

Features

- Size: 5 mm diameter, 7.2 mm length
- Surface mount design
- Symmetrical breakdown voltage (L-L, L-G)
- Low capacitance and insertion loss
- UL Recognized
- RoHS compliant*

Additional Information

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2052 Series Light Duty 3-Electrode Symmetrical Gas Discharge Tube

Characteristics

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

Characteristic	Model No.							
	2052-23	2052-25	2052-35	2052-40	2052-42	2052-47	2052-60	2052-80
DC Sparkover ±20 % @ 100 V/s (L-L, L-G)	230 V	250 V	350 V	400 V	420 V	470 V	600 V	800 V
Impulse Sparkover (L-L, L-G) (1) 100 V/µs 1000 V/µs	 < 600 V < 700 V	 < 600 V < 700 V	 < 650 V < 750 V	 < 700 V < 800 V	 < 700 V < 800 V	 < 800 V < 900 V	 < 900 V < 1000 V	 < 1150 V < 1400 V

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

Insulation Resistance (IR) (2)	100/250 Vdc	>1 GΩ
Glow Voltage	10 mA	~70 V
Arc Voltage	1 A	~10 V
Glow-Arc Transition Current		<1 A
Maximum Capacitance	1 MHz	<2 pF
Maximum Impulse Discharge Current	10,000 A, 8/20 µs	1 operation
	5,000 A, 8/20 µs	10 operations
Nominal Alternating Discharge Current	5 A, 50 Hz, 1 sec.	1 operation
	20 A, 9 cycles	1 operation
Impulse Life	200 A, 10/1000 µs	150 operations
DC Holdover Voltage (3)	>135 V	<150 ms
Operating Temperature		-30 to +85 °C
Storage Temperature		-40 to +115 °C
Climatic Category (IEC 60068-1)		40/90/21

Notes:

- **UL Recognized component:** Model 2052-80 = UL File E313168; All other models = UL File E153537.
- At delivery AQL 0.65 AQL Level II, DIN ISO 2859.
- The rated discharge current is the total current equally divided between each line to ground (ELTG).
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

(2)

DC Sparkover Voltage	IR Measuring Voltage
145-400 V	100 V
420–800 V	250 V

(3) Network Applied.

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

*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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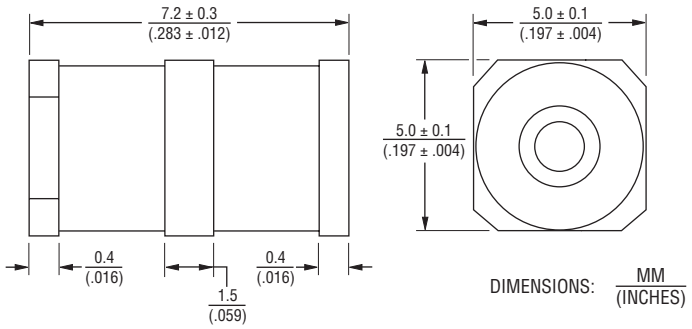
Applications

- Telecommunications equipment
- Industrial equipment/electronics
- Consumer electronics

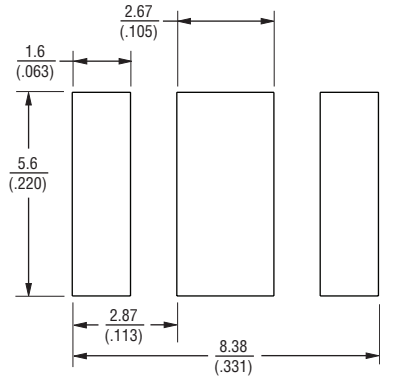
2052 Series Light Duty 3-Electrode Symmetrical Gas Discharge Tube

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Product Dimensions



Recommended Pad Layout



How to Order

2052 - xx - SM - RP LF

Model Number Designator

Voltage (Divided by 10)
- 23 = 230 V
- 25 = 250 V
- 35 = 350 V
- 40 = 400 V
- 42 = 420 V
- 47 = 470 V
- 60 = 600 V
- 80 = 800 V

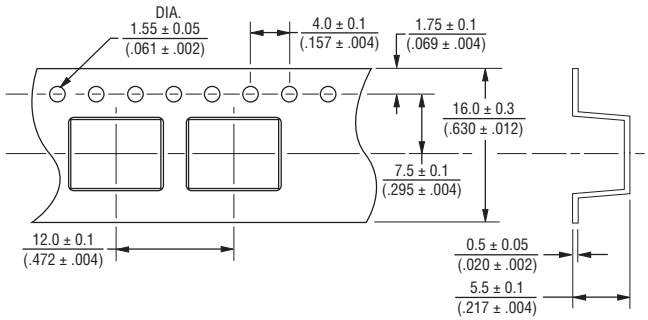
Surface Mount

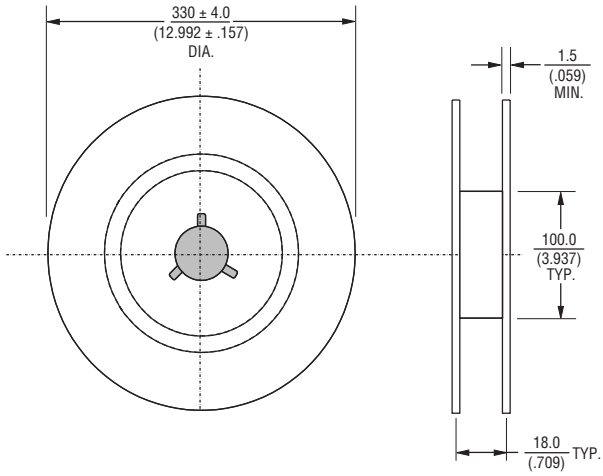
Packaging
- RP = Reel Pack

RoHS Compliancy
- LF = RoHS Compliant Product

Packaging Specifications

Model 2052-xx-SM-RPLF (Reel Pack) contains 900 pieces per reel, 2,700 pieces per box. The reel is 330 mm in diameter and 18 mm wide.





DIMENSIONS: MM / (INCHES)

REV. C 07/25

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