

RAYTHEON "GLASS" TYPE TUBE CHART

TYPE	DESCRIPTION			BASE	MAX. OVERALL	FIL.	CAPACITANCES		OPERATING CONDITIONS AND CHARACTERISTICS										TYPE				
NO.	USE	TYPE	CATHODE	SEE TUBE BASE CNT.	HEIGHT INCHES	DIAM. INCHES	CURR. AMPS	MICRO-MICRO-FARADS	GRID	INPUT	OUTPUT	WHEN USED AS	PLATE SUPPLY VOLTS	SCR. SUPPLY VOLTS	PLATE BIAS VOLTS	PLATE RES. OHMS	AMP. FACTOR	PLATE RES. OHMS	MUT. COND. OHMS	INT. LAMP. WATTS	RECOMM. LOAD RES. OHMS	CUT-OFF BIAS VOLTS	NO.
1.1 VOLT DC DETECTOR AND AMPLIFIER TUBES																							
WD-11	DETECTOR	TRIODE	FIL.									GRID LEAK DETECT.	45	2A									WD-11
WX-12	AMPLIFIER											AMPLIFIER	90	4.5	2.5	6.6	15500	425	0.007	15000			WX-12
													135	10.5	3.0	6.6	15000	440	0.040	15000			

a 1.1 VOLT DC DETECTOR AND AMPLIFIER TUBES

WD-11	DETECTOR	TRIODE	FIL.	4D	4 1/2	1 1/2	0.25	3.3	2.5	2.5	GRID LEAK DETECT.	45	1.0	2.5	6.6	15000	425	0.007	15000	WD-11
WX-12	AMPLIFIER	TRIODE	FIL.	4D	4 1/2	1 1/2	0.25	3.3	2.5	2.5	AMPLIFIER	90	4.5	2.5	6.6	15000	440	0.040	15000	WX-12

b 20 VOLT DC DETECTOR AND AMPLIFIER TUBES

20VOLT DC DETECTOR AND AMPLIFIER TUBES																				
30	DETECTOR AMPLIFIER	TRIODE	FIL.	4D SM 4 PIN	4 1/2	1%	0.060	6.0	3.7	2.1	BIAS DETECTOR	180	18							
											AMPLIFIER	135	9	3	9.3	10300	900	0.07	20000	30
31	POWER AMPLIFIER	TRIODE	FIL.	4D SM 4 PIN	4 1/2	1%	0.130				AMPLIFIER	180	13.5	3.1	9.3	10300	900	0.19	20000	
												135	22.5	8	3.8	4100	925	0.185	7000	31
32	DETECTOR AMPLIFIER	TETRODE	FIL.	4K MER 4 PIN	5 1/2	1%	0.060	0.015 MAX.	6.0	11.7	DETECTOR	180	30	12.3	3.8	3600	1050	0.375	5700	
											180	67.5	6					0.15 MA		
											135	67.5	3	1.7	610	95 MA	640			9
33	POWER AMPLIFIER	PENTODE	FIL.	5K MEG 5 PIN	4 1/2	1%	0.260				AMPLIFIER	180	100	8	1.7	780	12 MA	650		9
											100	100	8	10.5	60	50000	1200	0.30	7000	
											135	135	13.5	14.5	70	50000	1400	0.70	7000	33
34	DETECTOR AMPLIFIER	REMOTE CUT-OFF PENTODE	FIL.	4M MER 4 PIN	5 1/2	1%	0.060	0.015 MAX.	6.0	12.6	1ST. DETECTOR	135	135	13.5						
											180	67.5	3	2.8	360	0.6 MA	650			34
											180	67.5	3	2.8	620	1.0 MA	620			27
49	POWER AMPLIFIER	DOUBLE GRID PENTODE	FIL.	5C MER 5 PIN	4 1/2	1%	0.120				CLASS A CL. BIAS 2 TUBES	135	20	5.7	4.5	4000	1125	0.17	11000	
											180	0	4 to 30					2.1	9000 MIN	49
19	POWER AMPLIFIER	TWIN TRIODE	FIL.	6C SM 6 PIN	4 1/2	1%	0.260				COMPLETE CL. A (BOTH SECTIONS)	135	0	10 to 35				3.0	10000	
											135	3	4 to 35					1.9	10000	19
1A6	OSCILLATOR DETECTOR	HEPTODE	FIL.	6L SM 6 PIN	4 1/2	1%	0.080	0.8	5	6	OSC. SECTION	135	13.5	2.3				0.5 MA	300	CONVERSION CONDUCTANCE
								0.25	10.5	9	MIXER SECTION	180	67.5	1.2				0.6 MA	250	R ₂ 0.02 MA
								1.5	6	6	OSC. SECTION	180	45	1.2						22.5
								0.3	10	10	MIXER SECTION	180	0.65 MA	3.3						R ₂ 0.02 MA
1C6	OSCILLATOR DETECTOR	HEPTODE	FIL.	6L SM 6 PIN	4 1/2	1%	0.120					180	67.5	3	1.5			0.75 MA	325	CONVERSION CONDUCTANCE
																				14
																				IC6

