Features

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

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

2027 Series - 2-Pole Gas Discharge Tube

Characteristics

Test Methods per ITU-T K.12, IEEE C62.31 and IEC 61643-311 GDT standards.

Characteristic	Model No.					
	2027-07	2027-09	2027-15	2027-20	2027-23	2027-25
DC Sparkover ±15 % (±20 % for Models 2027-07 & 2027-09) @ 100 V/s	75 V	90 V	150 V	200 V	230 V	250 V
Impulse Sparkover (1) 100 V/µs 1000 V/µs	 300 V 500 V	 300 V 500 V	 350 V 575 V	 400 V 600 V	 450 V 675 V	 475 V 700 V

Characteristic	Model No.					
	2027-30	2027-35	2027-40	2027-42	2027-47	2027-60
DC Sparkover ±15 % @ 100 V/s	300 V	350 V	400 V	420 V	470 V	600 V
Impulse Sparkover (1) 100 V/µs 1000 V/µs	 550 V 800 V	 600 V 875 V	 650 V 925 V	 675 V 950 V	 725 V 1000 V	 850 V 1100 V

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

Insulation Resistance	100 V (50 V for Models 2027-07 and 2027–09)	>10^{10} Ω	
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 (2)	135 V, (52 V for Models 2027-07 and 2027-09, 80 V for Model 2027-15)	<150 ms	
Impulse Discharge Current	25000 A, 8/20 µs (3)	1 operation minimum	
	10000 A, 8/20 µs	10 operations	
	2000 A, 10/350 µs	2 operations	
	500 A, 10/1000 µs	400 operations	
	100 A, 10/1000 µs or 10/700 µs	1000 operations	
Alternating Discharge Current	65 Arms, 11 cycles (3)	1 operation minimum	
	10 Arms, 1 s	10 operations	
Operating and Storage Temperature		-55 to +125 °C	
Climatic Category (IEC 60068-1)		55/125/21	
Moisture Sensitivity Level		1	
ESD Classification (HBM)		N/A	

Notes:
- **UL recognized component, UL File E153537.**
- Model number marking on tube: 27-xxxV.
- Sparkover limits ±20 % after life, IR >10^8 Ω (-25 %, +30 % for Models 2027-07, 2027–09 and 2027–60).
- At delivery AQL 0.65 Level II, DIN ISO 2859.

(2) Network applied.
(3) DC Sparkover may exceed ±20 % after discharge, but will continue to protect without venting.

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.

Applications

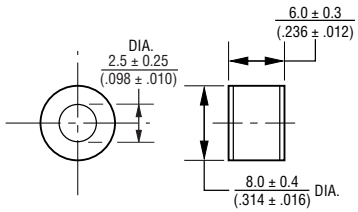
- Telecommunications
- Industrial electronics
- Commercial electronics
- Consumer electronics

2027 Series - 2-Pole Gas Discharge Tube

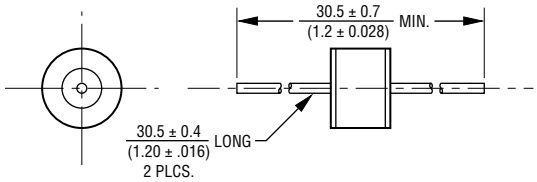
BOURNS®

Product Dimensions

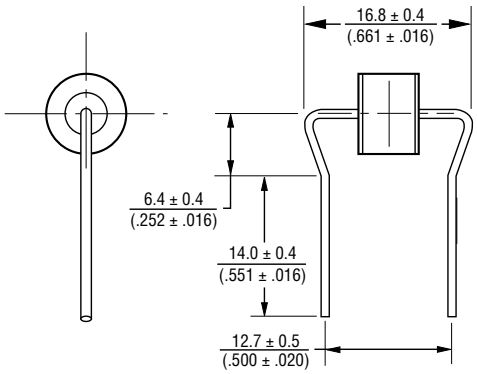
2027-XX-A



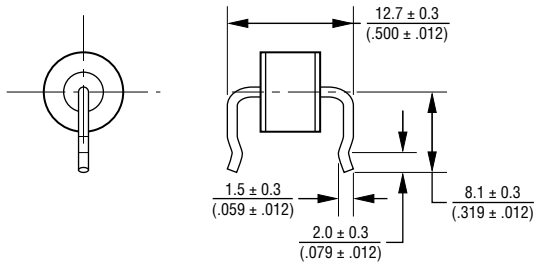
2027-XX-B — 0.8 ± .04 mm (0.032 ± 0.002 in.) dia. lead wire
2027-XX-C — 1.0 ± .04 mm (0.039 ± 0.002 in.) dia. lead wire



2027-XX-B19 — 0.8 ± 0.04 mm (0.032 ± 0.002 in.) dia. lead wire
(Not available in reelpack)



2027-XX-B10 — 0.8 ± .04 mm (0.032 ± 0.002 in.) dia. lead wire
2027-XX-C10 — 1.0 ± .04 mm (0.039 ± 0.002 in.) dia. lead wire
(Not available in reelpack)



DIMENSIONS: MM / (INCHES)

How to Order

2027 - xx - x nn T1 LF

Model Number Designator

Voltage (Divided by 10)

07 = 75 V	30 = 300 V
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

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

Lead Shape
(See Product Dimension Drawings)

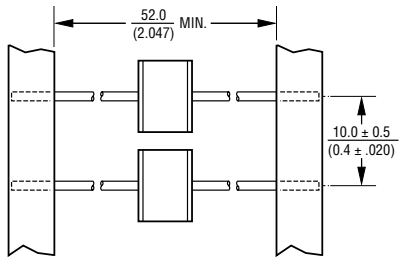
Packaging
- Blank = Bulk Packaging (Standard)
- T1 = Reelpack (Optional - not available for Models 2027-xx-B19 and 2027-xx-B10/C10)

RoHS Compliant Option
- Blank = Standard Product
- LF = RoHS Compliant Product

Packaging Specifications

Model	Standard Packaging Quantity			
	Bulk (Bag)	Tray	Box	Reel
2027-XX-A	250		1000	
2027-XX-B	100		500	
2027-XX-C	100		500	
2027-XX-B10		100	1000	
2027-XX-C10		100	1000	
2027-XX-B19	100		500	
2027-XX-C19	100		500	
2027-XX-BT1				1000
2027-XX-CT1				1000

2027-XX-BT1 — 0.8 ± 0.04 mm (0.032 ± 0.002 in.) dia. lead wire
Reel is 14-inches in diameter and 2.75-inches wide.



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