Full-Wave Vacuum Rectifier

**GENERAL DATA**

**Electrical:**
- Filament, Coated:
  - Voltage (AC or DC) .......... 5 ± 10% volts
  - Current at 5 volts ........... 3 amp

**Mechanical:**
- Operating Position: ..........
  - Vertical, base down or up, or
  - Horizontal with pins 2 and 4 in vertical plane
- Maximum Overall Length .......... 4-5/8"
- Maximum Seated Length .......... 4-1/16"
- Diameter .......................... 1.438" to 1.562"
- Bulb .............................. T12
- Base .............................. Short Medium-Shelf Octal 8-Pin with External Barriers
  - Style B (JEDEC Group 1, No.B8-118) or
  - Style A (JEDEC Group 1, No.B8-110), or
  - Short Medium-Shelf Octal 5-Pin with External Barriers,
  - Style B, Arrangement 1 (JEDEC Group 1, No.BS-121)
  - Basing Designation for BOTTOM VIEW ........... 5T

Pin 1 - No Connection
Pin 2 - Filament
Pin 3* - Same as Pin 1
Pin 4 - Plate No. 2
Pin 5 - Same as Pin 1
Pin 6 - Plate No. 1
Pin 7 - Same as Pin 1
Pin 8 - Filament

**FULL-WAVE RECTIFIER**

**Maximum Ratings, Design-Maximum Values:**
- For power-supply frequencies of 25 to 1000 cps
- PEAK INVERSE PLATE VOLTAGE .......... 1550 max. volts
- AC PLATE SUPPLY VOLTAGE PER PLATE
  - (RMS, without load) ........... 550 max. volts
- STEADY-STATE PEAK PLATE CURRENT PER PLATE ........ 1.4 max. amp
- TRANSIENT PEAK PLATE CURRENT PER PLATE ........ 6.6 max. amp
- DC OUTPUT CURRENT with capacitor-input filter for ac plate supply volts (RMS, per plate, without load) = 470. ....... 415 max. ma

**Typical Operation:**

<table>
<thead>
<tr>
<th>With capacitor-input filter</th>
<th>With choke-input filter</th>
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</thead>
<tbody>
<tr>
<td>AC Plate-to-Plate Supply Voltage</td>
<td></td>
</tr>
<tr>
<td>(RMS, without load) ........ 600</td>
<td>850</td>
</tr>
<tr>
<td>(RMS, without load) ........ 1000</td>
<td></td>
</tr>
<tr>
<td>Filter-Input Capacitor* ....... 40</td>
<td>40</td>
</tr>
<tr>
<td>Filter-Input Choke ............ -</td>
<td>-</td>
</tr>
<tr>
<td>- henrys **</td>
<td>10 **</td>
</tr>
</tbody>
</table>
Total Effective Plate Supply Impedance

<table>
<thead>
<tr>
<th>Per Plate</th>
<th>20</th>
<th>50</th>
<th>–</th>
<th>ohms</th>
</tr>
</thead>
</table>

DC Output Voltage at
input to filter

| 300 | 440 | 390 | volts |

DC Output Current

| 380 | 350 | 350 | ma    |

**Characteristics:**

Tube-Voltage Drop for plate ma. = 350 (Per plate) . . . . . . . . . . . . . . . . . . . 42 volts

a On the 5-pin base, pin 3 as well as pins 5 and 7 is omitted.

b When capacitance values higher than 40 μF are used, the effective plate supply impedance should be increased so that the maximum peak-plate-current rating is not exceeded.