c 2.5 VOLT AC DETECTOR AND AMPLIFIER TUBES

C																							2.5 VOLT AC DETECTOR AND AMPLIFIER TUBES										
24A	DETECTOR AMPLIFIER	TETRODE	HEATER	5E MECA 5 PIN	5 1/2	1 1/2	1.75	0.007 MAX.	5.0	10.5	DETECTOR A.F. AMPLIFIER	250	45	5	1000	2.0 MA	500	0.25 MA CJ MAX.	15	24A													
												180	90	3		4.0	400				0.4 MA	1050	0.6 MA										
26	AMPLIFIER	TRIODE	1.5V AC FIL.	4D MECA 4 PIN	4 1/2	1 1/2	1.5V 1.050	8.1	3.5	2.2	AMPLIFIER	250	30	3	4.0	630	1050	15	26														
												135	10	10	5.5	630	7300			1100	0.08	8800											
27	DETECTOR AMPLIFIER	TRIODE	HEATER	5A SM 5 PIN	4 1/2	1 1/2	1.75	3.3	3.5	3.0	BIAS DETECTOR	250	30	3	4.0	630	1050	15	27														
												135	10	9	4.5	9	9000			1000	0.08	13000											
35 51	DETECTOR AMPLIFIER	REMOTE CUT-OFF TETRODE	HEATER	5E MECA 5 PIN	5 1/2	1 1/2	1.75	0.007 MAX.	5.0	10.5	1ST DETECTOR AMPLIFIER	250	90	7 MAX	3.05	0.3 MA	1020	50	35 51														
												180	90	3	6.3	420	0.4 MA			1050	50												

45	POWER AMPLIFIER	TRIODE	FIL.	4D MECA 4 PIN	4 1/2	1 1/2	1.50					SINGLE AMPLIFIER	180		31.5	31	3.5	1850	2125	0.82	2700	
													275		56	36	5.5	1700	2050	2.0	4600	
46	POWER AMPLIFIER	DOUBLE GRID TRIODE	FIL.	5C MECA 5 PIN	5 1/2	2 1/2	1.75					PUSH-PULLING 2 TUBES	300	70	40 to 70							45
												CLASS A	250	33	22		5.6	2400	2350	1.25	6400	
47	POWER AMPLIFIER	PENTODE	FIL.	5B MECA 5 PIN	5 1/2	2 1/2	1.75					CL. A (2 TUBES)	300	0	8 to 70						5000MM	46
													400	0	12 to 75					20	3500MM	
												AMPLIFIER	250	250	16.5	31	150	60000	2500	2.7	7000	47
53	POWER AMPLIFIER	TWIN TRIODE	HEATER	7B MECA 7 PIN 16 PIN CIRCLE	4 1/2	1 1/2	2.0					CL. A (PARALLEL CATH)	294	6	7	35	17000	3200	0.37	33000		
												COMPLETE CLASS A	300	0	28 to 50					8	8000	53
55	DETECTOR	DIODE	HEATER	6G SM 6 PIN	4 1/2	1 1/2	1.0	2.0	2.0	4.0		(BOTH SECTIONS)	300	0	35 to 50					0	10000	
56	DETECTOR	TRIODE	HEATER	5A SM 5 PIN	4 1/2	1 1/2	1.0	3.2	3.2	2.2		DIODE DETECTOR	180	13.5			6.3	8500	975	0.16	20000	55
												TRIODE AMPLIFIER	250	20			6.3	7500	1100	0.35	20000	
57	DETECTOR	PENTODE	HEATER	6F SM 6 PIN	4 1/2	1 1/2	1.0	0.007	5.0	6.5		BIAS DETECTOR	250	20								
												AMPLIFIER	250	13.5	5.0	13.8	9500	1450	0.26	47000		
58	DETECTOR	REMOTE CUT-OFF PENTODE	HEATER	6F SM 6 PIN	4 1/2	1 1/2	1.0	0.007	5.0	6.5		DETECTOR	250	100	3.8					0.25 MA		
												AMPLIFIER	250	100	3	2.0	2000	2.0 MA	1225		7	57
59	POWER AMPLIFIER	TRIPLE GRID	HEATER	7A MECA 7 PIN 16 PIN CIRCLE	5 1/2	2 1/2	2.0					CLASS A TRIODE	250	100	3							
												AMPLIFIER	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
2A3	POWER AMPLIFIER	TRIODE	FIL.	4D MECA 4 PIN	4 1/2	1 1/2	2.5					CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
2A3H	POWER AMPLIFIER	TRIODE	HEATER	4D MECA 4 PIN	4 1/2	1 1/2	2.8					CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
2A5	POWER AMPLIFIER	PENTODE	HEATER	6B MECA 6 PIN	4 1/2	1 1/2	1.75					CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
2A6	DETECTOR	DIODE	HEATER	6G SM 6 PIN	4 1/2	1 1/2	0.8	2.0	2.0	4.0		CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
2A7	OSCILLATOR	HEPTODE	HEATER	7C SM 7 PIN	4 1/2	1 1/2	0.8	1.0	7	5.5		CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
2B7	DETECTOR	DIODE	HEATER	7D SM 7 PIN	4 1/2	1 1/2	0.8	0.010	3.3	10		CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
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												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
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												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
												CLASS A TRIODE	250	100	3	2.0	2000	2.0 MA	1225			
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d 3.3 VOLT DC DETECTOR AND AMPLIFIER TUBES

