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

### Let-through Voltage

![Let-through Voltage](chart)

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The Model 1675-01 Rail Surge Protective Device 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).

**Application/Installation**

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

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