



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 (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/ μ s Typical / For 99 % of Values 1000 V/ μ 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

Impulse values are estimated and typical; not maximum.

Insulation Resistance (IR)	50 V / 100 V	> $10^9 \Omega$
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 μ s	> 10 operations
	> 4,000 A, 10/350 μ s	> 10 operations
	> 8,000 A, 10/350 μ s	> 1 operation
Impulse Life	> 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

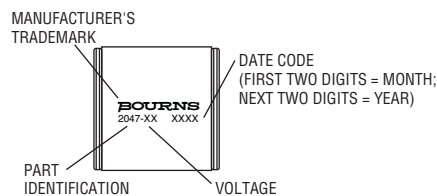
Notes:

- 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.

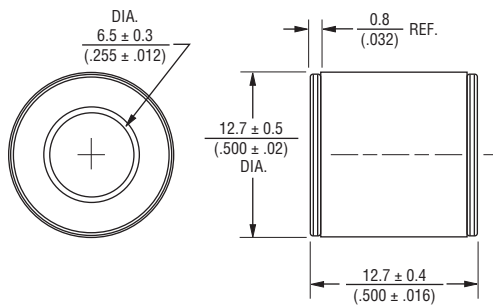
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

2047 Series High Current 2-Electrode Gas Discharge Tube

BOURNS®

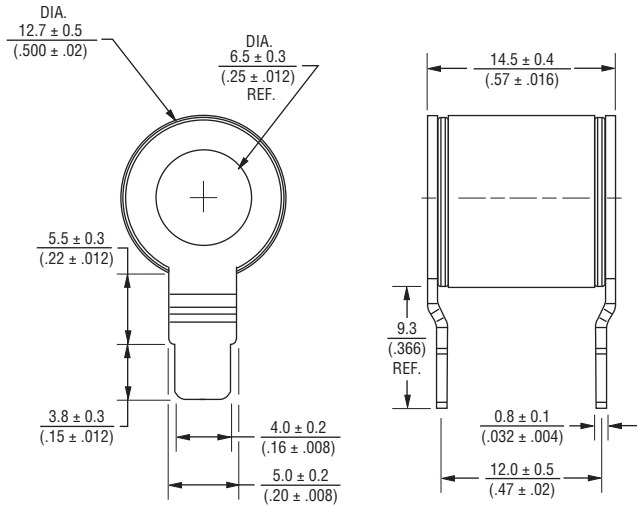
Product Dimensions

2047-xx-A



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

2047-xx-B



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

www.bourns.com

REV. L 12/13

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.