This tube is a seven pin miniature indirectly heated R.F. power pentode designed for reliable operation under adverse conditions of shock and vibration. It is suitable for use as an A.F. power amplifier or a driven R.F. power amplifier up to 100 Mc/s, where a low heater dissipation is required. Electrically it is similar to the 6AM5.

**Mechanical Data**

Coated unipotential cathode  
Outline drawing 5 - 2  
Base E7 - 1  
Bulb T - 5½  
Miniature Button 7 - pin  
Maximum diameter 3/4"  
Maximum overall length 2 1/8"  
Maximum seated height 1 7/8"  
Pin connections  
Pin 1 Grid No.1  
Pin 2 Cathode, grid No.3  
Pin 3 Heater  
Pin 4 Heater  
Pin 5 Plate  
Pin 6 No connection  
Pin 7 Grid No.2  
Basing 6CH

Mounting position any  
Maximum shock (in intermittent service) 500g  
Maximum vibration (continuous service) 2 1/2 g  
Minimum mechanical resonance 100c/s

**Electrical Data**

Direct Inter-electrode Capacitances - with a close fitting external shield  
Grid to plate \(g_{1}\text{ to } p\) max. 0.314μF  
Input: \(g_{1}\text{ to } (h+k+g_{2}+g_{3})\) 4.25μF  
Output: p to \((h+k+g_{2}+g_{3})\) 6.51μF

**Ratings** Design Centre Values except where indicated.  
Heater voltage (AC or DC) 6.3 volts  
Maximum heater cathode voltage ±150 volts  
Maximum plate voltage 300 volts  
Maximum plate voltage \((I_{P} = 0)\) 550 volts  
Maximum plate dissipation 4.75 watts  
Maximum grid No.2 voltage 275 volts  
Maximum grid No.2 voltage \((I_{G} = 0)\) 550 volts  
Maximum grid No.2 dissipation 0.80 watts  
Maximum grid No.1 - grid No.2 voltage 300 volts DC  
Maximum grid No.1 - cathode voltage 100 volts DC  
Maximum mean grid No.1 current 3.3 mA  
Maximum cathode current 23 mA

from JETEC release #1809, Dec. 17, 1956
Maximum grid No. 1 = cathode resistance with cathode bias 680 kΩ.
Maximum grid No. 1 = cathode resistance with fixed bias 220 kΩ.
Maximum operating frequency 100 kHz.
Maximum bulb temperature 180°C.

(= absolute ratings).

**Typical Operating Conditions and Characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Voltage</td>
<td>6.3 volts</td>
</tr>
<tr>
<td>Heater Current</td>
<td>0.2 amps</td>
</tr>
<tr>
<td>Plate Voltage</td>
<td>250 volts</td>
</tr>
<tr>
<td>Grid No. 2 voltage</td>
<td>250 volts</td>
</tr>
<tr>
<td>Grid No. 1 voltage</td>
<td>–13.5 Volts</td>
</tr>
<tr>
<td>Plate current</td>
<td>16 mA</td>
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<tr>
<td>Grid No. 2 current</td>
<td>2.25 mA</td>
</tr>
<tr>
<td>Plate resistance (approx.)</td>
<td>0.15 Megohms</td>
</tr>
<tr>
<td>Transconductance</td>
<td>25504mhos</td>
</tr>
<tr>
<td>Optimum plate load</td>
<td>16,000 ohms</td>
</tr>
<tr>
<td>Power output</td>
<td>1.4 watts</td>
</tr>
<tr>
<td>Amplification factor (grid No. 1 to grid No. 2)</td>
<td>12</td>
</tr>
</tbody>
</table>