



## Features

- Leadless, surface mount for economical assembly
- Compact mini-size
- Low capacitance and insertion loss
- RoHS compliant\*
-  UL Recognized

## 2055 Series Gas Discharge Tube Surge Protector

Bourns offers a low-cost surface mount (SM) 2-electrode GDT surge protection device. The 2055 Series is ideal for broadband protection due to its ultra-low capacitance. The 2055 Series offers superior protection characteristics suitable for telecommunications, commercial and industrial applications.

### Characteristics

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

| Characteristic                    | Model No. |         |         |         |         |         |
|-----------------------------------|-----------|---------|---------|---------|---------|---------|
|                                   | 2055-23   | 2055-25 | 2055-30 | 2055-35 | 2055-40 | 2055-60 |
| DC Sparkover $\pm 20\%$ @ 100 V/s | 230 V     | 250 V   | 300 V   | 350 V   | 400 V   | 600 V   |
| Impulse Sparkover                 |           |         |         |         |         |         |
| 100V/ $\mu$ s                     | 450 V     | 450 V   | 500 V   | 600 V   | 600 V   | 800 V   |
| 1000V/ $\mu$ s                    | 550 V     | 550 V   | 600 V   | 750 V   | 700 V   | 900 V   |

|                                        |                              |                     |
|----------------------------------------|------------------------------|---------------------|
| Insulation Resistance (IR) .....       | 100 V .....                  | $> 10^{10} \Omega$  |
| Glow Voltage .....                     | 10 mA .....                  | $\sim 80$ V         |
| Arc Voltage .....                      | $> 2$ A .....                | $\sim 12$ V         |
| Glow-Arc Transition Current .....      |                              | $< 1$ A             |
| Capacitance .....                      | 1 MHz .....                  | 0.6 pF typical      |
| DC Holdover Voltage <sup>1</sup> ..... | $> 150$ V .....              | $< 150$ ms          |
| Impulse Discharge Current .....        | 2500 A, 8/20 $\mu$ s .....   | 10 operations       |
|                                        | 100 A, 10/1000 $\mu$ s ..... | $> 300$ operations  |
|                                        | 10 A, 10/1000 $\mu$ s .....  | $> 1500$ operations |
| Alternating Discharge Current .....    | 10 Arms, 9 cycles .....      | 1 operation min.    |
|                                        | 2.5 Arms, 1 sec, 50 Hz ..... | 10 operations       |
| Operating Temperature .....            |                              | -30 to +85 °C       |

#### Notes:

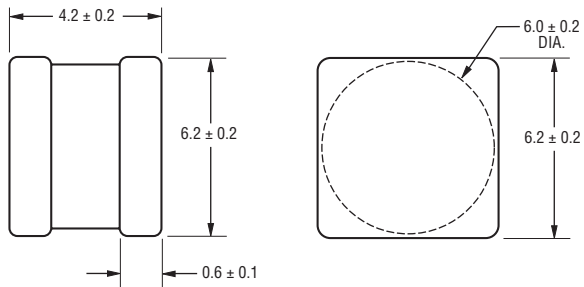
- UL Recognized component, UL File E153537.
- At delivery AQL 0.65 Level II, DIN ISO 2859.
- Surface Mount (SM) parts may show a temporary increase in DCBD after the solder reflow process. Most devices will recover within 24 hours time. It should be noted that there is no quality defect nor change in protection levels during the temporary change in DCBD.

<sup>1</sup> Network applied.

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**BOURNS®**

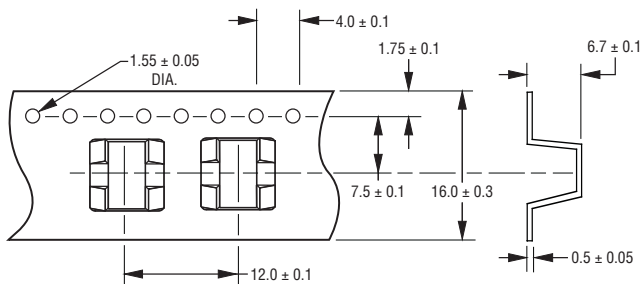
## Product Dimensions



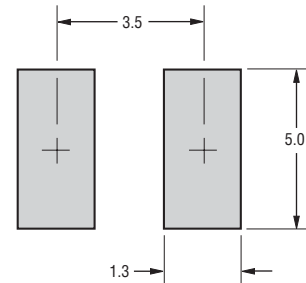
DIMENSIONS: MILLIMETERS

## Packaging Specifications

The Model 2055-xx-SM ships standard reelpack (-RP), 800 pieces per reel, 2,400 pieces per box. Reel is 330 mm in diameter and 16 mm wide.



## Recommended Pad Layout



## How to Order

Model Number Designator **2055 - xx - SM - RP LF**  
 Voltage (Divided by 10) \_\_\_\_\_  
 Surface Mount \_\_\_\_\_  
 Packaging \_\_\_\_\_  
 RP = Reelpack  
 RoHS Compliance \_\_\_\_\_  
 LF = RoHS Compliant Product

REV. I 03/28/12

Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.