Inverse Volts D C=21 Kv. Peak Current=80 Ma. Average Current D C=1.0 Ma.									
2V3G	Diode	ST-12	4Y	Fil.	2.5	5.0	H.W. Rectifier	6000 V. RMS Plate, 2 Ma. D C Output									2X2A
2W3, GT	Diode	Metal, GT	4X	Fil.	2.5	1.5	H.W. Rectifier	350 Volts RMS, 55 Ma. Max. D C Output Current with Cap. Input to Filter									2Z2
2Z2/G84	Diode	ST-12	4B	Fil.	2.5	1.50	H.W. Rectifier	350 Volts Per Plate RMS, 50 Ma. Output Current									2W3
3A5	Duo Triode	T-5½	7BC	Fil.	1.4 2.8	0.22 0.11	Amplifier	90 135	.....	2.5 20.0	3.7 30.0	.....	8,300 15	.....	2,000		
3A8GT	Diode Triode Pentode	GT	8AS	Fil.	2.8 1.4	.050 .100	Det. Amplifier Amplifier	90 90	0 90	0 0	0.2 1.5	0 0.5	0.2 Meg. 0.8 Meg.	325 250	.....	1H5 and 1N5 1C3 and 1S5	
3B5GT	Beam Amplifier	GT	7AQ	Fil.	1.4 2.8	0.10 0.05	Amplifier	45 67.5	45 67.5	4.5 7.0	4.4 6.7	0.3 0.5	8,000 5,000	1,400 1,500	70 180		

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♣ Approximate
 ♠ Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G_m μ MHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
6E7	Pentode	ST-12	7H	Cath.	6.3	0.30	Amplifier	Same as 6D6								6D6
6F5, GT, G	Triode	Metal, GT, ST-12	5M	Cath.	6.3	0.3	Amplifier	100	.....	1.0	0.4	.....	85,000	100	.....
6F7, 6F7S	Triode Pentode	ST-12	7E	Cath.	6.3	0.30	Amplifier	100	(Tri.) 100	2.0	0.9	.....	66,000	100	.....
6F8G	Duo Triode	ST-12	8G	Cath.	6.3	0.60	Amplifier Inv.	250	.....	3.0	3.5	1.5	16,200	8.5	.....	6SN7GT
6G5/6H5	Electron Ray	T-9	6R	Cath.	6.3	0.30	Indicator	.....	.....	0 to 22	.....	.....	850,000	1,100	(Pent.)	6U5/6G5
6G6G	Pentode	ST-12	7S	Cath.	6.3	0.15	Pwr. Amplifier	135	135	6.0	11.5	2.0	170,000	2,100	600	6K6
6H4GT	Diode	GT	5AF	Cath.	6.3	0.15	Rectifier	180	180	9.0	15.0	2.5	175,000	2,300	1,100	6K6
6H5	Electron Ray	T-9	6R	Cath.	6.3	0.30	Indicator	100	.....	.....	4.0	.....	.....	.....	.....	7A6
6J4	Triode	T-5½	7BQ	Cath.	6.3	0.4	Amplifier	Same as 6G5/6H5								6U5/6G5
6J7G, GT	Pentode	Metal ST-12, GT	7R	Cath.	6.3	0.30	R F Amplifier	150	.....	200▲	15.0	.....	4,500	55	.....
6J8G	Triode Heptode	ST-12	8H	Cath.	6.3	0.30	Mixer Osc.	100	100	3.0	2.0	0.5	1.0 Meg.	1,185	.....	6SJ7
6K4	Triode	T-3	6K4	Cath.	6.3	0.15	R F Amplifier	250	100	3.0	2.0	0.5	>1.0 Meg.	1,225	.....
6K5GT, G	Triode	GT, ST-12	5U	Cath.	6.3	0.30	Amplifier	200	.....	680▲	11.5	.....	4,650	16	.....	6AK4
6K8, G, GT	Triode Hexode	Metal ST-12, GT	8K	Cath.	6.3	0.30	Mixer Oscillator	250	100	3.0	2.5	6.0	600,000	350▼	(Hexode Section)	
6L5G	Triode	ST-12	6Q	Cath.	6.3	.150	Amplifier	100	100	3.0	2.3	6.2	400,000	325▼	(Hexode Section)	
6N4	Triode	T-5½	7CA	Cath.	6.3	0.20	Amplifier	100	100	3.0	2.3	6.2	600,000	350▼	(Hexode Section)	
								180	.....	3.5	12.0	.....	5,400	32	.....	6C4

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

◆ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
6N6G	Duo Triode	ST-14	7AU	Cath.	6.3	0.8	Direct Coupled Pwr. Amplifier	300	.....	0	42 Output 9.0 Input	.....	24,000	2400	4,000	
6P5GT	Triode	T-9	6Q	Cath.	6.3	.300	Amplifier	250	.....	13.5	5	.....	9,500	13.8		
6P7G	Pentode Triode	ST-12	7U	Cath.	6.3	0.30	Amplifier	Same as 6F7									6F7
6Q6, 6Q6G	Diode Triode	.....	6Y	Cath.	6.3	0.15	Det. Amplifier	250	.....	3.0	1.2	.....	.....	65	.....	6T7G
6Q6G/6T7G	Duodi Triode	.....	7V	Cath.	6.3	0.15	Det. Amplifier	250	.....	3.0	1.2	.....	.....	65	.....	6T7G
6Q7, G, GT	Duodiode Triode	Metal ST-12 GT	7V	Cath.	6.3	0.30	Det. Amplifier	100 250	.....	1.5 3.0	0.8 1.0	.....	58,000 58,000	70 70	.....	
6R6G	Pentode	ST-12	6AW	Cath.	6.3	0.30	R F Amplifier	250	100	3.0	7.0	1.7	800,000†	1,450	.....	
6R7, G, GT	Duodiode Triode	Metal GT, ST-12	7V	Cath.	6.3	0.30	Det. Amplifier	250	.....	9.0	9.5	.....	8,500	16	.....	6SR7
6R8	Triple Diode Triode	T-6½	9E	Cath.	6.3	0.45	Det. Amplifier	250	.....	9.0	9.5	.....	8,500	16	300	
6S7, G	Remote Cutoff Pentode	Metal ST-12	7R	Cath.	6.3	0.15	R F Amplifier	135 250	67.5 100	3.0 3.0	3.7 8.5	0.9 2.0	1.0 Meg. 1.0 Meg.	1,250 1,750	.....	6K7
6SB7Y	Heptode	Metal	8R	Cath.	6.3	.300	Converter	250	100	1.0	3.8	10.0	1.0 Meg.	950‡	.....	
6SD7GT	Pentode	T-9	8N	Cath.	6.3	.300	R F Amplifier	250	100	2	6.0	1.9	1.0 Meg.	3600	.....	
6SE7GT	Pentode	GT	8N	Cath.	6.3	0.3	R F Amplifier	100 250	100 100	1.0 1.5	5.5 4.5	2.4 1.5	.25 Meg.‡ 1.0 Meg.‡	3,100 3,400	.....	6SJ7GT
6SF5, GT	Triode	Metal, GT	6AB	Cath.	6.3	0.30	Amplifier	250	.....	2.0	0.9	.....	66,000	100	.....	
6SF7	Diode Pentode	Metal	7AZ	Cath.	6.3	0.30	Detector R F Amplifier	100 250	100 100	1.0 1.0	12.0 12.4	3.4 3.3	200,000† 700,000†	1,975 2,050	.....	6SV7

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 † Conversion Transconductance

‡ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

† Per Tube or Section—No Signal
 ‡ Plate and Target Supply
 † Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
6A X6G	Duo Diode	ST-14	7Q	Cath.	6.3	2.5	F.W. Rectifier	350 V. RMS Plate, 250 Ma. D C Output, Cond. Input									
6B4G	Triode	ST-16	5S	Fil.	6.3	1.0	Pwr. Amplifier	Characteristics Same as Type 6A3									6A3
6B5	Duo Triode	ST-14	6AS	Cath.	6.3	0.80	Pwr. Amplifier	300	Input Triode Output Triode	0	8.0	.....	.....	.....	.....
								300		.....	45.0	.....	7,000	.....	4,000	
6B6G	Duodi Triode	ST-12	7V	Cath.	6.3	0.30	Det. Amplifier	250	.....	20	0.9	.....	91,000	100	.....	6Q7GT
6B7, 6B7S	Duodi Pentode	ST-12	7D	Cath.	6.3	0.30	R F or I F Amplifier	100	100	3.0	5.8	1.7	300,000	950	.....	
					6.3	0.30		250	125	3.0	9.0	2.3	600,000	1,125	.....	
6B8, GT, G	Duodi Pentode	Metal, GT	8E	Cath.	6.3	0.30	Det. Amplifier	Characteristics Same as Type 6B7									
6BA7	Heptode	T-6½	8CT	Cath.	6.3	.300	Converter	250	100	1	3.8	10	1.0 Meg.	950▼	.....	
6BD5GT	Beam Amplifier	GT	6CK	Cath.	6.3	0.90	TV Horizontal Amplifier	Max. Peak Positive Pulse Plate Voltage = 4,000 V. Max. D C Cathode Current = 100 ma. Max. Plate Dissipation = 10 Watts, Max. Screen Dissipation = 3.0 Watts									6BQ6GTA
6BK6	Duodi Triode	T-5½	7BT	Cath.	6.3	0.3	Det. Amplifier	250	.....	-2.0	1.2	.....	62,500	100	.....	
								100	.....	-1.0	0.5	.....	80,000	100	.....	
6BN7	Duo Triode with Different Triode Sections	T-6½	9AJ	Cath.	6.3	0.75	Osc. Triode 1 Amp. Triode 2	120	.....	1.0	5.0	.....	14,000	28	.....	
								250	.....	15.0	24.0	.....	2,200	12	.....	
6BU5	Beam Pentode	T-12	8FP	Cath.	6.3	0.15	TV High Voltage Regulator	20,000	70	3.4	0.55	.....	.....	.....	.....
								20,000	70	2.4	1.0	0.4	.....	.....	.....
6BY6	Heptode	T-5½	7CH	Cath.	6.3	0.3	Sync. Separator	10	25	0	1.4	3.5	I _b = 50 μA When E _{c3} = 2.5 V				

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
6C6	Pentode	ST-12	6F	Cath.	6.3	0.30	Amplifier	100	100	3.0	2.0	0.50	1 Meg.	1,185	.....	77
				.....	6.3	0.30	As Triode	250	100	3.0	2.0	0.50	>1 Meg.	1,225	.....	
				.....	6.3	0.30	.....	180	.....	5.3	5.3	.....	11,000	20	.....	
				.....	6.3	0.30	.....	250	.....	8.0	6.5	.....	10,000	20	.....	
6C7	Duodi Triode	ST-12	7G	Cath.	6.3	0.30	Det. Amplifier	250	.....	9.0	4.5	.....	16,000	20	.....	6SR7GT
6C8G	Duo Triode	ST-12	8G	Cath.	6.3	0.30	Amplifier Inv.	250	.....	4.5	3.2	.....	22,500	36	.....	
6CR6	Diode Pentode	T-5½	7EA	Cath.	6.3	0.3	Det. Audio Amplifier	250	100	2.0	9.5	3.0	200,000	1,950	.....	
6D5G	Triode	.....	6Q	Cath.	6.3	0.70	Pwr. Amplifier	275	.....	40	31	.....	7,200	4.7	1,400	
6D6	Pentode	ST-12	6F	Cath.	6.3	0.30	Amplifier	100	100	3.0	8.0	2.2	250,000♦	1,500	.....	78
				.....	6.3	0.30	.....	250	100	3.0	8.2	2.0	800,000♦	1,600	.....	
6D7	Pentode	ST-12	7H	Cath.	6.3	0.30	Amplifier	Same as 6C6								6C6
6D8G	Heptode	ST-12	8A	Cath.	6.3	0.15	Converter	135	67.5	3.0	1.5	1.7	600,000	325▼	G ₂ =135 V. at 1.8 Ma.	7A8	
				.....	6.3	0.15	.....	250	100	3.0	3.5	2.6	400,000	550▼	G ₂ =250 V. at 4.5 Ma.■	
6DB6	Pentode	T-5½	7CM	Cath.	6.3	0.30	Color Demod.	150	150	1.0	5.8	6.6	50,000	2,050 μmhos when E ₂₃ =-3 V.	.....	
6DC6	Pentode	T-5½	7CM	Cath.	6.3	0.30	RF Amplifier	200	150	180▲	9.0	3.0	500,000	5,500	Semi-Remote Cutoff		
6DE6	Pentode	T-5½	7CM	Cath.	6.3	0.30	RF Amplifier	200	150	180▲	9.5	2.3	600,000♦	6,200	.....	
6E5	Electron Ray	T-9	6R	Cath.	6.3	0.30	Indicator	100§	(Series Plate Resistor 0.5 Megs. Target Current 1.0 Ma. Grid Bias = 3.3 for 90° Shadow)								6U5
				.....	250§	(Series Plate Resistor 1.0 Meg. Target Current 4.0 Ma. Grid Bias = 8.0 for 90° Shadow)										
6E6	Duo Triode	ST-14	7B	Cath.	6.3	0.60	Pwr. Amplifier	180	.....	20.0	11.5	.....	15,000♦	6.0	750	
				.....	250	.....	27.5	18.0	.....	14,000♦	6.0	1,600				

