DESCRIPTION

The GL-6201 is a miniature twin triode designed for use as a grounded-grid amplifier or as a frequency converter in very-high-frequency applications. The tube is specially designed to assure dependable life and reliable service under the exacting conditions encountered in mobile and aircraft applications. Features include a high degree of mechanical strength and a heater-cathode construction designed to withstand many-thousand cycles of intermittent operation.

TECHNICAL INFORMATION

GENERAL

Electrical Data

<table>
<thead>
<tr>
<th></th>
<th>With Shield</th>
<th>Without Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathode—Coated Unipotential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heater Voltage (A-c or D-c)</td>
<td>6.3</td>
<td>12.6 Volts</td>
</tr>
<tr>
<td>Heater Current</td>
<td>0.3</td>
<td>0.15 Ampere</td>
</tr>
</tbody>
</table>

Direct Interelectrode Capacitances

<table>
<thead>
<tr>
<th></th>
<th>With Shield</th>
<th>Without Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to Plate (Each Section)</td>
<td>1.6</td>
<td>1.6 uuf</td>
</tr>
<tr>
<td>Input (Each Section)</td>
<td>2.5</td>
<td>2.3 uuf</td>
</tr>
<tr>
<td>Output (Section 1)</td>
<td>1.2</td>
<td>0.4 uuf</td>
</tr>
<tr>
<td>Output (Section 2)</td>
<td>1.3</td>
<td>0.38 uuf</td>
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<tr>
<td>Heater to Cathode (Each Section)</td>
<td>2.8</td>
<td>2.8 uuf</td>
</tr>
</tbody>
</table>

Grounded-Grid Operation

<table>
<thead>
<tr>
<th></th>
<th>With Shield</th>
<th>Without Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate to Cathode (Section 1)</td>
<td>0.18</td>
<td>0.2 uuf</td>
</tr>
<tr>
<td>Plate to Cathode (Section 2)</td>
<td>0.2</td>
<td>0.24 uuf</td>
</tr>
<tr>
<td>Input (Each Section)</td>
<td>5.0</td>
<td>5.0 uuf</td>
</tr>
<tr>
<td>Output (Section 1)</td>
<td>2.7</td>
<td>1.9 uuf</td>
</tr>
<tr>
<td>Output (Section 2)</td>
<td>2.7</td>
<td>1.8 uuf</td>
</tr>
</tbody>
</table>
TECHNICAL INFORMATION (CONT'D)

Mechanical Data
Mounting Position—Any
Envelope—T-6 1/2 Glass
Base—Small Button 9-Pin, E9-1

MAXIMUM RATINGS
Electrical—Design Center Values—Each Section
Plate Voltage .................................................. 300 Volts
Negative D-c Grid Voltage ................................. 50 Volts
Plate Dissipation ........................................... 2.5 Watts
Heater-Cathode Voltage ................................. 90 Volts
Mechanical
Peak Impact Acceleration in Any Direction .......... 600 G

CHARACTERISTICS AND TYPICAL OPERATION
Class A1 Amplifier—Each Section
Plate Voltage .................................................. 100 250 Volts
Cathode Bias Resistor ..................................... 270 200 Ohms
Amplification Factor ........................................ 57 60
Plate Resistance, approximate ....................... 14,300 10,900 Ohms
Transconductance ......................................... 4000 5500 Micromhos
Plate Current ................................................... 3.3 10 Milliamperes
Grid Voltage, approximate for I₀ = 10 Microamperes .... −5 −12 Volts

* With external shield No. 315 connected to cathode of section under test.
† With external shield No. 315 connected to grid of section under test.

AVERAGE CHARACTERISTICS
(EACH SECTION)
AVERAGE CHARACTERISTICS
(EACH SECTION)
$E_r = 12.6\ \text{VOLTS}$
PLATE VOLTAGE $= 250\ \text{VOLTS}$

![Graph showing average characteristics with plate current in milliamperes and transconductance in micromhos on the y-axis.]

**OUTLINE**

**BASING DIAGRAM**

*Measured from base seat to bulb-top line as determined by ring gage of $7/16''$ I.D.*

**Pin Assignments:**
- PIN 1: PLATE (SECTION NO. 2)
- PIN 2: GRID (SECTION NO. 2)
- PIN 3: CATHODE (SECTION NO. 2)
- PIN 4: HEATER
- PIN 5: HEATER
- PIN 6: PLATE (SECTION NO. 1)
- PIN 7: GRID (SECTION NO. 1)
- PIN 8: CATHODE (SECTION NO. 1)
- PIN 9: HEATER CENTER-TAP

GENERAL ELECTRIC
Schenectady, N. Y.