JOINT ELECTRON TUBE ENGINEERING COUNCIL

ELECTRON TUBE TYPE 8514/GV5A-1000

The 8514 is a two electrode gas filled cold cathode tube primarily for use in voltage regulator applications operating in the corona mode.

**Maximum Ratings, Absolute Values**

- Maximum d.c. Cathode Current - peak pulse: 800 ua
- Minimum d.c. Cathode Current: 10 ua
- Ambient Temperature Limits: -65° to +125 °C
- and/or Bulb Temperature Limits

**Electrical Data Throughout Life**

<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>Bogey</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Voltage Drop at 100 ua</td>
<td>975</td>
<td>1000</td>
<td>1025 Volts</td>
</tr>
<tr>
<td>Anode Breakdown Voltage (1) in Darkness</td>
<td></td>
<td></td>
<td>1200 Volts</td>
</tr>
<tr>
<td>(2) in Light</td>
<td></td>
<td></td>
<td>1200 Volts</td>
</tr>
<tr>
<td>Regulation 10 to 650 ua</td>
<td></td>
<td></td>
<td>20 Volts</td>
</tr>
<tr>
<td>Temperature Coefficient of Voltage Drop (Note 3)</td>
<td>80</td>
<td></td>
<td>20 mV/°C</td>
</tr>
<tr>
<td>-65 to +125°C Ambient</td>
<td></td>
<td></td>
<td>10 Volts</td>
</tr>
<tr>
<td>Repeatability Note 1 &amp; 2</td>
<td></td>
<td></td>
<td>10 Volts</td>
</tr>
</tbody>
</table>

**Mechanical Data**

- Mounting Position, any: Bulb T 5½
- Net Weight, Maximum, .5 oz.: Base E7-1
- Top Cap C1-3

**Outline**

![Outline Diagram](image)

**Basing**

- Pin 1 2 3 4 5 6 7 Top Cap
- K K K K K K K Anode

**Note 1:** Tube operated at 100 ua of current at 250°C ambient temperature.

**Note 2:** Maximum change of Tube Voltage Drop, as measured before and after a seven-day non-operating hold period.

**Note 3:** Tube operated at 100 ua.

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sponsor: Victoreen Instrument Co.