


Features

- Size: 8 mm diameter, 6 mm length
- Low capacitance
- High insulation resistance
- RoHS compliant*
-  UL Recognized

Applications

- Telecommunications equipment
- Industrial equipment/electronics
- Consumer electronics

2045 Series Medium Duty 2-Electrode Gas Discharge Tube

Characteristics

Test Methods per ITU-T (CCITT) K.12 and IEEE C62.31.

| Characteristic | Model No. | | | | | |
|-----------------------------------|-----------|---------|---------|---------|---------|---------|
| | 2045-07 | 2045-09 | 2045-12 | 2045-13 | 2045-14 | 2045-23 |
| DC Sparkover $\pm 30\%$ @ 100 V/s | 75 V | 90 V | 120 V | 130 V | 145 V | 230 V |
| Impulse Sparkover ⁽¹⁾ | | | | | | |
| 100 V/ μ s | < 500 V | < 500 V | < 500 V | < 500 V | < 500 V | < 500 V |
| 1000 V/ μ s | < 600 V | < 600 V | < 700 V | < 700 V | < 700 V | < 700 V |

| Characteristic | Model No. | | | | |
|-----------------------------------|-----------|---------|---------|----------|----------|
| | 2045-25 | 2045-30 | 2045-35 | 2045-40 | 2045-47 |
| DC Sparkover $\pm 30\%$ @ 100 V/s | 250 V | 300 V | 350 V | 400 V | 470 V |
| Impulse Sparkover ⁽¹⁾ | | | | | |
| 100 V/ μ s | < 500 V | < 700 V | < 700 V | < 800 V | < 900 V |
| 1000 V/ μ s | < 700 V | < 900 V | < 900 V | < 1000 V | < 1100 V |

⁽¹⁾ Impulse Sparkover voltage is defined as typical values of distribution.

| | | |
|---|------------------------|-----------------|
| Insulation Resistance (IR) ⁽²⁾ | 50 / 100 / 250 Vdc | > 10 G Ω |
| Glow Voltage | 10 mA | ~ 70 V |
| Arc Voltage | 1 A | ~ 10 V |
| Glow-Arc Transition Current | | < 1 A |
| Maximum Capacitance | 1 MHz | < 1.5 pF |
| Impulse Discharge Current | 15,000 A, 8/20 μ s | 1 operation |
| | 10,000 A, 8/20 μ s | 10 operations |
| Alternating Discharge Current | 5 A, 50 Hz, 1 second. | 1 operation |
| | 65 A, Single, 9 cycles | 1 operation |
| Impulse Life | 100 A 10/1000 μ s | 500 operations |
| Storage Temperature | | -40 to +150 °C |
| Operating Temperature | | -30 to +85 °C |
| DC Holdover Voltage ⁽³⁾ | | < 150 ms |
| Climatic Category (IEC 60068-1) | | 40 / 90 / 21 |

Notes:

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

| | |
|-------------------------------------|----------------------|
| ⁽²⁾ DC Breakdown Voltage | DC Measuring Voltage |
| 75–90 V | 50 V |
| 120–400 V | 100 V |
| 470 | 250 V |

| | |
|-------------------------------------|---------------------|
| ⁽³⁾ DC Breakdown Voltage | DC Holdover Voltage |
| 75–145 V | 52 V |
| 230 V | 80 V |
| 250 V | 135 V |
| 300–470 V | 150 V |

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

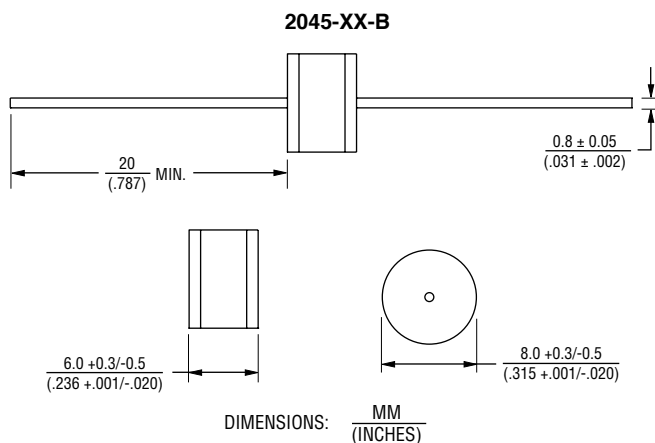
Specifications are subject to change without notice.

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.

2045 Series Medium Duty 2-Electrode Gas Discharge Tube

BOURNS®

Product Dimensions

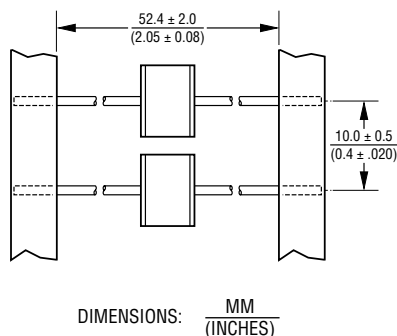


Note: Custom leadforms available - please contact Bourns for details.

Packaging Specifications

The reelpack (-BT1LF) contains 500 pieces per reel. Reel is 330 mm in diameter and 68 mm wide. Two reels per box (1K units).

2045-XX-BT1LF — 0.8 mm (0.032 in.) dia. lead wire



How to Order

2045 - xx - B LF

Model Number Designator _____

Voltage _____

| | |
|------------|------------|
| 07 = 75 V | 25 = 250 V |
| 09 = 90 V | 30 = 300 V |
| 12 = 120 V | 35 = 350 V |
| 13 = 130 V | 40 = 400 V |
| 14 = 145 V | 47 = 470 V |
| 23 = 230 V | |

Leads _____

B = 0.8 mm straight leads

Packaging _____

T1 = Reelpack (Optional) - 500 pcs./reel

RoHS Compliancy _____

LF = RoHS Compliant Product

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