


## Features

- Size: 8 mm diameter, 8 mm length
- Axial leaded device
- High voltage range up to 6 kV
- High insulation resistance
- RoHS compliant\*
-  UL Recognized

## Applications

- Industrial equipment/electronics
- Telecommunications electronics
- Consumer electronics

# 2095 Series High Voltage 2-Electrode Gas Discharge Tube

## Characteristics

Test Methods per ITU-T (CCITT) K.12 and IEC 61643-311.

Characteristic	Model No.				
	2095-80	2095-100	2095-140	2095-160	2095-200
DC Sparkover $\pm 20\%$ @ 100 V/s	800 V	1000 V	1400 V	1600 V	2000 V
Impulse Sparkover <sup>(1)</sup>					
100 V/ $\mu$ s	< 1100 V	< 1300 V	< 2100 V	< 2300 V	< 2700 V
1000 V/ $\mu$ s	< 1200 V	< 1400 V	< 2200 V	< 2400 V	< 2800 V

Characteristic	Model No.				
	2095-250	2095-270	2095-300	2095-350	2095-400
DC Sparkover $\pm 20\%$ @ 100 V/s	2500 V	2700 V	3000 V	3500 V	4000 V
Impulse Sparkover <sup>(1)</sup>					
100 V/ $\mu$ s	< 3500 V	< 3600 V	< 4100 V	< 4900 V	< 5300 V
1000 V/ $\mu$ s	< 3600 V	< 3800 V	< 4200 V	< 5000 V	< 5500 V

Characteristic	Model No.		
	2095-450	2095-500	2095-600
DC Sparkover $\pm 20\%$ @ 100 V/s	4500 V	5000 V	6000 V
Impulse Sparkover <sup>(1)</sup>			
100 V/ $\mu$ s	< 5800 V	< 6000 V	< 7000 V
1000 V/ $\mu$ s	< 6000 V	< 6400 V	< 7800 V

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

Insulation Resistance (IR) <sup>(2)</sup>	250/500/1000 Vdc	> 1 G $\Omega$
Glow Voltage	10 mA	~ 60 V
Arc Voltage	1 A	~ 15 V
Capacitance	1 MHz	< 1.5 pF
Impulse Discharge Current		
2095-80 through 2095-250	8,000 A, 8/20 $\mu$ s	1 operation
	5,000 A, 8/20 $\mu$ s	10 operations
2095-270 through 2095-600	5,000 A, 8/20 $\mu$ s	1 operation
	3,000 A, 8/20 $\mu$ s	10 operations
Alternating Discharge Current		
2095-80 through 2095-250	2 Arms, 50 Hz, 1 second	1 operation min.
	10 Arms, 50 Hz, 9 cycles	1 operation min.
2095-270 through 2095-300	3 Arms, 50 Hz, 1 second	1 operation min.
	5 Arms, 50 Hz, 9 cycles	1 operation min.
2095-350 through 2095-600	2.5 Arms, 50 Hz, 1 second	1 operation min.
	5 Arms, 50 Hz, 9 cycles	1 operation min.
Impulse Life	100 A, 10/1000 $\mu$ s	> 100 operations <sup>(3)</sup>
Operating Temperature		-30 to +90 °C
Storage Temperature		-40 to +115 °C
Climatic Category (IEC 60068-1)		40 / 90 / 21

## Notes:

- UL Recognized component: UL File E313168.
- At delivery AQL 0.65 Level II, DIN ISO 2859.

<sup>(2)</sup> DC Breakdown	IR Measuring Voltage
800-1000 V	250 V
1400-2000 V	500 V
2500-6000 V	1000 V

<sup>(3)</sup> Model 2095-270 and 2095-300 meet >300 operations at 100 A, 10/1000  $\mu$ s.

