



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 $\pm 15\%$ ($\pm 20\%$ for Model 2035/2037-09) @ 100 V/s	90 V	150 V	200 V	230 V	250 V	300V
Impulse Sparkover 100 V/ μ s	300 V	350 V	425 V	450 V	475 V	525 V
1000 V/ μ s	550 V	550 V	575 V	600 V	625 V	650 V

Characteristic	Model No.				
	2035/2037-35	2035/2037-40	2035/2037-42	2035/2037-47	2035/2037-60
DC Sparkover $\pm 15\%$ @ 100 V/s	350 V	400 V	420 V	470 V	600 V
Impulse Sparkover 100 V/ μ s	600 V	650 V	675 V	750 V	950 V
1000 V/ μ s	750 V	800 V	850 V	950 V	1100 V

Insulation Resistance (IR)	100 V (50 V for Models 2035/2037-09)	$> 10^{10} \Omega$
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 ¹	135 V, (52 V for Models 2035/2037-09,	< 150 ms
	80 V for Models 2035/2037-15)	
Impulse Discharge Current	10000 A, 8/20 μ s ²	1 operation min.
	5000 A, 8/20 μ s	> 10 operations
	1000 A, 10/350 μ s	1 operation
	100 A, 10/1000 μ s	> 300 operations
	100 A, 10/700 μ s	> 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 $\pm 20\%$ (-25 %, +30 % for Models 2035/2037-09 and 2035/2037-60) , IR $>10^8 \Omega$.
- 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 $\pm 20\%$ 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.

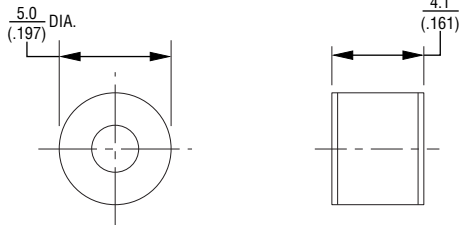
Customers should verify actual device performance in their specific applications.

2035/2037 Series - Miniature 2-Pole Gas Discharge Tube

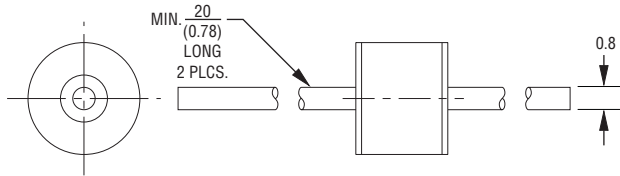
BOURNS®

Product Dimensions

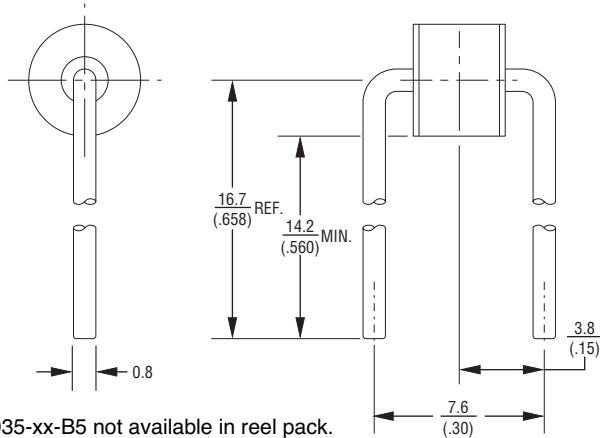
2035-XX-A



2035-XX-B

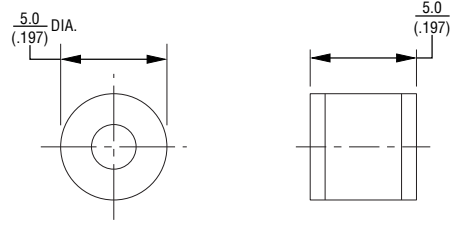


2035-XX-B5

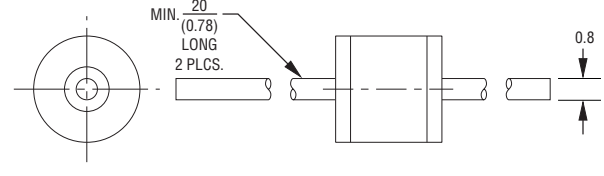


2035-xx-B5 not available in reel pack.

