High-Mu Twin Triode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

<table>
<thead>
<tr>
<th>Heater arrangement</th>
<th>Series</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage (AC or DC)</td>
<td>12.6</td>
<td>6.3 ± 10% volts</td>
</tr>
<tr>
<td>Current</td>
<td>0.15 ± 6%</td>
<td>0.3 amp</td>
</tr>
</tbody>
</table>

Direct Interelectrode Capacitances (Approx.):

<table>
<thead>
<tr>
<th>Without External Shield</th>
<th>With External Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate (Each unit)</td>
<td>1.7</td>
</tr>
<tr>
<td>Grid to cathode and</td>
<td>1.7</td>
</tr>
<tr>
<td>heater (Each unit)</td>
<td>1.6</td>
</tr>
<tr>
<td>Plate to cathode and</td>
<td>1.8</td>
</tr>
<tr>
<td>heater:</td>
<td></td>
</tr>
<tr>
<td>Unit No.1</td>
<td>0.46</td>
</tr>
<tr>
<td>Unit No.2</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Characteristics, Class A Amplifier (Each Unit):

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>100 volts</td>
</tr>
<tr>
<td>Grid Voltage</td>
<td>-1 volts</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>100</td>
</tr>
<tr>
<td>Plate Resistance (Approx.)</td>
<td>80000 ohms</td>
</tr>
<tr>
<td>Transconductance</td>
<td>1250 μmhos</td>
</tr>
<tr>
<td>Plate Current</td>
<td>0.5 ma</td>
</tr>
</tbody>
</table>

Mechanical:

Operating Position: Any

Maximum Overall Length: 2-3/16"

Maximum Seated Length: 1-15/16"

Length, Base Seat to Bulb Top (Excluding tip): 1-9/16" ± 3/32"

Diameter: 0.750" to 0.875"

Dimensional Outline: Sec General Section

Bulb: T6-1/2

Base: Small-Button Noval 9-Pin (JEDEC No.E9-1)

Basing Designation for BOTTOM VIEW: .9A

Pin 1 - Plate of Unit No.2
Pin 2 - Grid of Unit No.2
Pin 3 - Cathode of Unit No.2
Pins 4 & 9 - Heater of Unit No.2
Pins 5 & 9 - Heater of Unit No.1

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

* Indicates a change.
AMPLIFIER — Class A

Values are for Each Unit

- Maximum Ratings, Design-Maximum Values:
  PLATE VOLTAGE: ............................................ 330 max. volts
  GRID VOLTAGE:
    Negative-bias value: .............................. 55 max. volts
    Positive-bias value: ......................... 0 max. volts
  PLATE DISSIPATION: ......................................... 1.2 max. watts
  PEAK HEATER-CATHODE VOLTAGE:
    Heater negative with respect to cathode: 200 max. volts
    Heater positive with respect to cathode: 200\(^b\) max. volts

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED-AMPLIFIER CHART No.25
at front of this Section

\(^a\) With external shield JEDEC No.315 connected to cathode of unit under test.

\(^b\) The dc component must not exceed 100 volts.
AVERAGE PLATE CHARACTERISTICS
FOR EACH UNIT

$E_f = 6.3 \text{ VOLTS}$
PARALLEL HEATER ARRANGEMENT

PLATE MILLIAMPERES

JULY 30, 1947
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