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 ▲ Plate to Plate
 ■ Through 20,000 Ohms

† Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G_m μ MHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
6A4	Pentode	ST-14	5B	Fil.	6.3	0.30	Pwr. Amplifier	135 180	135 180	9.0 12.0	13.0 22.0	2.8 3.9	52,600 60,000	2,100 2,500	700 1,500	6K6GT	
6A4/LA	Pentode	ST-14	5B	Fil.	6.3	0.30	Pwr. Amplifier	100 180	100 180	6.5 12.0	9.0 22.0	1.6 3.9	11,000 8,000	1,200 2,200	310 1,400		
6A5G	Triode	ST-16	6T	Cath.	6.3	1.25	Pwr. Amplifier	250	0	45	60	0	800	5,250	3750		
6A6	Duo Triode	ST-14	7B	Cath.	6.3	0.8	Pwr. Amplifier	300	....	0	35.0	Per Plate	8,000▲	Max. Signal	10,000	6N7G
					6.3	0.8	Driver	250	....	5.0	6.0	11,300	35	....	....
					6.3	0.8	Driver	294	....	6.0	7.0	11,000	35	....	....
6A7S	Heptode	ST-12	7C	Cath.	6.3	0.30	Converter	Same as Type 6A7								6A7	
6AB5/6N5	Electron Ray	T-9	6R	Cath.	6.3	0.15	Indicator	135§ Series Plate Resistor 0.25 Meg., Target Current 2.0 Ma., Grid Bias = 10 for 0° Shadow									
6AB6G	Duo Triode	ST-12	7AU	Cath.	6.3	0.50	Pwr. Amplifier	250	Input Triode	0	5.0	....	....	....	....	....
								250	Output Triode	....	34.0	....	8,000	....	3,500	6N6G
6AB7/1853	Pentode	Metal	8N	Cath.	6.3	0.45	Amplifier	300	200	3.0	12.5	3.2	700,000	5,000	....	
6AC5GT, G	Triode	GT, ST-12	6Q	Cath.	6.3	0.40	Pwr. Amplifier	250	....	0.0	5.0‡	(Class B, Two Tubes)			8,000	
6AD5GT	Triode	GT	6Q	Cath.	6.3	0.30	Amplifier	250	....	2.0	0.9	....	66,000	100	....	
6AD6G	Electron Ray	T-9	7AG	Cath.	6.3	0.15	Indicator	100§ Ray Control Volts = 45 for 0° Shadow, = -23 Volts for 135° Shadow									
					6.3	0.15		150§ Ray Control Volts = 75 for 0° Shadow, = -50 Volts for 135° Shadow									
6AD7G	Triode Pentode	ST-14	8AY	Cath.	6.3	0.85	Triode Amplifier	250	....	25	3.7	....	19,000♦	6	....	
					6.3	0.85		Pentode Amp.	250	250	16.5	34.0	6.5	7,000	2,500	3,200	
6AE5GT, G	Triode	GT	6Q	Cath.	6.3	0.30	Amplifier	95	....	15	7.0	....	3,500	4.2	....	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 § Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor— Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
6AE6G	Duo Plate Triode	ST-12	7AH	Cath.	6.3	0.15	Remote Cut-Off	250	.....	1.5	6.5	.....	25,000	25	.....
				.....	6.3	0.15	Sharp Cut-Off	250	.....	35.0	0.01	.....	.....	.....	.....
				.....	6.3	0.15		250	.....	1.5	4.5	.....	35,000	33	.....
				.....	6.3	0.15		250	.....	9.5	0.01	.....	.....	.....	.....
6AE7GT	Duo Triode	GT	7AX	Cath.	6.3	0.50	Amplifier	250	.....	13.5	5.0	.....	9,300	14	Per Section	
(Driver for P.P. 6AC5GT = 250 V. 10 Ma., 6AC5GT Plate Ma. = 76 Output 9.5 Watts with 10,000 Ohms Load)																
6AF4A	Medium Mu Triode	T-5½	7DK	Cath.	6.3	0.225	U H F Oscillator	Identical to Type 6AF4 Except for Bulb Length, Bulb Length = 1¼ Inches								6AF4
6AF5G	Triode	ST-12	6Q	Cath.	6.3	0.30	Amplifier	180	.....	18.0	7.0	.....	4,900	7.4	.....
6AF6G	Twin Electron Ray	T-9	7AG	Cath.	6.3	0.15	Indicator	100§ Ray Control Volts = 60♠ for 0° Shadow, ♠Zero Volts for 100° Shadow 135§ Ray Control Volts = 81♠ for 0° Shadow, ♠Zero Volts for 100° Shadow 250§ Ray Control Volts = 155♠ for 0° Shadow, ♠Zero Volts for 100° Shadow								
6AH5G	Beam Amplifier	ST-16	6AP	Cath.	6.3	0.90	Amplifier	350	250	18.0	54.0	2.5	4,200	5,200	10,800	6L6G
6AH7GT	Duo Triode	GT	8BE	Cath.	6.3	0.30	Amplifier	100	.....	3.6	3.7	.....	10,300	16	.....
				.....	6.3	0.30	(Per Unit)	180	.....	6.5	7.6	.....	8,400	16	.....
6AJ4	Triode	T-6½	9BX	Cath.	6.3	0.225	U H F Amplifier	125	.....	68▲	16	.....	4,200♠	42	.....
6AJ5	Pentode	T-5½	7BD	Cath.	6.3	0.175	R F Amplifier	28	28	0.1	2.7	1.0	100,000	2,500	.....
6AL6G	Beam Amplifier	ST-16	6AM	Cath.	6.3	0.90	Pwr. Amplifier	Same as 6L6G								6L6G
6AM4	Triode	T-6½	9BX	Cath.	6.3	0.225	U H F Amplifier	200	.....	100▲	10	.....	8,700♠	85	.....
6AN5	Pentode	T-5½	7BD	Cath.	6.3	0.45	Pwr. Amplifier	120	120	6.0	35.0	12.0	12,500♠	8,000	1,300	6AQ5
6AQ7GT	Duodiode Triode	GT	8CK	Cath.	6.3	0.30	Det. Amplifier	250	.....	2.0	2.3	.....	44,000	70	.....
6AS6	Pentode	T-5½	7CM	Cath.	6.3	.175	R F Amplifier	120	120	2	5.2	3.5	110,000	3200	.....
6AS8	Diode Pentode	T-6½	9DS	Cath.	6.3	0.45	Det. Amplifier	Max. D C Plate Current—5 Ma. (Diode)				3.0	300,000♠	6,200		
								200	150	180▲	9.5					

① Load Resistance for Power Output Tubes

② Transconductance for Tetrodes, Pentodes, Etc.

▼ Conversion Transconductance

♠ Approximate

♠ Plate to Plate

■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal

§ Plate and Target Supply

▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE		
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.												
6SK7, GT	Remote Cutoff Pentode	Metal, GT	8N	Cath.	6.3	0.30	R F Amplifier	100	100	1.0	13.0	4.0	120,000♦	2,350	.....		
					250	100		3.0	9.2	2.6	800,000♦	2,000						
6SR7GT	Duodi Triode	Metal, GT	8Q	Cath.	6.3	.300	Det. Amplifier	250	.....	9	9.5	.....	8,500	16	.....		
6SS7	Remote Cutoff Pentode	Metal	8N	Cath.	6.3	0.15	R F Amplifier	100	100	1.0	12.2	3.1	0.12 Meg.♦	1,930	.....	6SG7GT	
					250	100		3.0	9.0	2.0	1.0 Meg.♦	1,850						
6ST7	Duodi Triode	Metal	8Q	Cath.	6.3	.15	Det. Amplifier	250	.....	9	9.5	.....	8,500	16	.....		
6SV7	Diode Pentode	Metal	7AZ	Cath.	6.3	0.30	Det. Amplifier	100	100	1.0	3.7	1.4	700,000	2,600	.....		
					250	150		1.0	7.5	2.8	1.5 Meg.	3,600						
6SZ7	Duodiode Triode	Metal	8Q	Cath.	6.3	0.15	Amplifier	250	.....	3.0	1.0	.....	58,000	70	.....	6SQ7GT
6T5	Electron Ray	ST-12	6R	Cath.	6.3	0.30	Indicator	250§	.....	0-22	3.0	.....	.....	.....	.....	6U5/6G5
6T7G	Duodiode Triode	ST-12	7V	Cath.	6.3	0.15	Det. Amplifier	100	.....	1.5	0.3	.....	95,000	65	.....		
6T7G/6Q6G	Duodi Triode	ST-12	7V	Cath.	6.3	0.15	Det. Amplifier	250	.....	3.0	1.2	.....	62,000	65	.....	6T7G
								.....	.....	.....	62,000					
6U4GT	Diode	GT	4CG	Cath.	6.3	1.2	H.W. Rectifier	350 A C Volts Per Plate RMS, 125 Ma. Output Current, 335 V. D C Output, 20μf Cap. Input								6W4GT	
6U6GT	Beam Power	T-9	7S	Cath.	6.3	.75	Pwr. Amplifier	200	135	14	55	3.0	3,000	6200	5,500			
6U7G	Remote Cutoff Pentode	ST-12	7R	Cath.	6.3	0.30	R F Amplifier	100	100	3.0	8.0	2.2	250,000	1,500	.....	6SK7GT, 6K7GT	
								250	100	3.0	8.2	2.0	800,000	1,600				
6V7G	Duodi Triode	ST-12	7V	Cath.	6.3	0.3	Det. Amplifier	Same Characteristics as Type 85									
6V8	Triple Diode Triode	T-6½	9AH	Cath.	6.3	0.45	Det. Amplifier	100	.....	1.0	0.8	.....	54,000	70	.....		
								250	.....	3.0	1.0	.....	58,000	70		
6W5G	Duo Diode	ST-12	6S	Cath.	6.3	0.90	F.W. Rectifier	325 V. RMS Per Plate, 90 Ma. D C Output, Cond. Input Filter 450 V. RMS Per Plate, 90 Ma. D C Output, Choke Input Filter								6X5G	
6W7G	Pentode	ST-12	7R	Cath.	6.3	.150	R F Amplifier	250	100	3	2.0	0.5	1 Meg.	1250	.....		

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. FACTOR ② OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
6Y3G	Diode	ST-12	4AC	Cath.	6.3	0.70	H.W. Rectifier	5000 A C Volts Per Plate RMS 7.5 Ma. Output Current								2 X2A
6Y5	Duo Diode	ST-12	6J	Cath.	6.3	0.80	F.W. Rectifier	350 V. RMS Per Plate, 50 Ma. D C Output								6 X5G
6Y5V	Duo Diode	ST-12	6J	Cath.	6.3	0.80	F.W. Rectifier	350 V. RMS Per Plate, 60 Ma. D C Output								6 X5G
6Y7G	Duo Triode	ST-12	8B	Cath.	6.3	0.6	Class B Amp.	Same Characteristics as Type 79								
6Z3	Diode	.....	4G	Cath.	6.3	0.30	H.W. Rectifier	350 V. RMS Plate, 50 Ma. D C Output								1V
6Z4, 6Z4/84	Duo Diode	ST-12	5D	Cath.	6.3	0.50	F.W. Rectifier	350 V. RMS Per Plate, 60 Ma. D C Output, Cond. Input Filter								6 X5G
6Z5, 6Z5/12Z5	Duo Diode	ST-12	6K	Cath.	6.3 12.6	0.80 0.40	F.W. Rectifier	230 V. RMS Per Plate, 60 Ma. D C Output								6 X5G 14Y4
6Z7G	Duo Triode	ST-12	8B	Cath.	6.3	0.3	Class B Amp.	135 180	..... .....	0 0	60 60	..... .....	..... .....	9,000 12,000	2,500 4,200	
6ZY5G	Duo Diode	ST-12	6S	Cath.	6.3	0.30	F.W. Rectifier	325 A C Volts Per Plate RMS, 40 Ma. Output Current. Capacitor Input to Filter								0Z4, 6 X5
7A4	Triode	Lock-In	5AC	Cath.	6.3	0.30	Amplifier	90 250	..... .....	0.0 8.0	10.0 9.0	..... .....	6,700 7,700	20 20	.....
7A5	Beam Pentode	Lock-In	6AA	Cath.	6.3	0.75	Pwr. Amplifier	110 125	110 125	7.5 190▲	40.0 44.0	3.0 3.3	16,000 17,000	5,800 6,000	1,500 2,200	
7AB7	Pentode	Lock-In	8B0	Cath.	6.3	0.15	Amplifier	250	100	2.0	4.0	1.3	500,000	1,800	.....
7AD7	Pentode	Lock-In	8V	Cath.	6.3	0.60	Video Amplifier	300 300	150 125	68▲ 68▲	28 25	7.0 6.0	300,000	9,500	(Class A ₁ Amplifier) (Class A ₁ Video Amplifier)	
7AF7	Duo Triode	Lock-In	8AC	Cath.	6.3	0.30	Amplifier	100 100 250	..... ..... .....	0 3.0 10	10.8‡ 5.0‡ 9.0‡	..... ..... .....	6,500 8,400 7,600	17 16 16	R _k = 600 Ohms R _k = 1,100 Ohms	
7AH7	Semi-Remote Pentode	Lock-In	8V	Cath.	6.3	0.15	R F Amplifier	250	250	250▲	6.8	1.9	1.0 Meg.	3,300	.....

