6AM5
POWER AMPLIFIER PENTODE
MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:
Voltage: 6.3 a.c. or d.c. volts
Current: 0.2 amp.

Direct Interelectrode Capacitance (Approx.):
Grid to Plate: 0.5 max. μF
Input: 4.2 μF
Output: 2.2 μF

Mechanical:

Mounting Position: Any
Maximum Overall Length: 2-1/8" 1-15/16"
Maximum Seated Height: 3/16" 1-5-1/2"

Sockets: Miniature Button 7-Pin

Pin 1 - Grid No. 1
Pin 2 - Cathode and Grid No. 3
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - No Connection
Pin 7 - Grid No. 2

BOTTOM VIEW
AMPLIFIER - Class A,
Pentode Connection

Maximum Ratings:

Plate Voltage: 250 max. volts
Grid No. 2 (Screen) Voltage: 250 max. volts
Plate Dissipation: 4 max. watts
Grid No. 2 (Screen) Dissipation: 0.6 max. watt
Plate Current: 25 max. mA
Peak Heater-Cathode Voltage: 50 max. volts

Typical Operation and Characteristics:

Single Valve Amplifier - Class A,

<table>
<thead>
<tr>
<th>Plate Voltage</th>
<th>Grid No. 2 (Screen) Voltage</th>
<th>Grid No. 1 (Control) Voltage</th>
<th>Cathode Bias Resistance</th>
<th>Peak A.F. Grid No. 1 Voltage</th>
<th>Plate Current</th>
<th>Grid No. 2 Current</th>
<th>Plate Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 volts</td>
<td>200 volts</td>
<td>-7.5 volts</td>
<td>330 ohms</td>
<td>-</td>
<td>20 mA</td>
<td>3 mA</td>
<td>0.15 megohm</td>
</tr>
</tbody>
</table>
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Mutual Conductance - 2,600 μhos
Amplification Factor - 390
Load Resistance 10,000 16,000 ohms
Total Harmonic Distortion 7 10 %
Max.-Sig. Power Output 1.25 1.4 watts

Push Pull Amplifier - Class AB
Values are for two valves

<table>
<thead>
<tr>
<th>Cathode Bias</th>
<th>Fixed Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>250</td>
</tr>
<tr>
<td>Grid No. 4 (Screen) Voltage</td>
<td>250</td>
</tr>
<tr>
<td>Grid No. 1 (Control) Voltage</td>
<td>-</td>
</tr>
<tr>
<td>Cathode Bias Resistance</td>
<td>600</td>
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<tr>
<td>Peak A.F. Grid No. 1 Voltage</td>
<td>34</td>
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<tr>
<td>Zero-Sig. Plate Current</td>
<td>22</td>
</tr>
<tr>
<td>Max.-Sig. Plate Current</td>
<td>25.6</td>
</tr>
<tr>
<td>Zero-Sig. Grid No. 2 Current</td>
<td>3.2</td>
</tr>
<tr>
<td>Max.-Sig. Grid No. 2 Current</td>
<td>8.2</td>
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<tr>
<td>Load Resistance</td>
<td>24,000</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>3.2</td>
</tr>
<tr>
<td>Max.-Sig. Power Output</td>
<td>4</td>
</tr>
</tbody>
</table>

Amplifier - Class A
Triode Connection #

Maximum Ratings:
Plate Voltage 250 max. volts
Plate Dissipation 4.6 max. watts
Plate Resistance † 3,850 ohms
Mutual Conductance † 3,000 μhos
Amplification Factor † 11.5

# Screen tied to plate at socket
† Measured at Ebb = 250V  Ec1 = -12V.