20	POWER	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.132				AMPLIFIER	135	22.5	6.5	3.3	6300	525	0.110	6500	20
V-99	DETECTOR	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.063	3.3	2.5	2.5	GRID LEAK DETECT.	45	90	4.5	1.5	6.6	17000	370		V-99
X-99	AMPLIFIER	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.063	3.3	2.5	2.5	AMPLIFIER	90	45	2.5	6.6	15000	425	0.007	15000	X-99
22	AMPLIFIER	SCREEN GRID	FIL.	4K	MECA 4 PIN	5 1/2	1 1/2	0.132	0.020	3.3	12	R.F. AMPLIFIER	135	67.5	1.5	3.7	160	0.32 MA	500		22

e 5.0 VOLT DC DETECTOR AND AMPLIFIER TUBES

12A	AMPLIFIER	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.25	8.0	4.0	2.0	AMPLIFIER	135	22.5	6.5	3.3	6300	525	0.110	6500	12A
71A	POWER	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.25	8.0	4.0	2.0	AMPLIFIER	135	22.5	6.5	3.3	6300	525	0.110	6500	71A
200A	DETECTOR	DIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.25	8.0	4.0	2.0	BIAS DETECT.	45	90	4.5	1.5	6.6	17000	370		200A
01A	DETECTOR	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.25	8.0	4.0	2.0	AMPLIFIER	135	22.5	6.5	3.3	6300	525	0.110	6500	01A
40	DETECTOR	TRIODE	FIL.	4D	MECA 4 PIN	4 1/2	1 1/2	0.25	8.0	4.0	2.0	BIAS DETECT.	45	90	4.5	1.5	6.6	17000	370		40

