Bourns offers an 8 x 6 mm Surface Mount (SM) 2-electrode GDT surge protection device. The industry-leading quality and features of Bourns® 2027 Series GDT continue in this new SM version. Compatible with “pick and place” assembly systems, the 2027-SM is ideal for compact applications such as PCBs for telecommunications, commercial and industrial applications.

Characteristics

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

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Sparkover ±15 % (±20 % for Models 2027-07-SM &amp; 2027-09-SM) @ 100 V/s</td>
<td>2027-07-SM</td>
</tr>
<tr>
<td>100 V/μs</td>
<td>75 V</td>
</tr>
<tr>
<td>1000 V/μs</td>
<td>300 V</td>
</tr>
<tr>
<td></td>
<td>500 V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Sparkover ±15 % @ 100 V/s</td>
<td>2027-30-SM</td>
</tr>
<tr>
<td>100 V/μs</td>
<td>300 V</td>
</tr>
<tr>
<td>1000 V/μs</td>
<td>550 V</td>
</tr>
<tr>
<td></td>
<td>800 V</td>
</tr>
</tbody>
</table>

Notes:
- UL recognized component, UL File E153537.
- Model number marking on tube: 27-xxxV.
- Surface Mount (SM) parts may show a temporary increase in DCBD after the solder reflow process. Most devices will recover within 24 hours time. It should be noted that there is no quality defect nor change in protection levels during the temporary change in DCBD.
- Sparkover limits ±20 % after life, IR >10^6 Ω (-25 %, +30 % for Models 2027-07-SM, 2027-09-SM and 2027-60-SM).
- At delivery AQL 0.65 Level II, DIN ISO 2859.
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

*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.

WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov
How to Order

Model Number Designator

Voltage (Divided by 10)
- 07 = 75 V
- 09 = 90 V
- 15 = 150 V
- 20 = 200 V
- 23 = 230 V
- 25 = 250 V
- 30 = 300 V
- 35 = 350 V
- 40 = 400 V
- 42 = 420 V
- 47 = 470 V
- 60 = 600 V

Surface Mount

Packaging Option
- Blank = Bulk Packaging (Standard)
- RP = 24 mm Reelpack (Optional)
- RP2 = 16 mm Reelpack (Optional)
- RP3 = 16 mm Reelpack / Vertical part alignment in tape (Optional)

RoHS Compliant Option
- Blank = Standard Product
- LF = RoHS Compliant Product

Packaging Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Packaging Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bulk (Bag)</td>
</tr>
<tr>
<td>2027-xx-SM</td>
<td>250</td>
</tr>
<tr>
<td>2027-xx-SM-RP</td>
<td></td>
</tr>
<tr>
<td>2027-xx-SM-RP2</td>
<td></td>
</tr>
</tbody>
</table>

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The optional reelpacks (-RP, -RP2, -RP3) are 33 cm in diameter and 3 cm wide.

**-RP**

**-RP2**

**-RP3**

Unless otherwise specified, tolerances in decimals are \( X \pm 0.3, .XX \pm 0.15 \) for lengths in millimeters and \( \pm 1^\circ \) for degrees.
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