Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Current. .......................... 0.450 ± 0.030 amp
Voltage (AC or DC) at heater amp-
eres = 0.450 ........................ 4.2 volts
Warm-up time (Average) .......... 11 sec
Peak heater-cathode voltage:
Heater negative with respect
to cathode .......................... 200 max. volts
Heater positive with respect
to cathode .......................... 200 max. volts

Direct Interelectrode Capacitances:

<table>
<thead>
<tr>
<th>Without External Shield</th>
<th>With External Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid No.1 to plate</td>
<td>0.031</td>
</tr>
<tr>
<td>Grid No.1 to cathode, grid No.3 &amp; internal shield, grid No.2, and heater</td>
<td>8.7</td>
</tr>
<tr>
<td>Plate to cathode, grid No.3 &amp; internal shield, grid No.2, and heater</td>
<td>2.15</td>
</tr>
</tbody>
</table>

Characteristics, Class A Current Amplifier:

Plate Supply Voltage .................. 125 volts
Grid No.3 (Suppressor Grid). Connected to cathode at socket
Grid No.2 Supply Voltage .................. 125 volts
Cathode Resistor ..................... 56 ohms
Plate Resistance (Approx.) ........... 0.156 megohm
Transconductance ..................... 15000 µmhos
Plate Current ......................... 13 ma
Grid No.2 Current ...................... 3.2 ma
Grid No.1 Voltage, (Approx.) for transconductance (µmhos) = 100 ................ -3 volts

Mechanical:

Operating Position ........................ Any
Type of Cathode ......................... Coated Unipotential
Maximum Overall Length .................. 2-3/16"
Maximum Seated Length ................... 1-15/16"
Length, Base Seat to Bulb Top (Excluding tip) 1-9/16" ± 3/32"
Diameter ............................... 0.750" to 0.875"
Dimensional Outline ........................ See General Section
Bulb ................................. T6-1/2
Base ................................. Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW.............. 9PM

Pin 1 - Cathode
Pin 2 - Grid No.1
Pin 3 - Cathode
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - No Internal Connection
Pin 7 - Plate
Pin 8 - Grid No.2
Pin 9 - Grid No.3, Internal Shield

AMPLIFIER — CLASS A1

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE................. 250 max. volts
GRID No.2 (SCREEN-GRID) SUPPLY VOLTAGE ... 250 max. volts
GRID No.2 VOLTAGE............. See Grid-No.2 Input Rating Chart at front of Receiving Tube Section

GRID-No.1 (CONTROL-GRID) VOLTAGE:
  Negative-bias value........... 50 max. volts
CATHODE CURRENT.............. 25 max. ma
GRID No.2 INPUT:
  For grid-No.2 voltages up to 125 volts . . 0.6 max. watt
  For grid-No.2 voltages between 125 and 250 volts...... See Grid-No.2 Input Rating Chart at front of Receiving Tube Section
PLATE DISSIPATION............ 2.5 max. watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:
  For fixed-bias operation........ 0.25 max. megohm
  For cathode-bias operation..... 1 max. megohm

* With JEDEC shield No.315 connected to ground.