MEDIUM-MU DUAL TRIODE
With Dissimilar Units

9-PIN MINIATURE TYPE

Intended for use in equipment having series heater-string arrangement

**GENERAL DATA**

**Electrical:**

Heater, for Unipotential Cathodes:
- Voltage: 6.3 ac or dc volts
- Current: 0.6 amp
- Warm-up time (Average): 11 sec

*For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.*

**Direct Interelectrode Capacitances (Approx.):**

<table>
<thead>
<tr>
<th>Unit No.1</th>
<th>Unit No.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillator</td>
<td>Amplifier</td>
</tr>
<tr>
<td>Grid to plate</td>
<td>2.6</td>
</tr>
<tr>
<td>Grid to cathode and heater</td>
<td>1.8</td>
</tr>
<tr>
<td>Plate to cathode and heater</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**Characteristics, Class A Amplifier:**

<table>
<thead>
<tr>
<th>Unit No.1</th>
<th>Unit No.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillator</td>
<td>Amplifier</td>
</tr>
<tr>
<td>Plate Voltage</td>
<td>250</td>
</tr>
<tr>
<td>Grid Voltage</td>
<td>-8.5</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>17</td>
</tr>
<tr>
<td>Plate Resistance (Approx.)</td>
<td>7700</td>
</tr>
<tr>
<td>Transconductance</td>
<td>2200</td>
</tr>
<tr>
<td>Plate Current</td>
<td>10.5</td>
</tr>
<tr>
<td>Plate Current for grid volts = -16</td>
<td>-</td>
</tr>
<tr>
<td>Grid Voltage (Approx.) for plate current of:</td>
<td></td>
</tr>
<tr>
<td>10 microamperes</td>
<td>-24</td>
</tr>
<tr>
<td>50 microamperes</td>
<td>-</td>
</tr>
</tbody>
</table>

**Mechanical:**

- Operating Position: Any
- Maximum Overall Length: 2-5/8"
- Maximum Seated Length: 2-3/8"
- Length, Base Seat to Bulb Top (Excluding tip): 2" ± 3/32"
- Diameter: 0.750" to 0.875"
- Dimensional Outline: See General Section
- Bulb: T6-1/2

\(^{0}\): See next page.
MEDIUM-MU DUAL TRIODE
With Dissimilar Units

Base. Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW 9EF

Pin 1 - Plate of Unit No.2
Pin 2 - No Connection
Pin 3 - Grid of Unit No.2
Pin 4 - Heater
Pin 5 - Heater

Pin 6 - Plate of Unit No.1
Pin 7 - Grid of Unit No.1
Pin 8 - Cathode of Unit No.1
Pin 9 - Cathode of Unit No.2

VERTICAL-DEFLECTION OSCILLATOR
Values are for Unit No.1

Maximum Ratings, Design-Center Values:
For operation in a 525-line, 30-frame system

DC PLATE VOLTAGE .......................... 500 max. volts
PEAK NEGATIVE-PULSE GRID VOLTAGE ........ 400 max. volts
CATHODE CURRENT:
  Peak. .................................... 70 max. ma
  DC. ........................................ 20 max. ma
PLATE DISSIPATION .................................. 1.25 max. watts
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode. 200 max. volts
  Heater positive with respect to cathode. 200 max. volts

Maximum Circuit Values:
Grid-Circuit Resistance ............................ 2.2 max. megohms

VERTICAL-DEFLECTION AMPLIFIER
Values are for Unit No.2

Maximum Ratings, Design-Center Values Except as Noted:
For operation in a 525-line, 30-frame system

DC PLATE VOLTAGE .......................... 500 max. volts
PEAK POSITIVE-PULSE PLATE VOLTAGE* (Absolute maximum) 2200 max. volts
PEAK NEGATIVE-PULSE GRID VOLTAGE .......................... 250 max. volts
CATHODE CURRENT:
  Peak. .................................... 105 max. ma
  DC. ........................................ 30 max. ma
PLATE DISSIPATION .................................. 6.5 max. watts
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode. 200 max. volts
  Heater positive with respect to cathode. 200 max. volts

*//, #: See next page.

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ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
Maximum Circuit Values:
Grid-Circuit Resistance. . . . . . . . . . . . . . 2.2 max. megohms

☐ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

▲ The dc component must not exceed 100 volts.

★ This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

■ Under no circumstances should this absolute value be exceeded.

○ Without external shield.