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 ▲ Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR Gm μ MHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
7AJ7	Pentode	Lock-In	8V	Cath.	6.3	.3	R F Amplifier	250	100	3	2.2	0.7	1 Meg.	1,575	.....
7B4	Triode	Lock-In	5AC	Cath.	6.3	0.30	Amplifier	100 250	.....	1.0 2.0	0.4 0.9	.....	85,000 66,000	100 100	.....
7B5	Pentode	Lock-In	6AE	Cath.	6.3	0.40	Pwr. Amplifier	100 250 315	100 250 250	7.0 18.0 21.0	9.0 32.0 25.5	1.6 5.5 4.0	104,000 68,000 75,000	1,500 2,300 2,100	350 3,400 4,500	6K6GT
7C4	H.F. Diode	Lock-In	4AH	Cath.	6.3	0.15	Detector	117 V. RMS			5.0	Resonant Frequency 900 Mc.				
7E5	Triode	Lock-In	8BN	Cath.	6.3	.15	Amp.-Oscillator	180	.....	3	5.5	.....	.12 Meg.	36	.....
7E6	Duo Diode Triode	Lock-In	8W	Cath.	6.3	0.30	Det. Amplifier	250 100	.....	9.0 3.0	9.5 3.9	.....	8,500 11,000	16 16.5	.....
7E7	Duo Diode Pentode	Lock-In	8AE	Cath.	6.3	0.30	Det. Amplifier	100 250	100 100	1.0 3.0	10.0 7.5	2.7 1.6	150,000♦ 700,000♦	1,600 1,300	.....
7G7	Pentode	Lock-In	8V	Cath.	6.3	0.45	R F Amplifier	250	100	2.0	6.0	2.0	800,000 ♦	4,500	.....
7G8	Duo Tetrode	Lock-In	8BV	Cath.	6.3	.3	Amplifier	250	100	2.5	4.5 †	0.8 †	225 Meg.	2,100	.....
7H7	Semi-Remote Pentode	Lock-In	8V	Cath.	6.3	0.30	R F Amplifier	100 250	100 150	1.5 180 ▲	7.5 10.0	2.6 3.2	350,000♦ 800,000♦	4,000 4,000	.....
7J7	Triode Heptode	Lock-In	8BL	Cath.	6.3	0.30	Mixer Oscillator	100 250 100 250	100 100 100	3.0 3.0 (R _{c1} = 50,000) (R _{c1} = 50,000)	1.5 1.4 3.2 5.0	2.6 2.8 (Triode Grid Current = 0.3 Ma.) (Triode Grid Current = 0.4 Ma.)	500,000 1.5 Meg. 280 ▼ 290 ▼	.....	(Heptode) (Heptode) (Triode) (Triode)	
7K7	Duo Diode Triode	Lock-In	8BF	Cath.	6.3	0.30	Det. Amplifier	250	.....	2.0	2.3	.....	44,000	70	.....
7L7	Pentode	Lock-In	8V	Cath.	6.3	0.30	R F Amplifier	100 250	100 100	1.0 1.5	5.5 4.5	2.4 1.5	100,000♦ 1.0 Meg. †	3,000 3,100	R _k = 125 R _k = 250	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
7R7	Duo Diode Pentode	Lock-In	8AE	Cath.	6.3	0.3	Detector R F Amplifier	100	100	2.0	3.4	1.0	500,000‡	2,100	
								100	100	1.0	5.5	2.2	350,000‡	3,000	.....
								250	100	2.0	3.5	1.0	1,800,000‡	2,200	.....
								250	100	1.0	6.2	1.6	1,000,000‡	3,200	.....
7S7	Triode Heptode	Lock-In	8BL	Cath.	6.3	0.30	Mixer Oscillator	100	100	2.0	1.9	3.0	500,000‡	500▼	(Heptode)	
								250	100	2.0	1.8	3.0	1.25 Meg. †	525▼	(Heptode)	
								100	R _{k1} =50,000	3.0	(Triode Grid Current = 0.3 Ma.)	(Triode)				
								250■	R _{k1} =50,000	5.0	(Triode Grid Current = 0.4 Ma.)	(Triode)				
7T7	Pentode	Lock-In	8V	Cath.	6.3	0.30	Amplifier	100	100	1.0	5.3	2.1	350,000	4,000	
					6.3	0.30		250	150	1.0	10.8	4.1	900,000	4,900	.....
7V7	Pentode	Lock-In	8V	Cath.	6.3	0.45	R F Amplifier	300	150	160▲	10.0	3.9	300,000	5,800	
7W7	Pentode	Lock-In	8BJ	Cath.	6.3	0.45	R F Amplifier	Characteristics Same as Type 7V7.								
7X6	Duo Diode	Lock-In	7DX	Cath.	6.3	1.2	Rectifier Doublers	235 Volts Per Plate RMS, 75 Ma. D C Output Per Plate (H.W. Rectifier) 117 Volts Per Plate RMS, 75 Ma. D C Output (Voltage Doubler)								
7X7/XXFM	Duo Diode Triode	Lock-In	8BZ	Cath.	6.3	0.30	Det. Amplifier	100	.....	0	1.2	.....	85,000	85	.....
								250	.....	1.0	1.9	.....	67,000	100	.....
7Z4	Duo Diode	Lock-In	5AB	Cath.	6.3	0.90	F.W. Rectifier	325 A C Volts Per Plate RMS, 100 Ma. Output Current, Capacitor Input to Filter 450 A C Volts Per Plate RMS, 100 Ma. Output Current, Choke Input to Filter 6 Henrys Min.								
10	Triode	ST-16	4D	Fil.	7.5	1.25	Pwr. Amplifier	250	.....	23.5	10.0	.....	13,000	8.0	400
								350	.....	32.0	16.0	.....	11,000	8.0	900
								425	.....	40.0	18.0	.....	10,200	8.0	1,600
12A, 112A	Triode	ST-14	4D	Fil.	5.0	0.25	Det. Amplifier	90	.....	4.5	5.0	.....	5,400	8.5	35
								135	.....	9.0	6.2	.....	5,100	8.5	130
12A4	Triode	T-6½	9AG	Cath.	6.3	0.60	Amplifier	250	.....	9.0	23	.....	2,500	20	.....
					12.6	0.30										
12A5	Pentode	ST-12	7F	Cath.	12.6	0.30	Pwr. Amplifier	100	100	15.0	19.0	6.0	4,500	1,700	800	
					6.3	0.60		180	180	25.0	48.0	14.0	3,300	2,400	3,400	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

‡ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE		
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.												
12A6	Beam Amplifier	Metal	7S	Cath.	12.6	0.15	Pwr. Amplifier	250	250									
12A6GT	Beam Amplifier	T-9	7S	Cath.	12.6	0.15	Pwr. Amplifier	Same as 12A6										
12A7	Diode Pentode	ST-12	7K	Cath.	12.6	0.30	Rectifier Amplifier	125 V. RMS Plate, 30 Ma. D C Output (Rect.)										
								135	135	13.5	9.0	2.5	13,500	975	550			
12A8G, GT	Heptode	ST-12, GT	8A	Cath.	12.6	0.15	Converter	100	50	1.5	1.1	1.3	500,000	360▼	E _{c2} = 100 V., I _{c2} = 2.0 Ma.			
								250	100	3.0	3.5	2.7	300,000	550▼	E _{c2} = 250 V., I _{c2} = 4.0 Ma.			
12AH7GT	Duo Triode	GT	8BE	Cath.	12.6	0.15	Amplifier	100	.....	3.6	3.7	.....	10,300	16	.....		
								180	.....	6.5	7.6	.....	8,400	16	.....		
12AW6	Pentode	T-5½	7CM	Cath.	12.6	0.15	R F Amplifier	250	150	200▲	7.0	2.0	0.8 Meg.	5,000	.....	12AU6	
								125	125	100▲	7.2	2.1	0.5 Meg.	5,100	.....		
								100	100	100▲	5.5	1.6	0.3 Meg.	4,750	.....		
12B7	Pentode	Lock-In	8V	Cath.	12.6	0.15	Amplifier	Same as Lock In Type 14A7									14A7	
12B8GT	Triode Pentode	GT	8T	Cath.	12.6	0.30	Triode Amplifier Pentode Amp.	90	.....	0.0	2.8	.....	37,000	90	.....	6AT6
								90	90	3.0	7.0	2.0	200,000	1,800	.....	6BA6	
12BA7	Heptode	T-6½	8CT	Cath.	12.6	0.15	Converter	Characteristics Same as Type 6BA7										
12BQ6GA	Beam Amplifier	T-11	6AM	Cath.	12.6	0.6	Horiz. Amp.	Characteristics Same as Type 6BQ6GTA									12BQ6GTA	
12BZ7	Duo Triode	T-6½	9A	Cath.	6.3	0.6	Sync. Separator or Amplifier	250	.....	2.0	2.5‡	.....	31,800	100	.....		
					12.6	0.3												
12C8	Duodi Pentode	Metal	8E	Cath.	12.6	0.15	Det. Amplifier	See Type 6B8										
12F5GT	Triode	T-9	5M	Cath.	12.6	.150	Amplifier	250	.....	2	0.9	.....	66,000	100	.....		
12G4	Triode	T-5½	6BG	Cath.	12.6	0.15	Amplifier	Same as One Section of Type 6SN7GTA										
12H4	Triode	T-5½	7DW	Cath.	6.3	0.3	Amplifier	Same as One Section of Type 6SN7GTA										
					12.6	0.15												
12H6	Duo Diode	Metal	7Q	Cath.	12.6	0.15	Rectifier	117 A C Volts Per Plate RMS, 8.0 Ma. Output Current Per Plate									12AL5	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR Gm μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
12J7GT, G	Pentode	GT, ST-12	7R	Cath.	12.6	0.15	R F Amplifier	Characteristics Same as Type 6J7									
12K7GT, G	Pentode	GT, ST-12	7R	Cath.	12.6	0.15	R F Amplifier	Characteristics Same as Type 6K7									
12K8, GT	Triode Hexode	Metal, GT	8K	Cath.	12.6	0.15	Mixer Oscillator	Characteristics Same as Type 6K8GT									
12L8GT	Duo Pentode	GT	8BU	Cath.	12.6	0.15	Pwr. Amplifier	110 180	110 180	5.5 9.0	6.1‡ 13.0‡	1.3‡ 2.8	14,000‡ 10,000‡	1,680‡ 2,150‡	300‡ 1,000‡		
12Q7GT, G	Duo Diode Triode	GT, ST-12	7V	Cath.	12.6	0.15	Det. Amplifier	Characteristics Same as Type 6Q7GT									
12S8GT	3 Di Triode	T-9	8CB	Cath.	12.6	.150	Det. Amplifier	250	.....	2.0	0.9	.....	91,000	100	.....	
12SC7	Triode	Metal	8S	Cath.	12.6	.150	Amplifier	250	.....	2.0	2.0	.....	53,000	70	.....	
12SF5, GT	Triode	T-9	6AB	Cath.	12.6	.150	Amplifier	250	.....	2.0	0.9	.....	66,000	100	.....	
12SH7	Pentode	Metal	8BK	Cath.	12.6	0.15	R F Amplifier	Characteristics Same as Type 6SH7									
12SJ7, GT	Pentode	Metal, GT	8N	Cath.	12.6	0.15	R F Amplifier	Characteristics Same as Type 6SJ7									
12SL7GT	Duo Triode	GT	8BD	Cath.	12.6	0.15	Amplifier	Characteristics Same as Type 6SL7GT									
12SR7	Duo Diode Triode	Metal	8Q	Cath.	12.6	0.15	Det. Amplifier	Characteristics Same as Type 6SR7GT									
12V6GT	Beam Amplifier	GT	7S	Cath.	12.6	0.225	Pwr. Amplifier	Characteristics Same as Type 6V6GT									
12Z3	Diode	ST-12	4G	Cath.	12.6	0.30	H.W. Rectifier	235 V. RMS Per Plate, 55 Ma. D C Output, Condenser Input Filter									
12Z5	Duo Diode	7L	Cath.	12.6	0.30	Rect. Doub.	225 V. RMS Per Plate, 60 Ma. D C Output, Condenser Input Filter									6Z5/12Z5
14A4	Triode	Lock-In	5AC	Cath.	12.6	.150	Amplifier	250	.....	8	9	.....	7,700‡	20	.....	
14A5	Beam Power	Lock-In	6AA	Cath.	12.6	.150	Pwr. Amplifier	250	250	12.5	30	3.5	7,500	3000	2,800		

- ① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

- ♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

- ‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
14AF7/XXD	Duo Triode	Lock-In	8AC	Cath.	12.6	0.15	Amplifier	Characteristics Same as Type 7AF7									
14B8	Heptode	Lock-In	8X	Cath.	12.6	0.15	Converter	Characteristics Same as Type 7B8									
14C5	Beam Amplifier	Lock-In	6AA	Cath.	12.6	0.225	Pwr. Amplifier	Characteristics Same as Type 6V6GT									
14C7	Pentode	Lock-In	8V	Cath.	12.6	0.15	R F Amplifier	100	100	1.0	5.7	1.8	400,000♦	2,275	.....	
								250	100	3.0	2.2	0.7	1.0 Meg.♦	1,575	.....	
14E6	Duodi Triode	Lock-In	8W	Cath.	12.6	.150	Det. Amplifier	250	.....	9.0	9.5	.....	8,500	16	.....	
14E7	Duo Diode Pentode	Lock-In	8AE	Cath.	12.6	0.15	Det. Amplifier	Characteristics Same as Type 7E7									
14F7	Duo Triode	Lock-In	8AC	Cath.	12.6	0.15	Amplifier	Characteristics Same as Type 7F7									
14F8	Duo Triode	Lock-In	8BW	Cath.	12.6	0.15	Osc. Amplifier	Characteristics Same as Type 7F8									
14H7	Semi-Remote Pentode	Lock-In	8V	Cath.	12.6	0.15	R F Amplifier	Characteristics Same as Type 7H7									
14J7	Triode Heptode	Lock-In	8BL	Cath.	12.6	0.15	Mixer Oscillator	Characteristics Same as Type 7J7									
14N7	Duo Triode	Lock-In	8AC	Cath.	12.6	0.30	Amplifier	Characteristics Same as Type 7N7									
14R7	Duo Diode Pentode	Lock-In	8AE	Cath.	12.6	0.15	Det. Amplifier	Characteristics Same as Type 7R7									
14S7	Triode Heptode	Lock-In	8BL	Cath.	12.6	0.15	Mixer Oscillator	Characteristics Same as Type 7S7									
14W7	Pentode	Lock-In	8BJ	Cath.	12.6	.225	R F Amplifier	300	300	.....	10.0	3.9	0.3 Meg.	5800	.....	
14X7	Duodi Triode	Lock-In	8BZ	Cath.	12.6	.150	Det. Amplifier	250	.....	1.0	1.9	.....	67,000	100	.....	
14Y4	Duodiode	Lock-In	5AB	Cath.	12.6	0.300	F.W. Rectifier	450 V. RMS Plate, 70 Ma. D C Output, Choke Input 325 V. RMS Plate, 70 Ma. D C Output, Cond. Input									
14Z3	Diode	4G	Cath.	14.0	0.30	H.W. Rectifier	250 V. RMS Plate, 60 Ma. D C Output									12Z3
15	Pentode	ST-12	5F	Cath.	2.0	0.22	Amplifier	135	67.5	1.5	1.85	0.3	800,000	750	.....	
16, 16B	Diode	.....	4B	Fil.	7.5	.....	H.W. Rectifier	.....	.....	.....	.....	.....	.....	.....	.....	81

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE RESISTANCE OHMS	AMP. FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
18	Pentode	ST-14	6B	Cath.	14.0	0.30	Pwr. Amplifier	See Type 6F6G.									
19	Duo Triode	ST-12 GT	6C	Fil.	2.0	0.26	Pwr. Amplifier	135	.....	0	10.0	.....	10,000	.....	2,100	
					2.0	.....		3.0	3.4	.....	10,000	.....	1,900			
					2.0	.....		6.0	0.2	.....	10,000	.....	1,600			
19C8	3 Diode Triode	T-6½	9E	Cath.	18.9	.150	Det. Amplifier	100	.....	1.0	0.5	.....	80,000	100	.....	
19J6	Duo Triode	T-5½	7BF	Cath.	18.9	0.15	Mixer	Characteristics Same as Type 6J6									
19V8	Triple Diode Triode	T-6½	9AH	Cath.	18.9	0.15	Det. Amplifier	Characteristics Same as Type 6V8									
19X8	Triode Pentode	T-6½	9AK	Cath.	18.9	0.15	Oscillator Mixer	Characteristics Same as Type 6X8									
20	Triode	T-8	4D	Fil.	3.3	0.132	Pwr. Amplifier	90	.....	16.5	2.8	.....	9,600	3.5	50	
								135	.....	22.5	6.0	.....	6,500	3.5	130	
22	Tetrode	ST-14	4K	Fil.	3.3	0.132	Amplifier	135	67.5	1.5	3.7	1.3	250,000	500	.....	
24A, 24S	Tetrode	ST-14	5E	Cath.	2.5	1.75	R F Amplifier	180	90	3.0	4.0	1.7	400,000	1,000	.....	
					2.5	1.75		250	90	3.0	4.0	1.7	600,000	1,050	.....	
25, 25S	Duodi Triode	.....	6M	Fil.	2.0	0.06	Det. Amplifier	135	.....	3.0	1.0	.....	.....	20	.....	1B5/25S
25A6, G, GT	Pentode	Metal ST-14 GT	7S	Cath.	25.0	0.30	Pwr. Amplifier	95	95	15.0	20.0	4.0	45,000	2,000	900		
								135	135	20.0	37.0	8.0	35,000	2,450	2,000		
								160	120	18.0	33.0	6.5	42,000	2,375	2,200		
25A7GT	Diode Pentode	GT	8F	Cath.	25.0	0.30	H.W. Rectifier Pwr. Amplifier	117 A C Volts Per Plate, RMS, 75 Ma. Output Current									
					25.0	0.30		100	100	15.0	20.5	4.0	4,500	1,800	770		
25AC5GT	Triode	GT	6Q	Cath.	25.0	0.30	Pwr. Amplifier Dyn. Coupled Amplifier	110	.....	+15	45.0	.....	15,200	58	.....	
					25.0	0.30		165	.....	46.0	.....	2,000	.....	2,000		
					Bias from 6AE5GT Driver												
25AV5GT	Pentode	GT	6CK	Cath.	25.0	0.30	Horiz. Amplifier	Characteristics Same as Type 6AV5GT									25BQ6GTA
25AX4GT	Diode	T-9	4CG	Cath.	25.0	0.30	Damper	Characteristics Same as Type 6A X4GT									

- ① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

- ♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

- ‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT M.W.	SUGGESTED REPLACEMENT TYPE		
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.												
25B5	Duo Triode	ST-12	6D	Cath.	25.0	0.30	Pwr. Amplifier	See Type 25N6G										
25B6G	Pentode	ST-14	7S	Cath.	25.0	0.30	Pwr. Amplifier	105	105	23.0	16.0	48.0	2.0	1,700	4,800	2,400	25A6GT	
								200	135		62.0	1.8	2,500	5,000	7,100			
25B8	Triode Pentode	T-9	8T	Cath. Cath.	25	0.15	Triode Amplifier Pentode Amp.	100 100	..... 100	1.0 3.0	0.6 7.6	..... 2.0	75,000 185,000	112 370	.....		
25BK5	Beam Amplifier	T-6½	9BQ	Cath.	25.0	0.30	Pwr. Amplifier	Characteristics Same as Type 6BK5										
25BQ6GA	Beam Amplifier	T-11	6AM	Cath.	25.0	0.30	Horiz. Amplifier	Characteristics Same as Type 6BQ6GTA										
25C6G	Beam Power	ST-14	7S	Cath.	25.0	.300	Amplifier	200	135	14.0	61	2.2	2,600	7,100	6,000			
25CD6G	Beam Power Amplifier	ST-16	5BT	Cath.	25.0	0.6	Horiz. Deflection Amplifier	Characteristics Same as Type 6CD6G										
25D8GT	Diode Triode Pentode	.....	8AF	Cath.	25.0	0.15	Det. Amplifier	100 100	..... 100	1.0 3.0	.5 8.5	..... 2.7	..... .....	100 1,900	(Triode) (Pentode)	12AV6 and 12BD6
25N6G	Duo Triode	ST-12	7W	Cath.	25.0	0.30	Pwr. Amplifier	110 180	110* 100*	0 0	45 46	7.0* 5.8*	2,000 4,000	.....	2,000 3,800		
25W6GT	Beam Amplifier	T-9	7S	Cath.	25.0	0.30	Amplifier	Characteristics Same as Type 6W6GT										
25Y5	Duo Diode	ST-12	6E	Cath.	25.0	0.30	Rect. Doubler	117 V. RMS Per Plate, 75 Ma. D C Output, Per Plate 235 V. RMS Plate, 75 Ma. D C Output Per Plate									25Z5	
26	Triode	ST-14	4D	Fil.	1.5	1.05	Amplifier	90 180	..... .....	7.0 14.5	2.9 6.2	..... .....	8,900 7,300	8.3 8.3	.....		
26A6	Pentode	T-5½	7BK	Cath.	26.5	0.07	R F Amplifier	26.5 250	26.5 250	..... .....	1.7 10.5	0.7 4.0	250,000 1,000,000	.....	.....	
26A7	Duo Pentode	T-9	8BU	Cath.	26.5	0.6	Pwr. Amplifier	26.5	26.5	4.5	20	2.0	1,500	5,500‡	200			
26C6	Duodi, Triode	T-5½	7BT	Cath.	26.5	0.07	Det. Amplifier	Same Characteristics as Type 7E6										

