TUNG-SOL

PENTODE
MINIATURE TYPE

UNIPOTENTIAL CATHODE

HEATER
6.3±10% VOLTS 0.4 AMP.
AC OR DC
ANY MOUNTING POSITION

GLASS BULB

BOTTOM VIEW
SMALL-BUTTON MINIATURE
7 PIN BASE
7CM

THE 6GM6 IS A SEMIREMOTE-CUTOFF PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS ESPECIALLY DESIGNED FOR USE IN GAIN-CONTROLLED PICTURE-IF STAGES OF TELEVISION RECEIVERS OPERATING AT INTERMEDIATE FREQUENCIES OF THE ORDER OF 40 MEGACYCLES.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE (MAX.) 0.036 μμf
GRID #1 TO CATHODE, INTERNAL SHIELD & G3, G2 & H. 10 μμf
PLATE TO CATHODE, INTERNAL SHIELD & G3, G2 & H. 2.4 μμf

RATINGS
INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

CLASS A1 AMPLIFIER

HEATER VOLTAGE 6.3±10% VOLTS
MAXIMUM PLATE VOLTAGE 330 VOLTS
MAXIMUM GRID #3 (SUPPRESSOR) VOLTAGE 0 VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE 330 VOLTS
MAXIMUM GRID #2 (SCREEN-GRID) VOLTAGE
(SEE JEDEC INPUT RATING CHART J5-C4-2)
MAXIMUM GRID #1 (CONTROL-GRID) VOLTAGE:
POSITIVE BIAS VALUE 0 VOLTS
MAXIMUM PLATE DISSIPATION 3.1 WATTS
MAXIMUM GRID #2 INPUT:
FOR GRID #2 VOLTAGES UP TO 165 VOLTS 0.65 WATT
FOR GRID #2 VOLTAGES BETWEEN 165 AND 330 VOLTS
(SEE JEDEC INPUT RATING CHART J5-C4-2)
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE 200 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE 200A VOLTS

*THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.
CONTINUED ON FOLLOWING PAGE
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>HEATER VOLTAGE</td>
<td>6.3 ± 10% V</td>
</tr>
<tr>
<td>HEATER CURRENT</td>
<td>0.4 AMPS</td>
</tr>
<tr>
<td>PLATE SUPPLY VOLTAGE</td>
<td>125 VOLS</td>
</tr>
<tr>
<td>GRID #3 CONNECTED TO CATHODE AT SOCKET</td>
<td></td>
</tr>
<tr>
<td>GRID #2 SUPPLY VOLTAGE</td>
<td>125 VOLS</td>
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<tr>
<td>CATHODE RESISTOR</td>
<td>96 OHMS</td>
</tr>
<tr>
<td>PLATE RESISTANCE (APPROX.)</td>
<td>0.2 MEGOHMS</td>
</tr>
<tr>
<td>TRANSCONDUCTANCE</td>
<td>13,000 UMHO</td>
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<tr>
<td>PLATE CURRENT</td>
<td>14 MA</td>
</tr>
<tr>
<td>GRID #2 CURRENT</td>
<td>5.4 MA</td>
</tr>
<tr>
<td>GRID #1 VOLTAGE (APPROX.) FOR</td>
<td></td>
</tr>
<tr>
<td>TRACONDUCTANCE = 60 UMHO</td>
<td>-15 VOLS</td>
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DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BAYEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BAYEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

SIMILAR TYPE REFERENCE: Except for heater ratings and heater warm-up time, the 6GM6 is identical to the 4GM6 and the 5GM6.