




## Features

- Size: 6.2 mm diameter, 4.2 mm length
- Surface mount device
- High voltage range
- Compact size
- High insulation resistance
- RoHS compliant\*
-  UL Recognized

## Applications

- Telecommunications equipment
- Industrial equipment/electronics
- Consumer electronics

# 2093 Series High Voltage 2-Electrode Gas Discharge Tube

## Characteristics

Test Methods per ITU-T K.12 and IEC 61643-311.

Characteristic	Model No.				
	2093-100	2093-120	2093-180	2093-200	2093-250
DC Sparkover $\pm 20\%$ @ 100 V/s	1000 V	1200 V	1800 V	2000 V	2500 V
Impulse Sparkover					
100V/ $\mu$ s	< 1500 V	< 1700 V	< 2500 V	< 2700 V	< 3100 V
1000V/ $\mu$ s	< 1600 V	< 1800 V	< 2600 V	< 2800 V	< 3200 V

Characteristic	Model No.	
	2093-270	2093-300
DC Sparkover $\pm 20\%$ @ 100 V/s	2700 V	3000 V
Impulse Sparkover		
100V/ $\mu$ s	< 3300 V	< 3600 V
1000V/ $\mu$ s	< 3400 V	< 3700 V

Insulation Resistance (IR) <sup>1</sup> .....	500/1000 Vdc.....	> 1 G $\Omega$
Glow Voltage .....	10 mA.....	~ 60 V
Arc Voltage .....	1 A.....	~ 15 V
Glow-Arc Transition Current .....		< 1 A
Capacitance.....	1 MHz .....	< 0.8 pF
Impulse Discharge Current.....	5000 A, 8/20 $\mu$ s.....	1 operation
	3000 A, 8/20 $\mu$ s.....	10 operations
Alternating Discharge Current .....	3 Arms, 50 Hz, 1 sec.....	1 operation
	10 Arms, 50 Hz, 9 cycles .....	1 operation
Impulse Life .....	100 A, 10/1000 $\mu$ s.....	> 300 operations
Operating Temperature.....		-30 to +85 °C
Storage Temperature .....		-40 to +115 °C
Climatic Category (IEC 60068-1).....		40 / 90 / 21

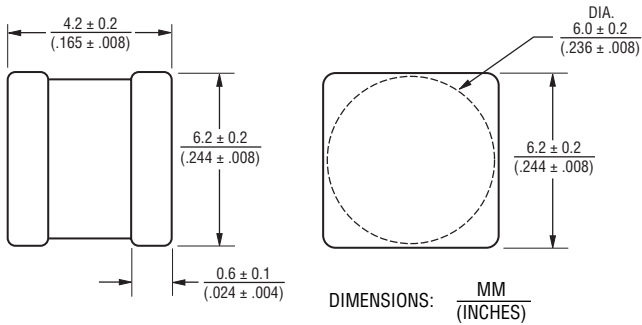
### Notes:

- <sup>1</sup> Insulation Resistance measured at 1000 V for GDTs with > 2000 V DCBD.
- UL Recognized component: UL1449, C-UL 3rd edition, UL file E135337.
- At delivery AQL 0.65 Level II, DIN ISO 2859.

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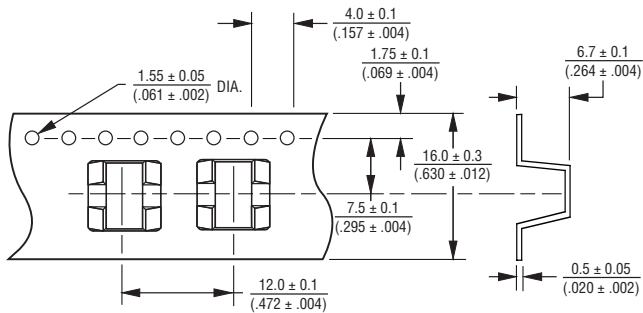
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## Product Dimensions

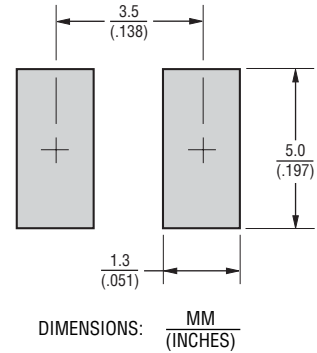


## Packaging Specifications

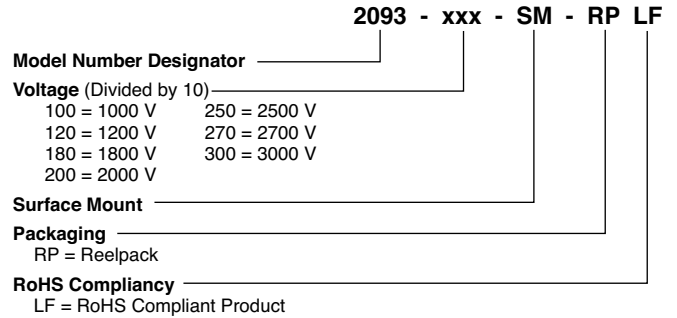
The Model 2093-xx-SM ships standard reelpack (-RP), 800 pieces per reel, 2,400 pieces per box. Reel is 330 mm in diameter and 16 mm wide.



## Recommended Pad Layout



## How to Order



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REV. A 02/12

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