High-Mu Triode

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
Voltage (AC or DC) .......... 6.3 volts
Current .................. 0.18 amp
Direct Inter-electrode Capacitances:
<table>
<thead>
<tr>
<th>Without External Shield</th>
<th>With External Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate .......... 0.38</td>
<td>0.36 ( \mu f )</td>
</tr>
<tr>
<td>Grid to cathode, internal shield, and heater .......... 4.4</td>
<td>4.4 ( \mu f )</td>
</tr>
<tr>
<td>Plate to cathode, internal shield, and heater .......... 3</td>
<td>4 ( \mu f )</td>
</tr>
<tr>
<td>Grid to heater .......... 0.28 max.</td>
<td>0.28 max. ( \mu f )</td>
</tr>
<tr>
<td>Plate to cathode .......... 0.24</td>
<td>0.2 ( \mu f )</td>
</tr>
<tr>
<td>Cathode to grid .......... 3.1</td>
<td>3.1 ( \mu f )</td>
</tr>
<tr>
<td>Heater to cathode .......... 2.5</td>
<td>2.5 ( \mu f )</td>
</tr>
</tbody>
</table>

Characteristics, Class A1 Amplifier:
Plate Voltage .................. 200 volts
Grid Voltage .................. -1.2 volts
Amplification Factor .......... 80
Plate Resistance (Approx.) ........ 8000 ohms
Transconductance ............. 10500 \( \mu \text{hos} \)
Plate Current ................. 10 ma
Grid Voltage (Approx.) for transconductance (\( \mu \text{hos} \)) = 500 .......... -3.8 volts
Grid Voltage (Approx.) for transconductance (\( \mu \text{hos} \)) = 100 .......... -5.6 volts

Mechanical:
Operating Position .............. Any
Maximum Overall Length .......... 2-1/8"
Maximum Seated Length .......... 1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) .......... 1-1/2" \( \pm \) 3/32"
Diameter ................. 0.650" to 0.750"
Dimensional Outline .......... See General Section
Bulb ......................... T5-1/2
Base ................. Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW .......... 7FP

Pin 1 - Cathode
Pin 2 - Grid
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Internal Shield
Pin 7 - Cathode

Indicates a change.
AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE ........................................ 250 max. volts
GRID VOLTAGE:
  Negative-bias value ...................................... 50 max. volts
CATHODE CURRENT ........................................ 20 max. ma
PLATE DISSIPATION ....................................... 2.2 max. watts
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode .... 100 max. volts
  Heater positive with respect to cathode .... 100 max. volts

Maximum Circuit Values:

Grid-Circuit Resistance ............................. 1 max. megohm

0 With external shield JEDEC No.316 connected to cathode except as noted.
• With external shield JEDEC No.316 connected to ground.

→ Indicates a change.