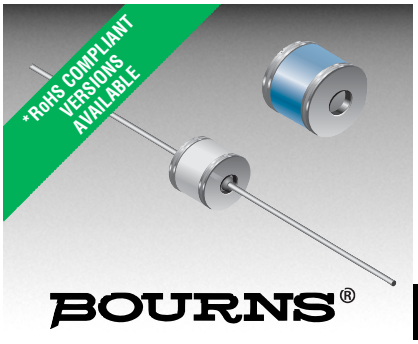


Features

- 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 (CCITT) K.12, IEEE C62.31

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 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 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

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[1]	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[2]	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[2]	1 operation min.	
	5 Arms, 1 s	>10 operations	
Operating Temperature		-55 to +85 °C	
Climatic Category (IEC 60068-1)		40/90/21	

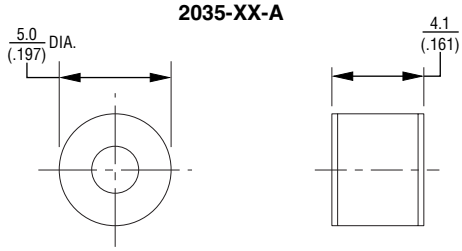
Notes:
- UL recognized component, UL File E153537.
- Model number marking on tube: xxxV.
- Sparkover limits after life ±20 % (-25 %, +30 % for Models 2035/2037-09 and 2035/2037-60) , IR>10^8 Ω.
- Other DC sparkover ranges available on request.
- At delivery AQL 0.65 Level II, DIN ISO 2859.

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

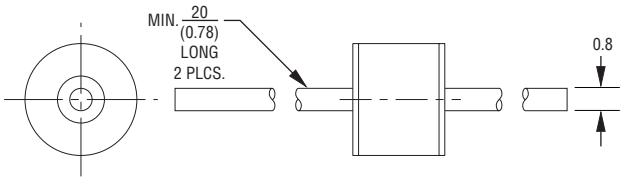
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

Product Dimensions

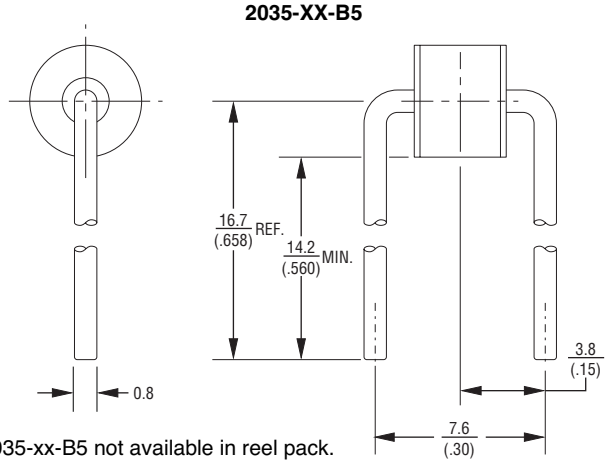
2035-XX-A



2035-XX-B

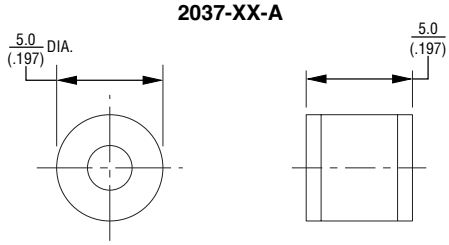


2035-XX-B5

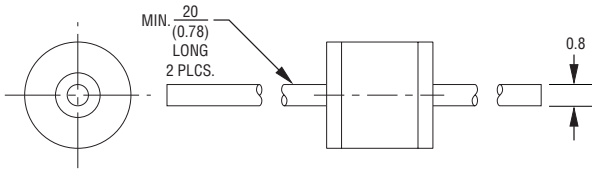


2035-xx-B5 not available in reel pack.

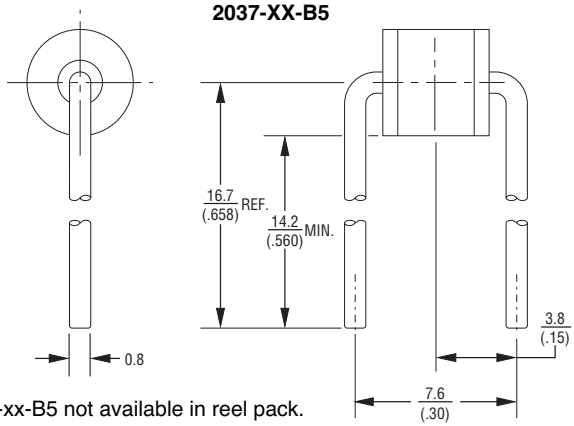
2037-XX-A



2037-XX-B

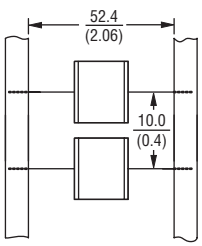


2037-XX-B5



2037-xx-B5 not available in reel pack.

Packaging Specifications



Model 2035/2037-xx-n ships standard bulk pack, 100 pcs./bag.

The optional reelpack (-BT1) contains 1,000 pcs./reel. Reel is 14 ” in diameter and 2.75 ” wide.

2035-xx-B5 not available in reel pack.

DIMENSIONS: MM / (INCHES)

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. 08/29/12

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