TYPE NO.	DESCRIPTION			BASE SEE TUBE BASE CHT.	MAX. DIMEN. OVERALL (HEIGHT) (DIAM.)	FIL. CURR. AMPS.	CAPACITANCES MICRO-MICRO-FARADS			OPERATING CONDITIONS AND CHARACTERISTICS											TYPE NO.	
	USE	TYPE	CATHODE				GRID	PLATE	INPUT	OUTPUT	WHEN USED AS	PLATE SUPPLY VOLTS	SCR. GRID VOLTS	GRID BIAS VOLTS	PLATE CURRENT M.A.	AMPL. FACTOR	PLATE RESIS. OHMS	MUT. COND. MMMS	MAX. LINEAR OUTPUT WATTS	RECOMM. LOAD RES. OHMS		CUT-OFF BIAS VOLTS
f 6.3 VOLT AC OR DC DETECTOR AND AMPLIFIER TUBES																						
36	DETECTOR AMPLIFIER	TETRODE	HEATER	5E SM.5 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.007 MAX.	3.7	9.2	DETECTOR	180	62.5	6	1.8	470	0.55 MA	850		0.25 MA	7	36
											AMPLIFIER	250	50	1.5	3.2	595	0.55 MA	1000			7	
37	DETECTOR AMPLIFIER	TRIODE	HEATER	5A SM.5 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.30	2.0	3.5	2.2	BIAS DETECTOR	180	20	3								
											AMPLIFIER	250	100	18	7.5	9.2	11500	800	0.03	17500		37
38	POWER AMPLIFIER	PENTODE	HEATER	5F SM.5 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30				AMPLIFIER	100	100	9	7	80	85000	950	0.27	13500		38
												135	135	15.5	9	100	0.1 MA	1000	0.525	13500		
39	DETECTOR AMPLIFIER	REMOTE CUT-OFF PENTODE	HEATER	5F SM.5 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.007 MAX.	3.5	10	1st. DETECTOR	250	250	25	22	120	0.1 MA	1200	2.5	10000		39
44	POWER AMPLIFIER	PENTODE	HEATER	6B SM.6 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.40				AMPLIFIER	90	90	3	5.6	360	0.375 MA	960			42	44
												250	90	3	5.8	1050	1.0 MA	1050				
41	POWER AMPLIFIER	PENTODE	HEATER	6B SM.6 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.40				AMPLIFIER	180	180	13.5	10.5	150	81000	1850	1.5	9000		41
												250	250	18	32	150	68000	2200	3-4	7000		
42	POWER AMPLIFIER	PENTODE	HEATER	6B MED.6 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.70				PENTODE	250	250	16.5	34	220	0.1 MA	2200	3	7000		42
											AMPLIFIER	315	315	22	42	230	0.1 MA	2300	5	7000		
												350	350	38	42 to 90			18	8000			
52	POWER AMPLIFIER	DOUBLE GRID TRIODE	FIL.	5C MED.5 PIN	4 ¹ / ₁₆	1 ¹ / ₁₆	0.30				CLASS A	110	0	43		5.2	1750	3000	1.5	2000		52
											CL.B (AVG 2 TUBES)	180	0	6 to 40				6	9000 MM			
75	DETECTOR AMPLIFIER	DIODE	HEATER	6G SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	2.0	2.0	4.0	DIODE DETECTOR	250	2	0.7								
											TRIODE AMPLIFIER	250	2	0.7						0.25 MA		75
76	OSCILLATOR AMPLIFIER	TRIODE	HEATER	5A SM.5 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.30	2.8	3.5	2.5	OSCILLATOR	90	0									
											AMPLIFIER	250	100	13.5	5.0	13.8	9500	1450	0.25	50000		76
77	DETECTOR AMPLIFIER	PENTODE	HEATER	6F SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.007 MAX.	4.0	11	DETECTOR	250	100	4.3								
											AMPLIFIER	250	100	3	2.3	1500	1.5 MA	1250			7.5	77
78	DETECTOR AMPLIFIER	REMOTE CUT-OFF PENTODE	HEATER	6F SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.007 MAX.	4.0	11	1st. DETECTOR	250	100	3	7.0	1160	0.8 MA	1450				
											AMPLIFIER	250	100	3	7.0	1160	0.8 MA	1450			42	78
79	POWER AMPLIFIER	TWIN TRIODE	HEATER	5A SM.5 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.60				COMPLETE CL.B (BOTH SECTIONS)	250	0	20 to 60					8	14000		79
85	DETECTOR AMPLIFIER	DIODE	HEATER	6G SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	2.0	2.0	4.0	DIODE DETECTOR	180	13.5	6	8.3	8500	975	0.16	20000			85
											TRIODE AMPLIFIER	250	20	8	6.3	7500	1100	0.35	20000			
89	POWER AMPLIFIER	TRIPLE GRID	HEATER	6F SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.40				CLASS A TRIODE	250	250	25	32	4.7	2600	1800	0.9	3500		89
											CL.B TRIODE (BOTH SECTIONS)	250	0	6 to 50					5	10000 MM		
6A2 LA	POWER AMPLIFIER	PENTODE	FIL.	5B MED.5 PIN	4 ¹ / ₁₆	1 ¹ / ₁₆	0.30				AMPLIFIER	180	180	12	22	100	4500	2200	1.4	8000		6A2 LA
											CL.AB (2 TUBES)	230	230	22	32		SELF BIAS	800 MA	4.2	16000		
12A5	POWER AMPLIFIER	PENTODE	HEATER	7F SM.7 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.5	4	2		AMPLIFIER	100	100	15	17		1700	0.65	4500			12A5
												180	180	27	38		2300	2.6	3800			
6A6	POWER AMPLIFIER	TWIN TRIODE	HEATER	7B MED.7 PIN	4 ¹ / ₁₆	1 ¹ / ₁₆	0.8				CL.A (PARALLEL CONN. BOTH SECTIONS)	250	0	28 to 50		35	11000	3200	0.37	35000		6A6
											COMPLETE CLASS A	250	0	35 to 50					10	10000		
6A7	OSCILLATOR DETECTOR	HEPTODE	HEATER	7C SM.7 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	1.0	7	5.5	OSC. SECTION	250	100	3	4							6A7
											MIXER SECTION	250	100	3	4		0.36 MA	520	CONVERSION CONDUCTANCE		45	
6B7	DETECTOR AMPLIFIER	DIODE	HEATER	7D SM.7 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.010 MAX.	3.3	10	DIODE DETECTOR	100	100	3	5.8	285	0.3 MA	950			17	6B7
											R.F. AMPLIFIER	250	50	4.5	0.65					0.2 MA		
6C6	DETECTOR AMPLIFIER	PENTODE	HEATER	6F SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.007 MAX.	5.2	6.8	DETECTOR	250	100	3.8						0.25 MA		6C6
											AMPLIFIER	250	100	3	2.0	2500	2.0 MA	1225			7	
6D6	DETECTOR AMPLIFIER	REMOTE CUT-OFF PENTODE	HEATER	6F SM.6 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.007 MAX.	5.2	6.8	1st. DETECTOR	250	100	3	8.2	1280	0.8 MA	1600			50	6D6
											TRIODE AMPLIFIER	100	100	3	3.5	8	18000	450				
6F7	OSCILLATOR DETECTOR	DIODE	HEATER	7E SM.7 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.30	0.009 MAX.	3.2	12	PENTODE 1st. DET.	250	100	3	6.5	900	0.85 MA	1700			50	6F7
											PENTODE AMPL.	250	100	3	6.5	900	0.85 MA	1700				