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance
 * Input Triode

♠ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CURR. MA.	SCREEN CURR. MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
26D6	Heptode	T-5½	7CH	Cath.	26.5	0.07	Converter	26.5	26.5	0.5	0.45	1.6	.....	270	.....	
								100	100	1.5	2.8	8.0	500,000	455	.....	
								250	100	1.5	3.0	7.8	1,000,000	475	.....	
27, 27S	Triode	ST-12	5A	Cath.	2.5	1.75	Amplifier	90	.....	6.0	3.0	.....	10,000	9.0	.....	
					2.5	1.75		135	.....	9.0	4.7	.....	9,000	9.0	.....	
					2.5	1.75		180	.....	13.5	5.0	.....	9,000	9.0	.....	
					2.5	1.75		250	.....	21.0	5.2	.....	9,250	9.0	.....	
					2.5	1.75		250	.....	30.0	.....	.....	.....	9,250	9.0	.....
28Z5	Double Diode	Lock-In	6BJ	Cath.	28.0	0.24	F.W. Rectifier	325	A C Volts Per Plate, RMS, 100 Ma. Output Current, Condenser Input to Filter								
					28.0	0.24		450	A C Volts Per Plate, RMS, 100 Ma. Output Current, 6h Choke Input to Filter								
30	Triode	ST-12	4D	Fil.	2.0	0.06	Amplifier	90	.....	4.5	2.5	.....	11,000	9.3	.....	
					2.0	0.06		135	.....	9.0	3.0	.....	10,300	9.3	.....	
					2.0	0.06		180	.....	13.5	3.1	.....	10,300	9.3	.....	
31	Triode	ST-12	4D	Fil.	2.0	0.13	Pwr. Amplifier	135	.....	22.5	8.0	.....	7,000	3.8	185	
					2.0	0.13		180	.....	30.0	12.3	.....	5,700	3.8	375	
32	Tetrode	ST-14	4K	Fil.	2.0	0.06	R F Amplifier	135	67.5	3.0	1.7	0.4	950,000	640	.....	
					2.0	0.06		180	67.5	3.0	1.7	0.4	1.2 Meg.	650	.....	
					2.0	0.06		180	67.5	6.0	.....	.....	.....	.....	.....
32L7GT	Diode Beam Amplifier	GT	8Z	Cath.	32.5	0.30	Rectifier	125 RMS Volts Per Plate, 60 Ma. Output Current. Condenser Input to Filter									
					.....	0.30		110	110	7.5	40.0	3.0	2,600	6,000	1,000	
33	Pentode	ST-14	5K	Fil.	2.0	0.26	Pwr. Amplifier	135	135	13.5	14.5	3.0	7,000	1,450	700		
					2.0	0.26		180	180	18.0	22.0	5.0	6,000	1,700	1,400		
34	Pentode	ST-14	4M	Fil.	2.0	0.06	R F Amplifier	67.5	67.5	3.0	2.7	1.1	400,000	560	.....	
					2.0	0.06		135	67.5	3.0	2.8	1.0	600,000	600	.....	
					2.0	0.06		180	67.5	3.0	2.8	1.0	1 Meg.	620	.....	
35/51, 35S/51S	Tetrode	ST-14	5E	Cath.	2.5	1.75	R F Amplifier	180	90	3.0	6.3	2.5	300,000	1,020	.....	
					2.5	1.75		250	90	3.0	6.5	2.5	400,000	1,050	.....	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE		
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.												
35Z6G	Duo Diode	ST-14	7Q	Cath.	35.0	0.30	Doub. Rectifier	117 V. RMS Plate, 110 Ma. D C Output										
36, 36A	Tetrode	ST-12	5E	Cath.	6.3	0.30	R F Amplifier	100	55	1.5	1.8	Not over 1/3 Plate Cur.	550,000	850	Adjust Bias for .1 Ma. Plate Current Without Signal			
					6.3	0.30		135	67.5	1.5	2.8		475,000	1,000				
					6.3	0.30		180	90	3.0	3.1		500,000	1,050				
					6.3	0.30		250	90	3.0	3.2		550,000	1,080				
					6.3	0.30		250	20 to 25	6.0								
37, 37A	Triode	ST-12	5A	Cath.	6.3	0.30	Amplifier	90	6.0	2.5	11,500	9.2				
					6.3	0.30		135	....	9.0	4.1	....	10,000	9.2		
					6.3	0.30		180	....	13.5	4.3	....	10,200	9.2		
					6.3	0.30		250	....	18.0	7.5	....	8,400	9.2		
					6.3	0.30												
38, 38A	Pentode	ST-12	5F	Cath.	6.3	0.30	Pwr. Amplifier	100	100	9.0	7.0	1.2	15,000	875	270			
					6.3	0.30		135	135	13.5	9.0	1.5	13,500	925	550			
					6.3	0.30		180	180	18.0	14.0	2.4	11,600	1,050	1,000			
					6.3	0.30		250	250	25.0	22.0	3.8	10,000	1,200	2,500			
					6.3	0.30												
39, 39/44, 39A	Pentode	ST-12	5F	Cath.	6.3	0.30	R F Amplifier	90	90	3.0	5.6	1.6	375,000	960				
					6.3	0.30		180	90	3.0	5.8	1.4	750,000	1,000				
					6.3	0.30		250	90	3.0	5.8	1.4	1 Meg.	1,050				
					6.3	0.30												
40	Triode	ST-14	4D	Fil.	5.0	0.25	Amplifier	135	1.5	0.2	150,000	30			
40A1	Ballast	T-9	8ES	Regulator	Avg. Operating Current—74 Ma. at 20 Volts; 150 Ma. at 40 Volts; 155 Ma. at 60 Volts										
40B2	Ballast	T-9	8ES	Regulator	Avg. Operating Current—140 Ma. at 20 Volts; 150 Ma. at 40 Volts; 155 Ma. at 60 Volts										
40Z5/45Z5GT	Diode	GT	6AD	Cath.	45	0.15	H.W. Rectifier	Characteristics Same as Type 35Y4										
41	Pentode	ST-12	6B	Cath.	6.3	0.40	Pwr. Amplifier	Characteristics Same as Type 6K6GT and 7B5										
42	Pentode	ST-14	6B	Cath.	6.3	0.65	Pwr. Amplifier	Characteristics Same as Type 6F6G										
43	Pentode	ST-14	6B	Cath.	25.0	0.30	Pwr. Amplifier	Characteristics Same as Type 25A6GT										
44	Pentode	5F	Cath.	6.3	0.30	Amplifier	See Type 39 or 39/44									39/44	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
45	Triode	ST-14	4D	Fil.	2.5	1.5	Pwr. Amplifier	180	31.5	31.0	2,700	3.5	830	
					2.5	1.5		250	....	50.0	34.0	....	3,900	3.5	1,600
					2.5	1.5		275	....	56.0	36.0	....	4,600	3.5	2,000
45A	Triode	4D	Fil.	2.5	1.50	Pwr. Amplifier	325	68	43	3,200	3.5	3,000	45
45Z3	Diode	T-5½	5AM	Cath.	45.0	0.075	H.W. Rectifier	117 A C Volts Per Plate RMS, 65 Ma. Output Current, Min. Supply Impedance = 15 Ohms								
46	Dual Grid Triode	ST-16	5C	Fil.	2.5	1.75	Pwr. Amplifier	250	Tie Gs to P	33.0	22.0	6,400	5.6	1,250	
					....	2.5	1.75	(Class B)	300	Tie Gs to G	0	150 Peak Per Tube	5,200‡	2 Tubes	16,000
					....	2.5	1.75	(Class B)	400	Tie Gs to G	0	200 Peak Per Tube	5,800‡	2 Tubes	20,000
47	Pentode	ST-16	5B	Fil.	2.5	1.75	Pwr. Amplifier	250	250	16.5	31.0	6.0	7,000	2,500	2,700	2A5
48	Tetrode	ST-16	6A	Cath.	30.	0.40	Pwr. Amplifier	95	95	20.0	52	12.0	1,500	3,900	2,000	
								125	100	22.5	52	12.0	1,500	3,900	3,000	
49	Dual Grid Triode	ST-14	5C	Fil.	2.0	0.12	Class A Amp. Class B Amp.	135	Gs to P	20	6.0	11,000	4.7	170	
					Gs to G	0	4.0	2 Tubes	12,000‡	....		3,500
50	Triode	ST-16	4D	Fil.	7.5	1.25	Pwr. Amplifier	300	54.0	35.0	4,600	3.8	1,600	
					7.5	1.25		350	....	63.0	45.0	....	4,100	3.8	2,400
					7.5	1.25		400	....	70.0	55.0	....	3,670	3.8	3,400
					7.5	1.25		450	....	84.0	55.0	....	4,350	3.8	4,600
50A1	Ballast	T-6½	9CM	....	....	....	Fil. Ballast	Avg. Operating Current—52 Ma. at 30 Volts; 54 Ma. at 50 Volts; 56 Ma. at 65 Volts							
50A X6G	Duo Diode	ST-14	7Q	Cath.	50.0	0.30	F.W. Rectifier	Characteristics Same as Type 6A X6G.								
50C6G	Beam Amplifier	ST-14	7S	Cath.	50.0	0.15	Pwr. Amplifier	135	135	13.5	58.0	3.5	9,300	7,000	3,600	
								200	135	14.0	61.0	2.2	18,300	7,100	6,000	
50Y6GT	Duo Diode	GT	7Q	Cath.	50.0	0.15	F.W. Rectifier	Characteristics Same as Type 6Y6G								
50Z7G	Duo Diode	ST-12	8AN	Cath.	50	0.15	F.W. Rectifier	117 V. RMS Per Plate, 65 Ma. D C Output								

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT M.W.	SUGGESTED REPLACEMENT TYPE		
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.												
51, 51S	Tetrode	ST-14	5E	Cath.	2.5	1.75	Amplifier	See Type 35, 35/51									35	
52	Dual Grid Triode	ST-14	5C	Fil.	6.3	0.30	Class A Amp. Class B Amp.	110 180	..... 2 Tube	0	43 3.0	.....	2,000 10,000	5.2	1,500 5,000	6A4/LA
53	Duo Triode	ST-14	7B	Cath.	2.5	2.0	Pwr. Amplifier	Characteristics Same as Type 6N7GT										
55	Duodi Triode	ST-12	6G	Cath.	2.5	1.0	Det. Amplifier	Characteristics Same as Type 6V7G										
55S	Duodi Triode	ST-12	6G	Cath.	2.5	1.00	Det. Amplifier	250	.....	20	8.0	.....	7,500	8.3	350	55
56, 56S	Triode	ST-12	5A	Cath.	2.5	1.0	Amplifier Detector	250 250	..... .....	13.5 20.0‡	5.0	.....	9,500	13.8	.....		
56AS	Triode	ST-12	5A	Cath.	6.3	0.40	Amplifier	250	.....	13.5	5.0	.....	9,500	13.8	.....	76
57, 57S	Pentode	ST-12	6F	Cath.	2.5	1.0	Amplifier	100	100	3.0	2.0	0.5	1 Meg.	1,185	.....		
					2.5	1.0	Detector	250	100	3.0	2.0	0.5	1 Meg.	1,225	.....		
					2.5	1.0	Detector	250†	100	4.3‡	Adjust Bias for 0.1 Ma. Plate Current Without Signal							
57AS	Pentode	ST-12	6F	Cath.	6.3	0.40	Amplifier	250	100	3.0	2.0	0.5	1 Meg.	1,225	.....	6C6	
58, 58S	Pentode	ST-12	6F	Cath.	2.5	1.0	Amplifier	100	100	3.0	8.0	2.2	250,000	1,500	.....		
					2.5	1.0	Amplifier	250	100	3.0	8.2	2.0	800,000	1,600	.....		
58AS	Pentode	ST-12	6F	Cath.	6.3	0.40	Amplifier	250	100	3.0	8.2	2.0	800,000	1,600	.....	6D6,78	
59	Pentode	ST-16	7A	Cath.	2.5	2.0	Pwr. Amplifier Triode	250 250	250 Tie Gs to P	18.0 28.0	35.0 26.0	9.0	6,000 5,000	2,500 2,600	3,000 1,250			
					.....	2.0	Triode— Class B	300	Tie Gs to G	0	10.0‡	.....	4,600‡	.....	15,000 (2 tubes)	
					.....	2.0	Triode— Class B	400	Tie Gs to G and Su to P	0	13.0‡	.....	6,000‡	.....	20,000 (2 tubes)	
64, 64A	Tetrode	.....	5E	Cath.	6.3	0.40	Amplifier	180	90	3.0	3.1	1.5	500,000	1,050	.....	36
65, 65A	Tetrode	.....	5E	Cath.	6.3	0.40	Amplifier	180	90	3.0	4.5	1.3	750,000	1,000	.....	39/44
67, 67A	Triode	.....	5A	Cath.	6.3	0.40	Det. Amplifier	180	.....	13.5	4.3	.....	10,200	9.2	.....	37

① Load Resistance for Power Output Tubes

② Transconductance for Tetrodes, Pentodes, Etc.

‡ Conversion Transconductance

† Applied Through 250,000 Ohms

‡ Approximate

‡ Plate to Plate

‡ Through 20,000 Ohms

‡ Per Tube or Section—No Signal

‡ Plate and Target Supply

‡ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR Gm μ MHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
68, 68A	Pentode	.....	5E	Cath.	6.3	0.40	Pwr. Amplifier	135	90	13.5	14	3.0	7,500	1,400	650	38
70A7GT	Diode Beam Amplifier	T-9	8AB	Cath.	70.0	0.15	H.W. Rectifier Pwr. Amplifier	125 V. 110	RMS Plate, 60 Ma. Output			40	3.0	2,500	5,800	1,500	70L7GT
70L7GT	Diode Beam Pentode	GT	8AA	Cath.	70.0	0.15	H.W. Rectifier Amplifier	117 A C Volts RMS 110	70 Ma. Output	7.5	40	3.0	15,000	7,500	1,800	Capacitor Input to Filter
71	Triode	ST-14	4D	Fil.	5.0	0.50	Pwr. Amplifier	180	.....	40.5	20	.....	4,800	3	790	71A
71A	Triode	ST-14	4D	Fil.	5.0	0.25	Pwr. Amplifier	90	.....	16.5	10.0	.....	3,000	3	125	.....
					5.0	0.25		135	.....	27.0	17.3	.....	3,000	3	400	
					5.0	0.25		180	.....	40.5	20.0	.....	4,800	3	790	
71B	Triode	ST-14	4D	Cath.	5.0	0.125	Pwr. Amplifier	180	.....	40.5	20	.....	4,800	3	790	71A
75, 75S	Duodi Triode	ST-12	6G	Cath.	6.3	0.30	Det. Amplifier	250	.....	2.0	0.9	.....	91,000	100	.....	.....
76	Triode	ST-12	5A	Cath.	6.3	0.30	Amplifier	100	.....	5.0	2.5	.....	12,000	13.8	.....	.....
					6.3	0.30		250	.....	13.5	5.0	.....	9,500	13.8		
					6.3	0.30		250	.....	20.0	Adjust Bias for 0.2 Ma. Plate Current Without Signal	.....	.....		
77	Pentode	ST-12	6F	Cath.	6.3	0.30	Amplifier	100	60	1.5	1.7	0.4	600,000	1,100	.....	.....
					6.3	0.30		250	100	3.0	2.3	0.5	>1.0 Meg.	1,250			
78	Pentode	ST-12	6F	Cath.	6.3	0.30	Amplifier	90	90	3.0	5.4	1.3	300,000	1,275	.....	.....
					6.3	0.30		180	75	3.0	4.0	1.0	1 Meg.	1,100			
					6.3	0.30		250	100	3.0	7.0	1.7	800,000	1,450			
					6.3	0.30		250	125	3.0	10.5	2.6	600,000	1,650			
					6.3	0.30		.....	.....	.....	.....	.....	.....	.....
79	Duo Triode	ST-12	6H	Cath.	6.3	0.60	Pwr. Amplifier	250	Class B	0	21.0	Both Triodes	14,000	.....	8,000	6N7
80M	Duo Di. M.V.	.....	4C	Fil.	5.0	2.00	F.W. Rectifier	450 V. RMS Per Plate, 125 Ma. D C Output								80
81, 81M	Diode	ST-16	4B	Fil.	7.5	1.25	H.W. Rectifier	700 A C Volts Per Plate, RMS, 85 Ma. Output Current. Condenser Input to Filter								.....
82	Mercury Vapor Duo Diode	ST-14	4C	Fil.	2.5	3.0	F.W. Rectifier	550 A C Volts Per Plate RMS, 115 Ma. Output Current, Choke Input—6 Henrys Min. 450 A C Volts Per Plate RMS, 115 Ma. Output Current, Capacitor Input to Filter								.....

