The 10JA8 is a highmu triode and a pentode in the 9 pin miniature construction. The triode unit is designed for service as a sync separator, sync clipper and phase inverter while the pentode unit is designed for operation as a video amplifier. Except for heater ratings and characteristics the 10JA8 is identical to the 6JAB.

**Circuit Diagram**

---

**Direct Interelectrode Capacitances**

Without external shield

<table>
<thead>
<tr>
<th></th>
<th>Triode Unit</th>
<th>Pentode Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid 1 to Plate</td>
<td>4.6</td>
<td>Max. 0.1</td>
</tr>
<tr>
<td>Input</td>
<td>2.6</td>
<td>11</td>
</tr>
<tr>
<td>Output</td>
<td>2.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Coupling:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pentode Grid 1 to Triode Plate</td>
<td>Max. 0.005</td>
<td>pf</td>
</tr>
<tr>
<td>Pentode Plate to Triode Grid</td>
<td>Max. 0.018</td>
<td>pf</td>
</tr>
<tr>
<td>Pentode Plate to Triode Plate</td>
<td>Max. 0.17</td>
<td>pf</td>
</tr>
</tbody>
</table>

Continued on following page.
HEATER CHARACTERISTICS AND RATINGS

AVERAGE CHARACTERISTICS
HEATER WARM-UP TIME
LIMITS OF SUPPLIED CURRENT

HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK
HEATER POSITIVE WITH RESPECT TO CATHODE
DC COMPONENT
TOTAL DC AND PEAK

TRIODE UNIT
PENTODE UNIT

MAXIMUM RATINGS

PLATE VOLTAGE
GRID2 SUPPLY VOLTAGE
GRID2 VOLTAGE
PLATE DISSIPATION
GRID2 DISSIPATION
POSITIVE GRID1 BIAS VOLTAGE

TRIODE UNIT
PENTODE UNIT

GRID1 CIRCUIT RESISTANCE
FIXED BIAS
CATHODE RESISTOR BIAS

CHARACTERISTICS AND TYPICAL OPERATION

TRIODE UNIT:

GRID VOLTAGE
PLATE CURRENT
TRANSCONDUCTANCE
AMPLIFICATION FACTOR
PLATE RESISTANCE

GRID 1 VOLTAGE FOR I_b = 10 μA

PENTODE UNIT:

GRID 2 VOLTAGE
GRID1 VOLTAGE
PLATE CURRENT
GRID 2 CURRENT
TRANSCONDUCTANCE
PLATE RESISTANCE

GRID 1 VOLTAGE FOR I_b = 10 μA