



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## 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 ( $\pm 25\%$ @ 100 V/s After Life)	90 V	150 V	230 V	350 V
Impulse Sparkover <sup>(1)</sup> 100 V/ $\mu$ s Typical / For 99 % of Values 1000 V/ $\mu$ s Typical / For 99 % of Values	350 / 450 V 600 / 650 V	350 / 450 V 550 / 600 V	450 / 500 V 600 / 650 V	475 / 550 V 725 / 800 V

<sup>(1)</sup> Impulse Sparkover voltage is defined as typical values of distribution.

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 .....	50,000 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 °C
Climatic Category (IEC 60068-1) .....		40/90/21

#### Notes:

- At delivery AQL 0.65, level II DIN ISO 2859.
- UL Recognized component, UL File E153537.

### How to Order

**2047 - xx - X LF**

Model Number Designator \_\_\_\_\_

Voltage (Divided by 10) \_\_\_\_\_

09 = 90 V      23 = 230 V  
15 = 150 V      35 = 350 V

Contact Terminals \_\_\_\_\_

A = None  
B = Optional

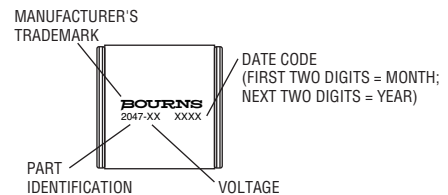
Packaging \_\_\_\_\_

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 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

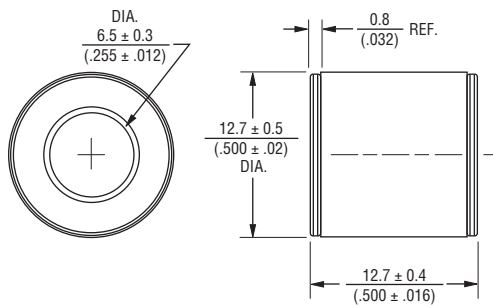
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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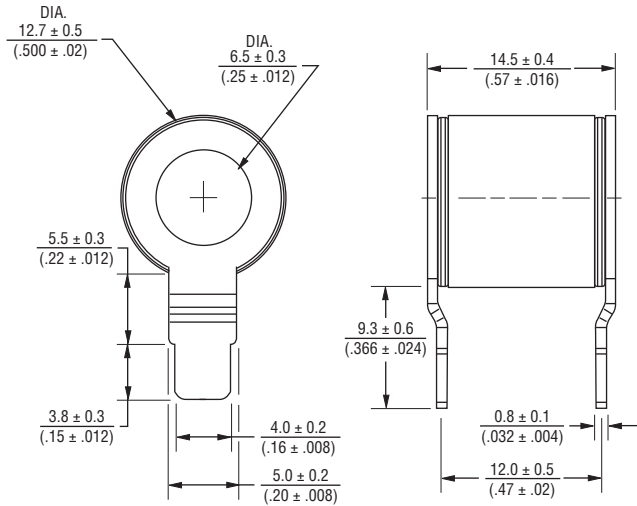
### Product Dimensions

2047-xx-A



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

2047-xx-B



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