THYRATRON TYPE WL-7269

The WL-7269 is a three-electrode mercury-vapor thyatron with negative control characteristics. The tube is designed for rectifier and industrial control service.

ELECTRICAL:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min.</th>
<th>Bogo</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filament Voltage</td>
<td>4.75</td>
<td>5.00</td>
<td>5.25</td>
</tr>
<tr>
<td>Filament Current at Bogo Voltage</td>
<td>4.50</td>
<td>5.00</td>
<td>5.50</td>
</tr>
<tr>
<td>Cathode Heating Time*</td>
<td>300</td>
<td>-</td>
<td>Sec.</td>
</tr>
<tr>
<td>Interelectrode Capacitance:</td>
<td>-</td>
<td>10</td>
<td>uuf</td>
</tr>
<tr>
<td>Anode to Grid</td>
<td>-</td>
<td>-</td>
<td>1000</td>
</tr>
<tr>
<td>Detonation Time, approx.</td>
<td>1000</td>
<td>-</td>
<td>usec</td>
</tr>
<tr>
<td>Ionization Time, approx.</td>
<td>10</td>
<td>-</td>
<td>usec</td>
</tr>
<tr>
<td>Anode Voltage Drop</td>
<td>15</td>
<td>-</td>
<td>Volts</td>
</tr>
</tbody>
</table>

MAXIMUM RATINGS:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Absolute Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Peak Anode Voltage:</td>
<td></td>
</tr>
<tr>
<td>Forward (see temperature range)</td>
<td>15000</td>
</tr>
<tr>
<td>Inverse (see temperature range)</td>
<td>15000</td>
</tr>
<tr>
<td>Maximum Cathode Current:</td>
<td></td>
</tr>
<tr>
<td>Peak</td>
<td>12.0</td>
</tr>
<tr>
<td>Average</td>
<td>3.2</td>
</tr>
<tr>
<td>Surge (max. duration 0.1 second)</td>
<td>50</td>
</tr>
<tr>
<td>Max. Average Time§</td>
<td>1.0</td>
</tr>
<tr>
<td>Maximum Negative Control Grid Voltage:</td>
<td>-500</td>
</tr>
<tr>
<td>Before Conduction</td>
<td>-500</td>
</tr>
<tr>
<td>During Conduction</td>
<td>-10</td>
</tr>
<tr>
<td>Maximum Positive Control Grid Voltage:</td>
<td>10</td>
</tr>
<tr>
<td>Anode Negative</td>
<td>10</td>
</tr>
<tr>
<td>Maximum Positive Control Grid Current:</td>
<td></td>
</tr>
<tr>
<td>Peak</td>
<td>1.0</td>
</tr>
<tr>
<td>Average</td>
<td>0.1</td>
</tr>
<tr>
<td>Maximum Average Time§</td>
<td>1.0</td>
</tr>
<tr>
<td>Condensed-Mercury Temperature Limits</td>
<td></td>
</tr>
<tr>
<td>Frequency Range</td>
<td>25-55</td>
</tr>
<tr>
<td>Equilibrium Condensed-Mercury Temperature Rise Above Ambient:</td>
<td>9°C</td>
</tr>
</tbody>
</table>

* The minimum heating time refers only to the cathode. Sufficient additional time must be allowed, during cold-weather periods, to permit the condensed-mercury temperature to rise to the minimum condensed-mercury temperature limit.

△ Forced-air cooling will be required in many applications to maintain the condensed-mercury temperature within the specified condensed-mercury temperature limits.

■ The optimum condensed-mercury temperature limits for 2000-volt operation are 35-45°C. For 15000-volt operation the optimum limits are 35-50°C.

§ One period of the supply frequency.