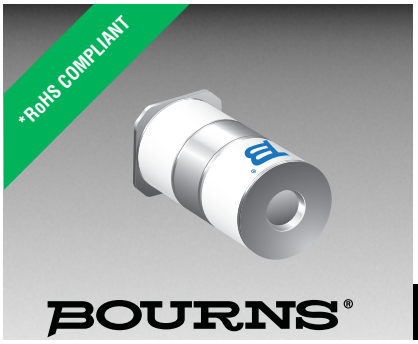


Features

- Surface mount
- Compact mini-size - 5 x 7.2 mm
- Economical
- Low capacitance and insertion loss
- UL Recognized
- RoHS compliant*

2054 Series Surface Mount Gas Discharge Tube Surge Protector

Bourns offers a low-cost, 3-electrode surface mount GDT surge protection device. The 2054 Series is ideal for broadband protection due to its ultra-low capacitance. The 2054 Series offers superior protection characteristics suitable for telecommunications, commercial and industrial applications.

Characteristics

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

Characteristic	Model No.				
	2054-23	2054-30	2054-35	2054-42	2054-47
DC Sparkover ±20 % @ 100 V/s	230 V	300 V	350 V	420 V	470 V
Impulse Sparkover[1]					
100 V/μs	550 V	700 V	700 V	800 V	800 V
1000 V/μs	650 V	800 V	800 V	900 V	900 V

[1] Impulse Sparkover voltage is defined as typical values of distribution.

Insulation Resistance (IR)	100 V	>10^9 Ω
Capacitance	1 MHz	2.0 pF maximum
DC Holdover Voltage [2]	>135 V (80 V for 2054-23)	<150 ms
Impulse Discharge Current	5000 A, 8/20 μs	5 operations
	200 A, 10/1000 μs	100 operations
Alternating Discharge Current	5 Arms, 1 sec., 50 Hz	1 operation minimum
Operating Temperature		-30 to +85 °C
Climatic Category (IEC 60068-1)		40/90/21

Notes:
- **UL Recognized component, UL File E153537.**
- Line to Line voltage is approximately 1.8 to 2 times the stated Line to Ground voltage.
- The rated discharge current is the total current equally divided between each line to ground.
- Surface Mount (SM) parts may show a temporary increase in DCBD after the solder reflow process. Most devices will recover within 24 hours time. It should be noted that there is no quality defect nor change in protection levels during the temporary change in DCBD.
- At delivery AQL 0.65 AQL Level II, DIN ISO 2859
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

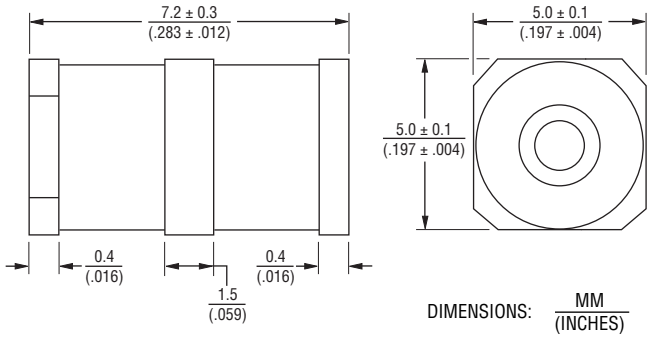
[2] Network applied.

BOURNS®

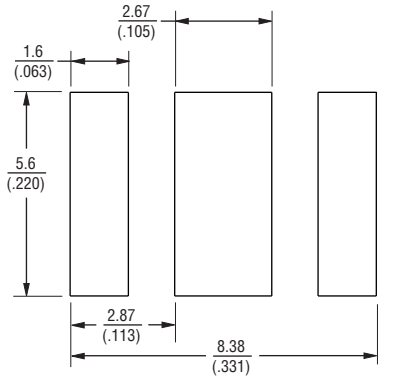
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EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211
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*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.
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.

Product Dimensions



Recommended Pad Layout



How to Order

2054 - xx - SM - RP LF

Model Number Designator

Voltage (Divided by 10)
- 23 = 230 V
- 30 = 300 V
- 35 = 350 V
- 42 = 420 V
- 47 = 470 V

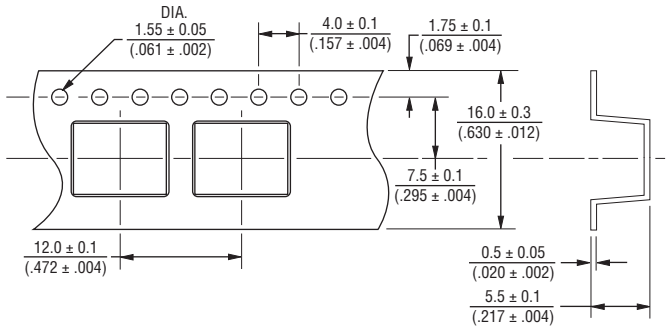
Surface Mount

Packaging
- RP = Reel Pack

RoHS Compliancy
- LF = RoHS Compliant Product

Packaging Specifications

Model 2054-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.



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Users should verify actual device performance in their specific applications.