



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!



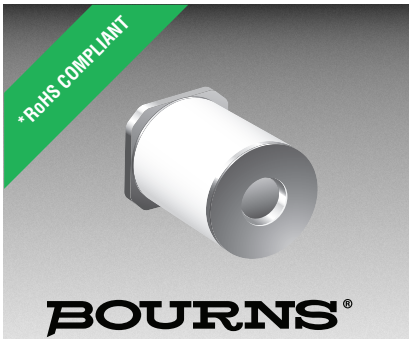
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Features

- Leadless, surface mount for economical assembly
- Compact mini-size
- Low capacitance and insertion loss
- RoHS compliant*
-  UL Recognized

2003 Series Gas Discharge Tube Surge Protector

Bourns offers a low-cost surface mount (SM) 2-electrode GDT surge protection device. The 2003 Series is ideal for broadband protection due to its ultra-low capacitance. The 2003 Series offers superior protection characteristics suitable for telecommunications, commercial and industrial applications.

Characteristics

Test Methods per ITU-T (CCITT) K.12 and IEEE C62.31

Characteristic	Model No.				
	2003-07	2003-09	2003-12	2003-15	2003-20
DC Sparkover $\pm 20\%$ @ 100 V/s	75 V	90 V	120 V	150 V	200 V
Maximum Impulse Breakdown Voltage					
100V/ μ s	600 V	600 V	600 V	600 V	600 V
1000V/ μ s	700 V	700 V	700 V	700 V	700 V
DC Holdover Voltage <150 ms	52 V	52 V	80 V	80 V	135 V

Characteristic	Model No.				
	2003-23	2003-25	2003-35	2003-40	2003-47
DC Sparkover $\pm 20\%$ @ 100 V/s	230 V	250 V	350 V	400 V	470 V
Maximum Impulse Breakdown Voltage					
100V/ μ s	600 V	600 V	600 V	700 V	900 V
1000V/ μ s	700 V	700 V	800 V	800 V	1100 V
DC Holdover Voltage <150 ms	135 V	135 V	135 V	135 V	135 V

Glow Voltage	10 mA.....	~ 70 V
Arc Voltage	1 A.....	~ 10 V
Glow-Arc Transition Current		< 1 A
Maximum Impulse Discharge Current	8/20 μ s, 1 Time	2000 A
	8/20 μ s, 10 Times	1000 A
Impulse Life	8/20 μ s, 100 A.....	300 operations
Alternating Discharge Current	50 Hz, 1 Sec.	1 A
DC Holdover Voltage.....	<150 ms	135 V
Minimum Insulation Resistance.....		1 gigaohm
Maximum Capacitance	1 MHz	0.5 pF
Operating Temperature.....		-40 °C to +90 °C
Moisture Sensitivity Level.....		1
ESD Classification (HBM).....		6

Notes:

- UL Recognized component, UL File E153537.

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*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

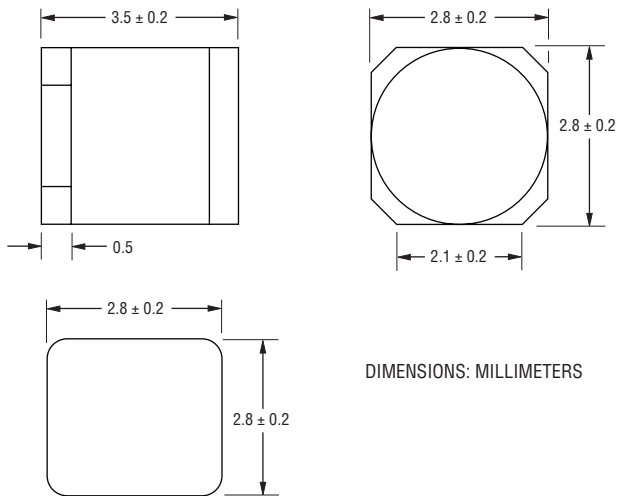
Users should verify actual device performance in their specific applications.

