



## Features

- Fast acting
- Small size
- Stable breakdown throughout life
- Designed to operate with TBU® devices
- RoHS compliant\* versions available
- UL Recognition pending

## Applications

- Telecommunications
- Industrial electronics
- Avionics

## 2031-xxT-SM Series - Miniature 2-Pole Gas Discharge Tube

### Characteristics

Characteristic	Model No.		
	2031-15T	2031-23T	2031-42T
Minimum DC Sparkover (100 V/s) Throughout Service Life	60 V	185 V	360 V
Maximum Impulse Sparkover (5k V 1.2/50 $\mu$ s) Throughout Service Life	500 V	650 V	850 V

Insulation Resistance (IR) .....	50 / 100 V .....	> 10 <sup>9</sup> $\Omega$
Glow Voltage .....	10 mA .....	~ 70 V
Arc Voltage .....	>1 A .....	~ 10 V
Glow-Arc Transition Current .....		< 0.5 A
Capacitance .....	1 MHz .....	< 1 pF
DC Holdover Voltage (Network Applied per ITU-T K.12)		
2031-15T .....	52 V .....	< 150 ms
2031-23T .....	80 V .....	< 150 ms
2031-42T .....	135 V .....	< 150 ms
Service Life .....	8/20 $\mu$ s, 1 kA .....	2 operations
	10/1000 $\mu$ s, 1 kV, 100 A .....	50 operations
	2/10 $\mu$ s, 5 kV, 500 A .....	20 operations
	10/700 $\mu$ s, 6 kV, 150 A .....	10 operations
	8/20 $\mu$ s 250 A, 1.2/50, 500 V (IEC61643-21) .....	150 operations
	600 V rms, 1 A, 0.2 s .....	5 operations

Operating and Storage Temperature,  
Climatic Category (IEC 6068-1) 40 / 90 / 21 .....

#### Notes:

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

- At delivery AQL 0.65 Level II, DIN ISO 2859.

### Applications

Port Protection	GDT Device P/N	TBU® Device P/N
CanBus	2031-23T-SM-RPLF	<a href="#">TBU-CA065-100-WH</a>
RS232	2031-23T-SM-RPLF	<a href="#">TBU-CA065-200-WH</a>
RS422	2031-23T-SM-RPLF	<a href="#">TBU-CA065-200-WH</a>
RS485	2031-23T-SM-RPLF	<a href="#">TBU-CA065-200-WH</a>
RS485	2031-42T-SM-RPLF	<a href="#">TBU-CA085-200-WH</a>
SDI	2031-23T-SM-RPLF	<a href="#">TBU-CA065-100-WH</a>
VDSL	2031-15T-SM-RPLF	<a href="#">TBU-CA050-500-WH</a>

"TBU" is a registered trademark of Bourns, Inc. in the U.S., Taiwan and European Community.

\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.

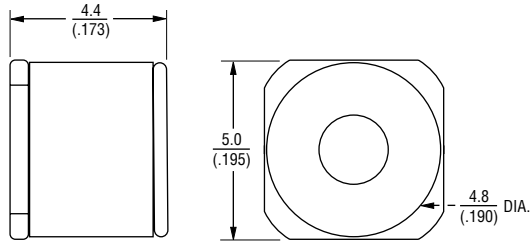
Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

# 2031-xxT-SM Series - Miniature 2-Pole Gas Discharge Tube

**BOURNS®**

## Product Dimensions

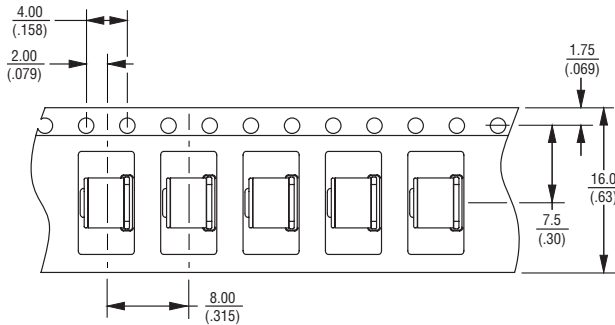


## Packaging Specifications

The Model 2031-xxT-SM ships standard bulk pack, 250 pieces per bag; 1000 pieces per box.

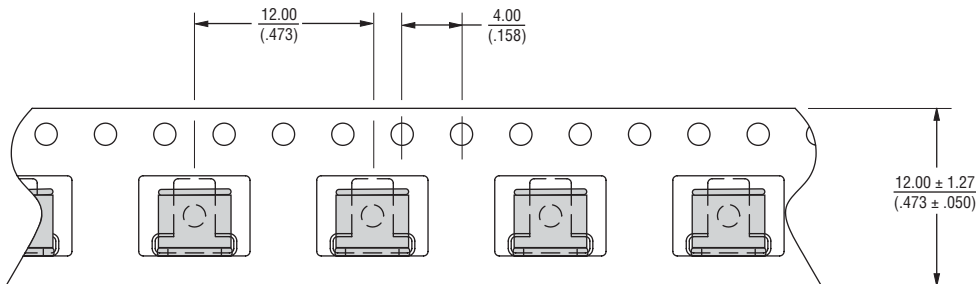
### -RP

The optional -RP reelpack contains 1,500 pieces per reel. Reel is 13 inches in diameter and 3/4 inch wide.



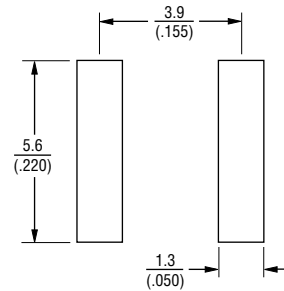
### -RP3

The optional -RP3 reelpack contains 1,000 pieces per reel. Reel is 13 inches in diameter and 11/16 inch wide.



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Recommended Pad Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## How to Order

