RECTIFIER

HALF-WAVE

The GL-6930 is a half-wave, mercury-vapor rectifier tube for use in industrial power-rectifier applications that require 250 volts d-c.

TECHNICAL INFORMATION

<table>
<thead>
<tr>
<th>General</th>
<th>Minimum</th>
<th>Bogy</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathode—Filamentary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filament Voltage</td>
<td>—</td>
<td>2.5</td>
<td>—</td>
</tr>
<tr>
<td>Filament Current at 2.5 Volts</td>
<td>16</td>
<td>—</td>
<td>20 Amperes</td>
</tr>
<tr>
<td>Heating Time</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Arc Drop at 20 Peak Amperes</td>
<td>—</td>
<td>9</td>
<td>—</td>
</tr>
<tr>
<td>Filament Starting Voltage</td>
<td>—</td>
<td>20</td>
<td>—</td>
</tr>
</tbody>
</table>

from JETEC release #1835, Feb. 4, 1957
TECHNICAL INFORMATION (Cont'd)

Mechanical
Mounting Position—Vertical, Base Down
Equilibrium Condensed-Mercury Temperature
  Rise Above Ambient
    No Load ................................................................. 30 C
    Full Load ............................................................... 40 C
Net Weight, approximate ............................................. 6 Ounces

MAXIMUM RATINGS, Absolute Values

Maximum Peak Anode Voltage
  Inverse ................................................................. 1000 Volts

Maximum Cathode Current
  Peak ................................................................. 77 Amperes
  Average .............................................................. 6.4 Amperes
  Maximum Averaging Time ........................................... 20 Seconds
  Fault ................................................................. 770 Amperes
  Maximum Duration ................................................... 0.1 Seconds
Condensed-Mercury Temperature Limits ................................ +35 to +100 C
Maximum Frequency .................................................. 150 Cycles per Second

* Most satisfactory performance and life will result with quadrature filament operation, i.e., with the filament voltage 90 degrees out of phase with the anode voltage. When quadrature operation is used the voltage on the filament and cathode terminal should be crossing zero from positive toward negative when the anode voltage is at the peak of the positive half cycle.
  In three-phase systems each tube should be connected so that its anode and filament voltages approximate as nearly as possible the quadrature phasing, i.e., filament voltage 90 plus or minus 30 degrees out of phase with the anode voltage.
  When quadrature operation is not practicable, the filament and cathode terminal should be negative when the anode is positive.
  The anode and grid-circuit returns should be made to the filament and cathode terminal. However, they can be made to the center tap of the filament transformer.