

## Features

- 12.7 x 12.7 mm
- High surge-energy handling
- Low capacitance and insertion loss
- RoHS compliant\* versions available

## 2047 Series Gas Discharge Tube Surge Protector

Bourns offers a precision heavy duty 2-electrode GDT surge protection device in voltages from 90 to 350 V. The 2047 Series offers superior protection characteristics suitable for highly exposed commercial and industrial applications.

### Characteristics

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

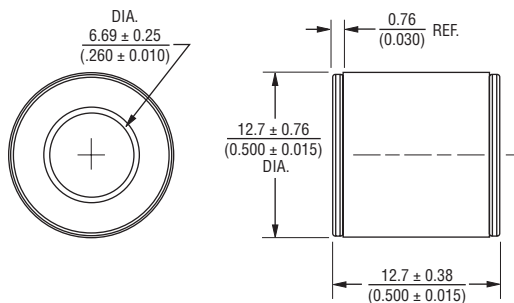
Characteristic	Model No.			
	2047-09	2047-15	2047-23	2047-35
DC Sparkover $\pm 20\%$ @ 100 V/s ( $\pm 25\%$ @ 100 V/s After Life)	90 V	150 V	230 V	350 V
Impulse Sparkover				
100 V/ $\mu$ s Typical / For 99 % of Values	350 / 450 V	350 / 450 V	450 / 500 V	475 / 550 V
1000 V/ $\mu$ s Typical / For 99 % of Values	600 / 650 V	550 / 600 V	600 / 650 V	725 / 800 V

Impulse values are estimated and typical; not maximum.

Insulation Resistance (IR) .....	50 V / 100 V .....	> 109 $\Omega$
Glow Voltage .....	10 mA .....	~ 80 V
Arc Voltage .....	@ 2 A .....	~ 12 V
Glow-Arc Transition Current .....		< 1 A
Capacitance .....	1 MHz .....	< 5 pF
Impulse Discharge Current .....	> 40,000 A, 8/20 $\mu$ s .....	> 10 operations
	> 4,000 A, 10/350 $\mu$ s .....	> 10 operations
	> 8,000 A, 10/350 $\mu$ s .....	> 1 operation
Impulse Life .....	> 1,000 A 10/1000 $\mu$ s .....	> 1000 operations
Alternating Discharge Current .....	> 20 A, 1 sec. ....	> 20 operations
	> 40 A, 1 sec. ....	1 operation min.
	> 200 A, 11 cycles .....	1 operation min.
Operating and Storage Temperature, .....		-40 to +90 $^{\circ}$ C
Climatic Category (IEC 60068-1) .....		40/90/21

Note: At delivery AQL 0.65, level II DIN ISO 2859

### Product Dimensions



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### How to Order

Model Number Designator	2047 - xx - A LF
Voltage (Divided by 10)	09 = 90 V      23 = 230 V 15 = 150 V      35 = 350 V
Leads	A = None
Packaging	Blank = Bulk Packaging (Standard) - 50 units per box
Plating Option	Blank = Standard Product - Tin/Lead Plating LF = Lead Free / RoHS Compliant Product Ni = Nickel Plating

## **BOURNS®**

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REV. E 01/11

\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.