



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 $\pm 15\%$ ($\pm 20\%$ for Model 2035/2037-09) @ 100 V/s	90 V	150 V	200 V	230 V	250 V	300 V
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 $\pm 15\%$ ($\pm 20\%$ for Model 2035/2037-09) @ 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
	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

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.

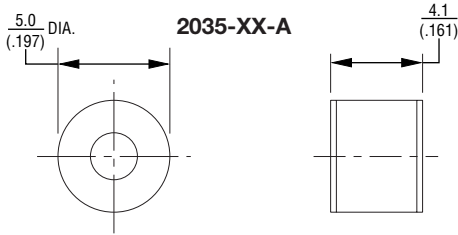
¹ Network applied.

² DC Sparkover may exceed $\pm 20\%$ but will continue to protect without venting.

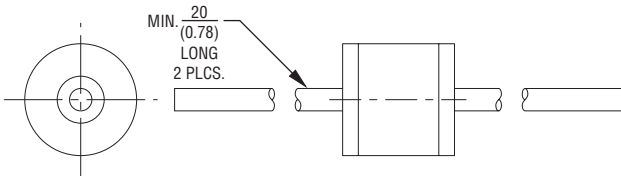
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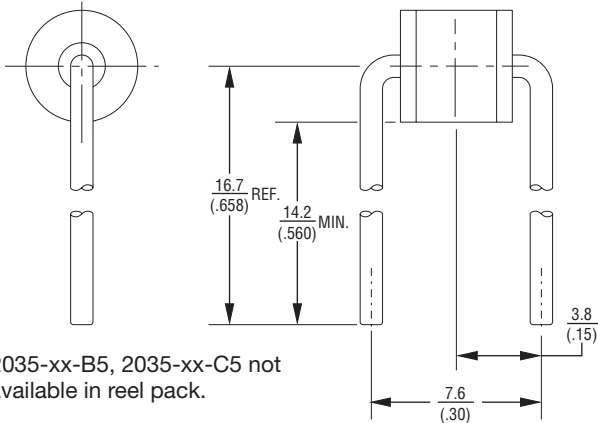
Product Dimensions



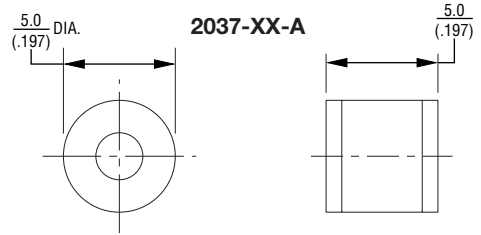
2035-XX-B — 0.8 mm (0.032 in.) dia. lead wire
2035-XX-C — 1.0 mm (0.040 in.) dia. lead wire



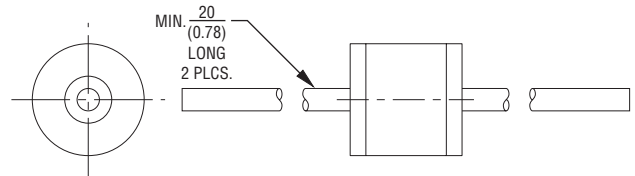
2035-XX-B5 — 0.8 mm (0.032 in.) dia. lead wire
2035-XX-C5 — 1.0 mm (0.040 in.) dia. lead wire



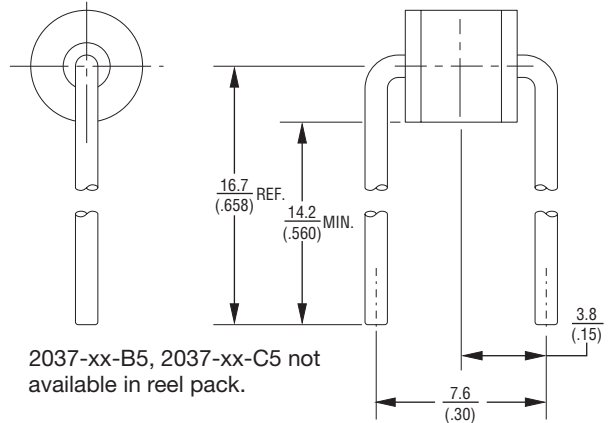
2035-xx-B5, 2035-xx-C5 not available in reel pack.



2037-XX-B — 0.8 mm (0.032 in.) dia. lead wire
2037-XX-C — 1.0 mm (0.040 in.) dia. lead wire

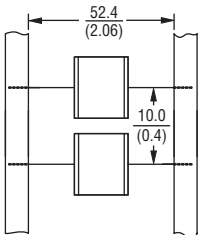


2037-XX-B5 — 0.8 mm (0.032 in.) dia. lead wire
2037-XX-C5 — 1.0 mm (0.040 in.) dia. lead wire



2037-xx-B5, 2037-xx-C5 not available in reel pack.

Packaging Specifications



Model 2035/2037-xx-nn 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, 2035-xx-C5 not available in reel pack

DIMENSIONS = $\frac{\text{MILLIMETERS}}{\text{(INCHES)}}$

How To Order

2035/37 - xx - x - nn - 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 C = 1 mm

Lead Shape _____
 (See Product Dimension Drawings)

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

Lead Free Option _____
 Blank = Standard Product
 LF = Lead Free/RoHS Compliant Product

REV. 02/09

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