SYLVANIA TUBES — AVERAGE CHARACTERISTICS

Type	Construction			Emitter			Note (1) (2) Capacitances in μμf.			Use	Plate Volts	Negative Grid Volts	Screen Volts	Plate Current Ma.	Screen Current Ma.	Plate Resistance Ohms	Transconductance Micromhos	Amplification Factor	Ohms Load for Stated Power Output	Power Output Milliwatts	Type
	Bulb Size or Style	Class	Basing Diag.	Type	Volts	Amps.	Cgp.	Cin.	Cout												
7J7	Lock-in	Tri. Heptode	8BL-L-7	Cathode	6.3	0.30	.03m	4.6	7.5	Hep. Mixer	100	3.0	100	1.5	2.6	500,000	280▲	.....	.....	....	7J7
											250	3.0	100	1.4	2.8	1.5 Meg.	290▲	.....	.....	....	
										Tri. Osc.	100	0.05 Meg.		3.2	(Triode Grid Current 0.3 Ma.)			.....	.....	....	
											250□	0.05 Meg.		5.0	(Triode Grid Current 0.4 Ma.)			.....	.....	....	
7K7	Lock-in	Duodiode Tri.	8BF-L-7	Cathode	6.3	0.30	1.8	2.6	3.0	Det. Amp.	250	2.0	.....	2.3	....	44,000	1,600	70	.....	....	7K7
7L7	Lock-in	Pentode	8V-L-5	Cathode	6.3	0.30	.010m	8.0	6.5	R-F Amp.	100	1.0	100	5.5	2.4	100,000 ♦	3,000	.....	.....	....	7L7
											250	1.5	100	4.5	1.5	1.0 Meg.	3,100	.....	.....	....	
7N7	Lock-in	Duotriode	8AC-L-0	Cathode	6.3	0.60	3.0	3.4	2.0	Amplifier	90	0.0	.....	10.0	....	6,700	3,000	20	.....	....	7N7
							3.0	2.9	2.4	(per unit)	250	8.0	.....	9.0	....	7,700	2,600	20	.....	....	
7Q7	Lock-in	Heptode	8AL-L-0	Cathode	6.3	0.30	0.15m	9.0	9.0	Converter	100	2.0	100	3.3	8.5	500,000	525▲	(Osc. Grid Resistor 20,000)			7Q7
											250	2.0	100	3.5	8.5	1.0 Meg.	550▲	(Osc. Grid Current 0.5 Ma.)			
7R7	Lock-in	Duodi. Pent.	8AE-L-7	Cathode	6.3	0.30	.004m	5.6	5.3	Det. Amp.	100	2.0	100	3.4	1.0	500,000 ♦	2,100	.....	.....	....	7R7
											100	1.0	100	5.5	2.2	350,000 ♦	3,000	.....	.....	....	
											250	2.0	100	3.5	1.0	1,800,000 ♦	2,200	.....	.....	....	
											250	1.0	100	6.2	1.6	1,000,000 ♦	3,400	.....	.....	....	
7S7	Lock-in	Tri. Heptode	8BL-L-7	Cathode	6.3	0.30	.03m	5.0	8.0	Hep. Mixer	100	2.0	100	1.9	3.0	500,000 ♦	500▲	.....	.....	....	7S7
											250	2.0	100	1.8	3.0	1.25 Meg. ♦	525▲	.....	.....	....	
										Tri. Osc.	100	0.05 Meg.		3.0	(Triode Grid Current 0.3 Ma.)			.....	.....	....	
											250□	0.05 Meg.		5.0	(Triode Grid Current 0.4 Ma.)			.....	.....	....	
7T7	Lock-in	Pentode	8V-L-5	Cathode	6.3	0.3	.005m	8.0	7.0	R-FAmp.	250	1.0	150	10.8	4.1	900,000 ♦	4,900	.....	.....	....	7T7
											100	1.0	100	5.3	2.1	350,000 ♦	4,000	.....	.....	....	
