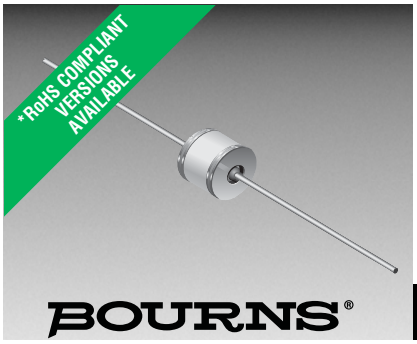


Features

- 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 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	300 V	300 V	350 V	400 V	450 V	475 V
1000 V/μs	500 V	500 V	575 V	600 V	675 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	550 V	600 V	650 V	675 V	725 V	850 V
1000 V/μs	800 V	875 V	925 V	950 V	1000 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
2500 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 Temperature ..... -55 to +125 °C
Climatic Category (IEC 60068-1) 40/90/21

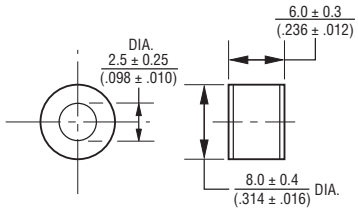
Notes:
- **UL recognized component, UL File E153537.**
- Model number marking on tube: 27-xxxV.
- Sparkover limits ±20 % after life, IR $>10^8$ Ω (-25 %, +30 % for Models 2027-07, 2027–09 and 2027–60).
- At delivery AQL 0.65 Level II, DIN ISO 2859.

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

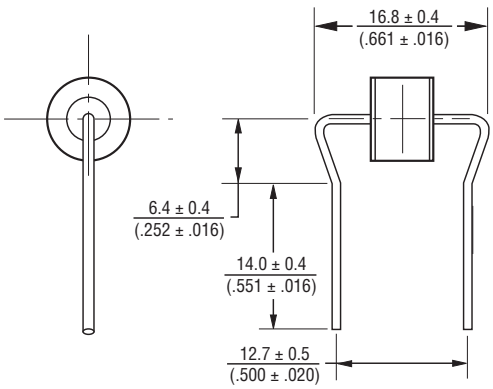
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Product Dimensions

2027-XX-A



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



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

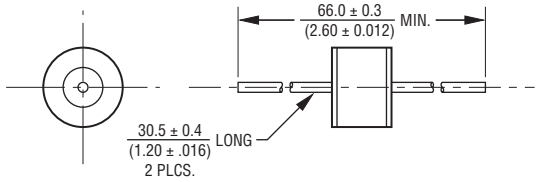
Leads
- A = None
- B = 0.8 mm
- C = 1 mm

Lead Shape
(See Product Dimension Drawings)

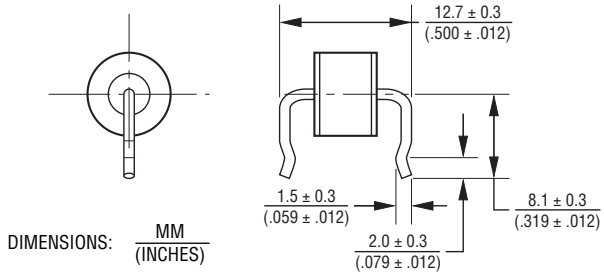
Packaging
- Blank = Bulk Packaging (Standard)
- T1 = Reelpack (Optional - not available for Models 2027-xx-B19 and 2027-xx-B10/C10)

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

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



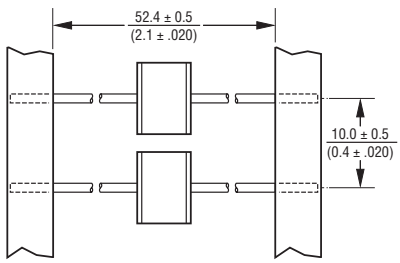
2027-XX-B10 — 0.8 ± .04 mm (0.032 ± 0.002 in.) dia. lead wire
2027-XX-C10 — 1.0 ± .04 mm (0.039 ± 0.002 in.) dia. lead wire
(Not available in reelpack)



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	900	
2027-XX-C10		100	900	
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 " in diameter and 2.75 " wide.



REV. 08/15