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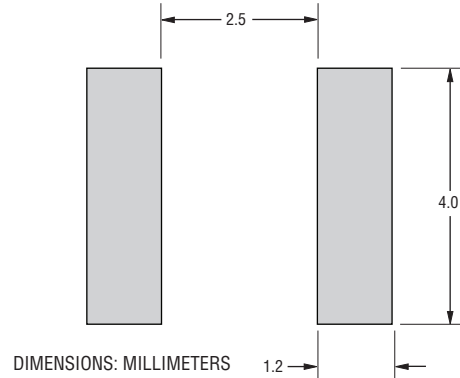
2003 Series Gas Discharge Tube Surge Protector

BOURNS®

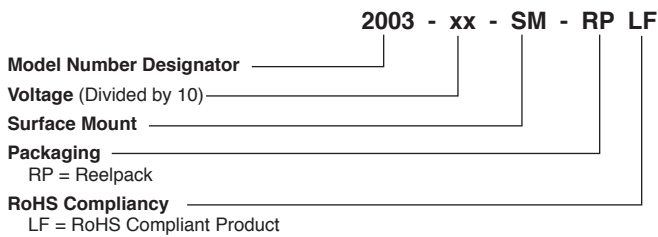
Product Dimensions



Recommended Pad Layout



How to Order

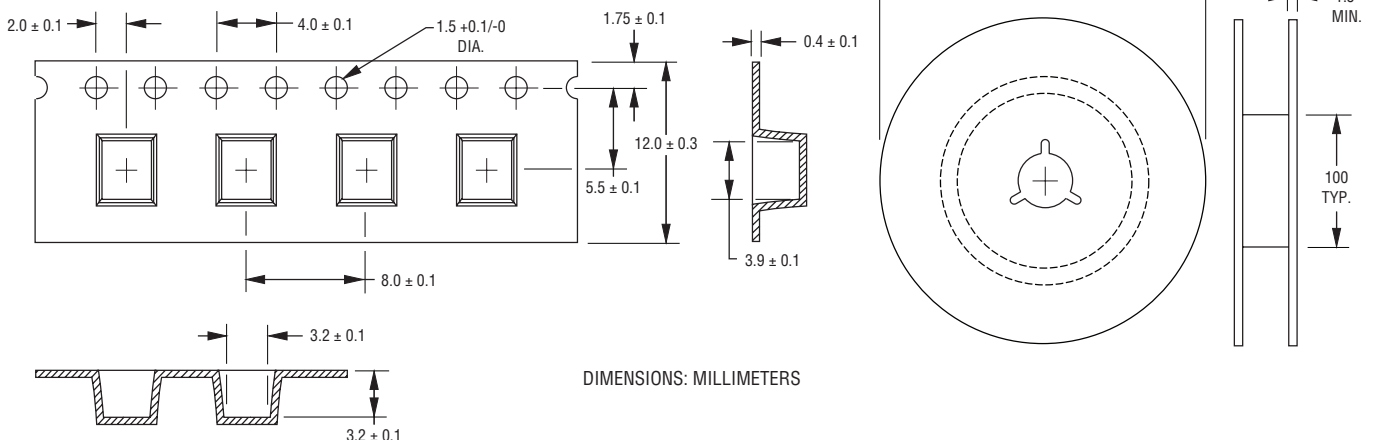


Typical Part Marking

2003-07-SM-RPLF	B07
2003-09-SM-RPLF	B09
2003-12-SM-RPLF	B12
2003-15-SM-RPLF	B15
2003-20-SM-RPLF	B20
2003-23-SM-RPLF	B23
2003-25-SM-RPLF	B25
2003-35-SM-RPLF	B35
2003-40-SM-RPLF	B40
2003-47-SM-RPLF	B47

Packaging Specifications

The Model 2003-xx-SM ships standard reelpack (-RP), 2,500 pieces per reel, 7,500 pieces per box. Reel is 330 mm in diameter and 12 mm wide.



REV. A 10/17

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