



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 µs) Throughout Service Life	500 V	650 V	850 V

Insulation Resistance (IR)	50 / 100 V	> 10 ⁹ Ω
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 µs, 1 kA	2 operations
	10/1000 µs, 1 kV, 100 A	50 operations
	2/10 µs, 5 kV, 500 A	20 operations
	10/700 µs, 6 kV, 150 A	10 operations
	8/20 µs 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	TBU-CA065-100-WH
RS232	2031-23T-SM-RPLF	TBU-CA065-200-WH
RS422	2031-23T-SM-RPLF	TBU-CA065-200-WH
RS485	2031-23T-SM-RPLF	TBU-CA065-200-WH
RS485	2031-42T-SM-RPLF	TBU-CA085-200-WH
SDI	2031-23T-SM-RPLF	TBU-CA065-100-WH
VDSL	2031-15T-SM-RPLF	TBU-CA050-500-WH

"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, 100 pieces per bag.

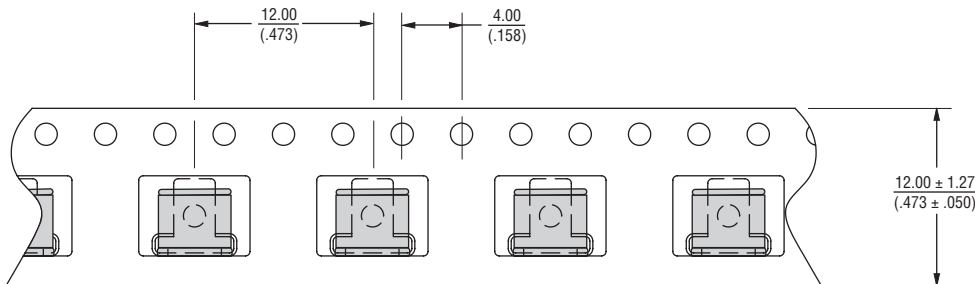
-RP

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.



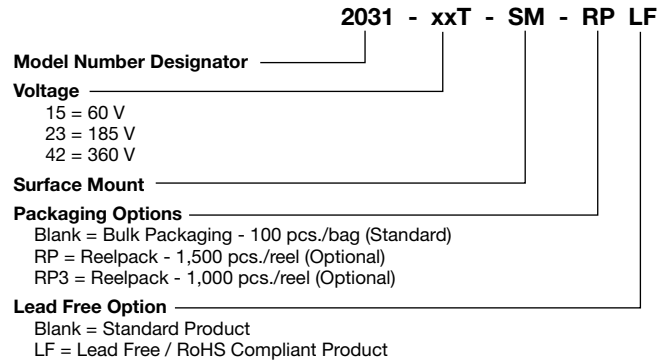
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Recommended Pad Layout



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

How to Order



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[2031-15T-SMLF](#) [2031-23T-SMLF](#) [2031-42T-SMLF](#)