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

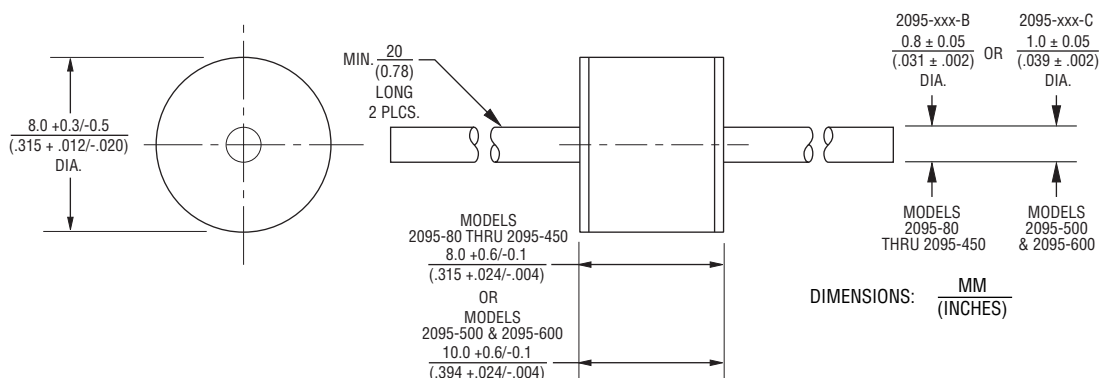
Specifications are subject to change without notice.

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.

# 2095 Series High Voltage 2-Electrode Gas Discharge Tube

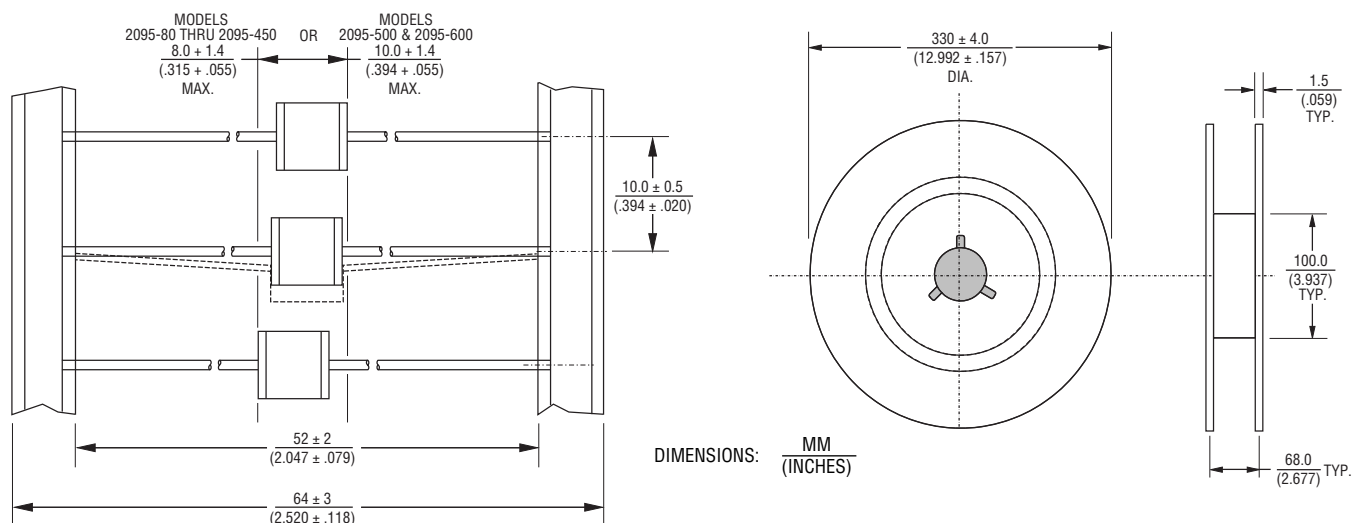
**BOURNS®**

## Product Dimensions



## Packaging Specifications

Model 2095 ships standard bulk, 100 pcs. per tray; 5 trays per box (500 units). The optional reelpack (-BT1) contains 500 pcs. per reel; 2 reels per box (1K units).



## How to Order

2095 - xxx - B T1 LF

Model Number Designator

Voltage (Divided by 10)

80 = 800 V	250 = 2500 V	450 = 4500 V
100 = 1000 V	270 = 2700 V	500 = 5000 V
140 = 1400 V	300 = 3000 V	600 = 6000 V
160 = 1600 V	350 = 3500 V	
200 = 2000 V	400 = 4000 V	

Leads

B = 0.8 mm (Available only for Models 2095-80 thru 2095-450)

C = 1.0 mm (Available only for Models 2095-500 & 2095-600)

Packaging

(Blank) = Bulk Packaging (Standard)

T1 = Reelpack (Optional)

RoHS Compliance

LF = RoHS Compliant Product

**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](http://www.bourns.com)

REV. D 08/15

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.