**GENERAL DESCRIPTION**

Principal Application: The type 6H6 is a twin-diode with individual cathodes brought out to separate base pins. It is designed for service as a diode detector, automatic volume control rectifier, or as a low current power rectifier.

- **Cathode:** Coated Unipotential
- **Heater Voltage (A-C or D-C):** 6.3 Volts
- **Heater Current:** 0.3 Ampere
- **Envelope:** MT-8 Metal Shell
- **Base:** 57-22 Small Wafer Octal 7-Pin Phenolic
- **Mounting Position:** Any
- **Direct Interelectrode Capacitances:**
  - Plate No. 1 to Cathode No. 1: 3.0 µuf
  - Plate No. 2 to Cathode No. 2: 3.4 µuf
  - Plate No. 1 to Plate No. 2 (Max): 0.10 µuf

**PHYSICAL DIMENSIONS**

![Physical Dimensions Diagram](Image)

**TERMINAL CONNECTIONS**

- **Pin 1:** Shell and Internal Shield
- **Pin 2:** Heater
- **Pin 3:** Plate Number 2
- **Pin 4:** Cathode Number 2
- **Pin 5:** Plate Number 1
- **Pin 7:** Heater
- **Pin 8:** Cathode Number 1

**BASING DIAGRAM**

![Basing Diagram](Image)

**MAXIMUM RATINGS**

<table>
<thead>
<tr>
<th>Design Center</th>
<th>Absolute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Inverse Voltage</td>
<td>420</td>
</tr>
<tr>
<td>Peak Plate Current per Plate</td>
<td>48</td>
</tr>
<tr>
<td>A-C Plate Voltage per Plate (RMS)</td>
<td>150</td>
</tr>
<tr>
<td>D-C Output Currentper Plate</td>
<td>8.0</td>
</tr>
<tr>
<td>D-C Heater-Cathode Voltage</td>
<td>330</td>
</tr>
</tbody>
</table>

**CHARACTERISTICS AND TYPICAL OPERATION**

**HALF-WAVE RECTIFIER**

- **Heater Voltage (A-C or D-C):** 6.3 Volts
- **A-C Plate Voltage per Plate (RMS):** 117 Volts
- **Minimum Total Effective Plate-Supply Impedance per Plate:** 15 Ohms
- **Maximum D-C Output Current per Plate:** 8 Milliamperes

**VOLTAGE DOUBLER**

- **Half-Wave heater Voltage (A-C or D-C):** 6.3 Volts
- **Full-Wave heater Voltage (A-C or D-C):** 6.3 Volts
- **Minimum Total Effective Plate-Supply Impedance per Plate:** 30 Ohms
- **Maximum D-C Output Current per Plate:** 8 Milliamperes

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**GENERAL ELECTRIC**
With shell and internal shield and heater connected to cathode of unit under test.

** With shell and internal shield, heater and cathodes connected to ground.

When operated as a half-wave rectifier the two units may be used separately or in parallel.

When filter condensers larger than 40 microfarads are used it may be necessary to add additional plate-supply impedance to limit the peak plate current to the rated maximum.

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**AVERAGE PLATE CHARACTERISTICS**

- D-C PLATE VOLTAGE IN VOLTS
- PLATE CURRENT IN MILLIAMPERES

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**OPERATION CHARACTERISTICS**

HALF-WAVE EACH SECTION

- D-C VOLTS DEVELOPED BY DIODE
- RECTIFIED CURRENT IN MICROAMPERES

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Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.