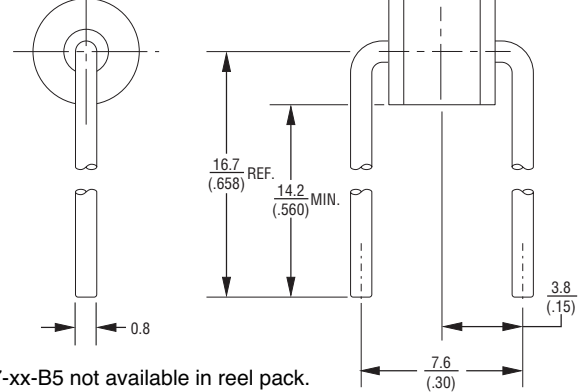
2037-XX-A



2037-XX-B

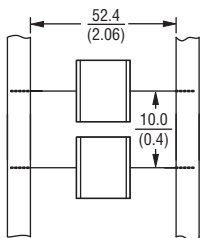


2037-XX-B5



2037-xx-B5 not available in reel pack.

Packaging Specifications



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

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

2035-xx-B5 not available in reel pack.

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

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 = Reel pack (Optional)

RoHS Compliant Option _____

Blank = Standard Product

LF = RoHS Compliant Product

REV. 05/15

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

Mouser Electronics

Authorized Distributor

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Bourns:

[2035-60-B5](#) [2037-60-B5](#) [2035-35-B5](#) [2037-35-B5](#) [2037-09-A](#) [2037-25-A](#) [2035-09-C5](#) [2035-47-A](#) [2035-47-B](#)
[2035-60-C5](#) [2037-23-A](#) [2037-15-B](#) [2035-15-BT1](#) [2037-35-A](#) [2037-35-B](#) [2035-30-B5](#) [2037-30-B5](#) [2037-30-C5](#)
[2037-23-B5](#) [2035-23-B5](#) [2035-60-B](#) [2035-60-A](#) [2035-09-B5](#) [2037-09-BT1](#) [2035-42-C](#) [2035-42-B](#) [2037-60-A](#) [2037-](#)
[25-C5](#) [2035-25-B5](#) [2037-25-B5](#) [2035-09-BT1](#) [2035-40-B](#) [2035-23-C](#) [2035-23-B](#) [2035-23-A](#) [2035-20-B](#) [2035-20-C](#)
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[B5LF](#) [2037-35-BLF](#) [2037-35-CLF](#) [2037-42-B5LF](#) [2037-60-CLF](#) [2035-40-B5](#) [2037-30-A](#) [2035-30-B](#) [2035-30-A](#)
[2035-09-A](#) [2035-09-B](#) [2035-09-C](#) [2035-25-B](#) [2035-25-A](#) [2035-15-B](#) [2035-15-A](#) [2035-15-C](#) [2035-15-B5](#) [2035-23-](#)
[BT1](#) [2037-42-A](#) [2037-40-A](#) [2035-20-B5](#) [2037-20-B5](#) [2035-35-BT1](#) [2035-35-B](#) [2035-35-C](#) [2035-35-A](#) [2037-23-BLF](#)
[2035-23-BT1LF](#) [2035-60-ALF](#) [2035-09-BLF](#) [2035-60-BLF](#) [2037-09-B](#) [2037-30-B](#) [2037-60-B](#) [2035-60-B5LF](#) [2037-](#)
[09-B5](#) [2037-40-B](#) [2037-40-BLF](#) [2035-23-BLF](#) [2035-15-BLF](#) [2035-20-ALF](#) [2035-20-BLF](#) [2035-23-B5LF](#) [2035-25-](#)
[BLF](#) [2035-30-B5LF](#) [2035-30-BLF](#) [2035-35-B5LF](#) [2035-40-BLF](#) [2035-42-BLF](#) [2035-47-BLF](#) [2035-60-C5LF](#) [2037-47-](#)
[BLF](#) [2037-60-B5LF](#) [2035-47-B5LF](#) [2037-60-BLF](#)