TYPE NO.	DESCRIPTION		BASE SEE TUBE BASE CHT.	MAX. DIMEN. OVERALL HEIGHT DIAM.	FIL. CURR. AMPS.	CAPACITANCES MICRO-MICRO-FARADS		OPERATING CONDITIONS AND CHARACTERISTICS											TYPE NO.			
	USE	TYPE				CATHODE	GRID	PLATE	INPUT	OUTPUT	WHEN USED AS	PLATE SUPPLY VOLTS	SCR. GRID VOLTS	GRID BIAS VOLTS	PLATE CURRENT M.A.	AMPL. FACTOR	PLATE RES. OHMS	MUT. COND. AMMS		MAX. LINEAR OUTPUT WATTS	RECOMM. LOAD RES. OHMS	CUT-OFF BIAS VOLTS
g 7.5 VOLT AC POWER AMPLIFIER TUBES																						
10	POWER AMPLIFIER	TRIODE	FIL.	8D MED. 8 PIN	5 3/8	2 3/16	1.25				AMPLIFIER	350	31	16	8.0	5150	1550	0.9	11000			10
50	POWER AMPLIFIER	TRIODE	FIL.	8D MED. 8 PIN	6 1/8	2 1/16	1.25				AMPLIFIER	425	39	18	8.0	5000	1600	1.6	10000			
	350											63	45	3.8	1900	2000	2.4	4100				
												450	84	55	3.8	1800	2100	4.6	4350			50

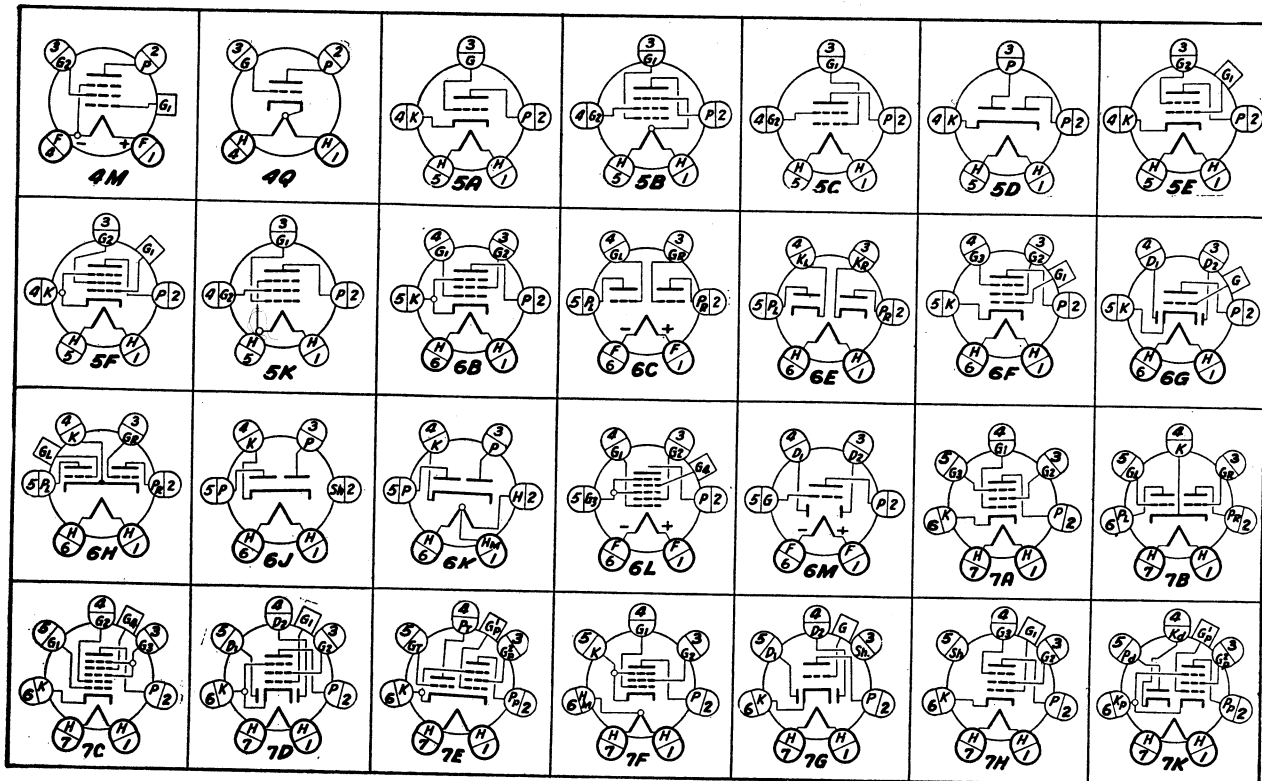
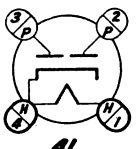
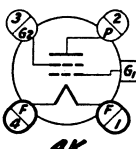
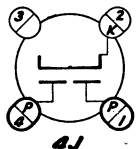
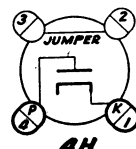
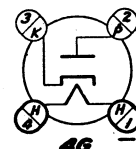
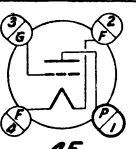
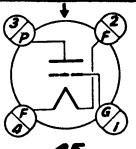
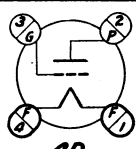
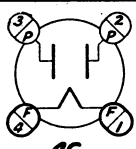
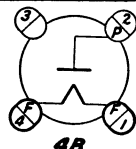
h SERIES FILAMENT POWER AMPLIFIER TUBES																						
43	POWER AMPLIFIER	PENTODE	HEATER	6B MED.6 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.3a				AMPLIFIER	95	95	15	20	90	45000	2000	0.9	4500		43
												135	135	20	34	80	35000	2300	2.0	4000		
48	POWER AMPLIFIER	PENTODE	HEATER	6B MED.6 PIN	5 ³ / ₈	2 ¹ / ₁₆	0.2a				AMPLIFIER	96	95	19	32				2.0	1500		48
												125	100	22.5	56				39.00	2.5	1500	
12A7	POWER AMP. & RECTIFIER	PENTODE & DIODE	HEATER	7K SM.7 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆	0.3a				RECTIFIER	135	135	13.5	9	100	1.0 MA	975	0.55	13500		12A7
												125 PWS			30 MAX							

