**Radio Manufacturers Association**

**Engineering Department**

**Counter Tubes**

**IB83, IB84**

**RMA Release No. 660**

May 5, 1948

**Sponsor:** Tracerlab, Inc.

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### General Characteristics

(a) Beta - Gamma

(b) Self-Quenching

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### Electrical

<table>
<thead>
<tr>
<th>Description</th>
<th>IB83</th>
<th>IB84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geiger Voltage Threshold</td>
<td>1300 (av.) volts, d.c.</td>
<td>1300 (av.) volts, d.c.</td>
</tr>
<tr>
<td>Plateau Length</td>
<td>&gt; 300</td>
<td>&gt; 300</td>
</tr>
<tr>
<td>Relative Plateau Slope</td>
<td>&lt; 5%</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>1400 (av.) volts, d.c.</td>
<td>1400 (av.) volts, d.c.</td>
</tr>
<tr>
<td>Recovery Time</td>
<td>&gt; 300</td>
<td>&gt; 300</td>
</tr>
<tr>
<td>Efficiency</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Electrode Capacitance</td>
<td>3 uuf</td>
<td>3 uuf</td>
</tr>
<tr>
<td>2. Output across standard input circuit at operating voltage.</td>
<td>&gt; 700 millivolts</td>
<td>&gt; 700 millivolts</td>
</tr>
</tbody>
</table>

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### Mechanical

See Outline Drawing

### Fuse Connections

- 2AC
- Window Thickness: 700-1...3 – 4 mg. per sq. cm.
- 2AC
- Window Thickness: 1 – 2 mg. per sq. cm.

### Maximum Ratings

- Ambient Temperature Range: -5 to +55 degrees C
- 5 to +55 degrees C

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(1) Surrounded 2" lead at sea level in Boston

(2) See Attached Circuit Drawing

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![Circuit Diagram](image)