# GENERAL DATA

**Electrical:**

**Heater, for Unipotential Cathode:**
- Voltage: 6.3 ac or dc volts
- Current: 0.15 amp

**Direct Interelectrode Capacitances:**

<table>
<thead>
<tr>
<th>Without External Shield</th>
<th>With External Shield</th>
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</thead>
<tbody>
<tr>
<td>Grid No.1 to plate</td>
<td>0.0035 max.</td>
</tr>
<tr>
<td>Grid No.1 to cathode,</td>
<td>0.0035 max.</td>
</tr>
<tr>
<td>grid No.3 &amp; internal</td>
<td>4.5 μf</td>
</tr>
<tr>
<td>shield, grid No.2,</td>
<td>4.5 μf</td>
</tr>
<tr>
<td>and heater</td>
<td></td>
</tr>
<tr>
<td>Plate to cathode,</td>
<td>5.5 μf</td>
</tr>
<tr>
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</tr>
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</tbody>
</table>

**Characteristics, Class A1 Amplifier:**

- **Plate Voltage:** 100 250 volts
- **Grid No.3 (Suppressor):** Connected to cathode at socket
- **Grid-No.2 Voltage:** 100 100 volts
- **Grid-No.1 Voltage:** -1 -1 volt
- **Plate Resistance (Approx.):** 0.25 1.3 megohm
- **Transconductance:** 3650 3600 μmhos
- **Plate Current:** 9 9.2 ma
- **Grid-No.2 Current:** 3.5 3.3 ma
- **Grid-No.1 Voltage (Approx.) for transconductance of 10 μmhos:** -20 -20 volts

**Mechanical:**

- **Mounting Position:** Any
- **Maximum Overall Length:** 2-1/8" 1-7/8"
- **Maximum Seated Length:** 1-1/2" ± 3/32"
- **Length, Base Seat to Bulb Top (Excluding tip):** 3/4"
- **Maximum Diameter:** T-5-1/2
- **Dimensional Outline:** See General Section
- **Bulb:** Small-Button Miniature 7-Pin (JETEC 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**

*With external shield JETEC No.316 connected to cathode.*

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SEPT. 1, 1955

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
REMOTE-CUTOFF PENTODE

AMPLIFIER - Class A1

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE: 300 max. volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE: 300 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
Positive bias value: 0 max. volts
PLATE DISSIPATION: 3 max. watts

GRID-No.2 INPUT:
For grid-No.2 voltages up to 150 volts: 0.6 max. watt
For grid-No.2 voltages between 150 and 300 volts: See Grid-No.2 Input Rating Chart at front of Receiving Tube Section

PEAK HEATER-CATHODE VOLTAGE:
Heater negative with respect to cathode: 90 max. volts
Heater positive with respect to cathode: 90 max. volts

SEPT. 1, 1955

DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
AVERAGE PLATE CHARACTERISTICS
PENTODE CONNECTION

$E_x = 6.3$ VOLTS
GRID-N$\# 2$ VOLTS = 100
GRID-N$\# 3$ VOLTS = 0

MAY 29, 1947
TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6867