Semiremote-Cutoff Pentode

7-PIN MINIATURE TYPE

For Gain-Controlled, 40-Mc, Picture-IF Stages of TV Receivers

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) .................. 6.3 ± 10% volts
Current at 6.3 volts ................ 0.4 amp

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. .... 0.036 max.</td>
<td>0.026 max. μf</td>
</tr>
<tr>
<td>Grid No.1 to cathode, grid</td>
<td></td>
</tr>
<tr>
<td>No.3 &amp; internal shield, grid No.2, and heater ... 10</td>
<td>10 μf</td>
</tr>
<tr>
<td>Plate to cathode, grid No.3</td>
<td></td>
</tr>
<tr>
<td>&amp; internal shield, grid No.2, and heater ... 2.4</td>
<td>3.4 μf</td>
</tr>
</tbody>
</table>

Characteristics, Class A Amplifier:

Plate Supply Voltage .................. 125 volts
Grid-No.3 and Internal Shield. . Connected to cathode at socket
Grid-No.2 Supply Voltage .................. 125 volts
Cathode Resistor .................. 56 ohms
Plate Resistance (Approx.) ........ 0.2 megohm
Transconductance .................. 13000 μmhos
Plate Current .................. 14 ma
Grid-No.2 Current .................. 3.4 ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos)= 60. .................. -15 volts

Mechanical:

Operating Position .................. Any
Maximum Overall Length .................. 2-1/8"
Maximum Seated Length .................. 1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) .................. 1-1/2" ± 3-32"
Diameter .................. 0.650" to 0.750"
Dimensional Outline ........ See General Section
Bulb .................. T5-1/2
Base .................. Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW .................. 7CM

Pin 1—Grid No.1
Pin 2—Cathode
Pin 3—Heater
Pin 4—Heater
Pin 5—Plate

Pin 6—Grid No.2
Pin 7—Grid No.3, Internal Shield

RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA 1

8–60
AMPLIFIER — Class A

Maximum Ratings, Design—Maximum Values:

PLATE VOLTAGE. . . . . . . . . . . . . . . . . . . . . . . . . . 330 max. volts
GRID No.3 (SUPPRESSOR GRID). . . Connect to cathode at socket
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE . . 330 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:
  Positive-bias value. . . . . . . . . . . . . . . . . . . . . . . . 0 max. volts
GRID-No.2 INPUT:
  For grid-No.2 voltages up
    to 165 volts . . . . . . . . . . . . . . . . . . . . . . . . . . . 0.65 max. watt
  For grid-No.2 voltages be-
    tween 165 and 330 volts. . . . . . . . . . . . . . . . . . . . . See Grid-No.2 Input

Rating Chart at front of Receiving Tube Section
PLATE DISSIPATION. . . . . . . . . . . . . . . . . . . . . . . . 3.1 max. watts
PEAK HEATER—CATHODE VOLTAGE:
  Heater negative with respect to cathode. 200 max. volts
  Heater positive with respect to cathode. 200 max. volts

▲ With external shield JEDEC No.316 connected to cathode.

● The dc component must not exceed 100 volts.
AVERAGE CHARACTERISTICS

$E_C = 6.3$ VOLTS
GRID N$\#3$ AND INTERNAL SHIELD CONNECTED TO CATHODE AT SOCKET.
GRID-N$\#2$ VOLTS = 125
AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
PLATE VOLTS = 125
GRID NO. 3 AND INTERNAL SHIELD CONNECTED TO CATHODE AT SOCKET.
GRID NO. 2 VOLTS = 125