6AH6
Description and Rating
RADIO-FREQUENCY AMPLIFIER PENTODE

GENERAL DESCRIPTION
Principal Application: The 6AH6 is a miniature sharp-cutoff pentode. Its high transconductance and low input and output capacitances adapt it to use as a wide-band amplifier or as a reactance tube.

Cathode: Coated Unipotential
Heater Voltage (A-C or D-C) 6.3 Volts
Heater Current 0.45 Amperes
Envelope: T-5½, Glass
Base: E7-1, Miniature Button 7-Pin
Mounting Position: Any

Direct Inter-electrode Capacitances:

Without Shield With Shield
Grid 1 to Plate (Max) 0.030...0.020 μf
Input 10...10 μf
Output 2.0...3.6 μf

PHYSICAL DIMENSIONS

TERMINAL CONNECTIONS
Pin 1 - Grid Number 1
Pin 2 - Grid Number 3 (Suppressor)
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid Number 2 (Screen)
Pin 7 - Cathode

MAXIMUM RATINGS

DESIGN CENTER VALUES:
Plate Voltage 300 Volts
Screen Supply Voltage 300 Volts
Screen Voltage 150 Volts
Plate Dissipation 3.2 Watts
Screen Dissipation 0.4 Watt
Cathode Current 13 Milliamperes
Heater-Cathode Voltage 90 Volts

CLASS A1 AMPLIFIER

<table>
<thead>
<tr>
<th>Pentode Connection</th>
<th>Triode Connection**</th>
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</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>300</td>
</tr>
<tr>
<td>Suppressor Voltage*</td>
<td>0</td>
</tr>
<tr>
<td>Screen Voltage</td>
<td>150</td>
</tr>
<tr>
<td>Cathode Bias Resistor</td>
<td>160</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>---</td>
</tr>
<tr>
<td>Plate Resistance (Approx)</td>
<td>0.5</td>
</tr>
<tr>
<td>Transconductance</td>
<td>9000</td>
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<tr>
<td>Plate Current</td>
<td>10</td>
</tr>
<tr>
<td>Screen Current</td>
<td>2.5</td>
</tr>
<tr>
<td>Grid Number 1 Voltage (Approx) for I_b = 10 Microamperes</td>
<td>-7</td>
</tr>
</tbody>
</table>

# With external shield #316 connected to pin 7
* Pin 2 connected to pin 7 at socket
** For triode connection, connect grids 2 and 3 to plate.

Note: Grid number 3 has practically no control characteristics, and it is not intended to be used as a control electrode. Its transconductance to the plate approximates 2 micromhos and the μ is 0.7 to 1.0.

GENERAL ELECTRIC
Supersedes ET-T520 dated 11-47
AVERAGE PLATE CHARACTERISTICS

PLATE VOLTAGE IN VOLTS

PLATE CURRENT (I_b) OR SCREEN CURRENT (I_c2) IN MILLIAMPERES