




**THE DATASHEET OF
2055-35-SM-RPLF**





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. | | | | |
|-----------------------------------|-----------|---------|---------|---------|---------|
| | 2055-07 | 2055-09 | 2055-23 | 2055-25 | 2055-30 |
| DC Sparkover $\pm 20\%$ @ 100 V/s | 75 V | 90 V | 230 V | 250 V | 300 V |
| Impulse Sparkover ⁽¹⁾ | | | | | |
| 100V/ μ s | 600 V | 600 V | 450 V | 450 V | 500 V |
| 1000V/ μ s | 700 V | 700 V | 550 V | 550 V | 600 V |

| Characteristic | Model No. | | | |
|-----------------------------------|-----------|---------|---------|---------|
| | 2055-35 | 2055-40 | 2055-60 | 2055-80 |
| DC Sparkover $\pm 20\%$ @ 100 V/s | 350 V | 400 V | 600 V | 800 V |
| Impulse Sparkover ⁽¹⁾ | | | | |
| 100V/ μ s | 600 V | 600 V | 800 V | 1000 V |
| 1000V/ μ s | 750 V | 700 V | 900 V | 1200 V |

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

| | | |
|--|----------------------------------|-----------------------------|
| Insulation Resistance (IR) | 50V / 100 V ⁽²⁾ | > 10 ¹⁰ Ω |
| Glow Voltage | 10 mA | ~ 80 V |
| Arc Voltage | >2 A | ~ 12 V |
| Glow-Arc Transition Current | | < 1 A |
| Capacitance..... | 1 MHz | 1.0 pF maximum |
| DC Holdover Voltage ⁽³⁾ | >150 V | < 150 ms |
| Impulse Discharge Current..... | 5000 A, 8/20 μ s | 10 operations |
| | 100 A, 10/1000 μ s | > 300 operations |
| | 10 A, 10/1000 μ 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 |
| Moisture Sensitivity Level..... | | 1 |
| ESD Classification (HBM)..... | | 6 |

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.
- Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D.

⁽²⁾ Insulation Resistance test conditions:

| | |
|----------------------|----------------------|
| DC Sparkover Voltage | DC Measuring Voltage |
| 75 - 150 V | 50 V |
| ≥ 151 V | 100 V |

⁽³⁾ Network applied.

*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.

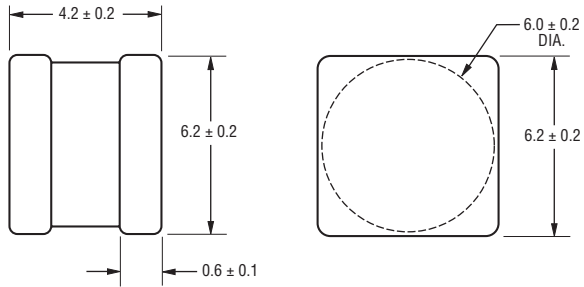
Users should verify actual device performance in their specific applications.

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2055 Series Gas Discharge Tube Surge Protector

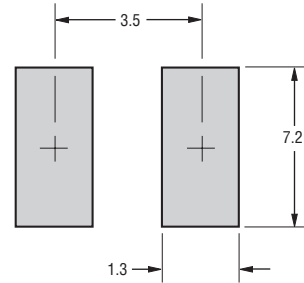
BOURNS®

Product Dimensions



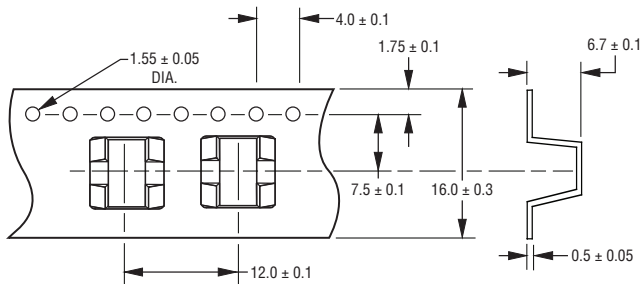
DIMENSIONS: MILLIMETERS

Recommended Pad Layout



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.



How to Order

2055 - xx - SM - RP LF

Model Number Designator _____

Voltage (Divided by 10) _____

Surface Mount _____

Packaging _____
 RP = Reelpack

RoHS Compliance _____
 LF = RoHS Compliant Product

REV. M 07/18

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