

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.

Additional Information

Click these links for more information:

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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 ± 20 % @ 100 V/s	75 V	90 V	230 V	250 V	300 V
Impulse Sparkover (1) 100V/µs 1000V/µs	 600 V 700 V	 600 V 700 V	 450 V 550 V	 450 V 550 V	 500 V 600 V

Characteristic	Model No.			
	2055-35	2055-40	2055-60	2055-80
DC Sparkover ± 20 % @ 100 V/s	350 V	400 V	600 V	800 V
Impulse Sparkover (1) 100V/µs 1000V/µs	 600 V 750 V	 600 V 700 V	 800 V 900 V	 1000 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	8000 A, 8/20 µs	1 operation
	5000 A, 8/20 µs	10 operations
	100 A, 10/1000 µs	> 300 operations
	10 A, 10/1000 µs	> 1500 operations
Alternating Discharge Current	10 Arms, 9 cycles	1 operation min.
	2.5 Arms, 1 sec, 50 Hz	10 operations
Operating Temperature		-40 to +85 °C
Moisture Sensitivity Level		1
ESD Classification (HBM)		N/A

Notes:

- **UL Recognized component:** Model 2055-80 = UL File E313168; All other models = 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:

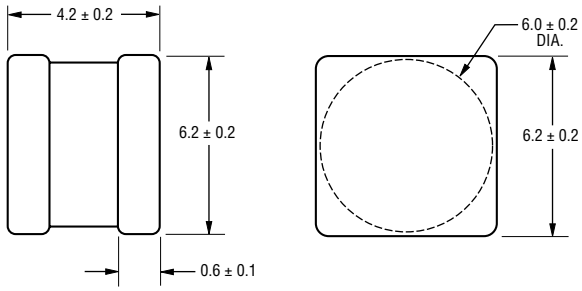
DC Sparkover Voltage	DC Measuring Voltage
75 - 150 V	50 V
≥151 V	100 V

(3) Network applied.

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

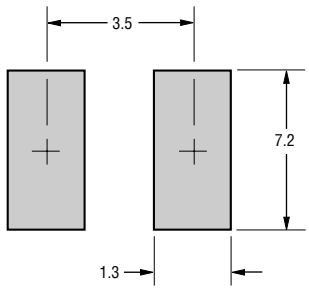
*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
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Product Dimensions



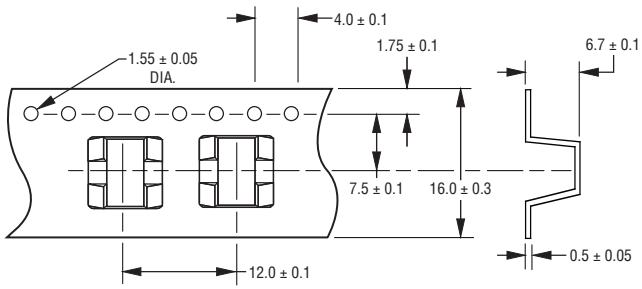
DIMENSIONS: MILLIMETERS

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.



DIMENSIONS: MILLIMETERS

How to Order

2055 - xx - SM - RP LF

Model Number Designator

Voltage (Divided by 10)

Surface Mount

Packaging
RP = Reelpack

RoHS Compliancy
LF = RoHS Compliant Product

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