



## Features

- Leadless, surface mount for economical assembly
- Low capacitance and insertion loss
- High surge current rating
- Compact “mini” size
- Stable breakdown throughout life
- RoHS compliant\* version available

## 2035-110-SM-RPLF Gas Discharge Tube

Bourns offers a miniature Surface Mount (SM) 2-electrode GDT surge protector. The industry-leading quality and features of the 2035 Series GDT continue in this SM version. Compatible with “pick and place” assembly systems, the 2035-SM is ideal for board level protection of high bandwidth applications such as xDSL, cable broadband and high speed Ethernet, due to its high energy-handling capability, long and stable life performance and low capacitance of less than 1 pF. Bourns® subminiature family of GDTs measure only 5 mm in diameter and are presently the best performing and smallest in the telecom industry. Bourns® GDTs are designed to prevent damage from transient disturbances by acting as a “crowbar” to create a short-to-ground circuit during conduction. When an electrical surge exceeds the defined breakdown voltage level of the GDT, the device becomes ionized and conduction takes place within a fraction of a microsecond. When the surge passes and system voltage returns to normal levels, the GDT returns to its high-impedance (off) state.

### Characteristics

Test Methods per ITU-T (CCITT) K.12, IEEE C62.31

DC Sparkover .....	±20 % @ 100 V/s.....	1100 V
Impulse Sparkover .....	@ 1k V/μs.....	1500 V
Insulation Resistance (IR) .....	100 V .....	> 10 <sup>9</sup> Ω
Arc Voltage .....	1 A .....	~ 10 V
Glow-Arc Transition Current .....	.....	< 0.5 A
Capacitance .....	1 MHz .....	< 2 pF
DC Holdover Voltage .....	135 V .....	< 150 ms
Max. Single Discharge <sup>1</sup> .....	5 kA .....	> 1 operation
Impulse Discharge Current.....	2.5 kA, 8/20 μs .....	> 10 operations
	100 A, 10/1000 μs .....	> 100 operations
	10 A, 10/1000 μs .....	> 1500 operations
Alternating Discharge Current .....	2.5 Arms, 1 s .....	> 10 operations
Operating and Storage Temperature.....	.....	-55 to +85 °C

### Notes:

Sparkover limits after life +30/-25 %, IR >10<sup>8</sup> Ω.

<sup>1</sup> DC Sparkover may exceed +30/-25 % but will continue to protect without venting.



### Circuit Protection Division

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\* RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

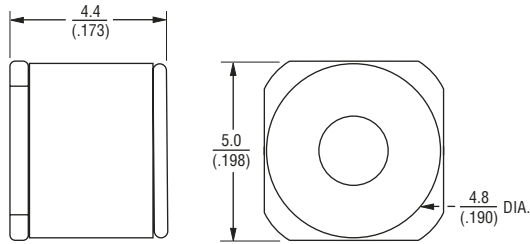
Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

# 2035-110-SM-RPLF Gas Discharge Tube

**BOURNS®**

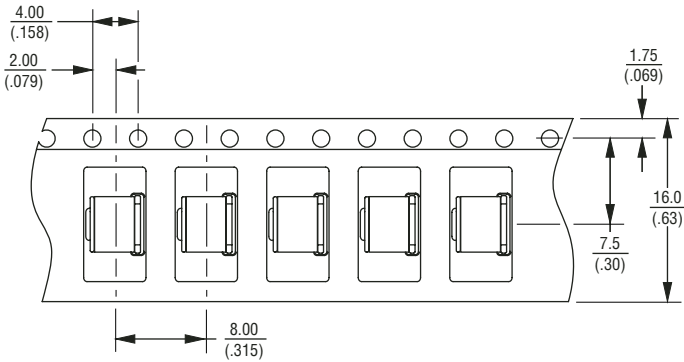
## Product Dimensions



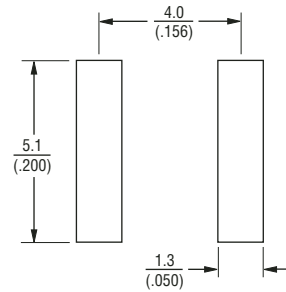
## Packaging Specifications

The Model 2035-110-SM-RPLF ships standard bulk pack, 100 pieces per bag.

The optional reelpack (-RP) contains 1,500 pieces per reel. Reel is 13 " in diameter and 3/4 " wide.



## Recommended Pad Layout



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

## How To Order

