THE VICTOREEN INSTRUMENT CO. 5806 HOUGH AVE. CLEVELAND, OHIO

MAY 1950  DATA SHEET 21  TENTATIVE

1B102 THYRODE

The 1B102 is a mica-window beta counter tube designed to meet both laboratory and field requirements.

Photosensitivity and the effects of static charges on the window have been practically eliminated by the use of a halogen quenching gas.

The 1B102 Thyrode has been equipped with a RNA medium 4-pin tube base to facilitate mounting in laboratory and field equipment.

Resistance to vibration and shock is much greater than that of the 1B67.

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold Voltage*</td>
<td>825 Volts</td>
</tr>
<tr>
<td>Plateau Length*</td>
<td>150 Volts</td>
</tr>
<tr>
<td>Plateau Slope*</td>
<td>10 %/100 Volts</td>
</tr>
<tr>
<td>($V_0 = 800$ To 1000 V)</td>
<td></td>
</tr>
<tr>
<td>Recovery Time</td>
<td>200 µsec</td>
</tr>
<tr>
<td>Background</td>
<td>40 c/m</td>
</tr>
<tr>
<td>($V_0 = 900$ V)</td>
<td></td>
</tr>
<tr>
<td>Life</td>
<td>Unlimited by use</td>
</tr>
<tr>
<td>(At 6000 c/m, $V_0 = 900$ V)</td>
<td></td>
</tr>
<tr>
<td>Active Length</td>
<td>1.7 inches</td>
</tr>
<tr>
<td>Window (Mica)</td>
<td>2 mg/cm²</td>
</tr>
<tr>
<td>Electrode Capacitance</td>
<td>2.5 µF</td>
</tr>
</tbody>
</table>

*New Tubes

RATINGS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage</td>
<td>(Min.) 850 Volts (Max.) 950 Volts</td>
</tr>
<tr>
<td>(Min.)</td>
<td>950 Volts</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>(Min.) -55 °C (Max.) +70 °C</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>(Max.) 100 %</td>
</tr>
</tbody>
</table>

TUBE CHARACTERISTICS