



Features

- Mini-compact size: 4 mm diameter, 4.2 mm length
- Surface mount device
- High voltage range
- High insulation resistance
- RoHS compliant*
-  UL Recognized

Applications

- Industrial equipment/electronics
- Telecommunications electronics
- Consumer electronics

2087 Series High Voltage Mini 2-Electrode Gas Discharge Tube

Characteristics

Test Methods per ITU-T (CCITT) K.12 and IEC 61643-311.

Characteristic	Model No.					
	2087-80	2087-100	2087-120	2087-150	2087-180	2087-200
DC Sparkover $\pm 20\%$ @ 100 V/s	800 V	1000 V	1200 V	1500 V	1800 V	2000 V
Impulse Sparkover ⁽¹⁾						
100 V/ μ s	< 1300 V	< 1500 V	< 1700 V	< 2000 V	< 2500 V	< 2700 V
1000 V/ μ s	< 1400 V	< 1600 V	< 1800 V	< 2100 V	< 2600 V	< 2800 V

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

Insulation Resistance (IR) ⁽²⁾	250/500 Vdc	> 1 G Ω
Glow Voltage	10 mA	~ 60 V
Arc Voltage	1 A	~ 15 V
Glow-Arc Transition Current		< 1 A
Capacitance	1 MHz	< 0.5 pF
Impulse Discharge Current	3,000 A, 8/20 μ s	1 operation
	2,000 A, 8/20 μ s	10 operations
Alternating Discharge Current	2 Arms, 50 Hz, 1 second	1 operation min.
	4 Arms, 50 Hz, 9 cycles	1 operation min.
Impulse Life	100 A, 10/1000 μ s	> 100 operations
Operating Temperature		-30 to +85 °C
Storage Temperature		-40 to +115 °C
Climatic Category (IEC 60068-1)		40 / 90 / 21

Notes:

⁽²⁾ Insulation Resistance measured at 500 V for GDTs with >1000 V DCBD.

- UL Recognized component: UL File E313168.
- At delivery AQL 0.65 Level II, DIN ISO 2859.
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

Additional Information

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WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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

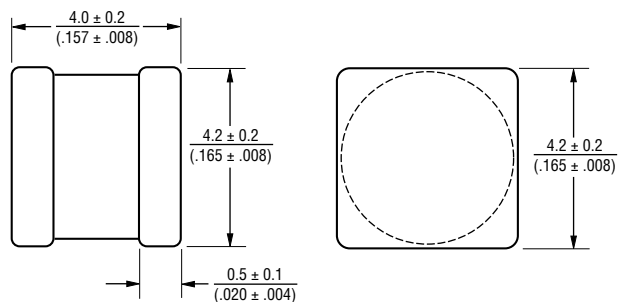
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Users should verify actual device performance in their specific applications.

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2087 Series High Voltage Mini 2-Electrode Gas Discharge Tube Surge Protector **BOURNS®**

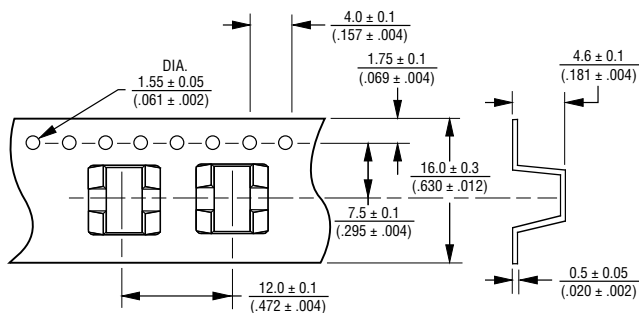
Product Dimensions



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

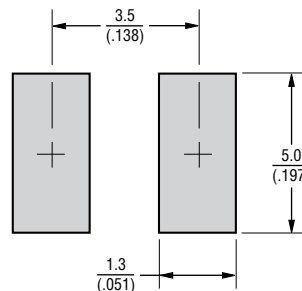
Packaging Specifications

The Model 2087-xxx-SM ships standard reelpack (-RP), 900 pieces per reel, 2,700 pieces per box. Reel is 13 inches in diameter.



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

Recommended Pad Layout



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

How to Order

2087 - xxx - SM - RP LF

Model Number Designator _____

Voltage (Divided by 10) _____

80 = 800 V

100 = 1000 V

120 = 1200 V

150 = 1500 V

180 = 1800 V

200 = 2000 V

Surface Mount _____

Packaging _____

RP = Reelpack (900 pcs./13" reel)

RoHS Compliance _____

LF = RoHS Compliant Product

REV. D 09/19

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