R-F AMPLIFIER PENTODE
MINIATURE TYPE

Filament Coated
d-c volts
Voltage 1.4 amp.
Current 0.05 μf
Direct Interelectrode Capacitances:
Grid to Plate 0.008 max.
Input 3.6 μf
Output 7.5 μf
Maximum Overall Length 2-1/8"
Maximum Seated Height 1-7/8"
Maximum Diameter 3/4"
Bulb T-5-1/2
Base ▲ Miniature Button 7-Pin
Pin 1 {Filament −, Internal Shield
Pin 2 - Plate
Pin 3 - Screen
Pin 4 - No Connection
RCA Stock No. 9914
Socket
Mounting Position BOTTOM VIEW (6AR)

Maximum And Minimum Ratings Are Design-Center Values

Plate Voltage 110 max. volts
Screen Voltage 90 max. volts
Screen Supply Voltage 110 max. volts
Grid Voltage 0 min. volts
Total Cathode Current 6.5 max. ma.

Typical Operation and Characteristics - Class A mA Amplifier

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>90 volts</td>
<td>90 volts</td>
</tr>
<tr>
<td>Screen Voltage</td>
<td>67.5 volts</td>
<td>90 volts</td>
</tr>
<tr>
<td>Grid Voltage</td>
<td>0 volts</td>
<td>0 volts</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>0.6 megalohm</td>
<td>0.35 megalohm</td>
</tr>
<tr>
<td>Transconductance</td>
<td>925 μmhos</td>
<td>1025 μmhos</td>
</tr>
<tr>
<td>Grid Bias for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plate Current = 10 μamp.</td>
<td>-6 volts</td>
<td>-8 volts</td>
</tr>
<tr>
<td>Plate Current</td>
<td>2.9 ma.</td>
<td>4.5 ma.</td>
</tr>
<tr>
<td>Screen Current</td>
<td>1.2 ma.</td>
<td>2.0 ma.</td>
</tr>
</tbody>
</table>

▲ The center hole in sockets designed for this base provides for the possibility that this tube type may be manufactured with the exhaust-tube tip at the base end. For this reason, it is recommended that in equipment employing this tube type, no material be permitted to obstruct the socket hole.

June 1, 1942
RCA RADIO TRON DIVISION
TENTATIVE DATA
RCA MANUFACTURING COMPANY, INC.
AVerage Plate Characteristics

$E_g = 1.4 \text{ Volts D.C.} \quad \text{Screen Volts} = 90$