from JETEC release
#1548, Dec. 12, 1955

ADVANCE DATA

**MECHANICAL DATA**

- **Mounting**
- **Overall Dimensions**
  12 1/2 X 6 1/16 X 5 1/16
- **Net Weight**
  33 Lbs. Approx.
- **Cooling**
  Forced Air
- **Pressurization**
  50 psig maximum air or its equivalent pressure of sulfur hexafluoride (SF6)
- **Output Coupling**
  RG-96/U Waveguide
- **Vibration (non-operating)**
  50 Cycles - 10 G

**ELECTRICAL DATA**

- **Heater Voltage-Preheat**
  6.0 ± 5% Volts
- **Heater Current at 5.0 Volts**
  1.8 - 2.4 Amps
- **Minimum Preheat Time**
  4 Minutes
- **Heater Power During Operation**
  (Note 1)

**RATINGS (Absolute Maximum)**

- **Heater Voltage**
  7.0 Volts
- **Peak Current**
  40 Amps
- **Peak Anode Voltage**
  20 Kv
- **Average Power Input**
  160 Watts
- **Maximum Frequency Pulling at VSWR 1.5:1**
  50 Mc
- **Anode Temperature**
  130° C
- **Maximum Pulse Duration**
  0.5 us
- **Maximum Duty Cycle**
  0.00035
- **Minimum Pulse Voltage Rise Time**
  0.05 us
- **Maximum VSWR**
  1.5:1
- **R F Bandwidth**
  3.0/tp Mc

**TYPICAL OPERATION**

<table>
<thead>
<tr>
<th>Oscillator 1</th>
<th>Oscillator 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pulse Recurrent Frequency</strong></td>
<td>1000</td>
</tr>
<tr>
<td><strong>Pulse Duration</strong></td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Peak Anode Voltage</strong></td>
<td>19</td>
</tr>
<tr>
<td><strong>Peak Anode Current</strong></td>
<td>28</td>
</tr>
<tr>
<td><strong>Average Anode Current</strong></td>
<td>7</td>
</tr>
<tr>
<td><strong>Useful Range of Average Current</strong></td>
<td>5-7</td>
</tr>
<tr>
<td><strong>Average Power Output</strong></td>
<td>26</td>
</tr>
<tr>
<td><strong>Input Capacitance</strong></td>
<td>7.55</td>
</tr>
</tbody>
</table>

**SYLVANIA Type 6799**

Sylvania Type 6799 is a high power, pulsed, fixed frequency (34512-35208 Mc) magnetron. The unit is supplied with magnet in place.

**SYLVANIA ELECTRIC PRODUCTS INC.**

**ELECTRONICS DIVISION**

**WOBURN, MASS.**

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

Nov. 8, 1955
Page 1 of 3
NOTES:

1. During operation, reduce heater power in accordance with the following formula:

\[ E_f = 5.0 \left( 1 - \frac{I_b}{5} \right) \text{ volts, where } I_b \text{ is in ma}, \]

\[ E_f = 0 \text{ for } I_b \leq 5 \text{ ma} \]

2. The values specified are based on the "absolute system" and are not to be exceeded under any service conditions. The ratings are limiting values above which serviceability of any individual tube may be impaired. It does not necessarily follow that combinations of absolute maximum ratings can be attained simultaneously.