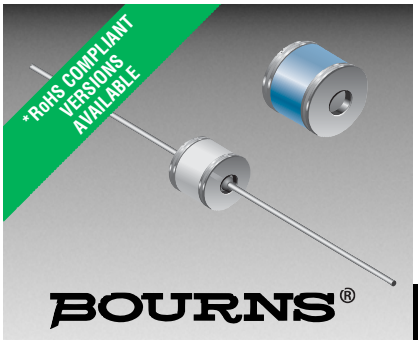


Features

- 5 mm diameter, 4 mm long (2035 series)
- 5 mm diameter, 5 mm long (2037 series)
- UL Recognized
- High surge current rating
- Stable breakdown throughout life
- RoHS compliant* versions available

Applications

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

2035/2037 Series - Miniature 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.					
	2035-2037-09	2035/2037-15	2035/2037-20	2035/2037-23	2035/2037-25	2035/2037-30
DC Sparkover ±15 % (±20 % for Model 2035/2037-09) @ 100 V/s	90 V	150 V	200 V	230 V	250 V	300V
Impulse Sparkover (1) 100 V/µs 1000 V/µs	 300 V 550 V	 350 V 550 V	 425 V 575 V	 450 V 600 V	 475 V 625 V	 525 V 650 V

Characteristic	Model No.				
	2035/2037-35	2035/2037-40	2035/2037-42	2035/2037-47	2035/2037-60
DC Sparkover ±15 % @ 100 V/s	350 V	400 V	420 V	470 V	600 V
Impulse Sparkover (1) 100 V/µs 1000 V/µs	 600 V 750 V	 650 V 800 V	 675 V 850 V	 750 V 950 V	 950 V 1100 V

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

Insulation Resistance (IR)	100 V (50 V for Models 2035/2037-09)	$>10^{10}$ Ω	
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 2035/2037-09, 80 V for Models 2035/2037-15)	<150 ms	
Impulse Discharge Current	10000 A, 8/20 µs (3)		1 operation min.
	5000 A, 8/20 µs	>10 operations	
	1000 A, 10/350 µs		1 operation
	100 A, 10/1000 µs	>300 operations	
	100 A, 10/700 µs	>500 operations	
Alternating Discharge Current	20 Arms, 11 cycles (3)		1 operation min.
	5 Arms, 1 s	>10 operations	
Operating Temperature		-55 to +85 °C	
Climatic Category (IEC 60068-1)		40/90/21	

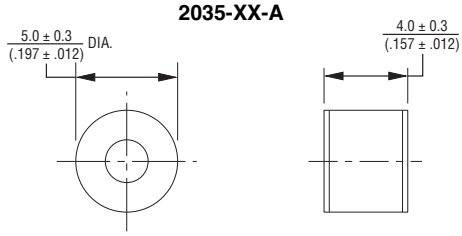
Notes:
- UL recognized component, UL File E153537.
- Model number marking on tube: xxxV.
- Sparkover limits after life ±20 % (-25 %, +30 % for Models 2035/2037-09 and 2035/2037-60) , IR>10^8 Ω.
- Other DC sparkover ranges available on request.
- At delivery AQL 0.65 Level II, DIN ISO 2859.

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

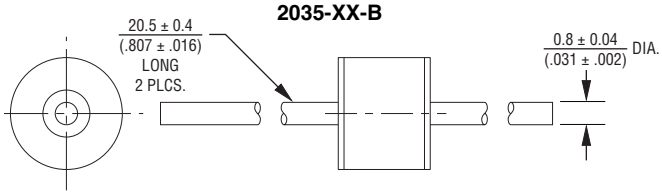
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

Product Dimensions

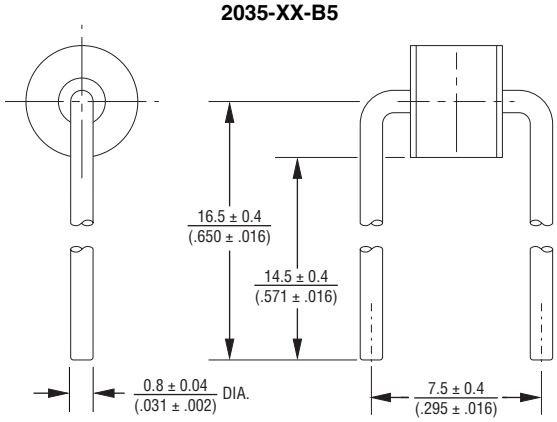
2035-XX-A



2035-XX-B

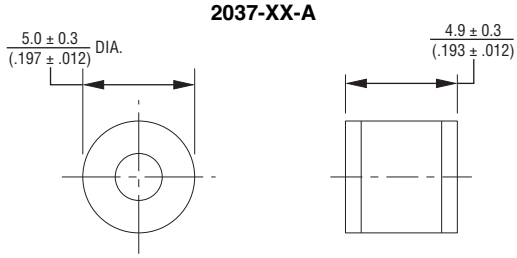


2035-XX-B5

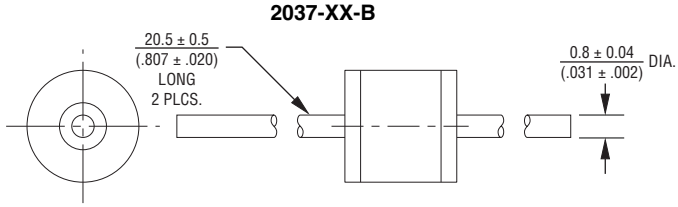


2035-xx-B5 not available in reel pack.

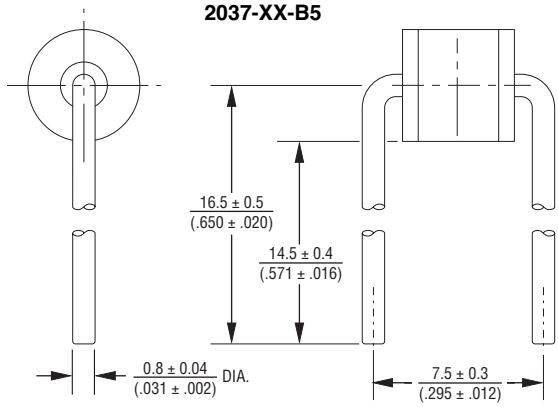
2037-XX-A



2037-XX-B



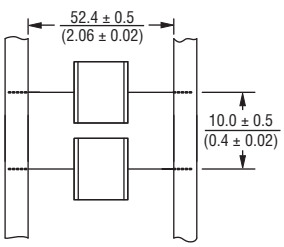
2037-XX-B5



2037-xx-B5 not available in reel pack.

Packaging Specifications

-BT1



Reel is 14 ” in diameter and 2.75 ” wide.

DIMENSIONS: MM / (INCHES)

Model	Standard Packaging Quantity			
	Bulk (Bag)	Tray	Box	Reel
2035/2037-XX-A	250		1000	
2035/2037-XX-B	100		700	
2035/2037-XX-B5	250		1000	
2035/2037-XX-BT1				1000

How to Order

2035/37 - xx - x (n) T1 LF

Model Number Designator

Voltage (Divided by 10)

09 = 90 V	25 = 250 V	42 = 420 V
15 = 150 V	30 = 300 V	47 = 470 V
20 = 200 V	35 = 350 V	60 = 600 V
23 = 230 V	40 = 400 V	

Leads

A = None B = 0.8 mm

Lead Shape
(See Product Dimension Drawings)

Packaging

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

RoHS Compliant Option

Blank = Standard Product
LF = RoHS Compliant Product

REV. 08/15

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