Medium-Mu Twin Triode

9-PIN MINIATURE TYPE
For TV Tuners Using Direct-Coupled Cathode-Drive Circuits

GENERAL DATA

Electrical:
Heater, for Unipotential Cathodes:
Voltage (AC or DC). ............... 6.3 volts
Current .................................. 0.4 amp
Direct Interelectrode Capacitances:

<table>
<thead>
<tr>
<th></th>
<th>Unit No. 1</th>
<th>Unit No. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Grid to cathode, internal shield, and heater</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>Cathode to grid, internal shield, and heater</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Plate to cathode, internal shield, and heater</td>
<td>1.2</td>
<td>-</td>
</tr>
<tr>
<td>Plate to grid, internal shield, and heater</td>
<td>-</td>
<td>2.2</td>
</tr>
<tr>
<td>Plate to cathode</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Heater to cathode</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Plate of unit No.1 to plate of unit No.2</td>
<td>0.010 max.</td>
<td></td>
</tr>
<tr>
<td>Plate of unit No.2 to plate and grid of unit No.1</td>
<td>0.024 max.</td>
<td></td>
</tr>
</tbody>
</table>

Characteristics, Class A\textsubscript{f} Amplifier (Each Unit):
Plate Supply Voltage. ............... 150 volts
Cathode Resistor. .................. 220 ohms
Amplification Factor. .............. 38
Plate Resistance (Approx.). ........ 5900 ohms
Transconductance. ............... 6400 \mu\text{mhos}
Plate Current. ................. 9 ma
Grid Voltage (Approx.) for plate \(\mu\text{a} = 100\) ........ -6.5 volts

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" \pm 3/32"
Diameter. ...................... 0.750" to 0.875"
Dimensional Outline .......... See General Section
Bulb. ................................ Small-Button Noval 9-Pin (JEDEC No.E9-1)

Indicates a change.
Basing Designation for BOTTOM VIEW. ............... 9AJ

Pin 1 – Plate of Unit No. 2
Pin 2 – Grid of Unit No. 2
Pin 3 – Cathode 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 – Internal Shield

AMPLIFIER — Class A
Values are for Each Unit

Maximum Ratings, Design-Center Values:

- PLATE VOLTAGE ............... 250$^b$ max. volts
- PLATE DISSIPATION ............... 2 max. watts
- CATHODE CURRENT ............... 20 max. ma

- PEAK HEATER–CATHODE VOLTAGE:
  - Heater negative with respect to cathode. 200$^b$ max. volts
  - Heater positive with respect to cathode. 200$^c$ max. volts

Maximum Circuit Values:

- Grid–Circuit Resistance ............... 0.5 max. megohm

$^a$ With external shield JEDEC No. 315 connected to internal shield.

$^b$ Under cutoff conditions in direct-coupled cathode-drive circuits, it is permissible for this voltage to be as high as 300 volts.

$^c$ The dc component must not exceed 100 volts.

Indicates a change.