RECTIFIER TUBES																	
							FIL. AMPS.	FIL. VOLTS	MAX. AC VOLTS PER ANODE	MAX. DC OUT. CURR. (AMPS)	MAX. PEAK INVERSE VOLTS	MAX. PEAK PLATE CURR.	MIN. CHOKE BEFORE FILTER CONDENSER	MAX. HEATER CATHODE BIAS	MAX. DC VOLTS DEL. TO FILTER (NOM.)	CHOKE INPUT	
BA	FULL WAVE	GAS	COLD	4J MED. 4 PIN	5 ³ / ₈	2 ¹ / ₁₆			350	0.350	1000	1.00					
BH	FULL WAVE	GAS	COLD	4J MED. 4 PIN	4 ⁷ / ₃₂	1 ¹ / ₁₆			350	0.125	1000	0.40				300	BA
BR	HALF WAVE	GAS	COLD	4H MED. 4 PIN	3 ³ / ₈	1 ¹ / ₁₆			300	0.050	850	0.20				300	BR
IV	HALF WAVE	HIGH VACUUM	HEATER	2G SM. 4 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.3	6.3	350	0.050	1000	0.30			300		IV
80	FULL WAVE	HIGH VACUUM	FIL.	4C MED. 4 PIN	4 ¹ / ₈	1 ¹ / ₁₆	2.0	5.0	350	0.125	1000	0.40		500	400		80
81	HALF WAVE	HIGH VACUUM	FIL.	4B MED. 4 PIN	6 ¹ / ₈	2 ¹ / ₁₆	1.25	7.5	700	0.110	1100	0.35			300	225	81
82	FULL WAVE	MERCURY VAPOR	FIL.	4C MED. 4 PIN	4 ¹ / ₈	1 ¹ / ₁₆	3.0	2.5	500	0.135	1500	0.30	20 HENRIES		370	275	82
83	FULL WAVE	MERCURY VAPOR	FIL.	4C MED. 4 PIN	5 ³ / ₈	2 ¹ / ₁₆	3.0	5.0	500	0.125	1400	0.40			590	425	83
83V	FULL WAVE	HIGH VACUUM	HEATER	4C MED. 4 PIN	4 ¹ / ₈	1 ¹ / ₁₆	2.0	5.0	500	0.250	1400	0.80			530	400	83
84	FULL WAVE	HIGH VACUUM	HEATER	5D SM. 5 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.5	6.3	350	0.250	1400	0.80			510	385	84
84V	FULL WAVE	HIGH VACUUM	FIL.	4C MED. 4 PIN	5 ³ / ₈	2 ¹ / ₁₆	3.0	5.0	500	0.050	1000	0.20		500	425	300	84V
823	HALF WAVE	HIGH VACUUM	HEATER	4G SM. 4 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.3	5.0	500	0.250	1400	0.70			480	350	84
5Z5	VOLTAGE DOUBLER	HIGH VACUUM	HEATER	6E SM. 6 PIN	4 ¹ / ₈	1 ¹ / ₁₆	0.3	12.6	250	0.060	700	0.40		350	310		5Z5
							0.3	25.0	125	0.100	700	0.40		350	200		12Z5
																	25Z5

