

**Transient Voltage
Surge Suppressors By:**

**ST-Dx-x
Data Line Models**

Network Data Circuit protection device with Discrete All-Mode Protection



"Power Quality is our Only Business"

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The Series ST-Dx-x devices are designed to protect data transmission circuits and 4-20mA loop circuits. These devices are intended for installation near the equipment to be protected and mounted as close to the electrical power source of the equipment as possible so as to allow for a common grounding point for grounding.

This device is available for two to twelve wire data line connections (1 to 6 pair) accomplished by using the terminal strips provided, making your installation a breeze. Two ground lugs are provided on the face of the unit to insure a low impedance ground discharge path.

The unique design of these devices make them among the most versatile TVSS devices on the market with performance specs that are superior to our competitors and a warranty that is second to none.

GENERAL

Description:	Series wired transient voltage surge suppressor with encapsulated Optimal Response Network™ circuitry for protection of data circuits.
Application:	Designed for use data, signal and current loop circuits to protect data transmission system equipment from damaging transients generated between terminals and equipment in the data collection/transmission system.
Warranty:	25 Years Unlimited Free Replacement

MECHANICAL

Enclosure:	Plastic, UL 94V
Mounting:	External mounting feet.
Connection Method:	Wire clamping box terminals located at the input and output sides of the device. Wire size: Lines #18-22 AWG, Ground #6-12 AWG.
Shipping Weight:	≈ .5 lbs

CIRCUITRY

Circuit Design:	Series wired hybrid design incorporating discrete all mode protection and utilizing our encapsulated Optimal Response Network™ design to provide lowest possible let-through voltages. All suppression circuits are completely encapsulated in our exclusive compound to assure long component life and complete protection from the environment and/or vibration.
Protection Modes:	Dedicated protection components and circuitry for each mode. Discrete L-L (Normal Mode) and L-G, Shield-G (Common Mode)
Maximum Data Rate:	2.0 Mbps

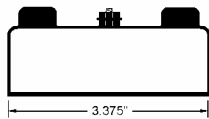
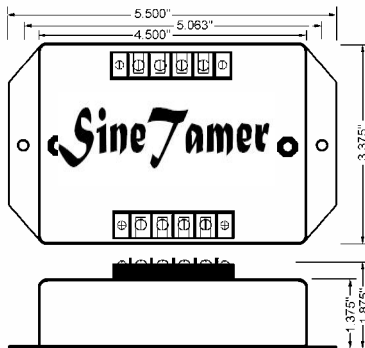
PERFORMANCE

Maximum Continuous Operating Voltage:	7.5VDC, 15VDC, 33VDC, 53VDC and 140VDC
Maximum Continuous Operating Current:	360ma
Maximum Data Rate:	2.0 Mbps
Peak Surge Current per Pair:	L-L ≈ 10 kA, L-G ≈ 10 kA
Response Time:	<1 nanosecond

Because we are constantly seeking to improve our products, specifications are subject to change at any time.

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Let-Through Voltages Using ANSI/IEEE C62-41-1991 Test Environment: Static, positive polarity. All voltages are peak ($\pm 10\%$). Time base= $5\mu\text{sec}$.				
Model	Maximum Continuous Operating Voltages	Maximum Continuous Operating Current	Test Mode	B3/C1 Impulse Wave 6,000V, 3000A
ST-D5-2 ST-D5-4 ST-D5-6 ST-D5-8 ST-D5-12	7.5VDC L-G 7.5VDC L-L 70 Shield-G	360mA	L-G L-L Shield-G	<20 <30 <170
ST-D15-2 ST-D15-4 ST-D15-6 ST-D15-8 ST-D15-12	15VDC L-G 15VDC L-L 70 Shield-G	360mA	L-G L-L Shield-G	<30 <40 <170
ST-D33-2 ST-D33-4 ST-D33-6 ST-D33-8 ST-D33-12	36VDC L-G 36VDC L-L 70 Shield-G	360mA	L-G L-L Shield-G	<70 <70 <170
ST-D53-2 ST-D53-4 ST-D53-6 ST-D53-8 ST-D53-12	54VDC L-G 54VDC L-L 70 Shield-G	360mA	L-G L-L Shield-G	<80 <90 <170
ST-D140-2 ST-D140-4 ST-D140-6 ST-D140-8 ST-D140-12	140VDC L-G 140VDC L-L 70 Shield-G	360mA	L-G L-L Shield-G	<180 <180 <170



Data Line Models

Image is ST-Dx-4 Model

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