

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

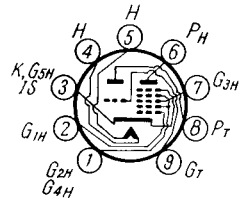
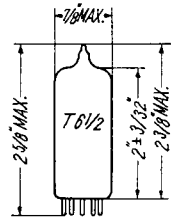
MOUNTING POSITION—Any

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