① Load Resistance for Power Output Tubes

② Transconductance for Tetrodes, Pentodes, Etc.

▼ Conversion Transconductance

♠ Approximate

♣ Plate to Plate

■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal

§ Plate and Target Supply

▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.										
82V		ST-16	4C	Fil.	5.0	3.00	F.W. Rectifier	550 A C Volts Per Plate RMS, 225 Ma. Output Current, Choke Input—3 Henrys Min.								82
83	Mercury Vapor Duo Diode	ST-16	4C	Fil.	5.0	3.00	F.W. Rectifier	450 A C Volts Per Plate RMS, 225 Ma. Output Current, Capacitor Input to Filter								
83V	Duo Diode	ST-14	4AD	Cath.	5.0	2.00	F.W. Rectifier	500 A C Volts Per Plate RMS, 175 Ma. Output Current, Choke Input—4 Henrys Min. 5V4G 375 A C Volts Per Plate RMS, 175 Ma. Output Current, Capacitor Input to Filter								
84/6Z4	Duo Diode	ST-12	5D	Cath.	6.3 6.3	0.50 0.50	F.W. Rectifier	325 A C Volts Per Plate RMS, 60 Ma. Output Current, Condenser Input to Filter 450 A C Volts Per Plate RMS, 60 Ma. Output Current, 10h Choke Input to Filter								
85	Duodi Triode	ST-12	6G	Cath.	6.3	0.30	Det. Amplifier	Characteristics Same as Type 6V7G								6V7G
85AS	Duodi Triode	ST-12	6G	Cath.	6.3	0.30	Det. Amplifier	250	9.0	4.5			16,000	20		85
88	Duo Diode		4C	Fil.	5.0	2.00	F.W. Rectifier	450 V. RMS Per Plate, 125 Ma. D C Output								83V
89	Pentode	ST-12	6F	Cath.	6.3 6.3 6.3	0.40 0.40 0.40	Pwr. Amplifier Triode Triode Class B	180 160 180	180 Gs+Su to P Tie Su to P	18.0 20.0 0	20.0 17.0 3.0	3.0	8,000 7,000 9,400‡	1,550 4.7 Tie Gs to G	1,500 300 3,500 (2 tubes)	
89 Y								Same as Type 89. Has low-loss base								
95	Pentode		6B	Cath.	2.5	1.75	Pwr. Amplifier	315	315	22.0	42	8.0	7,000	2,300	5,000	2A5
96	Diode		4G	Cath.	10.0	0.50	H.W. Rectifier	350 V. RMS Plate, 100 Ma. D C Output								1V
98																84
X99	Triode	T-9	4D	Fil.	3.3	.063	Det. Amplifier	Same as V99								
117L7GT	Beam Power Diode	T-9	8AO	Cath. Cath.	117.....	.090	Amplifier H.W. Rect.	105 117 V. RMS Plate, 75 Ma. D C Output, Cond. Input	105	5.2	43	4.0	4,000	5,300	850	
117L7/M7GT	Diode Beam Amplifier	GT	8AO	Cath.	117	0.09	H.W. Rectifier Pwr. Amplifier	117 A C Volts RMS, 75 Ma. Output Current, Capacitor Input to Filter	105 105	5.2 5.2	43 43	4.0 4.0	17,000‡ 5,300	5,300 850		

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

CONDENSED DATA SECTION—Cont.

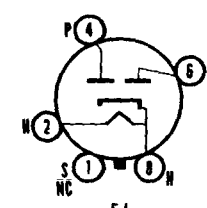
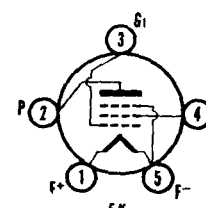
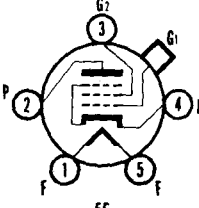
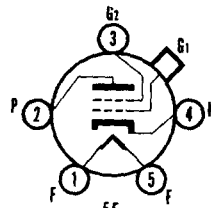
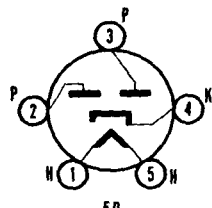
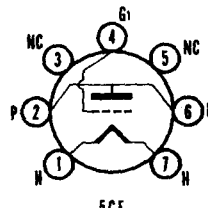
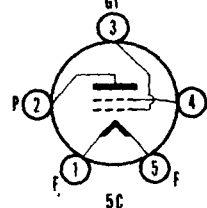
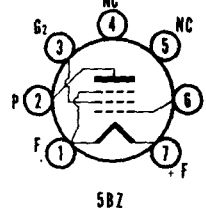
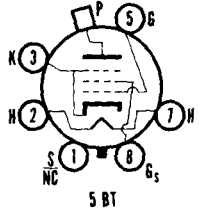
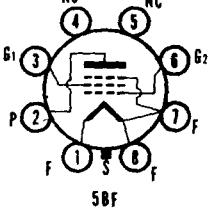
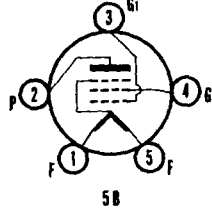
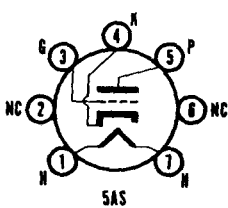
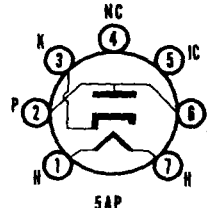
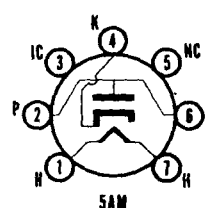
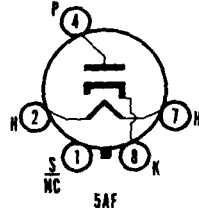
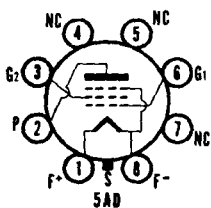
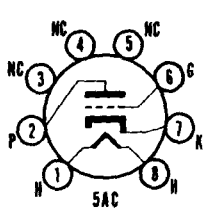
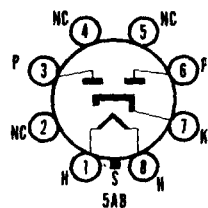
TYPE	CLASS	CONSTRUCTION		EMITTER			USE	PLATE VOLTS	SCREEN VOLTS	NEG. GRID VOLTS	PLATE CUR-RENT MA.	SCREEN CUR-RENT MA.	PLATE ① RESISTANCE OHMS	AMP. ② FACTOR OR G _m μMHOS	POWER OUTPUT MW.	SUGGESTED REPLACEMENT TYPE	
		STYLE	BASE DIAG.	TYPE	VOLTS	AMP.											
117N7GT	Beam Power Diode	T-9	8AV	Cath.	117	.090	Amplifier Rectifier	100	100	6.0	51	5.0	3,000		1,200		
117P7GT	Diode Beam Amplifier	GT	8AV	Cath.	117.0	0.09	H.W. Rectifier Pwr. Amplifier	117 V. RMS Plate, 75 Ma. D C Output	105	105	5.2	43	4.0	4,000	5,300	850	
117Z4GT	Diode	GT	5AA	Cath.	117	0.04	H.W. Rectifier	117 V. RMS Plate, 90 Ma. D C Output									
182B/482B	Triode	ST-14	4D	Fil.	5.0	1.25	Pwr. Amplifier	250	....	35.0	20	....	4,500	5.0	1,350	71A or 45
183/483	Triode	ST-14	4D	Fil.	5.0	1.25	Pwr. Amplifier	250	....	65.0	20	....	4,500	3.0	1,800	71A or 45
210T	Triode	ST-16	4D	Fil.	7.5	1.25	Pwr. Amplifier	Standard Type 10 with Ceramic Base, See Type 10 Characteristics									
401	Triode	....	4D	Cath.	3.0	1.35	Det. Amplifier	90	....	3.0	5.0	....	9,500	9.5	....	27
484	Triode	....	5A	Cath.	2.8	1.60	Det. Amplifier	180	....	9.0	6.0	....	9,300	12.5	....	485
950	Pentode	....	5K	Fil.	2.0	0.125	Pwr. Amplifier	135	135	16.5	5.5	2.0	13,500	950	575	33
951	Tetrode	....	4K	Fil.	2.0	0.60	Amplifier	180	67.5	3.0	1.7	0.4	1.2 Meg.	650	....	1B4P
9001	Pentode	T-5½	7PM	Cath.	6.3	0.15	Det. Amplifier	90	90	3	1.2	0.5	1,000,000	....	....
								250	100	3	2.0	0.7	1 Meg. Min.	1,400	....	
9002	Triode	Min.	7BS	Cath.	6.3	0.15	Amplifier	250	....	7.0	6.3	....	11,400	25	....	
9003	Pentode	Min.	7BD	Cath.	6.3	0.15	R.F. Amplifier	250	100	3.0	6.7	....	700,000	1,800	....	
9006	U H F Diode	T-5½	6BH	Cath.	6.3	0.15	Rectifier	270 V. RMS Plate, 5 Ma. D C Output									
XXB	Duo Triode	Lock-In	7BW	Fil.	1.4	0.10	Amplifier	90	....	0	4.5	....	11,200	14.5	....	
XXD	Duo Triode	Lock-In	8AC	Cath.	12.6	0.15	Amplifier	See Type 14AF7/XXD									
XXFM	Duodi Triode	Lock-In	8BZ	Cath.	6.3	0.30	Det. Amplifier	See Type 7X7.									
XXL	Triode	Lock-In	5AC	Cath.	6.3	0.30	Amplifier	100	....	0	10.0	....	7,000	25	....	7A4
								250	....	8.0	8.0	....	8,700	20	....	

