Features

- Fast acting
- Balanced
- Stable breakdown throughout life
- Designed to operate with TBU® devices
- RoHS compliant* versions available

Applications

- Telecommunications
- Industrial electronics
- Avionics

2020 T-Series - Fast Acting 3-Electrode Miniature GDT

Characteristics

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

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>2020-15T</th>
<th>2020-23T</th>
<th>2020-42T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial DC Sparkover (100 V/s)</td>
<td>150 V</td>
<td>230 V</td>
<td>420 V</td>
</tr>
<tr>
<td>Typical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum DC Sparkover (100 V/s)</td>
<td>60 V</td>
<td>180 V</td>
<td>360 V</td>
</tr>
<tr>
<td>Throughout Service Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Impulse Sparkover (1) (5 kV/μs) Throughout Service Life</td>
<td>500 V</td>
<td>650 V</td>
<td>850 V</td>
</tr>
</tbody>
</table>

Notes:

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

2. The rated discharge current is the total current equally divided between each line to ground.

3. Surge polarity should be reversed between consecutive surges (+, -, +, -)

4. Applies only to GDT with optional Fail-Short. GDT operates and will survive with Fail-Short activation.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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Product Dimensions (additional lead form configurations available upon request)

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2020 T-Series - Fast Acting 3-Electrode Miniature GDT

How to Order

2020 - xxT - x x F LF

Model Number
Designator
Voltage (Divided by 10)
15 = 150 V
23 = 230 V
42 = 420 V
Leads
A = None/Cassette Applications
C = 1 mm Dia. Leads/Through-hole
Lead Shape
(See Product Dimension Drawings)
Fail-Short Option
Blank = Standard Product
F = With Fail-Short Mechanism
RoHS Compliant Option
Blank = Standard Product
LF = RoHS Compliant Product

Model 2020-xxT ships in standard bulk pack, 100 pcs./tray.

Switch-Grade Fail-Short Device Shorting Curve

ELTGS = Each Line to Ground Simultaneously
NOTE: When using a GDT fail-short device, it is imperative that all components associated and connected to the GDT with failsafe be tested in their respective completely integrated environment (finished product) to ensure desired operation.

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>2020-xxT-A1</td>
<td>250</td>
</tr>
<tr>
<td>2020-xxT-C</td>
<td>100</td>
</tr>
<tr>
<td>2020-xxT-C2</td>
<td>100</td>
</tr>
<tr>
<td>2020-xxT-C3</td>
<td>100</td>
</tr>
<tr>
<td>2020-xxT-C4</td>
<td>100</td>
</tr>
</tbody>
</table>

Typical Part Marking

Applications

<table>
<thead>
<tr>
<th>Port Protection</th>
<th>GDT Device P/N</th>
<th>TBU® Device P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CanBus</td>
<td>2020-23T</td>
<td>TBU-CA065-100-WH</td>
</tr>
<tr>
<td>RS232</td>
<td>2020-23T</td>
<td>TBU-CA065-200-WH</td>
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<tr>
<td>RS422</td>
<td>2020-23T</td>
<td>TBU-CA065-200-WH</td>
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<tr>
<td>RS485</td>
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<td>RS485</td>
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<td>TBU-CA065-200-WH</td>
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<tr>
<td>SDI</td>
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<td>TBU-CA065-100-WH</td>
</tr>
<tr>
<td>VDSL</td>
<td>2020-15T</td>
<td>TBU-CA065-500-WH</td>
</tr>
</tbody>
</table>

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