




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 ⁽¹⁾	90 V	150 V	230 V	350 V
Impulse Sparkover ⁽²⁾				
100 V/ μ s Typical / For 99 % of Values	350 / 450 V	350 / 450 V	450 / 500 V	475 / 550 V
1000 V/ μ 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 ⁹ Ω
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 μ s ⁽¹⁾	10 operations
	> 4,000 A, 10/350 μ s ⁽¹⁾	> 10 operations
	> 8,000 A, 10/350 μ s	> 1 operation
	> 1,000 A 10/1000 μ 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.

⁽¹⁾ DC Sparkover may exceed $\pm 25\%$ after discharge, but will continue to protect without venting.

⁽²⁾ Impulse Sparkover voltage is defined as typical values of distribution.

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

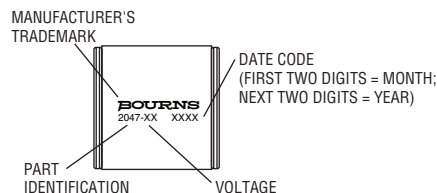
Plating Option _____

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.

Users should verify actual device performance in their specific applications.

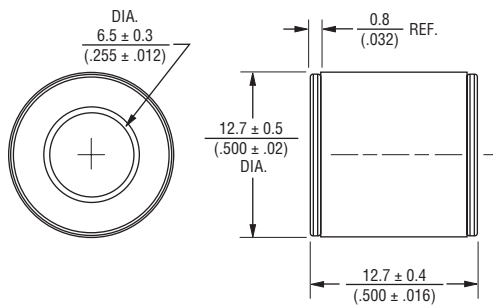
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2047 Series High Current 2-Electrode Gas Discharge Tube

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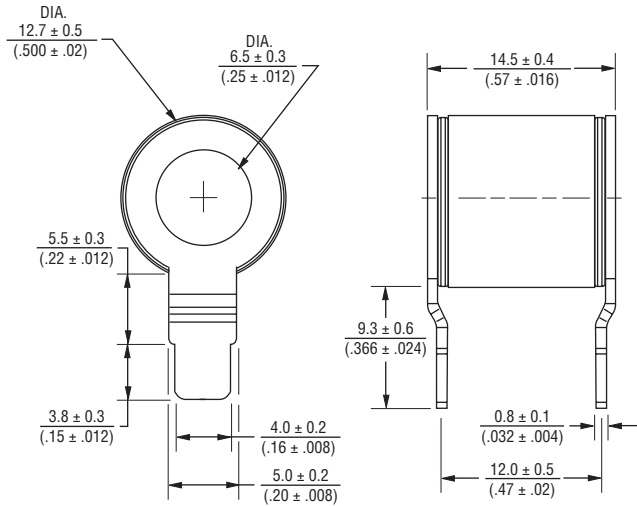
Product Dimensions

2047-xx-A



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

2047-xx-B



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