① Load Resistance for Power Output Tubes
 ② Transconductance for Tetrodes, Pentodes, Etc.
 ▼ Conversion Transconductance

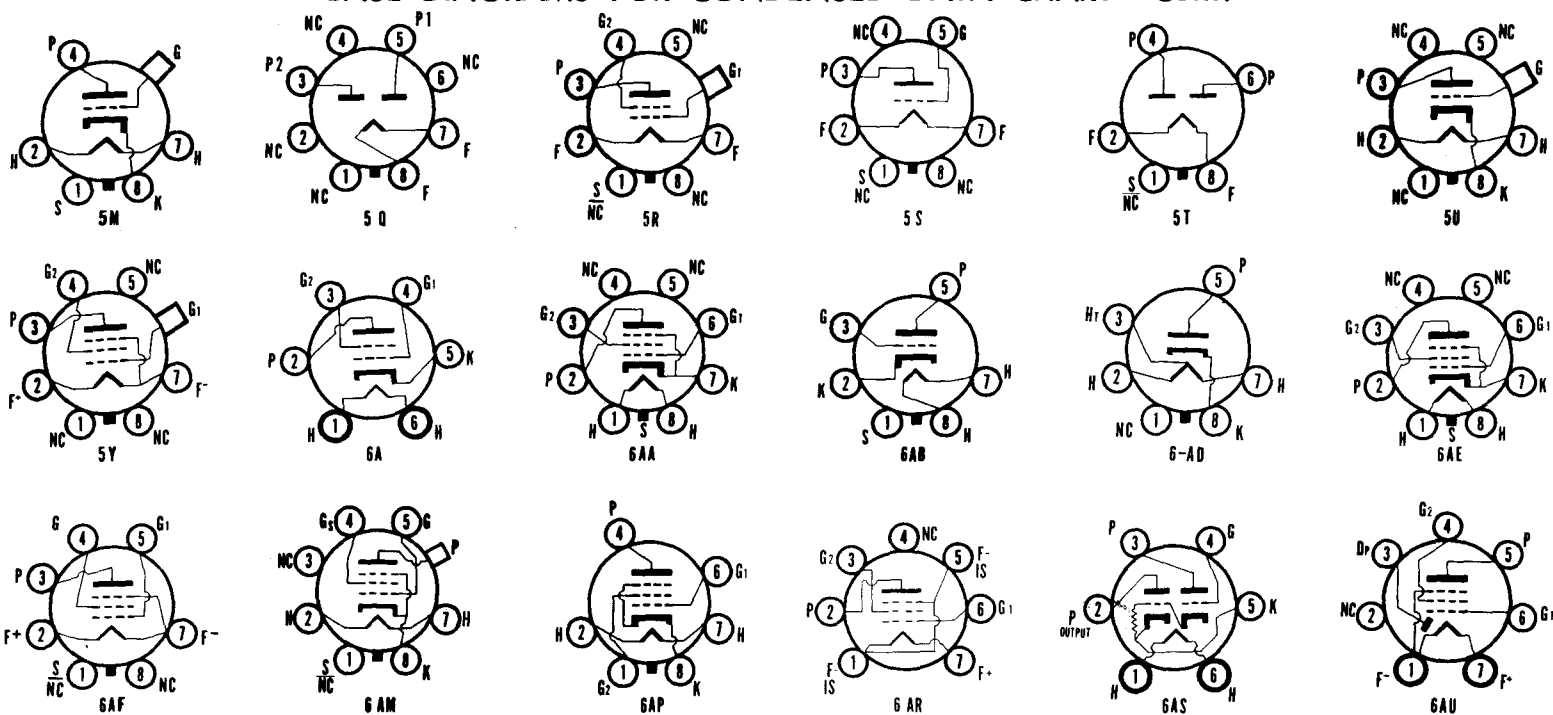
♦ Approximate
 † Plate to Plate
 ■ Through 20,000 Ohms

‡ Per Tube or Section—No Signal
 § Plate and Target Supply
 ▲ Self Bias Cathode Resistor—Ohms

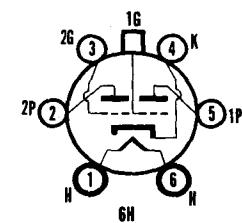
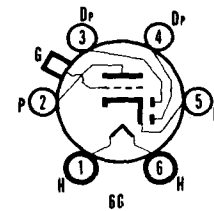
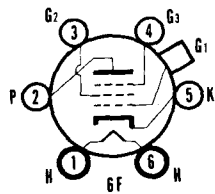
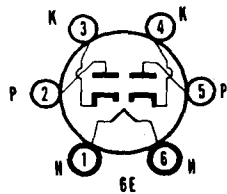
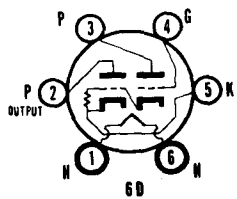
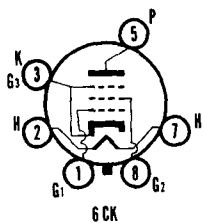
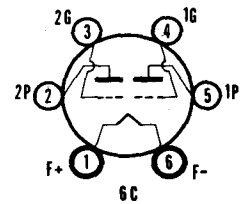
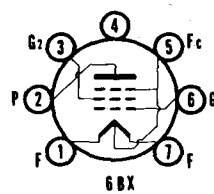
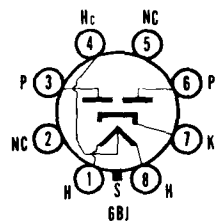
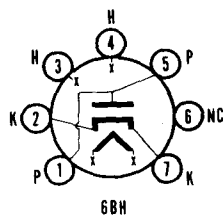
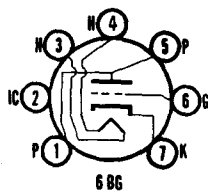
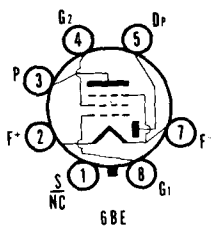
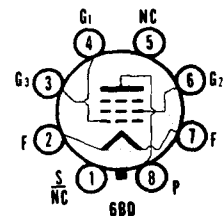
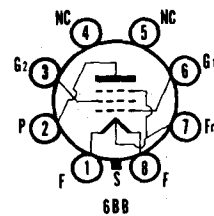
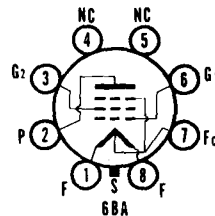
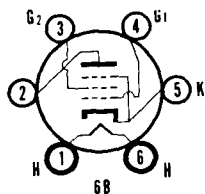
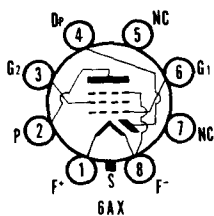
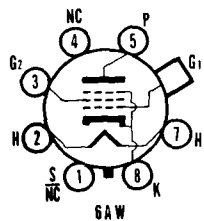
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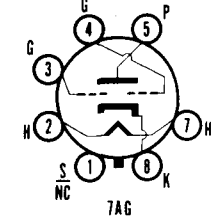
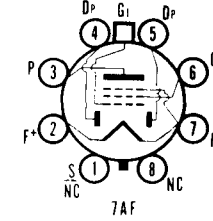
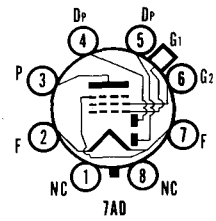
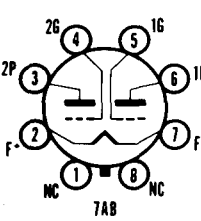
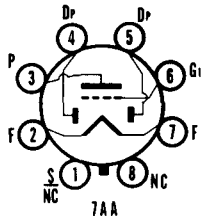
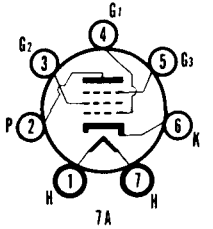
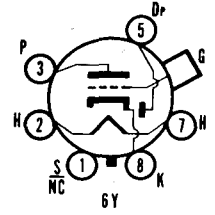
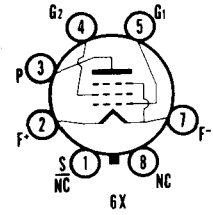
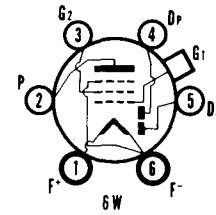
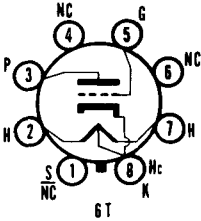
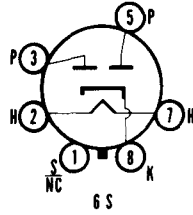
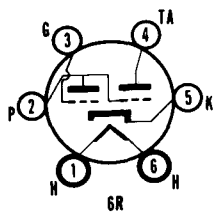
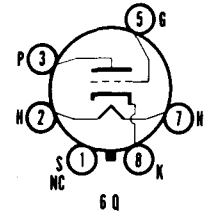
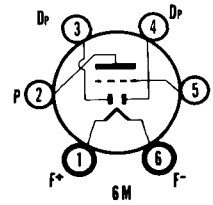
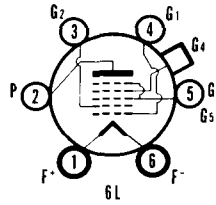
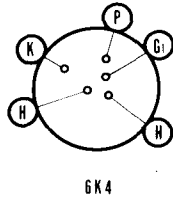
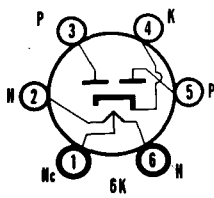
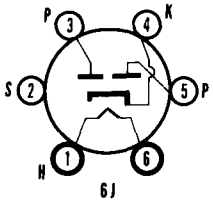
BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



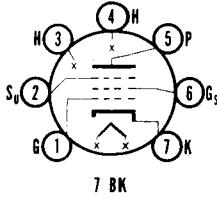
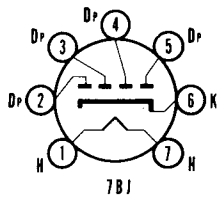
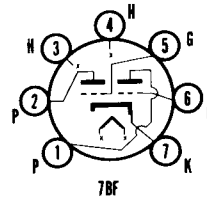
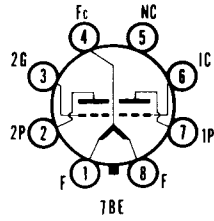
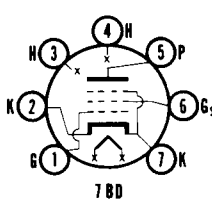
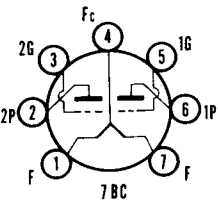
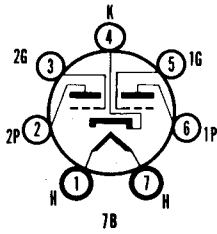
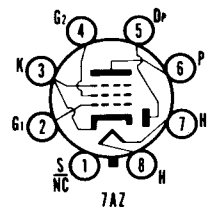
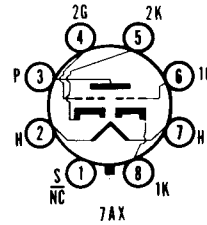
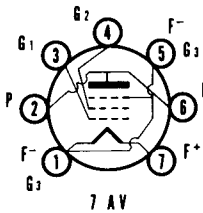
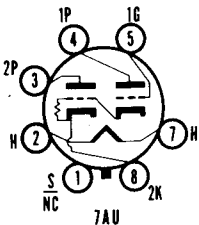
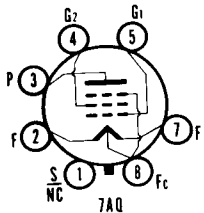
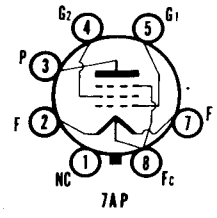
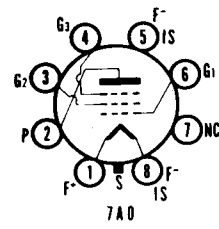
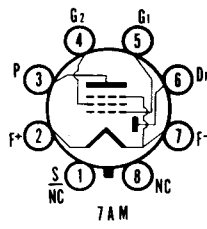
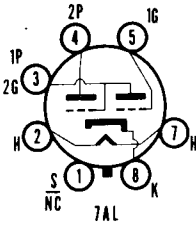
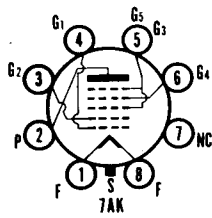
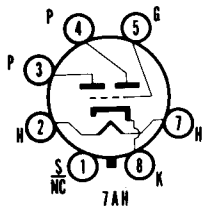
BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



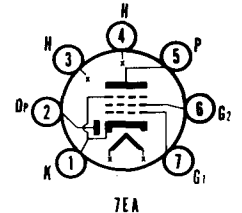
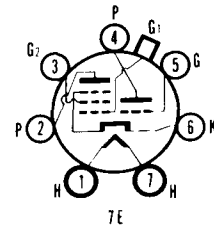
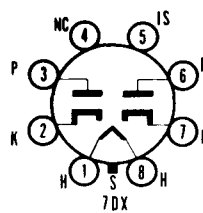
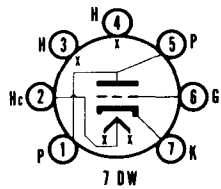
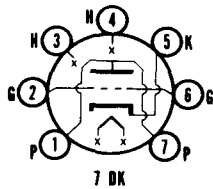
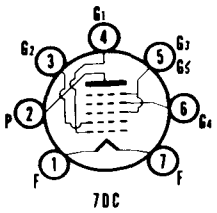
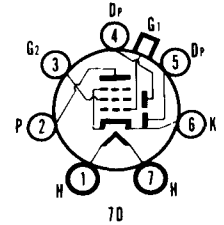
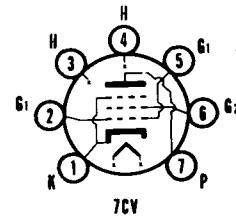
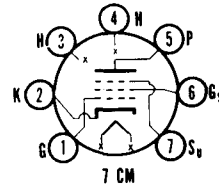
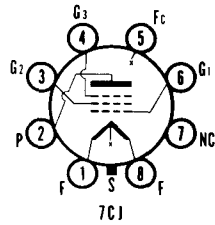
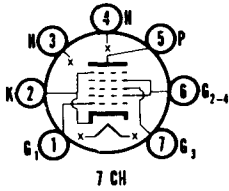
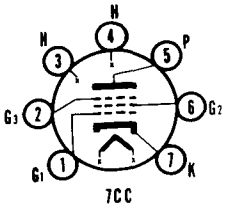
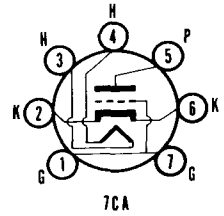
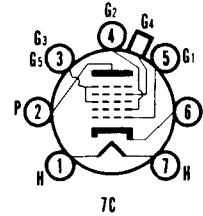
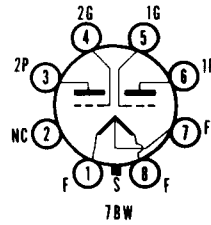
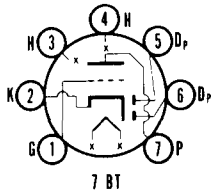
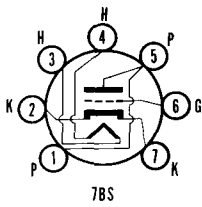
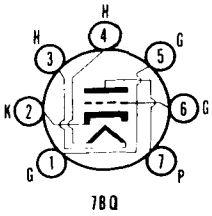
BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



