

SPR-TF SERIES

MODEM / TELECOM / TELEPHONE

SURGE SUPPRESSOR



FEATURES:

- ▶ Product family design allows a cost effective selection (mix and match) from one line to extensive multi-line applications.
- ▶ Exceeds severity level 4 of IEC/EN 61000-4-4. (Provides 10.0 kA/line of surge protection.)
- ▶ Unique three-stage design provides the most effective suppression available and requires no additional secondary protection.
- ▶ Automatically resets after each transient. This series requires no maintenance.
- ▶ This series can be used on any telephone telecommunications analog or digital signal/data lines which operate at standard telephone voltages.
- ▶ Fast, direct wire termination to secure wire clamp terminals.
- ▶ 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.
- ▶ Design meets requirements of UL 497 and FCC parts 15 and 68. Lightning rated fusing exceeds crossover requirements of UL 497A.
- ▶ Simple installation to a wall or case.
- ▶ Superior protection at an affordable price.

Applications:

The SPR-TF Series is designed to protect all models of feature phones, fax machines, modems and other telecommunication equipment.

Select the model according to the operating voltage found on the reverse side of this data sheet. Available from 2 pair up to 10 pair applications.

Select the SPR-TM Series for lower operating voltages such as RS-232C, RS-422, and RS-485 or current loops.

Typical Installation:

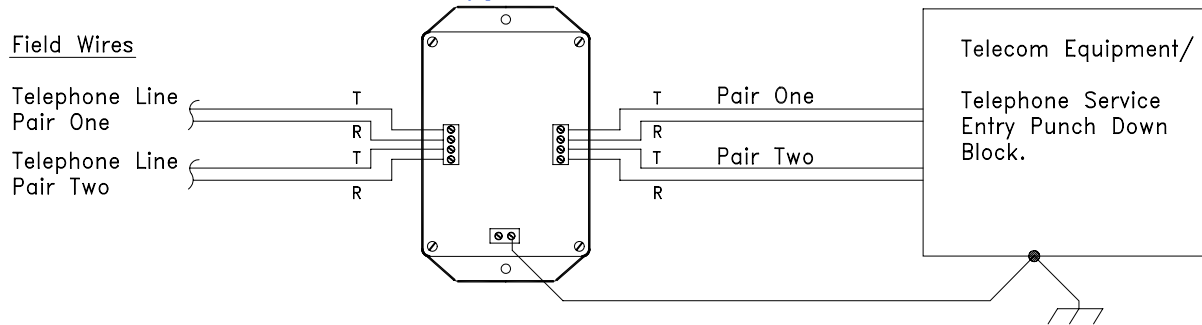
Screw mount the SPR-TF Series suppressor on any convenient surface. Connect each incoming line pair to the suppressor as indicated. Connect the facility "clean" pair(s) to the equipment and dress away from the incoming line(s). The suppressor must be connected to a good earth ground. Keep the ground 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.

SPR-TF SERIES OPERATING SPECIFICATIONS:

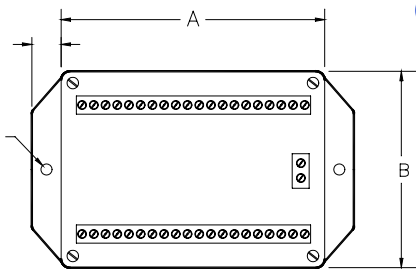
Specifications	SPR-1TF	SPR-2TF	SPR-4TF	SPR-6TF	SPR-10TF
Number of Lines (Pairs)	2 / (1)	4 / (2)	8 / (4)	12 / (6)	20 / (10)
Operating Line Voltage	185 Volts	185 Volts	185 Volts	185 Volts	185 Volts
Maximum Operating Current	200 mA	200 mA	200 mA	200 mA	200 mA
Clamping Action Turn-On	208 Volts	208 Volts	208 Volts	208 Volts	208 Volts
Clamping Voltage at I_t (10 x 1000 μ Sec)	240 Volts	240 Volts	240 Volts	240 Volts	240 Volts
Clamping Voltage at 500 Amps (8 x 20 μ Sec) Per Line	325 Volts	325 Volts	325 Volts	325 Volts	325 Volts
Maximum Surge Voltage (1.2 x 50 μ Sec)	20 kV	20 kV	20 kV	20 kV	20 kV
Maximum Surge Current (8 x 20 μ Sec)	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
Maximum Leakage Current at Operating Voltage	5 μ A	5 μ A	5 μ A	5 μ A	5 μ A
Capacitance/Line At Rated Voltage	50 pF	50 pF	50 pF	50 pF	50 pF
Throughput Resistance	10 Ohms Nominal				
Operating And Storage Temperature	-40 degrees Celsius to +85 degrees Celsius				
Response Time	Less than 1 nanosecond				
Surge Life At 10 Amps (10 x 1000 μ Sec)	>2500 times				

Consult the factory for other applications and operating conditions and specifications. All specifications each line at 25

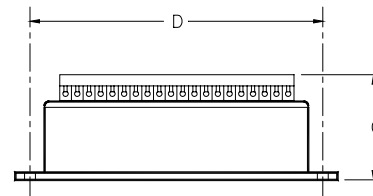
Typical Installation:



OUTLINE DIMENSIONS:



NOTE:
SPR-10TF Terminals
shown.



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

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

DIMENSIONS ARE IN INCHES.

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