# ANTREX Electronics

Electronic Components Sourcing Information

## Product Reference Information

| | |
|---|---|
| **Part Number:** | 2054-42-SM-RPLF |
| **Manufacturer:** | Bourns Inc. |
| **Package:** | Tape & Reel (TR) |
| **Availability:** | Please confirm with sales |

**Product Page:**

https://antrexco.com/product/details/bourns-inc/2054-42-sm-rplf.html

**Request a Quote:**

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### Contact Information

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CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

**Note:**

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.


## 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.

### Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

### 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]<br>100 V/μs<br>1000 V/μs | <br>550 V<br>650 V | <br>700 V<br>800 V | <br>700 V<br>800 V | <br>800 V<br>900 V | <br>800 V<br>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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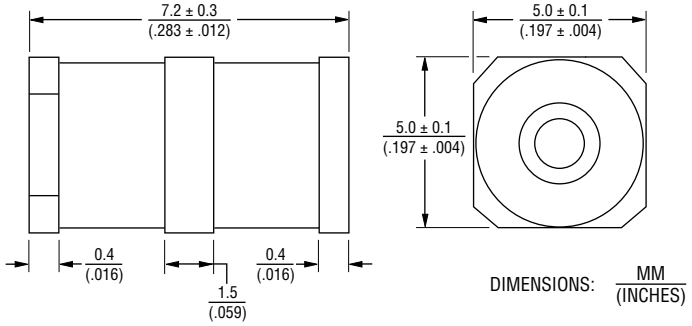
**The Americas:** Tel: +1-951 781-5500 • Email: americus@bourns.com
**www.bourns.com**

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

# 2054 Series Surface Mount Gas Discharge Tube Surge Protector

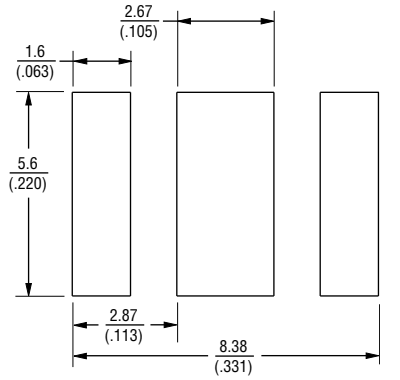
BOURNS®

## Product Dimensions




DIMENSIONS: MM / (INCHES)

## 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

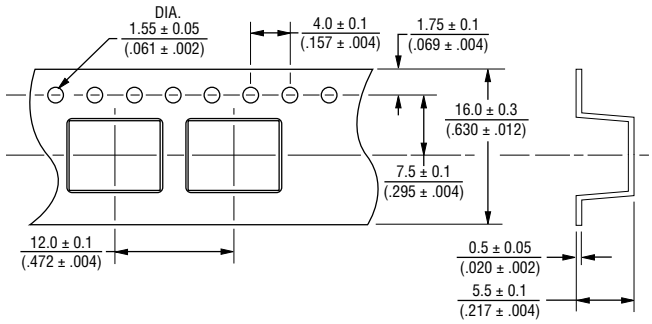
Surface Mount

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.




DIMENSIONS: MM / (INCHES)

REV. F 09/19

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