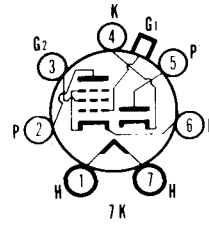
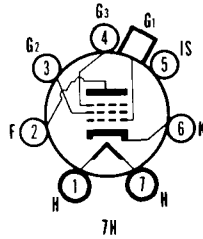
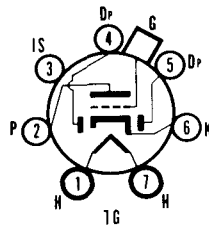
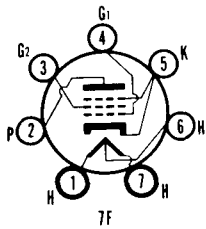
BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.

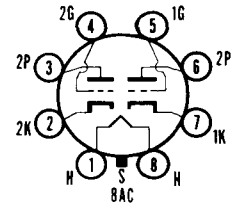
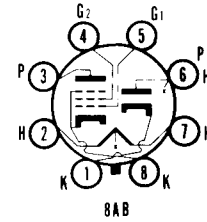
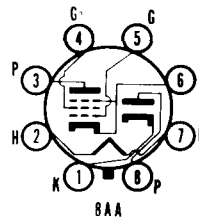
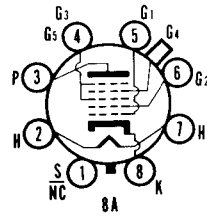
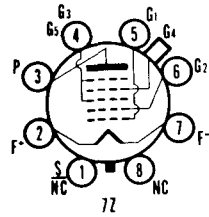
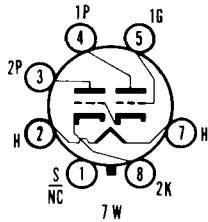
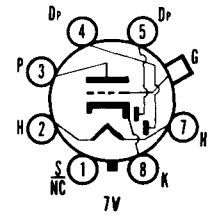
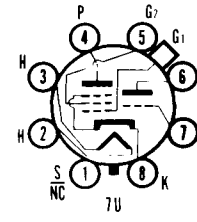
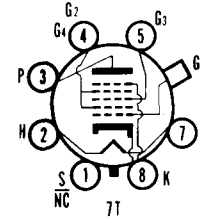
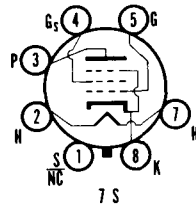
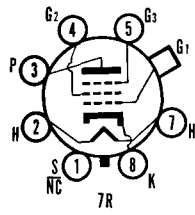
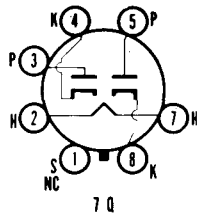


7L

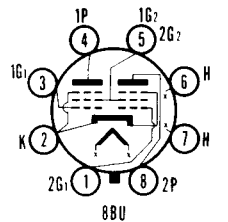
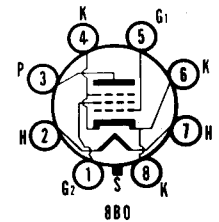
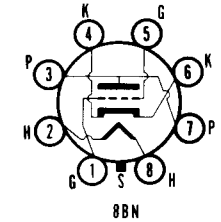
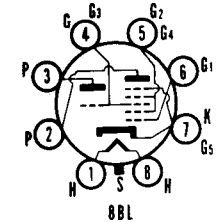
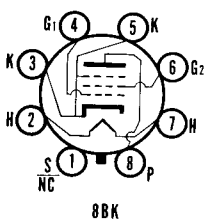
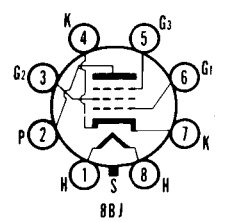
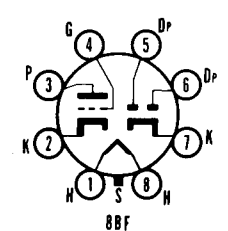
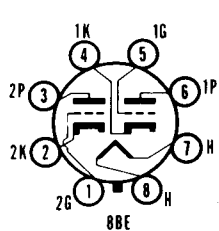
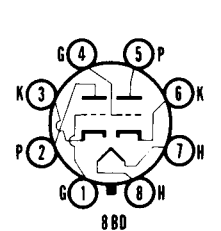
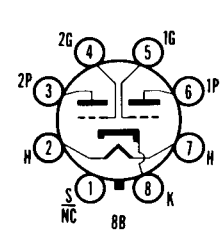
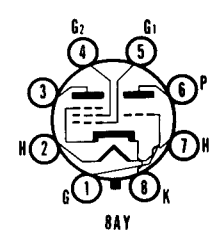
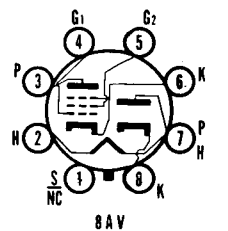
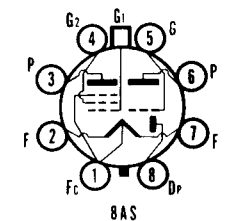
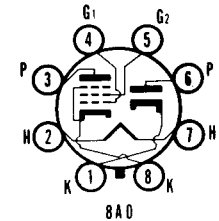
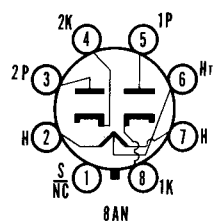
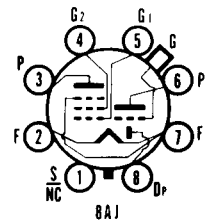
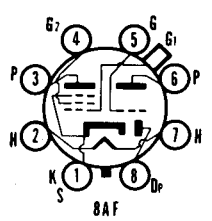
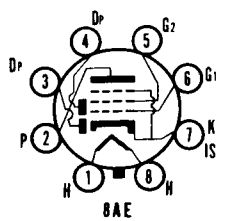
- 1 H
- 2 P2
- 3 K2
- 4 Hc
- 5 K1
- 6 P1
- 7 H

7PM

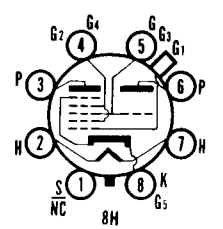
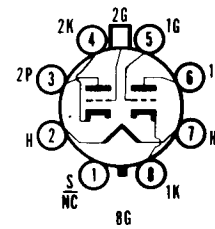
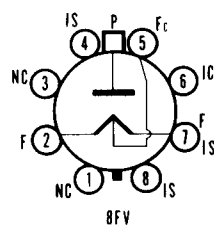
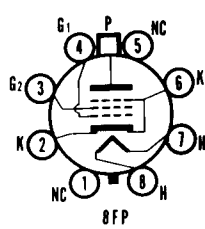
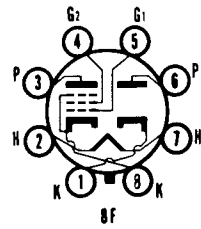
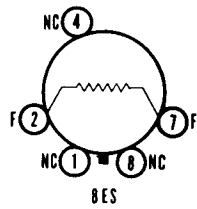
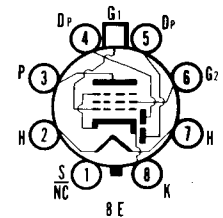
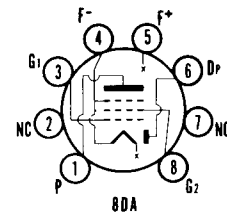
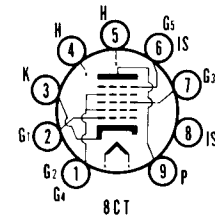
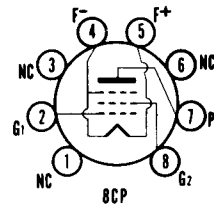
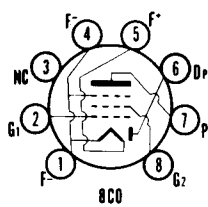
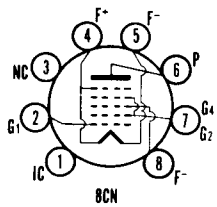
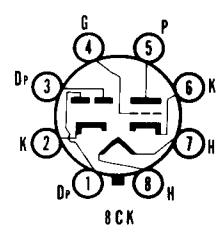
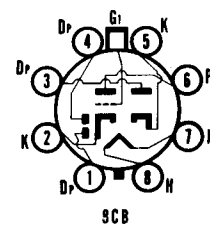
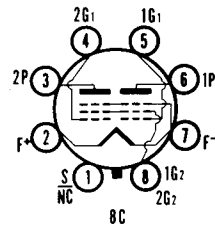
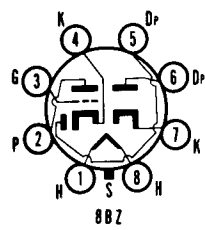
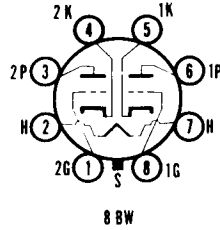
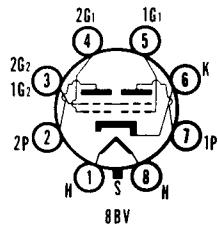
- 1 G
- 2 K
- 3 H
- 4 H
- 5 P
- 6 Gs
- 7 K, Su, IS



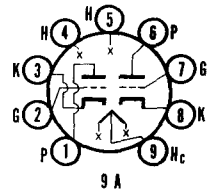
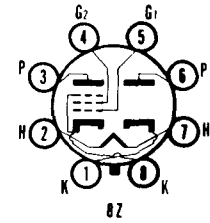
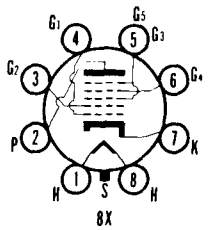
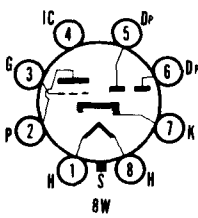
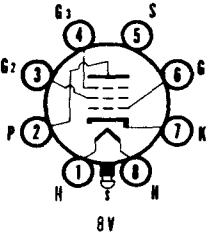
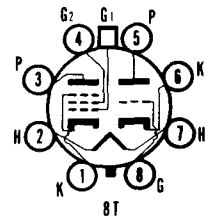
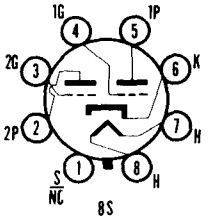
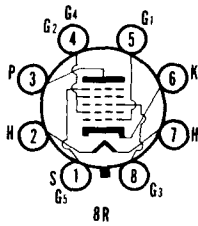
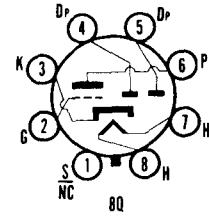
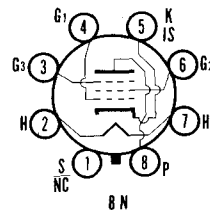
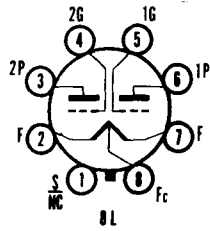
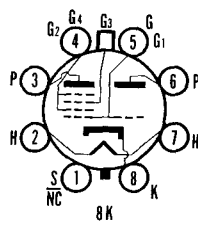
BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.



BASE DIAGRAMS FOR CONDENSED DATA CHART—Cont.

