Semiremote-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:
Heater Characteristics and Ratings (Design-Center Values):
Voltage (AC or DC) ........................................ 6.3 ± 0.6 volts
Current at heater volts = 6.3 .................................. 0.300 amp
Peak heater-cathode voltage:
Heater negative with respect to cathode .................. 150 max. volts
Heater positive with respect to cathode .................. 150 max. volts
Direct Inter-electrode Capacitances:
Grid No.1 to plate ........................................... 0.005 max. μμf
Grid No.1 to cathode, grid No.3, grid No.2, internal shield, and heater .. 9 μμf
Plate to cathode, grid No.3, grid No.2, internal shield, and heater .. 3 μμf

Characteristics, Class A, Amplifier:
Plate Voltage .................................................. 200 volts
Grid No.3 .................................................. Connected to cathode at socket
Grid-No.2 Voltage .......................................... 90 volts
Grid-No.1 Voltage .......................................... –2 volts
Plate Resistance (Approx.) .................................. 0.5 megohm
Transconductance ........................................... 12500 μmhos
Plate Current ............................................... 12 ma
Grid-No.2 Current ......................................... 4.5 ma

Mechanical:
Operating Position ............................................ Any
Type of Cathode ............................................. Coated Unipotential
Maximum Overall Length ..................................... 2-13/32”
Maximum Seated Length ........................................ 2-5/32”
Length, Base Seat to Bulb Top (Excluding tip) .. 1-25/32” ± 3/32”
Diameter ...................................................... 0.750” to 0.875”
Bulb ............................................................. T6-1/2
Base ......................................................... Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW .................. 9AQ

Pin 1 – Cathode
Pin 2 – Grid No.1
Pin 3 – Cathode
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – Internal Shield
Pin 7 – Plate
Pin 8 – Grid No.2
Pin 9 – Grid No.3
AMPLIFIER — Class A1

Maximum Ratings, Design-Center Values:

- PLATE SUPPLY VOLTAGE: 550 max. volts
- PLATE VOLTAGE: 250 max. volts
- GRID No.3 (SUPPRESSOR GRID): Connect to cathode at socket
- GRID No.2 (SCREEN-GRID) SUPPLY VOLTAGE: 550 max. volts
- GRID-No.2 VOLTAGE: 250 max. volts
- CATHODE CURRENT: 20 max. ma
- GRID-No.2 INPUT: 0.65 max. watt
- PLATE DISSIPATION: 2.5 max. watts

Typical Operation:

- Plate Voltage: 200 volts
- Grid No.3: Connected to cathode at socket
- Grid-No.2 Supply Voltage: 200 volts
- Grid-No.2 Series Resistor: 22000 ohms
- Grid-No.1 Voltage: -19.5 volts
- Transconductance: 125 μmhos
- RMS Grid-No.1 Voltage for cross-modulation factor = 0.01: 450 mv

Maximum Circuit Values:

- Grid-No.1-Circuit Resistance: 1 max. megohm

* Without external shield.