Features
■ Size: 12.7 mm diameter, 12.7 mm length
■ Long service life
■ High surge current rated
■ Low capacitance and insertion loss
■ Tube with contact terminals available
■ RoHS compliant* versions available
■ UL Recognized

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

Characteristics
Test Methods per ITU-T K.12, IEEE C62.31 and IEC 61643-311 GDT standards.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>2047-09</th>
<th>2047-15</th>
<th>2047-23</th>
<th>2047-35</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Sparkover ±20 % @ 100 V/s (1)</td>
<td>90 V</td>
<td>150 V</td>
<td>230 V</td>
<td>350 V</td>
</tr>
<tr>
<td>Impulse Sparkover (2)</td>
<td>350 / 450 V</td>
<td>350 / 450 V</td>
<td>450 / 500 V</td>
<td>475 / 550 V</td>
</tr>
<tr>
<td>100 V/μs Typical / For 99 % of Values</td>
<td>600 / 650 V</td>
<td>550 / 600 V</td>
<td>600 / 650 V</td>
<td>725 / 800 V</td>
</tr>
<tr>
<td>1000 V/μs Typical / For 99 % of Values</td>
<td>600 / 650 V</td>
<td>550 / 600 V</td>
<td>600 / 650 V</td>
<td>725 / 800 V</td>
</tr>
<tr>
<td>Insulation Resistance (IR)</td>
<td>...50 V / 100 V ... &gt; 10⁹ Ω</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glow Voltage</td>
<td>...10 mA ... ~ 80 V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arc Voltage</td>
<td>...@ 2 A ... ~ 12 V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glow-Arc Transition Current</td>
<td>&lt; 1 A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacitance</td>
<td>...1 MHz ... &lt; 5 pF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impulse Discharge Current</td>
<td>&gt; 10 operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,000 A, 10/350 μs (1)</td>
<td>&gt; 1 operation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8,000 A, 10/350 μs</td>
<td>&gt; 10 operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000 A 10/1000 μs</td>
<td>&gt; 1000 operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternating Discharge Current</td>
<td>&gt; 20 operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 A, 1 sec.</td>
<td>1 operation min.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 A, 1 sec.</td>
<td>1 operation min.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 A, 11 cycles</td>
<td>1 operation min.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating and Storage Temperature</td>
<td>-40 to +90 ºC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climatic Category (IEC 60068-1)</td>
<td>40/90/21</td>
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<tr>
<td>Moisture Sensitivity Level</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESD Classification (Passive Component HBM)</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
• At delivery AQL 0.65, level II DIN ISO 2859.
• UL Recognized component, UL File E153537.
(1) DC Sparkover may exceed ±25 % after discharge, but will continue to protect without venting.
(2) Impulse Sparkover voltage is defined as typical values of distribution.

How to Order
Model Number Designator
Voltage (Divided by 10)
09 = 90 V
15 = 150 V
Contact Terminals
A = None
B = Optional
Packaging
Blank = Bulk Packaging (Standard) - 50 pcs. per box
Plating Option
Blank = Standard Product - Tin/Lead Plating
LF = RoHS Compliant Product - Sn Plating
Ni = RoHS Compliant Product - Nickel Plating

Typical Part Marking

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

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Users should verify actual device performance in their specific applications.
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Applications
- Telecommunications equipment
- Industrial equipment/electronics

2047 Series High Current 2-Electrode Gas Discharge Tube

Product Dimensions

**2047-xx-A**

**2047-xx-B**

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