




## Features

- Size: 12.7 mm diameter, 12.7 mm length
- Long service life
- High surge current rated
- Low capacitance and insertion loss
- Tube with contact terminals available
- RoHS compliant\* versions available
-  UL Recognized

## Applications

- Telecommunications equipment
- Industrial equipment/electronics

## 2047 Series High Current 2-Electrode Gas Discharge Tube

### Characteristics

Test Methods per ITU-T K.12, IEEE C62.31 and IEC 61643-311 GDT standards.

Characteristic	Model No.			
	2047-09	2047-15	2047-23	2047-35
DC Sparkover $\pm 20\%$ @ 100 V/s <sup>(1)</sup>	90 V	150 V	230 V	350 V
Impulse Sparkover <sup>(2)</sup>				
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

Insulation Resistance (IR) .....	50 V / 100 V .....	> 10 <sup>9</sup> $\Omega$
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 <sup>(1)</sup> .....	10 operations
	> 4,000 A, 10/350 $\mu$ s <sup>(1)</sup> .....	> 10 operations
	> 8,000 A, 10/350 $\mu$ s .....	> 1 operation
	> 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 °C
Climatic Category (IEC 60068-1) .....		40/90/21
Moisture Sensitivity Level .....		1
ESD Classification (Passive Component HBM) .....		6

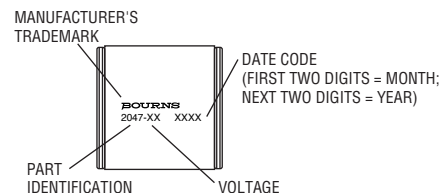
#### Notes:

- At delivery AQL 0.65, level II DIN ISO 2859.
- UL Recognized component, UL File E153537.
- <sup>(1)</sup> DC Sparkover may exceed  $\pm 25\%$  after discharge, but will continue to protect without venting.
- <sup>(2)</sup> Impulse Sparkover voltage is defined as typical values of distribution.

### How to Order

Model Number Designator	2047 - xx - X	LF
Voltage (Divided by 10)		
09 = 90 V	23 = 230 V	
15 = 150 V	35 = 350 V	
Contact Terminals		
A = None		
B = Optional		
Packaging		
Blank = Bulk Packaging (Standard) - 50 pcs. per box		
Plating Option		
Blank = Standard Product - Tin/Lead Plating		
LF = RoHS Compliant Product - Sn Plating		
Ni = RoHS Compliant Product - Nickel Plating		

### Typical Part Marking



\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

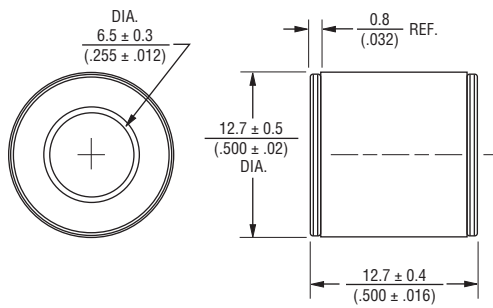
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# 2047 Series High Current 2-Electrode Gas Discharge Tube

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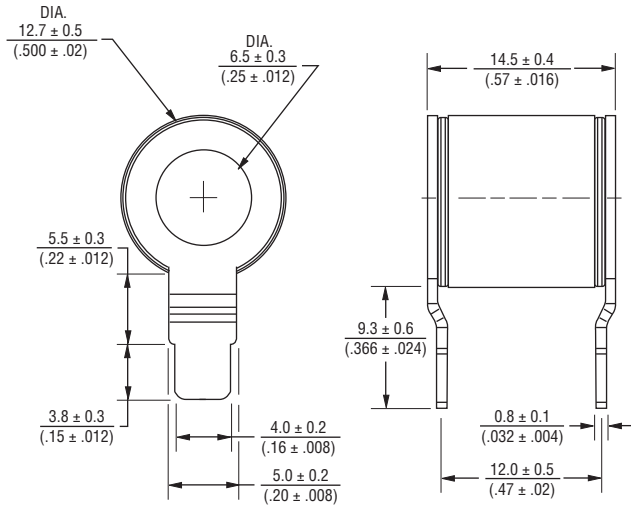
## Product Dimensions

2047-xx-A



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

2047-xx-B



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