RAYTHEON SPECIAL TUBES (SUPPLIED FOR REPLACEMENT USE ONLY)															
k	FILAMENT		BASING		CHARACTERISTICS, USE & DIMEN.	TYPE NO.		FILAMENT		BASING		CHARACTERISTICS, USE & DIMEN.	TYPE NO.		
	NO.	AMPS.	VIEW	SHIELD CONN. TO				NO.	AMPS.	VIEW	SHIELD CONN. TO				
	25/4S	2.5	1.35	5D	CATHODE PIN	APPROXIMATELY 40 MR. ON EACH DIODE PLATE AT 50 VOLTS DC.		25/4S	2A7-S	2.5	1.0	7C	CATHODE PIN	SAME AS 2A7	2A7-S
	20S	2.5	1.75	5E	CATHODE PIN	SAME AS 24A		24S	2E2-60A	2.5	1.5	4B	NO SHIELD	SIMILAR TO 1-V	2E2-60A
	25/25S	2.0	.06	6M	NO SHIELD	SIMILAR TO 85 EXCEPT AMP FACTOR = 20; MUTUAL COND. = 475; PLATE CURRENT = 75 MA, PLATE VOLTS = 350, GRID BIAS = -3"		25/25S	6A7-S	6.3	0.3	7C	CATHODE PIN	SAME AS 6A7	6A7-S
	27S	2.5	1.75	5E	CATHODE PIN	SAME AS 27		27S	6B7-S	6.3	0.3	7D	CATHODE PIN	SAME AS 6B7	6B7-S
	35/51S	2.5	1.75	5E	CATHODE PIN	SAME AS 35		35/51S	6C7	6.3	0.3	7G	SEPARATE PIN	SAME AS 65A-S	6C7
	55S	2.5	1.0	6G	CATHODE PIN	SAME AS 55		55S	6D7	6.3	0.3	7H	SEPARATE PIN	SAME AS 6C6	6D7
	56S	2.5	1.0	5A	CATHODE PIN	SAME AS 56		56S	6E7	6.3	0.3	7H	SEPARATE PIN	SAME AS 6D6	6E7
	57S	2.5	1.0	6F	CATHODE PIN	SAME AS 57		57S	6F7	6.3	0.3	7E	CATHODE PIN	SAME AS 6F7	6F7-S
	57AS	6.3	0.4	6F	CATHODE PIN	SAME AS 57		57A-S	6Y5	6.3	0.8	6J	SEPARATE PIN	SIMILAR TO 6Z4/84	6Y5
	58S	2.5	1.0	6F	CATHODE PIN	SAME AS 58		58S	6Z5	12.6/6.3	0.4/0.8	6K	NO SHIELD	SIMILAR TO 6Z4/84	6Z5
	58A-S	6.3	0.4	6F	CATHODE PIN	SAME AS 58		58A-S	75-S	6.3	0.3	6G	CATHODE PIN	SAME AS 75	75-S
	85A-S	6.3	0.3	6G	HEATER PIN ADJACENT TO CATHODE PIN	SIMILAR TO 85 EXCEPT AMP FACTOR = 20, MUTUAL COND. = 1250, PLATE CURRENT = 5.5 MA, PLATE VOLTS = 350, GRID BIAS = -3"		85A-S							

TUBE BASE CONNECTION CHART (T) (LOOKING DOWN ON TOP OF SOCKET)

