




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 | 300 V |
| 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 % (±20 % for Model 2035/2037-09) @ 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, | < 150 ms |
| Impulse Discharge Current | 10000 A, 8/20 μs ² | 1 operation min |
| | 5000 A, 8/20 μs..... | > 10 operations |
| | 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 |

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>10⁸ Ω.
- Other DC sparkover ranges available on request.
- At delivery AQL 0.65 Level II, DIN ISO 2859.

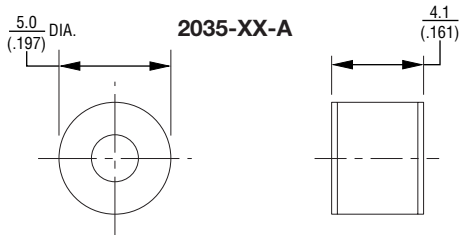
¹ Network applied.

² DC Sparkover may exceed ±20 % but will continue to protect without venting.

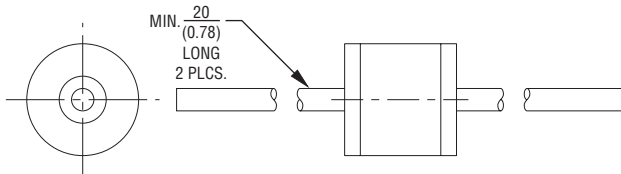
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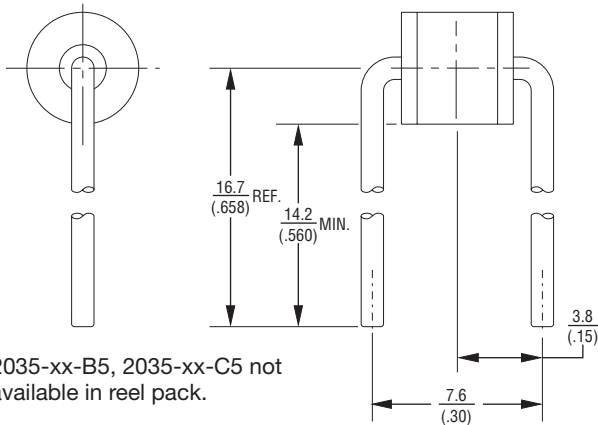
Product Dimensions



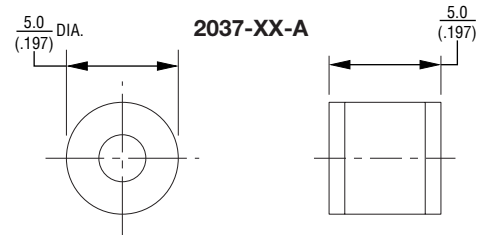
2035-XX-B — 0.8 mm (0.032 in.) dia. lead wire
2035-XX-C — 1.0 mm (0.040 in.) dia. lead wire



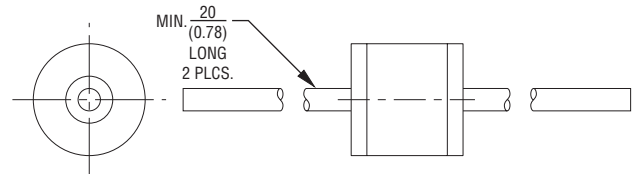
2035-XX-B5 — 0.8 mm (0.032 in.) dia. lead wire
2035-XX-C5 — 1.0 mm (0.040 in.) dia. lead wire



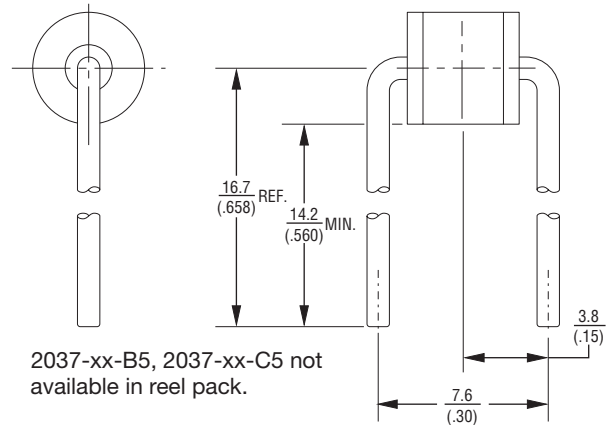
2035-xx-B5, 2035-xx-C5 not available in reel pack.



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

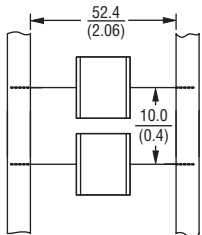


2037-XX-B5 — 0.8 mm (0.032 in.) dia. lead wire
2037-XX-C5 — 1.0 mm (0.040 in.) dia. lead wire



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.