Power Pentode

7-PIN MINIATURE

Electrical:

Heater Ratings and Characteristics:
- Voltage (AC or DC) .......................... 6.3 ± 0.6 volts
- Current at heater volts = 6.3 .................. 0.380 amp
- 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:
- Grid No.1 to plate ................................ 0.24 pf
- Input: G1 to (K+G3,G2,H) ......................... 8.5 pf
- Output: P to (K+G3,G2,H) ......................... 3.8 pf

Mechanical:

Operating Position .................................... Any
- Type of Cathode .................................. Coated Unipotential
- 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 .................................... Small-Button Miniature 7-Pin (JEDEC No.E7-1)
- Basing Designation for BOTTOM VIEW .................. 7CV

Pin 1 - Cathode, Grid No.3
Pin 2 - Grid No.1
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Grid No.1
Pin 6 - Grid No.2
Pin 7 - Plate

Bulb Temperature (At hottest point on bulb surface) .................. 200° C

AMPLIFIER — Class A

Maximum Ratings, Design—Maximum Values:
- Plate Voltage .................................. 300 max. volts
- Grid-No.2 (Screen-Grid) Voltage .................. 300 max. volts
- Grid-No.1 (Control-Grid) Voltage:
  - Positive-bias value .......................... 0 max. volts
- Average Cathode Current ......................... 30 max. ma
- Grid-No.2 Input ................................ 1.1 max. watts
- Plate Dissipation ................................ 4.8 max. watts

Typical Operation and Characteristics:

Plate Supply Voltage .......................... Bypassing Capacitor
- Grid-No.2 Supply Voltage .......................... Bypass

<table>
<thead>
<tr>
<th>No</th>
<th>Bypassing Capacitor</th>
<th>Volts</th>
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<tr>
<td>250</td>
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RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA
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<table>
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<tr>
<th>Parameter</th>
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<th>Bypass Capacitor</th>
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<td>Cathode Resistor.</td>
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<td>Peak AF Grid-No.1 Voltage</td>
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<td>Zero-Signal Plate Current</td>
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<td>Max.-Signal Plate Current</td>
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<tr>
<td>Zero-Signal Grid-No.2 Current</td>
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<td>Max.-Signal Grid-No.2 Current</td>
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<td>Plate Resistance (Approx.)</td>
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<td>Transconductance.</td>
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<td>Power Output</td>
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<td>1.1</td>
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</table>

**Maximum Circuit Values:**

Grid-No.1-Circuit Resistance:
- For fixed-bias operation: 0.5 max. megohm
- For cathode-bias operation: 1 max. megohm

a The dc component must not exceed 100 volts.
b Without external shield.