



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832


Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Features

- Size: 5 mm diameter, 7.3 mm length
- Very fast acting
- Small size
- Stable breakdown throughout life
- Designed to operate with TBU® devices
- RoHS compliant* versions available
-  UL Recognized

Applications

- Telecommunications
- Industrial electronics
- Avionics

2030-xxT-SM Series - Fast Acting 3-Electrode Miniature Gas Discharge Tube

Characteristics

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

Characteristic	Model No.	
	2030-23T	2030-42T
Minimum DC Sparkover (100 V/s) Throughout Service Life	185 V	360 V
Maximum Impulse Sparkover ⁽¹⁾ (5 kV/μs) Throughout Service Life	650 V	850 V

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

Insulation Resistance (IR)50 V / 100 V.....	> 10 ¹⁰ Ω
Glow Voltage10 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)	
2030-23T.....80 V.....	< 150 ms
2030-42T.....135 V.....	< 150 ms
Impulse Service Life.....8/20 μs, 4 kA.....	1 operation ⁽²⁾
1.2/50 μs - 500 V.....	150 operations ^{(2) (3)}
10/1000 μs, 1 kV, 100 A.....	25 operations ⁽²⁾
2/10 μs, 6 kV, 500 A.....	10 operations ⁽²⁾
10/700 μs, 6 kV, 150 A.....	5 operations ⁽²⁾
AC Service Life.....600 V, 1 Arms, 0.2 sec.....	5 operations
Operating Temperature Range.....	-40 °C to +90 °C
Storage Temperature Range.....	-55 °C to +90 °C

Notes:

⁽²⁾ The rated discharge current is the total current equally divided between each line to ground and operation(s) are performed in both polarities. The polarity of lightning surge tests should be reversed between consecutive surges.

⁽³⁾ Per IEC 61643-21.

- At delivery AQL 0.65 Level II, DIN ISO 2859.
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

Applications

Port Protection	GDT Device P/N	TBU® Device P/N
CanBus	2030-23T-SM-RPLF	TBU-CA065-100-WH
RS232	2030-23T-SM-RPLF	TBU-CA065-200-WH
RS422	2030-23T-SM-RPLF	TBU-CA065-200-WH
RS485	2030-23T-SM-RPLF	TBU-CA065-200-WH
RS485	2030-42T-SM-RPLF	TBU-CA085-200-WH
SDI	2030-23T-SM-RPLF	TBU-CA065-100-WH

"TBU" is a registered trademark of Bourns, Inc. in the United States and other countries.

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

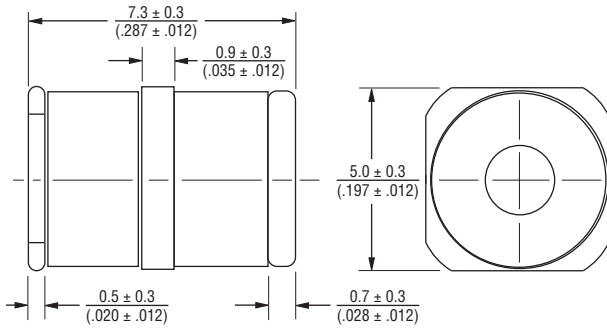
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

2030-xxT-SM Series - Fast Acting 3-Electrode Miniature Gas Discharge Tube

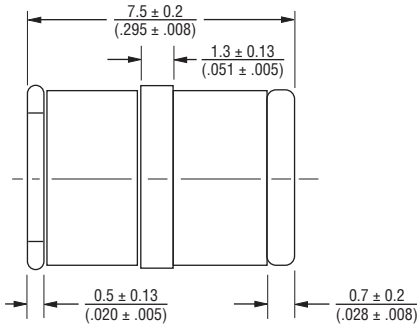


Product Dimensions

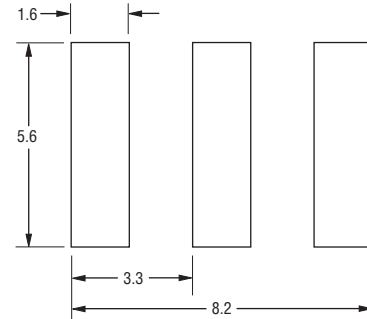
2030-23T-SM



2030-42T-SM



Recommended Pad Layout



DIMENSIONS: MILLIMETERS

How to Order

2030 - xxT - SM - RP LF

Model Number Designator

Voltage

23 = 185 V

42 = 360 V

Surface Mount

Packaging Options

Blank = Bulk Packaging - 250 pcs./bag, 1,000 pcs./box (Standard)

