

Features

- High current handling/capability
- Transparent housing
- Magnified fuse indicator window
- Low leakage - up to 36 V
- Fail-open-circuit indicator
- AREMA compliant

Applications

Railroad electronic equipment:

- Bungalows
- Wayside Interface Units (WIU)
- Electronic enclosures

1675-01 Rail Surge Protective Device

General Information

The Bourns® Model 1675 Surge Protective Device (SPD) was designed specifically for railroad wayside applications. The Model 1675 is intended to protect signal and track circuits and other electrical circuits leaving the bungalow. The Model 1675 employs a heavy duty multi-technology protection design that shunts surge current to ground in the event of a lightning strike. In the event of a strike that disables the protector unit, two visual indicators will assist technicians in being able to quickly identify the activated unit within the crowded space of the electronics enclosure. The visual indicators are spring-loaded red tabs - when sticking out of the side of the arrester, the unit should be replaced. There is also a fuse designed into the arrester which is visible through the magnifying lens at the top of the arrester. If this fuse is blown, the arrester should be replaced.

The arrester has also been designed to prevent the shorting of signals or track circuits to earth GND in the event of a heavy duty strike.

See page 2 for application details.

Electrical Characteristics

Operating Voltage.....	Up to 36 Vdc
Operating Current.....	Up to 12 A
DC Sparkover	~ 40 V
Impulse Sparkover 100 V/μs	< 300 V
Impulse Discharge Voltage.....	3 kA, 6 kV, 8/20 μs
	> 1000 operations
	20 kA, 8/20 μs
	> 25 operations
	40 kA, 8/20 μs
	> 10 operations
	1000 A, 10/1000 μs
	> 1000 operations
Let-through Voltage for a 3 kA, 6 kV, 8/20 μsec Surge.....	See chart below

General Characteristics

Operation and Storage Temperature.....	-40 °C to 70 °C
Flame Rating	UL 94V0
Failure Mode.....	OPEN CIRCUIT
Unit Weight.....	3 oz.
Warranty	2 years

How to Order

Part Number	1675-01
Units per Inner Package	5
Units per Shipping Package	100

BOURNS®

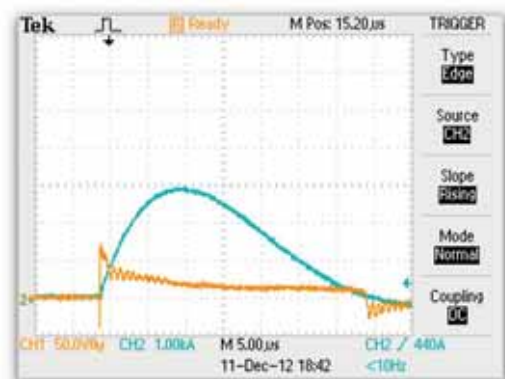
Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

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Let-through Voltage



8/20 μs / 6 kV / 3 kA



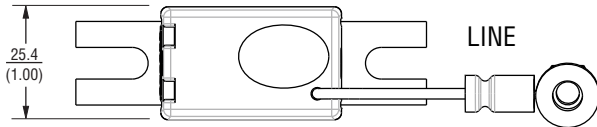
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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1675-01 Rail Surge Protective Device

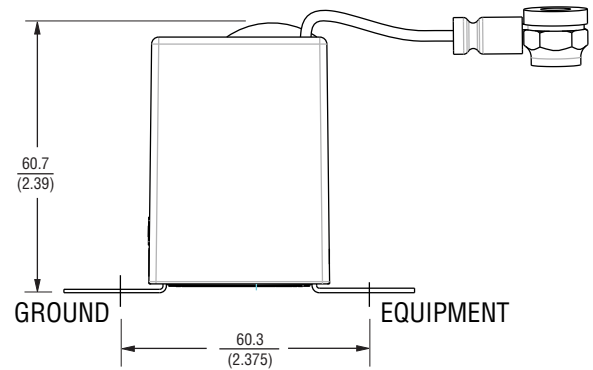
BOURNS®

Product Dimensions



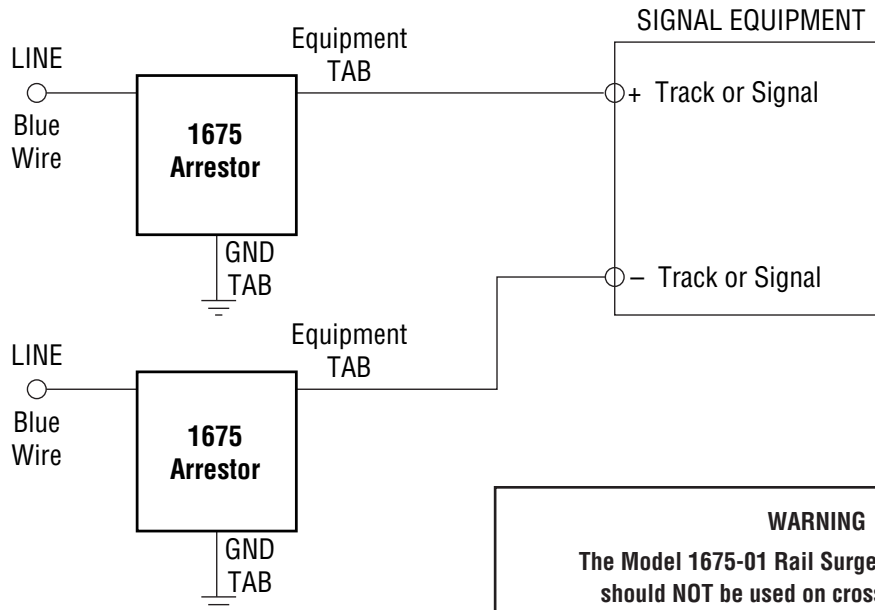
6.5 INCH LEAD INSULATED #14 AWG WIRE
WITH TEST TERMINAL AND NUT

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



Application/Installation

The Model 1675-01 is a passive device and is compatible with electronic equipment operating at voltages up to 36 Vdc or 25 VAC. The protector is intended to be mounted in series between the signals or track leads (Line) and the leads going to the equipment to be protected (Equipment).



WARNING

The Model 1675-01 Rail Surge Protective Device should NOT be used on crossing equipment!

REV. 10/19

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