

6AJ8 is a compound tube designed for FM-AM receiver sets. The triode unit is used as a local oscillator of the medium wave band while the heptode unit is used as a frequency converter in case of the medium wave band and as an IF amplifier tube in case of FM (VHF).

BASE E9-1 Small Button Noval 9-Pin

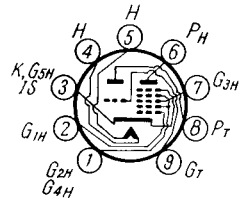
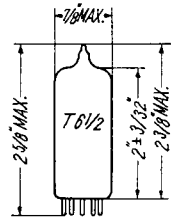
MOUNTING POSITION—Any

HEATER

Voltage6.3 (V)
 Current0.3 (mA)

DIRECT INTERELECTRODE CAPACITANCES

(Without Shield)	Triode Unit	Heptode Unit	
Grid No. 1 to Plate	1.0	0.006 max.	(pF)
Input	2.6	4.8	(pF)
Output	2.1	7.1	(pF)
Grid No. 3 to All	—	6.0	(pF)
Plate to Plate	0.2	(pF)



MAXIMUM RATINGS (Design Center Values)			TYPICAL OPERATION		
	Triode Unit	Heptode Unit	Heptode Unit Triode Unit (Con- (RF/IF) (Class A1) verter) (Amp.) (Amp.)		
Plate Voltage	250	300 (V)	Plate Voltage	250	100 (V)
Grid No. 2 Supply Voltage		300 (V)	Grid No. 3 Voltage	—	0 (V)
Plate Dissipation	0.8	1.7 (W)	Grid No. 2 & No. 4 Voltage	103	100 (V)
Grid No. 2 Dissipation	—	1.0 (W)	Grid No. 1 Voltage	—2	—2 (V)
Total Cathode Current	6.5	12.5 (mA)	Grid No. 3 & Triode Grid Resistor	47	— (kΩ)
Peak Heater—Cathode Voltage			Plate Current	3.25	6.5 13.5 (mA)
Heater negative with respect to cathode		100 (V)	Grid No. 3 & Triode Grid Current	200	— (μA)
Heater positive with respect to cathode		100 (V)	Grid No. 2+No. 4 Current	6.7	3.8 (mA)
Grid No. 1 Circuit Resistance	3.0	3.0 (MΩ)	Transconductance	— 2,400	3,700 (μΩ)
			Conversion Trans-conductance	775	— (μΩ)
			Plate Resistance (Approx.)	1,000	700 (kΩ)
			Amplification Factor	—	22
			Grid No. 1 Voltage (Approx.)		
			$G_m = 24 \mu\Omega$	—	—42 (V)
			$G_c = 7.75 \mu\Omega$	—28.5	— (V)

TYPICAL CIRCUIT

