The 6X5WGT is a heater-cathode type, high-vacuum double diode designed for use as a full-wave power rectifier in equipment of moderate current requirements. It is designed for dependable operation under conditions of shock and vibration usually found in mobile and aircraft applications.

**MECHANICAL DATA**
- **ENVELOPE:** T-9 Glass
- **BASE:** Intermediate or Short Intermediate Shell Octal 6+ Pin
- **TERMINAL CONNECTIONS:**
  - Pin 1: No Connection
  - Pin 2: Heater
  - Pin 3: Plate #2
  - Pin 5: Plate #1
  - Pin 7: Heater
  - Pin 8: Cathode
- **MOUNTING POSITION:** Any

**ELECTRICAL DATA**

**HEATER CHARACTERISTICS:**
- Heater Voltage (ac or dc)
- Heater Current
- Heater-Cathode Voltage

**DESIGN CENTER MAXIMUM RATINGS:**
- Peak Inverse Plate Voltage
- Peak Plate Current per Plate
- DC Output Current
- 1250 volts
- 210 ma.
- 70 ma.

**CHARACTERISTICS AND TYPICAL OPERATION - FULL-WAVE RECTIFIER:**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Plate Voltage, per Plate (RMS)</td>
<td>450</td>
</tr>
<tr>
<td>Min. Total Effective Plate Supply Impedance, per Plate</td>
<td></td>
</tr>
<tr>
<td>Filter Input Condenser</td>
<td>8</td>
</tr>
<tr>
<td>Filter Input Choke</td>
<td>70</td>
</tr>
<tr>
<td>DC Output Current</td>
<td>385</td>
</tr>
<tr>
<td>DC Voltage at Input to Filter (approx.)</td>
<td>380</td>
</tr>
<tr>
<td>At 35 ma. load.</td>
<td>5</td>
</tr>
<tr>
<td>Regulation</td>
<td>405</td>
</tr>
<tr>
<td>Tube Voltage Drop at 70 ma. per plate</td>
<td>370</td>
</tr>
</tbody>
</table>

**AVERAGE PLATE CHARACTERISTICS**

Conditions:
- $E_f = 6.3$ volts

**TENTATIVE DATA**

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RAYTHEON MANUFACTURING COMPANY

January 3, 1955

NEWTON 58, MASS.

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OPERATION CHARACTERISTICS

Conditions:
- \( E_f = 6.3 \) volts
- Choke \( L \) input to filter: \( L = 8 \) henries (min.)
- Condenser \( C \) input to filter: \( C = 4 \) uf
- Total effect plate-supply impedance per plate = 15 ohms
- 325 volts RMS per plate

DC Output Voltage at Input to Filter

DC Load Current - Ma.

Raytheon Manufacturing Company

January 3, 1955