TWIN DIODE—REMOTE-CUTOFF PENTODE

GENERAL DATA

**Electrical:**
- **Heater, for Unipotential Cathode:**
  - Voltage: 6.3 ac or dc volts
  - Current: 0.3 amp
- **Direct Interelectrode Capacitances (Pentode Unit):**
  - Grid No.1 to Plate: 0.007 max. μuf
  - Input: 3.5 μuf
  - Output: 9.5 μuf
- *With external shield connected to cathode.*

**Mechanical:**
- **Mounting Position:** Any
- **Maximum Overall Length:** 4-17/32"
- **Seated Length:** 3-25/32" ± 1/8"
- **Maximum Diameter:** 1-9/16"
- **Bulb:** ST-12
- **Cap.** Small
- **Base:** Small-Shell Small 7-Pin 7D
- **Basing Designation for BOTTOM VIEW:**
  - Pin 1-Heater Plate
  - Pin 2-Pentode Plate
  - Pin 3-Pentode Grid No.2
  - Pin 4-Diode No.2 Plate
  - Pin 5-Diode No.1 Plate
  - Pin 6-Cathode, Pentode Grid No.3
  - Pin 7-Heater Cap - Pentode Grid No.1

**PENTODE UNIT**
**AMPLIFIER—Class A** 1

**Maximum Ratings, Design-Center Values:**
- **PLATE VOLTAGE:** 300 max. volts
- **GRID-No.2 (SCREEN) VOLTAGE:** 125 max. volts
- **GRID-No.2 SUPPLY VOLTAGE:** 300 max. volts
- **GRID-No.1 (CONTROL-GRID) VOLTAGE:**
  - Positive bias value: 0 max. volts
- **PLATE DISSIPATION:** 2.25 max. watts
- **GRID-No.2 DISSIPATION:** 0.3 max. watt
- **PEAK HEATER-CATHODE VOLTAGE:**
  - Heater negative with respect to cathode: 90 max. volts
  - Heater positive with respect to cathode: 90 max. volts

**Characteristics:**
- **Plate Voltage:** 100 180 250 250 volts
- **Grid-No.2 Voltage:** 100 75 100 125 volts
- **Grid-No.1 Voltage:** -3 -3 -3 -3 volts
- **Plate Resistance (Approx.):** 0.3 1.0 0.8 0.6 megohms
- **Transconductance:** 950 840 1000 1125 μmhos

*Indicates a change.

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### TWIN DIODE—REMOTE-CUTOFF PENTODE

<table>
<thead>
<tr>
<th>Grid-No.1 Bias (Approx.) for</th>
<th>Cathode-Current Cutoff . . .</th>
<th>-17</th>
<th>-13</th>
<th>-17</th>
<th>-21 volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Current. . . . .</td>
<td>5.8 3.4 6 9 ma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grid-No.2 Current. . . .</td>
<td>1.7 0.9 1.5 2.3 ma</td>
<td></td>
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</tr>
</tbody>
</table>

#### DIODE UNITS

Maximum Ratings, Design-Center Values:

- PLATE CURRENT (For Each Diode) . . . . . . . 1.0 max. ma

#### Diode Considerations:

See front of this Section.

*For additional data, refer to RESISTANCE-COUPLED AMPLIFIER CHARTS at the front of this Section.*

The curve shown under type 2B7 also applies to the pentode unit of the 6B7.

→ Indicates a change.

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