7V7	Lock-in	Pentode	8V-L-5	Cathode	6.3	0.45	.002m	9.5	6.5	R-F Amp.	300	160 ■	150	10.0	3.9	300,000	5,800	.....	.....	....	7V7
7W7	Lock-in	Pentode	8BJ-L-5	Cathode	6.3	0.45	.002m	9.5	7.0	R-F Amp.	Characteristics Same as Type 7V7, Except Capacitances.										7W7
7X6	Lock-in	Duodiode	7DX-L-0	Cathode	6.3	1.2	....	....	....	H-W Rect. Doubler	235 Volts Per Plate, RMS, 75 Ma. DC Output Per Plate.										7X6
											117 Volts Per Plate, RMS, 75 Ma. DC Output.										
7X7	Lock-in	Duodiode Tri.	8BZ-L-4	Cathode	6.3	0.30	....	....	....	Det. Amp.	100	0	.....	1.2	....	85,000	1,000	85	....	....	7X7
											250	1.0	.....	1.9	....	67,000	1,500	100	....	....	
7Y4	Lock-in	Duodiode	5AB-L-0	Cathode	6.3	0.50	....	....	....	F-W Rect.	325 A-C Volts Per Plate, RMS, 70 Ma. Output Current. Condenser Input to Filter.										7Y4
											450 A-C Volts Per Plate, RMS, 70 Ma. Output Current. Choke Input to Filter.										
7Z4	Lock-in	Duodiode	5AB-L-0	Cathode	6.3	0.90	....	....	....	F-W Rect.	325 A-C Volts Per Plate, RMS, 100 Ma. Output Current. Condenser Input to Filter.										7Z4
											450 A-C Volts Per Plate, RMS, 100 Ma. Output Current. Choke Input to Filter.										
10	ST-16	Triode	4D-0-0	Filament	7.5	1.25	7.0*	4.0*	3.0*	Power Amp.	250	23.5	.....	10.0	....	6,000	1,330	8.0	13,000	400	10
											350	32.0	.....	16.0	....	5,150	1,550	8.0	11,000	900	
											425	40.0	.....	18.0	....	5,000	1,600	8.0	10,200	1,600	
12A	ST-14	Triode	4D-0-0	Filament	5.0	0.25	8.5*	4.0*	2.0*	Det. Amp.	180	13.5	.....	7.7	....	4,700	1,800	8.5	10,650	285	12A
12A4	T-6½	Triode	9AG-0-0	Cathode	6.3	0.60	5.6*	4.9*	0.9*	Amplifier	250	9.0	.....	23	....	2,500	8,000	20	....	....	12A4
					12.6	0.30	....	....	....												
12A5	ST-12	Pentode	7F-0-0	Cathode	12.6	0.30	0.3	9.0	9.0	Power Amp.	100	15.0	100	17.0	3.0	50,000 ♦	1,700	.....	4,500	800	12A5
					6.3	0.60	....	....	....		180	25.0	180	45.0	8.0	35,000 ♦	2,400	.....	3,300	3,400	
12A6	Metal	Beam Amp.	7S-1-0	Cathode	12.6	0.15	....	....	....	Power Amp.	250	12.5	250	30	3.5	70,000	3,000	.....	7,500	3,400	12A6
12A6GT	T-9		7S-0-0				....	....	....				.....			.....	.....	.....	.....	.....	12A6GT
12A7	ST-12	Diode Pent.	7K-0-0	Cathode	12.6	0.30	....	....	....	H-W Rect.	125 RMS		.....	30.0 Max.	....	.....	.....	.....	.....	.....	12A7
										Power Amp.	135	13.5	135	9.0	2.5	102,000	975	100	13,500	550	
12A8G	T-12	Heptode	8A-1-0	Cathode	12.6	0.15	0.26	9.5	12.0	Converter	Characteristics Same as Type 6A8G.										12A8G
