DETECTOR AMPLIFIER TRIODE
(TENTATIVE DATA)

Heater Voltage (A.C. or D.C.) 6.3 Volts
Heater Current 0.3 Ampere
Direct Interelectrode Capacitances (Approx.): #
   Grid to Plate 3.4 µµf
   Grid to Cathode 3.4 µµf
   Plate to Cathode 3.6 µµf
Maximum Overall Length 2-5/8"
Maximum Diameter 1-5/16"
Base Small Wafer Octal 6-Pin

As Class A₁ Amplifier

Operating Conditions and Characteristics:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>250 max. Volts</td>
</tr>
<tr>
<td>Grid Voltage</td>
<td>-8 Volts</td>
</tr>
<tr>
<td>Plate Current</td>
<td>9 Milliamperes</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>7700 Ohms</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>20</td>
</tr>
<tr>
<td>Transconductance</td>
<td>2600 Micromhos</td>
</tr>
</tbody>
</table>

# with shell connected to cathode.

from RMA release #118, June 22, 1937

June 11, 1937
MECHANICAL DATA

Coated unipotential cathode
Outline drawing. .............. 8-1  Bulb. ................. MT-8
Base. ......................... B6-23 Small wafer octal 6-pin
Maximum diameter. ............. 1-5/16"  Maximum overall length. ........ 2-5/8"
Maximum seated height. ......... 2-1/16"  Pin connections. .......... Basing 6Q
Pin 1 - Shell  Pin 5 - Grid
Pin 2 - Heater  Pin 7 - Heater
Pin 3 - Plate  Pin 8 - Cathode
Mounting position. ............. Any

ELECTRICAL DATA

Direct interelectrode capacitances*  
Grid to plate (g to p). ............. 3.4 μμf  Input: g to (h+k+s). ............ 3.4 μμf  Output: p to (h+k+s). ........ 3.6 μμf

*Pin #1 connected to pin #8.

Ratings

Heater voltage (ac or dc). ............. 6.3 volts  Maximum heater-cathode voltage ........ 90 volts
Maximum plate voltage. ............... 300 volts  Maximum positive DC grid voltage ........ 0 volts
Maximum grid circuit resistance. .... 1.0 megohm  Maximum plate dissipation. ............ 2.5 watts
Maximum cathode current. ............. 20 ma

Typical operating conditions and characteristics, class A1 amplifier

Heater voltage. .............. 6.3  6.3 volts 6 6.3 volts
Heater current. .............. 300 300 ma
Plate voltage .............. 90 250 volts
Grid voltage. .............. 0 -8 volts
Plate resistance (approx.). ........ 6700 7700 ohms
Transconductance. ............. 3000 2600 μmhos
Plate current. .............. 10 9.0 ma
Amplification factor. ............ 20 20 ma
Grid #1 voltage (approx.) for Ib= 10 μa. ........ -7.0 -18 volts

Refer to "Interpretation of Receiving Tube Ratings"