DESCRIPTION

The GL-6136 is a miniature sharp cutoff pentode for use as a high-gain radio-frequency or intermediate-frequency amplifier. 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.

GENERAL

<table>
<thead>
<tr>
<th>Electrical Data</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 Volts</td>
<td></td>
</tr>
<tr>
<td>Heater Current</td>
<td>0.3 Ampere</td>
<td></td>
</tr>
<tr>
<td>Direct Intercapacitances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grid—No. 1 to Plate, maximum</td>
<td>0.0035</td>
<td>0.0035 uuf</td>
</tr>
<tr>
<td>Input</td>
<td>6.5</td>
<td>6.0 uuf</td>
</tr>
<tr>
<td>Output</td>
<td>5.5</td>
<td>5.0 uuf</td>
</tr>
</tbody>
</table>

Mechanical Data

- Mounting Position—Any
- Envelope—T-5½ Glass
- Base—Miniature Button 7-Pin, E7-1

TECHNICAL INFORMATION
MAXIMUM RATINGS

Electrical—Design Center Values
Plate Voltage .................................................. 300 Volts
Suppressor Voltage† ........................................... 0 Volt
Screen Supply Voltage ...................................... 300 Volts
Screen Voltage ................................................ 150 Volts
Positive D-c Grid—No. 1 Voltage ......................... 0 Volt
Plate Dissipation ............................................. 3.0 Watts
Screen Dissipation .......................................... 0.65 Watt
Heater-Cathode Voltage .................................. 90 Volts
Mechanical
Peak Impact Acceleration in Any Direction ............ 600 G

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier
Plate Voltage .................................................. 100 250 Volts
Suppressor Voltage† ........................................... 0 0 Volt
Screen Voltage ................................................ 100 150 Volts
Cathode Bias Resistor ...................................... 150 68 Ohms
Plate Resistance, approximate ......................... 0.5 1.0 Megohm
Transconductance ........................................... 3900 5200 Micromhos
Plate Current .................................................. 5.0 10.6 Milliamperes
Screen Current ............................................... 2.1 4.3 Milliamperes
Grid—No. 1 Voltage, approximate for \( I_g = 10 \) Microamperes ............................................. \(-4.2\) \(-6.5\) Volts
† With external shield No. 316 connected to pin 7.
† Pin 2 connected to pin 7 at socket.

GL-6136
AVERAGE CHARACTERISTICS
AVERAGE PLATE CHARACTERISTICS

$E_t = 6.3$ Volts

SCREEN VOLTAGE = 150 Volts

SUPPRESSOR VOLTAGE = 0 Volts

AVERAGE CHARACTERISTICS

$E_t = 6.3$ Volts

PLATE VOLTAGE = 250 Volts

SUPPRESSOR VOLTAGE = 0 Volts

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OUTLINE
GL-6136

MINIATURE BUTTON 7-PIN BASE NO. E7-1

BASING DIAGRAM

PIN 1: GRID NO. 1
PIN 2: GRID NO. 3 AND INTERNAL SHIELD
PIN 3: HEATER
PIN 4: HEATER
PIN 5: PLATE
PIN 6: GRID NO. 2 (SCREEN)
PIN 7: CATHODE

Tube Department

GENERAL ELECTRIC
Schenectady, N. Y.