

SPR-TM SERIES

INSTRUMENTATION/DATA LINE

SURGE SUPPRESSOR



RJ11 & RJ45 Versions available. See back page



FEATURES:

- ▶ Exceeds severity level 4 of IEC/EN 61000-4-4 (Provides 10 kA/Line of surge protection).
- ▶ Product family design allows a cost effective selection (mix and match) from one line pair to extensive multi-line applications.
- ▶ Differential protection for wire pairs.
- ▶ Simple installation to a wall or case.
- ▶ Unique multi-stage design provides the most effective suppression available and requires no additional secondary protection.
- ▶ Fast, direct wire termination to secure wire clamp terminals.
- ▶ This series can be used on analog or digital signal/data lines, RS-422, RS-485, and RS-232 lines.
- ▶ Space efficient protector is hermetically sealed and suitable for the most harsh industrial environments.
- ▶ Sub nanosecond response time stops failures due to lightning, spikes and over-voltage surges while minimizing other electrical noise.
- ▶ Superior protection at an affordable price.

Applications:

The SPR-TM Series is designed to protect measurement and process control equipment, 4-20 mA loop instrumentation, data processing, telecommunication equipment, etc.

Select the model according to the number of lines needing protection and the operating voltage found on the reverse side of this data sheet. Select from 2 pair to 10 pair or 20 individual lines

Ideally suited for multi-line applications where a concentration of data lines is found.

Typical Installation:

Screw mount the SPR-TM Series suppressor on any convenient surface. Connect each incoming line pair to the suppressor as indicated. Connect the facility ("clean") line pair(s) to the equipment and dress away from the incoming lines. The suppressor must be connected to a good earth ground. Keep the ground wire (#12 AWG or larger) short and place the suppressor as near to the equipment it is to protect as possible. Equipment ground and suppressor ground should be common.

SURGE CONTROL®
A PRODUCT OF CCI

SPR-TM SERIES OPERATING SPECIFICATIONS:

See note 3 for RJ11 & RJ45 versions

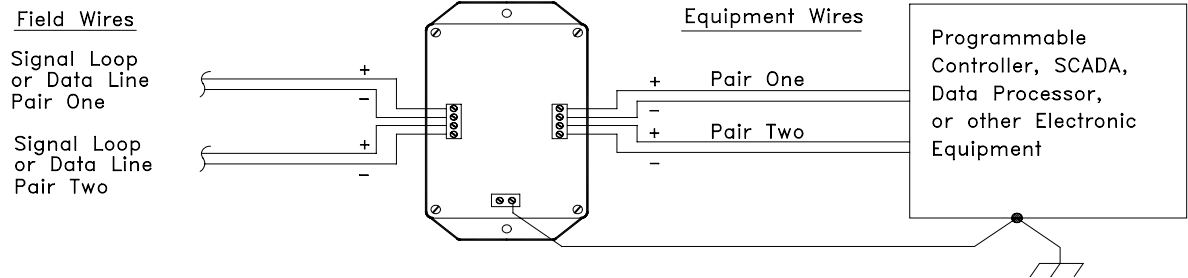
| Specifications | SPR-XTM05 | SPR-XTM14 | SPR-XTM25 | SPR-XTM28 | SPR-XTM36 | SPR-XTM50 | SPR-XTM60 |
|--|--|------------------|------------|------------|------------|------------|------------|
| "RS" Applications | N/A | RS-422 RS-485 | RS-232 | N/A | N/A | N/A | N/A |
| Operating Voltage | 5 Volts | 12 Volts | 24 Volts | 28 Volts | 36 Volts | 50 Volts | 60 Volts |
| Maximum Operation Voltage | 6 Volts | 14 Volts | 27 Volts | 30 Volts | 38 Volts | 55 Volts | 67 Volts |
| Maximum Operating Current | 200 mA | 200 mA | 200 mA | 200 mA | 200 mA | 200 mA | 200 mA |
| Clamping Action Turn-On | 7.1 Volts | 14.3 Volts | 28.5 Volts | 31.4 Volts | 40.9 Volts | 58.9 Volts | 71.3 Volts |
| Maximum Clamping at 2 kA (8 x 20 µSec) | 11 Volts | 22 Volts | 44 Volts | 46 Volts | 58 Volts | 81 Volts | 94 Volts |
| Maximum Surge Voltage | 20 kV | 20 kV | 20 kV | 20 kV | 20 kV | 20 kV | 20 kV |
| Maximum Surge Current (8 x 20 µSec) | 10.0 kA | 10.0 kA | 10.0 kA | 10.0 kA | 10.0 kA | 10.0 kA | 10.0 kA |
| Current Leakage/Line At Operating Voltage | 500 µA | 5 µA | 5 µA | 5 µA | 5 µA | 5 µA | 5 µA |
| Capacitance/Line At Rated Voltage | 4000 pF | 2000 pF | 500 pF | 500 pF | 400 pF | 300 pF | 200 pF |
| Response Time | Less than 1 nanosecond | | | | | | |
| Operating and Storage Temperature | -40 degrees Celsius to +85 degrees Celsius | | | | | | |

Note 1: X = Select Model, i.e., 1 = 1 Pair (2 lines), 2 = 2 Pair (4 lines), 4 = 4 Pair (8 lines), 6 = 6 Pair (12 lines), 10 = 10 Pair (20 lines)

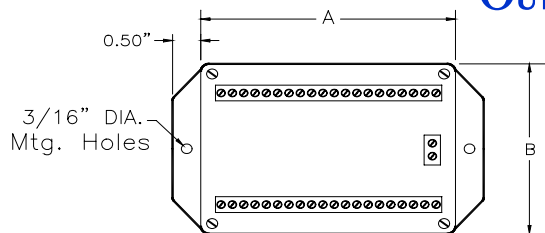
Note 2: For low capacitance (LC) version, consult with factory.

Note 3: RJ11 & RJ45 versions available for models 1,2, & 4. These versions are not UL listed. Add -RJ11 or -RJ45 for either version at the end of the P/N. All lines are protected

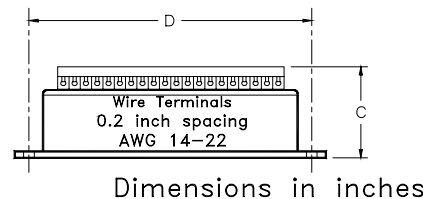
Typical Installation:



Outline Dimensions:



| MODEL | A | B | C | D |
|---------|------|------|------|------|
| SPR-1TM | 3.30 | 2.40 | 1.55 | 3.80 |
| SPR-2TM | 3.30 | 2.40 | 1.55 | 3.80 |
| SPR-4TM | 4.20 | 2.80 | 1.55 | 4.70 |



| MODEL | A | B | C | D |
|----------|------|------|------|------|
| SPR-6TM | 4.58 | 3.35 | 1.80 | 5.05 |
| SPR-10TM | 5.55 | 3.80 | 1.80 | 6.05 |

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