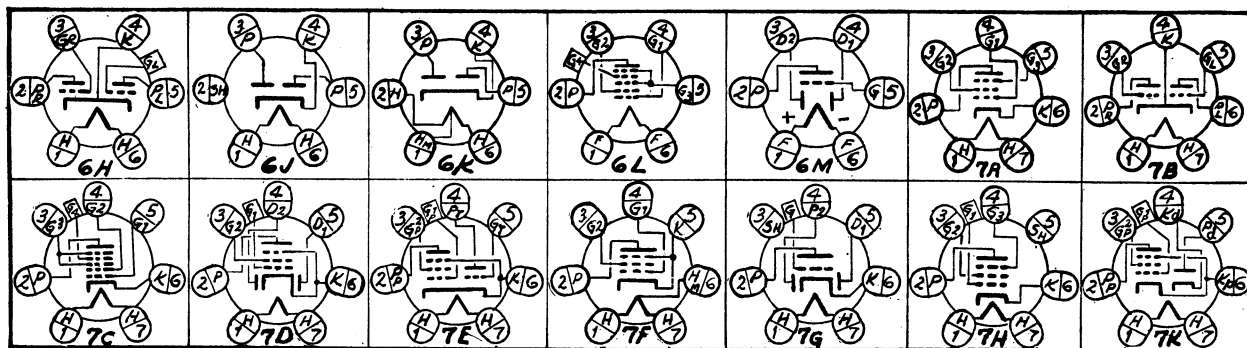
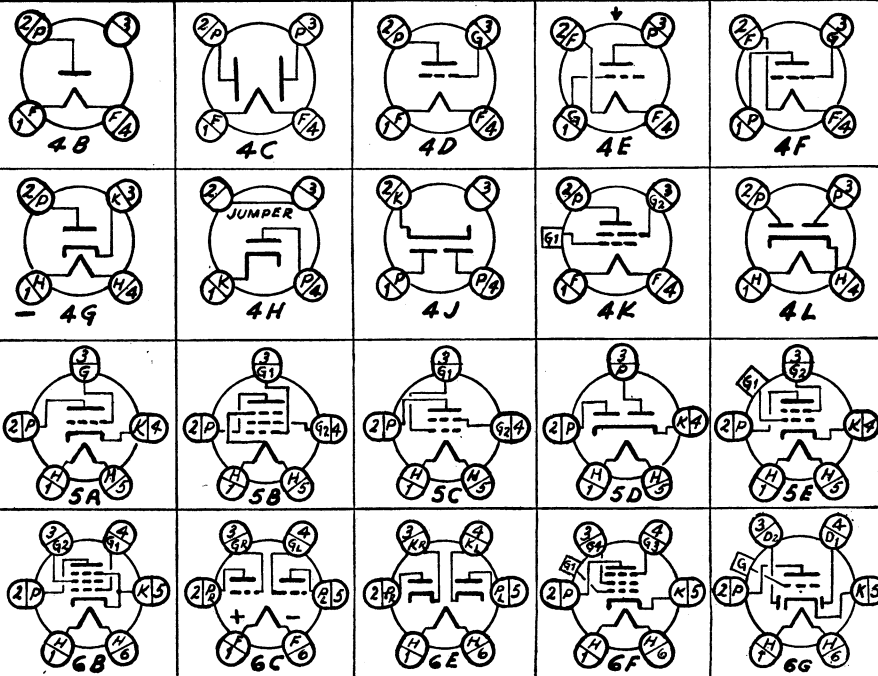
THIS CHART IS IN ACCORDANCE WITH THE NEW STANDARDS OF THE RMA. THESE DIAGRAMS SHOW THE VARIOUS ELEMENTS AND THE CONNECTIONS TO THE TUBE PINS. NR 1 IS THE RIGHT-HAND HEATER (OR FILAMENT) PIN WHICH IS SEEN WHEN LOOKING DOWN ON THE TUBE SOCKET WITH THE FILAMENT LEADS TOWARD THE OBSERVER. THE OTHER PINS ARE NUMBERED IN A COUNTER - CLOCKWISE ROTATION FROM THIS PARTICULAR PIN.



TUBE BASE CONNECTION CHART (B)

(LOOKING UP AT SOCKET CONNECTIONS FROM BOTTOM)

THE SOCKET CONNECTIONS SHOWN IN THIS CHART ARE THOSE WHICH APPEAR WHEN LOOKING UP AT THE SOCKET CONNECTIONS FROM THE BOTTOM. THE NO 1 PIN IS THE LEFT HAND FILAMENT PIN AND THE OTHER PINS ARE NUMBERED IN CLOCKWISE ROTATION.



SYMBOLS USED IN TUBE BASE CONNECTION CHARTS (T) & (B)

F-FILAMENT; H-HEATER; P-PLATE; K-CATHODE; G₁-CONTROL GRID; G₂-SCREEN GRID; G₃-SUPPRESSOR GRID; G_L-GRID (TRIODE-1); G_R-GRID (TRIODE-2); G_T-TRIODE GRID; G_P-PENTODE GRID; P-PLATE; P_L-PLATE (TRIODE-1); P_R-PLATE (TRIODE-2); P_T-TRIODE PLATE; P_P-PENTODE PLATE; D₁-ONE DIODE PLATE; D₂-OTHER DIODE PLATE; □-TOP CAP. (NOTE: THESE DO NOT APPLY TO TUBE BASES 6L AND 7C).