12A8GT	T-9																				12A8GT
12AC6	T-5½	Pentode	7BK	Cathode	12.6	0.150	0.004	4.3	5.0	Class A1 Amp.	12.6	0	12.6	550 μa.	200 μa.	0.5 Meg.	730	.....	.....	....	12AC6
12AD6	T-5½	Heptode	7CH	Cathode	12.6	0.150	0.25m	8.0	13	Hep. Mixer	12.6	1.6	12.6	450 μa.	1.5	.....	260▲	.....	.....	....	12AD6
12AD7	T-6½	Duotriode	9A	Cathode	12.6/	.225/	1.8	1.7	1.6	Amplifier #	250	2	.....	1.25	....	62,500	1,600	100	....	....	12AD7
					6.3	.450	1.8	1.7	1.9												
12AE6	T-5½	Duodiode Tri.	7DT	Cathode	12.6	0.150	2.0	1.8	1.1	Class A1 Amp.	12.6	0	.....	0.75	....	15,000	1,000	15	.....	.....	12AE6
12AF6	T-5½	Pentode	7BK-0-2	Cathode	12.6	0.150	0.006*	5.5*	4.8*	Class A1 Amp.	12.6	0	12.6	0.75	0.35	0.3 Meg.	1,150	.....	.....	.....	12AF6
12AG6	T-5½	Heptode	7CH	Cathode	12.6	0.150	0.065m*	5.5*	7.5*	Converter	12.6	0.85	12.6	0.55	1.4	.....	300▲	G1 = 20,000 Ohms; G1 = 0.050 Ma.		....	12AG6
12AH7GT	T-9	Duotriode	8BE-0-0	Cathode	12.6	0.15	3.0	2.8	2.6	Amplifier	100	3.6	.....	3.7	....	10,300	1,550	16	....	....	12AH7GT
							2.2	3.2	3.0	(per unit)	180	6.5	.....	7.6	....	8,400	1,900	16	....	....	
12AL5	T-5½	Duodiode	6BT-0-6	Cathode	12.6	0.15	....	....	....	Detector	Characteristics Same as Type 6AL5.										12AL5
12AQ5	T-5½	Beam Amp.	7BZ-0-0	Cathode	12.6	0.225	0.35*	8.3*	8.2*	Power Amp.	Characteristics Same as Type 6AQ5.										12AQ5
12AT6	T-5½	Duodiode Tri.	7BT-0-0	Cathode	12.6	0.15	....	....	....	.....	Characteristics Same as Type 6AT6.										12AT6
12AT7	T-6½	Duotriode	9A-0-0	Cathode	6.3	0.30	1.45*	2.5*	0.45*	Amplifier	100	1	.....	3.7	....	.....	4,000	54	....	....	12AT7
					12.6	0.15	1.45*	2.5*	0.35*		180	1	.....	11.0	....	.....	6,600	62	....	....	
											250	2	.....	10.0	....	.....	5,500	55	....	....	
12AU6	T-5½	Pentode	7BK-0-2	Cathode	12.6	0.15	.0035m*	5.5*	5.0*	R-F Amp.	Characteristics Same as Type 6AU6.										12AU6

(1) Values are given shielded unless marked with (*).
(2) Converter tube capacitances given are signal grid to plate; RF Input, Mixer Output.
(3) Has special mechanical and/or life characteristics.
§§ With Average Power Input of 320 Mw. Grid to Grid.
†† For two tubes with 40 volts RMS applied to each grid.
x Controlled Heater Warm-up Time, applies only for 600 Ma. condition.
* Applied through 250,000 ohms.
# Per Tube or Section.
§ Plate and Target Supply Voltage.
□ Applied through 20,000 ohms.
▲ Conversion Transconductance.
** Triode Operation.
‡ Pentode Operation.
¶ Plate to Plate.
♦ Approximate.
m maximum
■ Cathode Resistor (ohms).