TUNG-SOL

PENTODE
SUBMINIATURE TYPE

RELIABLE
SEMI-REMOTE-CUTOFF
PENTODE
FOR
AGC AMPLIFIER SERVICE
IN MOBILE AND AIRBORNE
EQUIPMENT

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION

BOTTOM VIEW
7 LEADS 0.048"
CENTER-TO-CENTER
IN-LINE
LEAD DIAMETER
.016" +.002" -.001"

THE 6872 IS A HEATER-CATHODE TYPE SEMI-REMOTE CUTOFF PENTODE OF SUBMINIATURE CONSTRUCTION. IT IS APPLICABLE TO AMPLIFIER SERVICE IN WHICH AGC IS DESIRABLE. STANDARD IN-LINE SUBMINIATURE SOCKETS MAY BE USED BY CUTTING THE FLEXIBLE LEADS TO A SUITABLE LENGTH.

DIRECT INTERELECTRODE CAPACITANCES
WITH A CYLINDRICAL SHIELD 0.405" I.D. - 1-7/8" LONG CONNECTED TO LEAD 6.

GRID 1 TO PLATE MAX. 0.03 pf
INPUT
OUTPUT 5.0 pf
3.5 pf

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

AVERAGE CHARACTERISTICS 6.3 VOLTS 200 MA.

LIMITS OF APPLIED VOLTAGE 6.3 ± 0.6 VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE: 200 VOLTS

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

PLATE VOLTAGE 165 VOLTS
GRID 1 VOLTAGE -55 VOLTS
GRID 2 VOLTAGE 155 VOLTS
GRID 3 VOLTAGE 0 VOLTS
PLATE DISSIPATION 1.1 WATTS
GRID 2 DISSIPATION 0.4 WATTS
CATHODE CURRENT 16.5 MA.
GRID 1 CIRCUIT RESISTANCE 1.2 MEGOHMS
TEMPERATURE AT HOTTEST POINT ON BULB 4220 °C

TUNG-SOL ELECTRIC INC., ELECTRON TUBE DIVISION, BLOOMFIELD, NEW JERSEY, U.S.A.-SEPTEMBER 1, 1963 PLATE #6191
## TYPICAL OPERATING CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>120 V</td>
</tr>
<tr>
<td>Grid 1 Voltage</td>
<td>0 V</td>
</tr>
<tr>
<td>Grid 2 Voltage</td>
<td>120 V</td>
</tr>
<tr>
<td>Grid 3 Voltage</td>
<td>0 V</td>
</tr>
<tr>
<td>Cathode Bias Resistor</td>
<td>200 Ω</td>
</tr>
<tr>
<td>Plate Current</td>
<td>7.75 mA</td>
</tr>
<tr>
<td>Grid 2 Current</td>
<td>2.7 mA</td>
</tr>
<tr>
<td>Transconductance</td>
<td>4,100 μMhos</td>
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<tr>
<td>Plate Resistance</td>
<td>0.34 MΩ</td>
</tr>
</tbody>
</table>

## SPECIAL TESTS AND RATINGS

<table>
<thead>
<tr>
<th>Test</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermittant Life Test</td>
<td></td>
</tr>
<tr>
<td>Heater Cycling Test</td>
<td></td>
</tr>
<tr>
<td>Shock Test</td>
<td></td>
</tr>
<tr>
<td>Vibration Test</td>
<td></td>
</tr>
<tr>
<td>Altitude Rating</td>
<td>60,000 feet</td>
</tr>
</tbody>
</table>
AVERAGE TRANSFER CHARACTERISTICS

$E_b = 120 \text{ Volts DC}$

$E_{C2} = 120 \text{ Volts DC}$