




Features

- 8 mm diameter, 6 mm long
- UL Recognized 
- Custom configurations available
- High surge current rating
- Stable breakdown throughout life
- RoHS compliant* versions available

Applications

- Telecommunications
- Industrial electronics
- Commercial electronics
- Consumer electronics
- Automotive, aircraft, military electronics

2027 Series - 2-Pole Gas Discharge Tube

Characteristics

Test Methods per ITU-T (CCITT) K.12, IEEE C62.31, RUS PE-80, Telcordia GR 1361

Characteristic	Model No.					
	2027-09	2027-15	2027-20	2027-23	2027-25	2027-30
DC Sparkover $\pm 15\%$ ($\pm 20\%$ for Model 2027-09) @ 100 V/s	90 V	150 V	200 V	230 V	250 V	300 V
Impulse Sparkover 100 V/ μ s 1000 V/ μ s	300 V	350 V	400 V	450 V	475 V	550 V
	500 V	575 V	600 V	675 V	700 V	800 V

Characteristic	Model No.				
	2027-35	2027-40	2027-42	2027-47	2027-60
DC Sparkover $\pm 15\%$ @ 100 V/s	350 V	400 V	420 V	470 V	600 V
Impulse Sparkover 100 V/ μ s 1000 V/ μ s	600 V	650 V	675 V	725 V	850 V
	875 V	925 V	950 V	1000 V	1100 V

Insulation Resistance.....	100 V (50 V for Model 2027-09).....	>	$10^{10} \Omega$
Glow Voltage.....	10 mA.....	~	70 V
Arc Voltage.....	> 1A.....	~	10 V
Glow-Arc Transition Current.....	<	0.5 A
Capacitance.....	1 MHz.....	<	1 pF
DC Holdover Voltage ¹	135 V, (52 V for Model 2027-09 80 V for Model 2027-15) ...	<	150 ms
Impulse Discharge Current	20000 A, 8/20 μ s ²		1 operation minimum
	10000 A, 8/20 μ s.....	>	10 operations
	500 A, 10/1000 μ s.....	>	400 operations
	100 A, 10/1000 μ s or 10/700 μ s.....	>	1000 operations
	Alternating Discharge Current.....	65 Arms, 11 cycles ²	
Operating Temperature.....	10 Arms, 1 s.....	>	10 operations
		-55 to +85 °C

Notes:

UL recognized component, UL File E153537.

Model number marking on tube: 27-xxxV.

Sparkover limits $\pm 20\%$ after life, IR $> 10^8 \Omega$ (-25 %, +30 % for Model 2027-09 and 2027-60).

¹ Network applied.

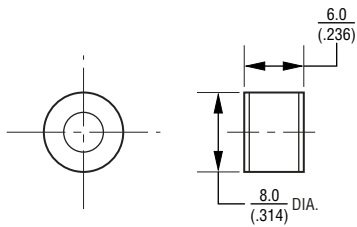
² DC Sparkover may exceed $\pm 20\%$ after discharge, but will continue to protect without venting.

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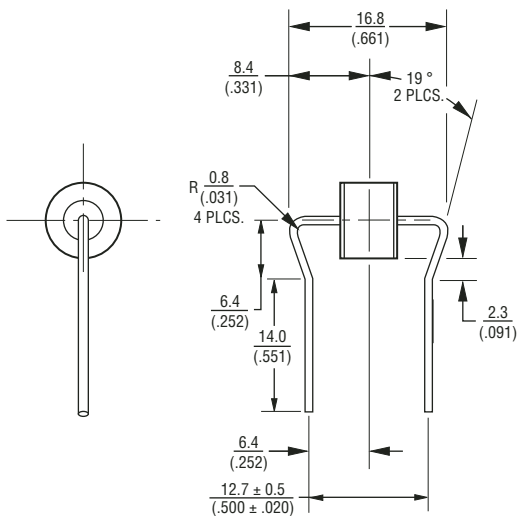
BOURNS®

Product Dimensions

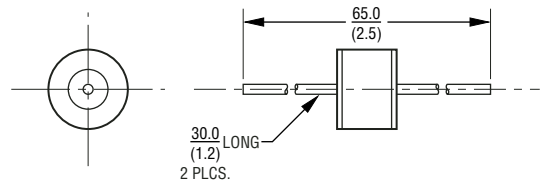
2027-XX-A



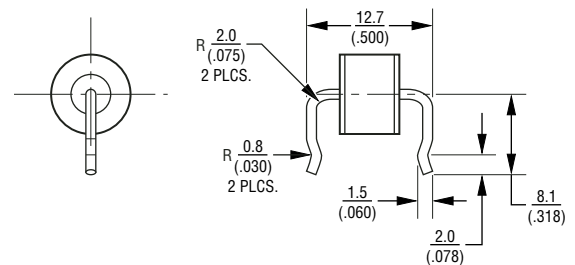
2027-XX-B19 0.8 mm (0.032 in.) dia. lead wire



2027-XX-B 0.8 mm (0.032 in.) dia. lead wire
2027-XX-C 1.0 mm (0.040 in.) dia. lead wire



2027-XX-B10 0.8 mm (0.032 in.) dia. lead wire
2027-XX-C10 1.0 mm (0.040 in.) dia. lead wire



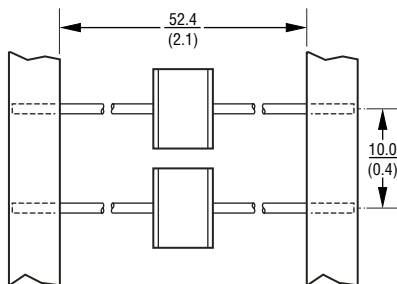
DIMENSIONS = $\frac{\text{MILLIMETERS}}{\text{(INCHES)}}$

Packaging Specifications

Model 2027-xx-nn ships standard bulk pack, 100 pcs./bag.

The optional reelpack (-BT1) contains 1,000 pcs./reel.
 Reel is 14 " in diameter and 2.75 " wide.

2027-XX-BT1 0.8 mm (0.032 in.) dia. lead wire



How To Order

2027 - xx - x nn T1 LF

Model Number _____
 Designator _____

Voltage (Divided by 10) _____
 09 = 90 V 35 = 350 V
 15 = 150 V 40 = 400 V
 20 = 200 V 42 = 420 V
 23 = 230 V 47 = 470 V
 25 = 250 V 60 = 600 V
 30 = 300 V

Leads _____
 A = None
 B = 0.8 mm
 C = 1 mm

Lead Shape _____
 (See Product Dimension Drawings)

Packaging _____
 Blank = Bulk Packaging (Standard)
 T1 = Reelpack (Optional)

Lead Free Option _____
 Blank = Standard Product
 LF = Lead Free/RoHS Compliant Product