REMOTE CUT-OFF
PENTODE AMPLIFIER

UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.3 AMPERE
AC OR DC

GLASS BULB

SMALL 5 PIN BASE

THE TUNG-SOL 39/44 IS DESIGNED FOR USE AS AN RF AMPLIFIER OR MIXER
IN AC AND STORAGE BATTERY OPERATED SUPERHETERODYNE RECEIVERS.

OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A AMPLIFIER

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min.</th>
<th>Max.</th>
<th>Volts</th>
<th>Mhos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>90</td>
<td>180</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Screen Voltage</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Control Grid Voltage Min.</td>
<td>-3</td>
<td>-3</td>
<td>-3</td>
<td></td>
</tr>
<tr>
<td>Plate Current</td>
<td>5.6</td>
<td>5.8</td>
<td>5.8</td>
<td>MA.</td>
</tr>
<tr>
<td>Screen Current</td>
<td>1.6</td>
<td>1.4</td>
<td>1.4</td>
<td>MA.</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>0.375</td>
<td>0.75</td>
<td>1.0</td>
<td>MEGOHM</td>
</tr>
<tr>
<td>Transconductance</td>
<td>960</td>
<td>1000</td>
<td>1050</td>
<td>μMHOBS</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>360</td>
<td>750</td>
<td>1050</td>
<td></td>
</tr>
<tr>
<td>Control Grid Voltage</td>
<td>-42.5</td>
<td>-42.5</td>
<td>-42.5</td>
<td>Volts</td>
</tr>
</tbody>
</table>

For transconductance = 2 μMhos

A THE DC RESISTANCE IN THE GRID CIRCUIT SHOULD NOT EXCEED 3 MEGOHMS.

AS MIXER IN SUPERHETERODYNE CIRCUIT

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<td>250</td>
</tr>
<tr>
<td>Screen Voltage</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Control Grid Voltage</td>
<td>-7</td>
<td>-7</td>
<td>-7</td>
</tr>
</tbody>
</table>

THIS GRID BIAS IS MINIMUM FOR AN OSCILLATOR PEAK VOLTAGE OF 6 VOLTS.

DIRECT INTERELECTRODE CAPACITANCES

<table>
<thead>
<tr>
<th>Electrode Combination</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Grid to Cathode</td>
<td>3.5</td>
<td>μF</td>
</tr>
<tr>
<td>Plate to Cathode</td>
<td>10</td>
<td>μF</td>
</tr>
<tr>
<td>Control Grid to Plate5</td>
<td>.007</td>
<td>μF</td>
</tr>
</tbody>
</table>

5 WITH SHIELD

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