


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*

Applications

- Telecommunications equipment
- Industrial equipment/electronics
- Consumer electronics

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 $\pm 20\%$ @ 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/ μ s	< 600 V	< 600 V	< 650 V	< 700 V	< 700 V	< 800 V	< 900 V	< 1150 V
1000 V/ μ s	< 700 V	< 700 V	< 750 V	< 800 V	< 800 V	< 900 V	< 1000 V	< 1400 V

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

Insulation Resistance (IR) ⁽²⁾	100/250 Vdc	> 1 G Ω
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 μ s	1 operation
	5,000 A, 8/20 μ s	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 μ s	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, 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⁾ <u>DC Sparkover Voltage</u>	<u>IR Measuring Voltage</u>
145-400 V	100 V
420-800 V	250 V

⁽³⁾ Network Applied.

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

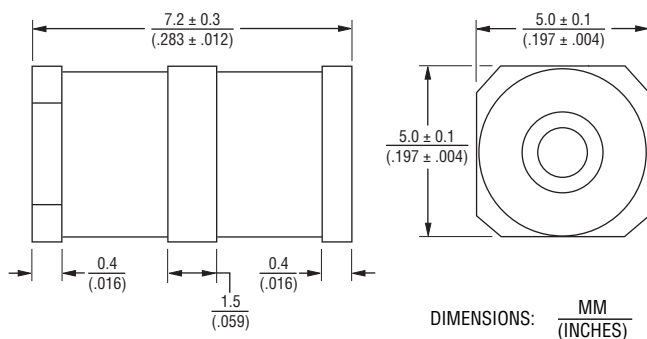
Specifications are subject to change without notice.

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.

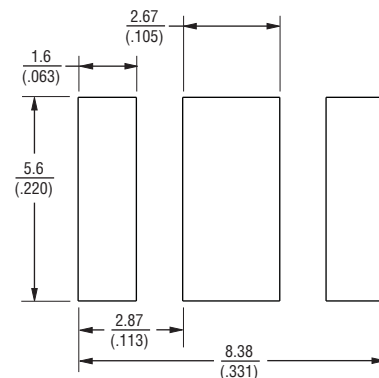
2052 Series Light Duty 3-Electrode Symmetrical Gas Discharge Tube

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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

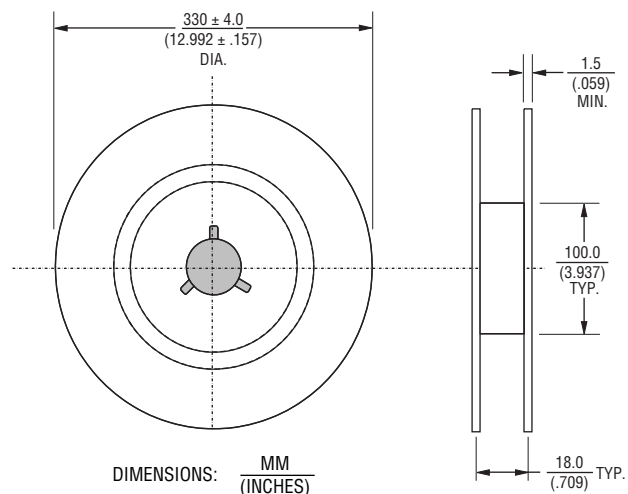
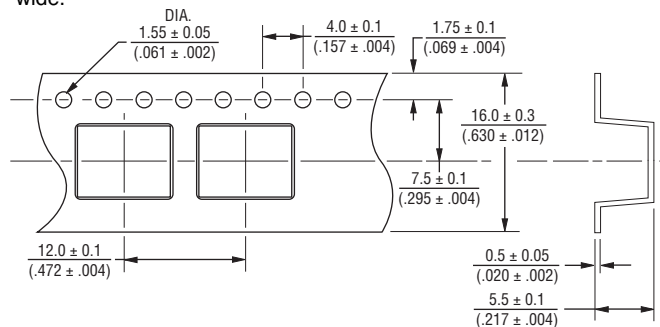
RP = Reel Pack

RoHS Compliance

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.



REV. B 07/15

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