TUNG-SOL

REMOTE-CUTOFF PENTODE
MINIATURE TYPE

UNIPOTENTIAL CATHODE
HIGH GM, SMALL SIGNAL
RF & IF AMPLIFIER
WITH GAIN CONTROL

GLASS BULB
MINIATURE
9 PIN BASE 99-1

ROTATING VIEW
BASED DIAGRAM
JEDEC 9A0

THE 6EH7 IS A REMOTE-CUTOFF PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT FEATURES VERY HIGH GM WITH A REMOTE CUTOFF AND IS DESIGNED FOR FREQUENCIES INTO THE VHF RANGE. ITS CHIEF APPLICATION IS IN THE IF AMPLIFIER STAGES OF TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE: (G4 TO P) MAX. 0.0055 pf
INPUT: G1 TO (H+G2+G3+K+1S) 9.5 pf
OUTPUT: P TO (H+G2+G3+K+1S) 2.8 pf

HEATER CHARACTERISTICS AND RATINGS
DESIGN MAXIMUM VALUES – SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS 6.3 VOLTS 300 MA

HEATER SUPPLY LIMITS:
VOLTAGE OPERATION 6.3±0.6 VOLTS
CURRENT OPERATION 300±20 MA.
MAXIMUM HEATER-CATHODE VOLTAGE 165 VOLTS

MAXIMUM RATINGS
DESIGN CENTER VALUES – SEE EIA STANDARD RS-239

PLATE VOLTAGE 250 VOLTS
PLATE DISSIPATION 2.5 WATTS
GRID #2 VOLTAGE 250 VOLTS
GRID #2 DISSIPATION 0.65 WATTS
CATHODE CURRENT 20 MA
GRID #1 CIRCUIT RESISTANCE 1 MEGOHM

CONTINUED ON FOLLOWING PAGE
**TUNGFOL**

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**TYPICAL OPERATING CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Grid #3 Voltage</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grid #2 Voltage (Supply)</td>
<td>90</td>
<td>200</td>
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<tr>
<td>Grid #2 Series Resistor</td>
<td>0</td>
<td>24</td>
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<tr>
<td>Grid #1 Voltage</td>
<td>-2</td>
<td>-2</td>
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<tr>
<td>Plate Current</td>
<td>12</td>
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</tr>
<tr>
<td>Grid #2 Current</td>
<td>4.5</td>
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</tr>
<tr>
<td>Transconductance</td>
<td>12500</td>
<td>12500</td>
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<tr>
<td>Plate Resistance</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Grid #1 Impedance AT 40 MC</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Grid #1 Cutoff: Ec1 = 6.5</td>
<td></td>
<td>1250</td>
</tr>
<tr>
<td>Ec1 = -9.5</td>
<td></td>
<td>625</td>
</tr>
<tr>
<td>Ec1 = -19.5</td>
<td></td>
<td>125</td>
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<tr>
<td>Grid #1 Voltage For A Cross-Modulation Factor of 1%: Ec1 = 6.5</td>
<td>100 Mv.</td>
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<tr>
<td>Ec1 = -9.5</td>
<td>160 Mv.</td>
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<tr>
<td>Ec1 = -19.5</td>
<td>450 Mv.</td>
<td></td>
</tr>
</tbody>
</table>

**Graph:**

- $E_f = 6.3$ Volts
- $E_b = 200$ Volts
- $E_{cc} = 200$ Volts (Supply)
- $E_{c2} = 0$ Volts
- $R_{c2} = 24$ kΩ