Mechanical Data

Coated unipotential cathode
Outline drawing 6-2 Bulb T 6 1/2
Base E 9-1 small button noval 9-pin
Maximum diameter 7/8 "
Maximum overall length 2-3/16"
Maximum seated height 1-15/16 "
Pin connections Basing $\bar{\gamma} \kappa \bar{G}$
Pin 1 - Plate
Pin 2 - Grid
Pin 3 - Cathode
Pin 4 - Heater
Pin 5 - Heater
Mounting position Any

Electrical Data

Capacitances With Shield\(^+\) Without Shield
Grid to plate (g to p) 3.1 2.0 $\mu$F
Plate to grid and heater (p to g + h) --- 2.1 $\mu$F
Plate to cathode (p to k) --- 0.2 $\mu$F
Grid to cathode (g to k) --- 3.6 $\mu$F
Cathode to grid and heater (k to g + h) --- 6.6 $\mu$F
Grid to heater (g to h) --- $<0.3$ $\mu$F
Grid to cathode and heater (g to h + k) 4.2 3.9 $\mu$F
Plate to cathode and heater (p to h + k) 0.25 0.3 $\mu$F

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\(+\) External Shield $\frac{15"}{16}$ Dia, Length 2"

Ratings

Heater current (ac or dc) 300 ma

Maximum heater-cathode voltage
Heater negative with respect to cathode 100 volts
Heater positive with respect to cathode 100 volts

from JEDEC release #2405, March 9, 1959
Maximum resistance cathode-heater 20,000 ohms
Maximum plate voltage 220 volts
Maximum plate dissipation 2.2 watts
Maximum cathode current 20 ma
Maximum grid circuit resistance 1.0 megohm
Maximum negative grid voltage 50 volts
Maximum frequency (UHF amplification) 800 Mc

Typical operating conditions and characteristics, grounded-grid amplifier

Heater current 300 ma
Heater voltage 3.8 volts
Plate voltage 175 volts
Grid voltage - 1.5 volts
Plate current 12 ma
Transconductance 14,000 µmhos
Amplification factor 68
Equivalent noise resistance 230 ohms
Space-charge capacitance (grounded cathode) 2.0 µµf

Characteristics at 100 Mc

Phase of transconductance - 7°
Additional noise-conductance 0.5 mmhos