Features
■ Size: 8 mm diameter, 8 mm length
■ Axial leaded device
■ High voltage range up to 6 kV
■ High insulation resistance
■ RoHS compliant*
■ UL Recognized

Applications
■ Industrial equipment/electronics
■ Telecommunications electronics
■ Consumer electronics

2095 Series High Voltage 2-Electrode Gas Discharge Tube

Characteristics
Test Methods per ITU-T (CCITT) K.12 and IEC 61643-311.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Model No.</th>
<th>2095-80</th>
<th>2095-100</th>
<th>2095-140</th>
<th>2095-160</th>
<th>2095-200</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Sparkover ±20 % @ 100 V/s</td>
<td></td>
<td>800 V</td>
<td>1000 V</td>
<td>1400 V</td>
<td>1600 V</td>
<td>2000 V</td>
</tr>
<tr>
<td>Impulse Sparkover (1)</td>
<td></td>
<td>&lt;1100 V</td>
<td>&lt;1300 V</td>
<td>&lt;2100 V</td>
<td>&lt;2300 V</td>
<td>&lt;2700 V</td>
</tr>
<tr>
<td>100 V/μs</td>
<td></td>
<td>&lt;1200 V</td>
<td>&lt;1400 V</td>
<td>&lt;2200 V</td>
<td>&lt;2400 V</td>
<td>&lt;2800 V</td>
</tr>
<tr>
<td>1000 V/μs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Model No.</th>
<th>2095-250</th>
<th>2095-270</th>
<th>2095-300</th>
<th>2095-350</th>
<th>2095-400</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Sparkover ±20 % @ 100 V/s</td>
<td></td>
<td>2500 V</td>
<td>2700 V</td>
<td>3000 V</td>
<td>3500 V</td>
<td>4000 V</td>
</tr>
<tr>
<td>Impulse Sparkover (1)</td>
<td></td>
<td>&lt;3500 V</td>
<td>&lt;3600 V</td>
<td>&lt;4100 V</td>
<td>&lt;4900 V</td>
<td>&lt;5300 V</td>
</tr>
<tr>
<td>100 V/μs</td>
<td></td>
<td>&lt;3600 V</td>
<td>&lt;3800 V</td>
<td>&lt;4200 V</td>
<td>&lt;5000 V</td>
<td>&lt;5500 V</td>
</tr>
<tr>
<td>1000 V/μs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Model No.</th>
<th>2095-450</th>
<th>2095-500</th>
<th>2095-600</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Sparkover ±20 % @ 100 V/s</td>
<td></td>
<td>4500 V</td>
<td>5000 V</td>
<td>6000 V</td>
</tr>
<tr>
<td>Impulse Sparkover (1)</td>
<td></td>
<td>&lt;5800 V</td>
<td>&lt;6000 V</td>
<td>&lt;7000 V</td>
</tr>
<tr>
<td>100 V/μs</td>
<td></td>
<td>&lt;6000 V</td>
<td>&lt;6400 V</td>
<td>&lt;7800 V</td>
</tr>
<tr>
<td>1000 V/μs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Impulse Sparkover voltage is defined as typical values of distribution.

Insulation Resistance (IR) (2) ............. 250/500/1000 Vdc ................. > 1 GΩ
Glow Voltage .................................. 10 mA .................................. ~ 60 V
Arc Voltage .................................... 1 A ..................................... ~ 15 V
Capacitance .................................... 1 MHz .............................. < 1.5 pF

Impulse Discharge Current
2095-80 through 2095-250 ...... 8,000 A, 8/20 μs ............................... 1 operation
....................................................... 5,000 A, 8/20 μs ...................... 10 operations
....................................................... 3,000 A, 8/20 μs ...................... 10 operations

Alternating Discharge Current
2095-80 through 2095-250 ...... 2 Arms, 50 Hz, 1 second ............... 1 operation min.
....................................................... 10 Arms, 50 Hz, 9 cycles .......... 1 operation min.
2095-270 through 2095-300 ...... 3 Arms, 50 Hz, 1 second ............... 1 operation min.
....................................................... 5 Arms, 50 Hz, 9 cycles .......... 1 operation min.
2095-350 through 2095-600 ...... 2.5 Arms, 50 Hz, 1 second .......... 1 operation min.
....................................................... 5 Arms, 50 Hz, 9 cycles .......... 1 operation min.

Impulse Life .................................. 100 A, 10/1000 μs ................. 100 operations (3)
Operating Temperature ......................... -30 to +90 °C
Storage Temperature ........................... -40 to +115 °C
Climatic Category (IEC 60068-1) .................. 40 / 90 / 21

Notes:
• UL Recognized component: UL File E313168.
• At delivery AQL 0.65 Level II, DIN ISO 2859.
• (2) DC Breakdown IR Measuring Voltage
   800-1000 V 250 V
   1400-2000 V 500 V
   2500-6000 V 1000 V

(3) Model 2095-270 and 2095-300 meet >300 operations at 100 A, 10/1000 μs.

Additional Information
Click these links for more information:
PRODUCT SELECTOR  TECHNICAL LIBRARY  INVENTORY  SAMPLES  CONTACT

WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.
2095 Series High Voltage 2-Electrode Gas Discharge Tube

Product Dimensions

- **DIA.**
  - 8.0 +0.3/-0.5 (0.315 +0.012/−0.020)
  - 8.0 +0.6/-0.1 (0.315 +0.024/−0.004)
  - 10.0 +0.6/-0.1 (0.394 +0.024/−0.004)

- **MODELS**
  - 2095-500 & 2095-600
  - 2095-80 thru 2095-450
  - 2095-xxx-B
  - 2095-xxx-C

**Models 2095-80 thru 2095-450**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>MM (INCHES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2095-xxx-B</td>
<td>8.8 × 0.05</td>
</tr>
<tr>
<td>2095-xxx-C</td>
<td>10.8 × 0.05</td>
</tr>
</tbody>
</table>

**Packaging Specifications**

Model 2095 ships standard bulk, 100 pcs. per tray; 5 trays per box (500 units). The optional reelpack (-BT1) contains 500 pcs. per reel; 2 reels per box (1K units).

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>MM (INCHES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>330 × 4.0</td>
<td>12.992 × 0.157</td>
</tr>
<tr>
<td>10.0 × 0.5</td>
<td>0.394 × 0.020</td>
</tr>
</tbody>
</table>

**How to Order**

- **Model Number Designator**
  - 2095 - xxx - B T1 LF

- **Voltage (Divided by 10)**
  - 80 = 800 V
  - 100 = 1000 V
  - 120 = 1200 V
  - 140 = 1400 V
  - 160 = 1600 V
  - 200 = 2000 V
  - 220 = 2200 V
  - 250 = 2500 V
  - 300 = 3000 V
  - 400 = 4000 V

- **Leads**
  - B = 0.8 mm (Available only for Models 2095-80 thru 2095-450)
  - C = 1.0 mm (Available only for Models 2095-500 & 2095-600)

- **Packaging**
  - (Blank) = Bulk Packaging (Standard)
  - T1 = Reelpack (Optional)

- **RoHS Compliance**
  - LF = RoHS Compliant Product

**Contact Information**

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  - EMEA: Tel: +36 88 885 877
  - Email: eurocus@bourns.com
  - The Americas: Tel: +1-951 781-5500
  - Email: americus@bourns.com
  - www.bourns.com

**Specifications**

- Specifications are subject to change without notice.
- Users should verify actual device performance in their specific applications.
- The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

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