RP = Reelpack - (Optional)

RP2 = Reelpack - (Optional)

RoHS Compliant Option

Blank = Standard Product

LF = RoHS Compliant Product

2030-xxT-SM Series - Fast Acting 3-Electrode Miniature Gas Discharge Tube

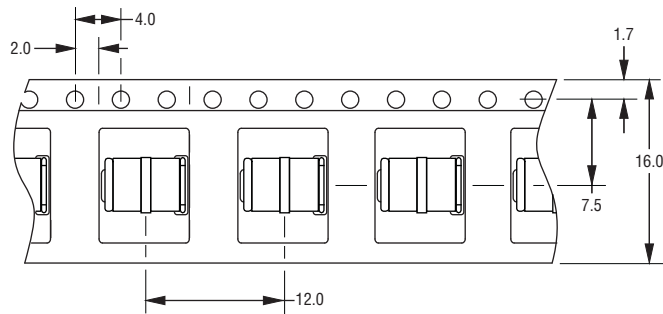


Packaging Specifications

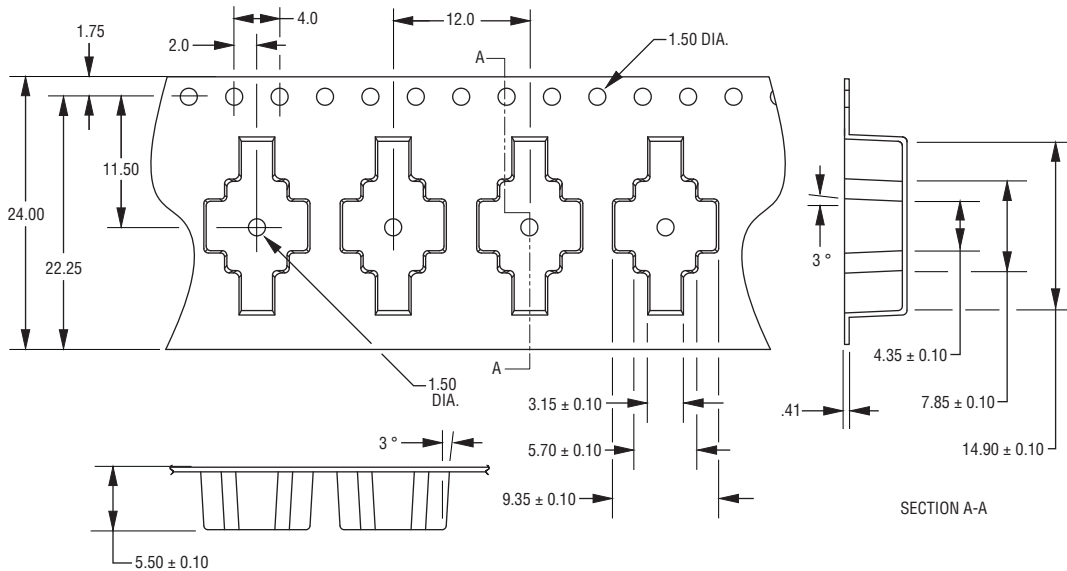
Model	Standard Packaging Quantity			
	Bulk (Bag)	Tray	Box	Reel
2030-xxT-SM	250		1000	
2030-xxT-SM-RP				500
2030-xxT-SM-RP2				500

The optional -RP & -RP2 reels are 330 mm in diameter. The -RP reelpack is 18 mm wide. The -RP2 reelpack is 26 mm wide.

-RP



-RP2



DIMENSIONS: MILLIMETERS

Unless otherwise specified, tolerances in decimals are .X ± 0.3, .XX ± 0.15 for lengths in millimeters and ±1 ° for degrees.

REV. F 08/15

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