

ENTERTAINMENT & AUDIO TUBES* (Continued)

TYPE NO.	FILAMENT		TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS							
			Circuit Application	Applied Voltages			Plate Current (ma)	Screen Current (ma)	Amplification Factor	Plate Resistance (K ohms)
	Volts	Amps		Plate	Screen	Grid				
9A8/PCF80	9	0.3	AM/FM Oscillator Mixer	(For other data see 6BL8 / ECF80)						
12AT7/ECC81	12.6 6.3	0.15 0.30	Voltage Amplifier	250	—	-2.0	10.0	—	55	—
12AU7/ECC82	12.6 6.3	0.15 0.30	Voltage Amplifier	250	—	-8.5	10.5	—	17	7.7
12AX7/ECC83	12.6 6.3	0.15 0.30	Voltage Amplifier	250	—	-2.0	1.2	—	100	62.5
15CW5/PL84	15	0.3	Medium Power Hi-Fi Amplifiers	(For other data see 6CW5/EL86)						
16AQ3/XY88	16.4	0.6	Damper diode	(For other data see 6AL3/EY88)						
17EW8	17.5	0.15	RF Dual Triode	200	—	-2.1	10	—	—	15
27GB5	27	0.3	Horizontal Deflection Output of TV Receivers	(For other data see 6GB5 data)						
45B5/UL84	45	0.1	IDENTICAL ELECTRICAL CHARACTERISTICS AS 6CW5/EL86							
50BM8	50	0.1	Voltage Amplifier & Power Output Tube	(For other data see 6BM8/ECL82)						
6267/EF86	6.3	0.2	Voltage Amplifier	250	140	-2.0	3.0	0.6	—	2500
7025	12.6 6.3	0.15 0.30	Voltage Amplifier	250	—	-2.0	1.2	—	100	62.5
7189	6.3	0.76	Power Output Tube	250	250	-7.3	48	5.5	19.5	40
8278	6.3	1.2	Audio Output Tetrode	265	265	-12.5	2x115	2x27	—	—

TUNING INDICATOR TUBES

TYPE NO.	FILAMENT		Supply And Screen Volts	Screen Current At Start Of Control (ma)	Anode Series Resistance (Megohms)	Grid Bias For End Of Control Range (Volts)
	Volts	Amps				
IM3/DM70	1.4	0.025	85	0.17	—	-10
IN3/DM71	1.4	0.025	85	0.17	—	-10
6CD7/EM34	6.3	0.2	250	2.0	1.0	Section 1 = -5 Section 2 = -16
6FG6/EM84	6.3	0.27	250	1.1	0.47	-22
6HU6/EM87	6.3	0.3	250	2	0.1	-10

PREMIUM QUALITY TUBES

TYPE NO.	PROTO-TYPE	HEATER		Amplification Factor	Trans-conductance (Micromhos)	TYPICAL OPERATION					
		Volts	Amps			PLATE			Grid Volts DC	SCREEN	
						Volts DC	Current ma-DC	Resistance K Ohms		Volts DC	Current ma-DC
5726	6AL5	6.3	0.3	Max. plate 117 V. rms at 9ma-DC total output; Peak plate current 54 ma max.							
5654	6AK5	6.3	0.175	—	5000	120	7.5	340	R _k =200	120	2.5

*Available to Military Specifications.

²Grid 2 to Grid 1.

³Plate Current = 10 μ a approx.

					DESCRIPTION	TYPE NO.
	Trans-conductance (micromhos)	Max. Power Output - 2 Tubes, Push-Pull Class B	Load Resistance (K ohms)	Cut-Off Bias (volts)		
					This tube is a 300 ma version of the 6BL8/ECF80	9A8/PCF80
	5,500	—	—	-12.0	Medium-gain dual triode with low hum, noise and microphonics. High quality replacement for the standard 12AT7 without circuit changes.	12AT7/ECC81
	2,200	—	—	—	Low noise dual triode with low hum, noise and microphonics. High quality replacement for the standard 12AU7 without circuit changes.	12AU7/ECC82
	1,600	—	—	—	High-gain dual triode with low hum, noise and microphonics. High quality replacement for the standard 12AX7 without circuit changes.	12AX7/ECC83
					This tube is a 300 ma version of the 6CW5/EL86	15CW5/PL84
					This tube is a 600 ma version of the 6AL3/EY88	16AQ3/XY88)
	5,800	—	—	—	Dual triode for use as an RF amplifier and self oscillating mixer	17EW8
					This tube is a 300 ma version of the 6GB5	27GB5
						45B5/UL84
						50BM8
	2,000	—	—	—	High gain pentode particularly suitable for pre-amplifier and input stages in which hum, noise and microphony must be kept to a minimum. Electrode structure rigid. Heater is bifilar, twisted pair of wires with magnetic field of one opposed to that of the other.	6267/EF86
	1,600	—	—	—	High gain dual triode with low hum, noise and microphonics, the 7025 is a direct, high quality replacement for the 12AX7/ECC83.	7025
	11,300	24	—	—	Miniature pentode designed for use as a power amplifier in high fidelity audio equipment. It is a specially tested and improved tube intended for use in amplifiers of over 20 watt capabilities.	7189
	24,000	40	2.4 Plate to Plate	—	Beam power tetrode designed for push-pull audio output stages.	8278

	DESCRIPTION	TYPE NO.
	Tuning indicator especially designed for battery operated sets featuring low filament consumption (25mA), subminiature size and "on-off" indication. Ideal for transistorized computers.	IM3/DM70
	Tuning indicator especially designed for battery operated sets featuring low filament consumption (25mA), subminiature size and "on-off" indication. Ideal for transistorized computers.	IN3/DM71
	Tuning indicator featuring double sensitivity, clear indication even with weak signals.	6CD7/EM34
	9 pin miniature tuning indicator for use in broadcast receivers and tape recorders. The deflection electrode is connected separately to a pin at the base. Converging dual fluorescent bar pattern.	6FG6/EM84
	Designed especially as an audio level indicator for tape recorders.	6HU6/EM87

				CAPACITANCES - $\mu\mu\text{f}$			DESCRIPTION	TYPE NO.
	Power Output Watts	Load Resistance K ohms	Cut-Off Bias Volts	G-P	Input	Output		
				—	—	—	High perveance twin diode. Rugged and reliable. For use in critical applications in which operational dependability is of primary importance.	5726
	—	—	-12	0.02	4.0	2.9	Sharp cut-off pentode particularly suited for use as a wide band, high frequency amplifier. Ruggedized construction makes it suitable for critical applications in which operational dependability is of primary importance.	5654

*For transconductance of 1500 micromhos.