


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
- Aircraft and 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 $\pm 15\%$ ($\pm 20\%$ 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/ μ s	300 V	300 V	350 V	400 V	450 V	475 V
	1000 V/ μ s	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 $\pm 15\%$ @ 100 V/s	300 V	350 V	400 V	420 V	470 V	600 V	
Impulse Sparkover ⁽¹⁾	100 V/ μ s	550 V	600 V	650 V	675 V	725 V	850 V
	1000 V/ μ s	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)	$> 10^{10} \Omega$
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 ⁽²⁾	135 V, (52 V for Models 2027-07 and 2027-09,	< 150 ms
	80 V for Model 2027-15)	
Impulse Discharge Current	25000 A, 8/20 μ s ⁽³⁾	1 operation minimum
	10000 A, 8/20 μ s	> 10 operations
	2500 A, 10/350 μ s	2 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 ⁽³⁾	1 operation minimum
	10 Arms, 1 s	> 10 operations
Operating Temperature .....	.....	-55 to +125 °C
Climatic Category (IEC 60068-1) .....	.....	40/90/21
Moisture Sensitivity Level .....	.....	1
ESD Classification (HBM) .....	.....	6

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 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 $\pm 20\%$ after discharge, but will continue to protect without venting.



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

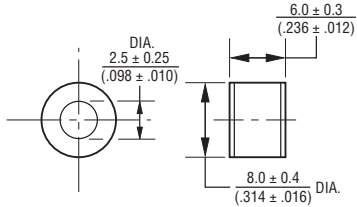
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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2027 Series - 2-Pole Gas Discharge Tube

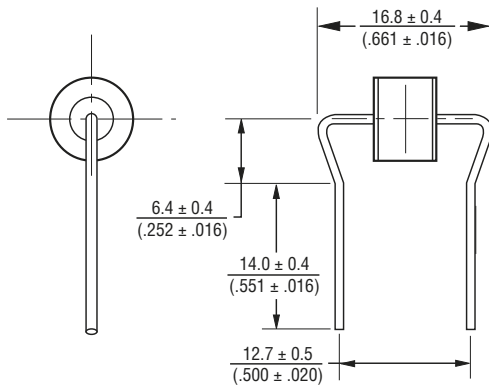
BOURNS®

Product Dimensions

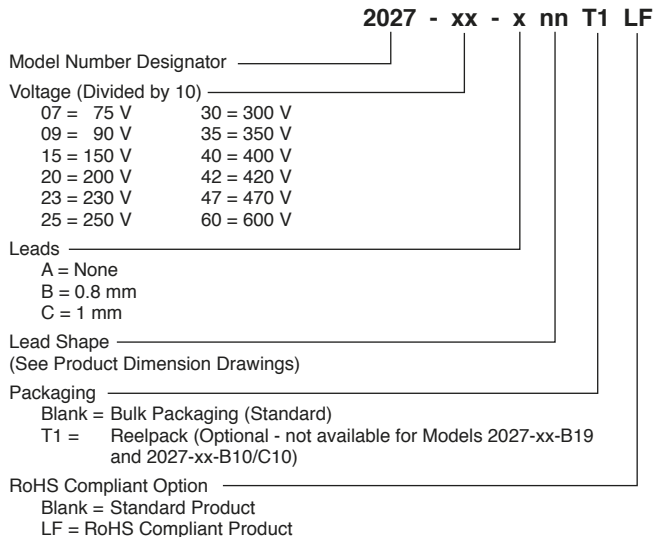
2027-XX-A



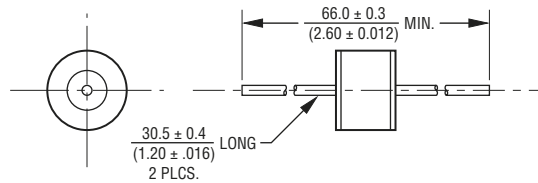
2027-XX-B19 — 0.8 ± 0.04 mm (0.032 ± 0.002 in.) dia. lead wire
(Not available in reelpack)



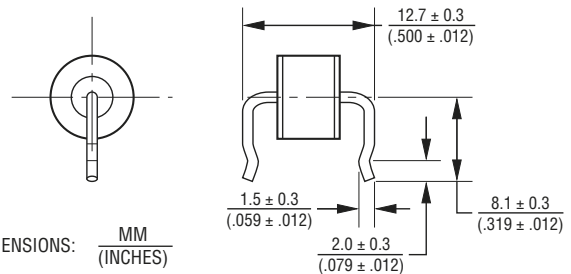
How to Order



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



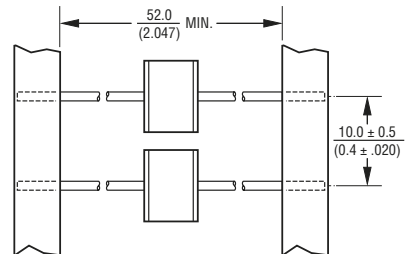
2027-XX-B10 — $0.8 \pm .04$ mm (0.032 ± 0.002 in.) dia. lead wire
2027-XX-C10 — $1.0 \pm .04$ mm (0.039 ± 0.002 in.) dia. lead wire
(Not available in reelpack)



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	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.



REV. 11/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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