



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

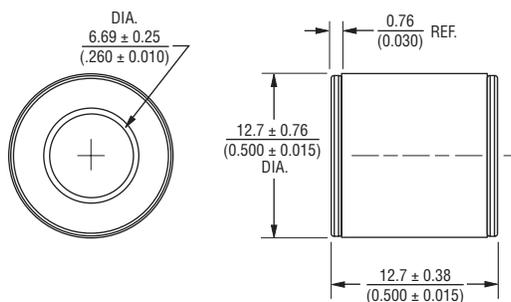
| Characteristic | Model No. | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|
| | 2047-09 | 2047-15 | 2047-23 | 2047-35 |
| DC Sparkover $\pm 20\%$ @ 100 V/s ($\pm 25\%$ @ 100 V/s After Life) | 90 V | 150 V | 230 V | 350 V |
| Impulse Sparkover 100 V/ 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 | > 109 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 | > 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 |

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 = RoHS Compliant Product Ni = Nickel Plating |

REV. F 04/11

*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.

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