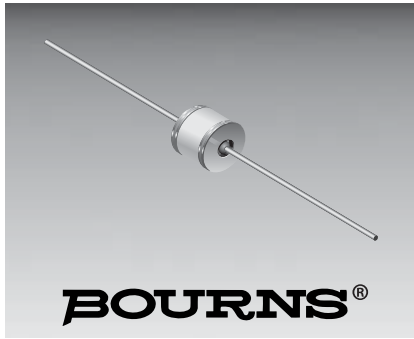




Features

- 8 mm diameter, 6 mm long
- UL recognized
- Custom configurations available
- High surge current rating
- Stable breakdown throughout life

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	300 V	350 V	400 V	450 V	475 V	550 V
1000 V/ μ s	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	600 V	650 V	675 V	725 V	850 V
1000 V/ μ s	875 V	925 V	950 V	1000 V	1100 V

Insulation Resistance (IR)	100 V (50 V for Model 2027-09)	$> 10^{10} \Omega$
Glow Voltage	10 mA	~ 70 V
Arc Voltage	> 1 A	~ 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	1 operation minimum
	10 Arms, 1 s	> 10 operations
Operating Temperature		-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.

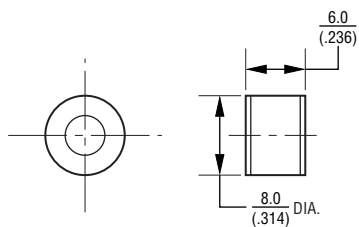
² DC Sparkover may exceed $\pm 20\%$ but will continue to protect without venting.

2027 Series - 2-Pole Gas Discharge Tube

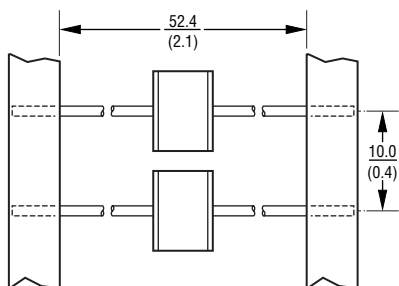
BOURNS®

Product Dimensions

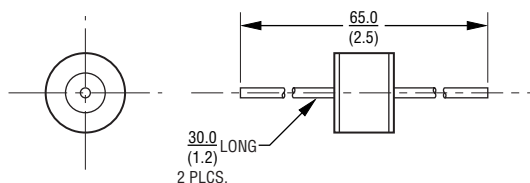
2027-XX-A



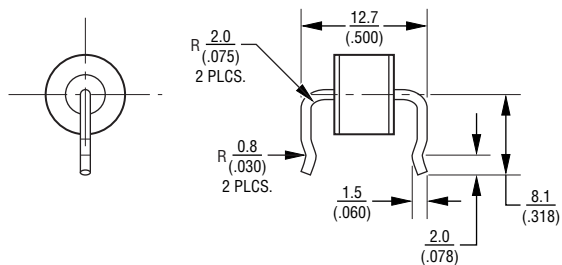
2027-XX-BT1 — 0.8 mm (0.032 in.) dia. lead wire



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

REV. 09/04

Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.