


## 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 <sup>(1)</sup>						
100 V/ $\mu$ s	< 500 V	< 500 V	< 500 V	< 500 V	< 500 V	< 500 V
1000 V/ $\mu$ 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 <sup>(1)</sup>					
100 V/ $\mu$ s	< 500 V	< 700 V	< 700 V	< 800 V	< 900 V
1000 V/ $\mu$ s	< 700 V	< 900 V	< 900 V	< 1000 V	< 1100 V

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

Insulation Resistance (IR) <sup>(2)</sup> .....	50 / 100 / 250 Vdc .....	> 10 G $\Omega$
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 $\mu$ s .....	1 operation
	10,000 A, 8/20 $\mu$ 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 $\mu$ s .....	500 operations
Storage Temperature .....	.....	-40 to +150 °C
Operating Temperature.....	.....	-30 to +85 °C
DC Holdover Voltage <sup>(3)</sup> .....	.....	< 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.

<sup>(2)</sup> DC Breakdown Voltage	DC Measuring Voltage
75–90 V	50 V
120–400 V	100 V
470	250 V

<sup>(3)</sup> DC Breakdown Voltage	DC Holdover Voltage
75–145 V	52 V
230 V	80 V
250 V	135 V
300–470 V	150 V

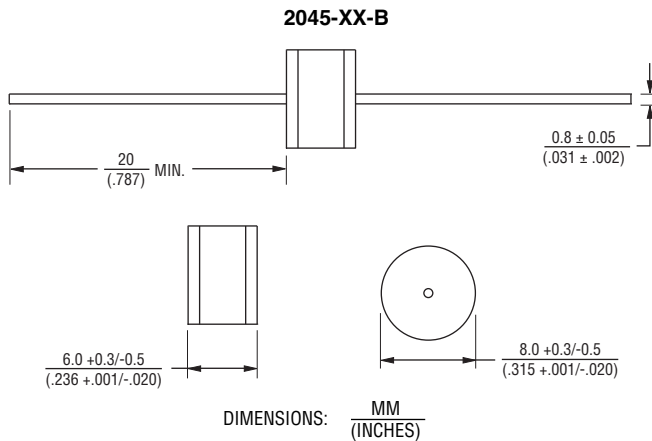
\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice.

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

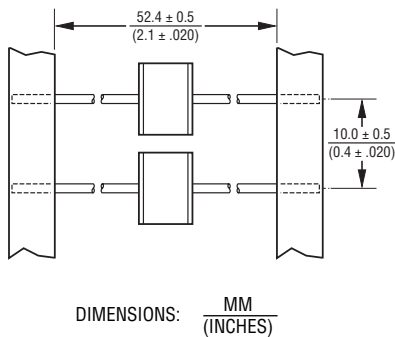


Note: Custom leadforms available - please contact Bourns for details.

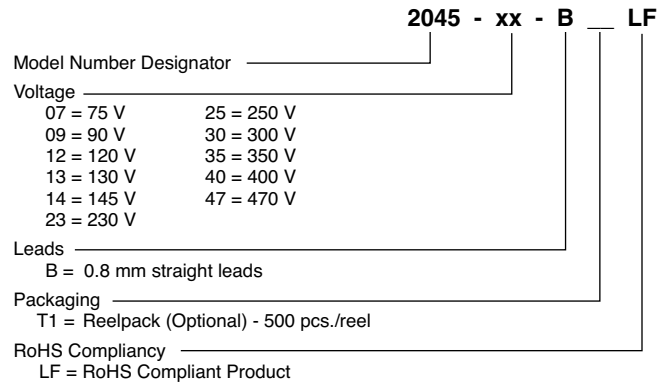
## Packaging Specifications

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



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