

STC-642 Series - Data/Signal Line Protection

The STC-642 Series of surge suppressors are dual pair (four wire) modules using three-stage hybrid technology. This module addresses overvoltage transients with gas tubes and silicon avalanche components. In addition, sneak and fault currents are mitigated with resettable fuses (PTCs). The PTCs increase resistance several orders of magnitude when over currents exceed safe levels. A normal state resumes when over currents are removed. The ability to self restore in this manner significantly increases suppressor performance and survivability.

The card edge module is gold-plated, double sided and is designed to mate with the gold-plated female terminal connector. When snapped together, the data circuits pass thru the protector in a serial fashion from the four Field Side terminals to the four Electronics Side terminals. Terminals 1 or 10 of the STCPCB1B must be attached to building approved ground.


Application

- Intended for indoor use on communication loop circuits which have been isolated from the Public Switch Telephone Network
- Ideal for RS232 applications
- Also works well for 4-20 mA signal applications
- For use in service capable of supplying less than 150 milliamperes continuously

Features

- Surge protection for low-voltage data signal lines
- Three-stage protection (SAD, GDT, PTC)
- Sneak/fault current protection
- Resettable solid-state fuses - PTCs
- Low capacitance option for high speed data
- Plug-in module with base included
- Optional DIN Rail Mounting Clip is available for use with the Plug-in module in place of the standard base
- Hybrid design of includes series resistance
- Fast response time
- Five year limited warranty

Certifications and Compliances

-  Listed
- UL 497B
- RoHS Compliant



STC-642 shown with DIN Rail Mounting Clip Option

Selection Table

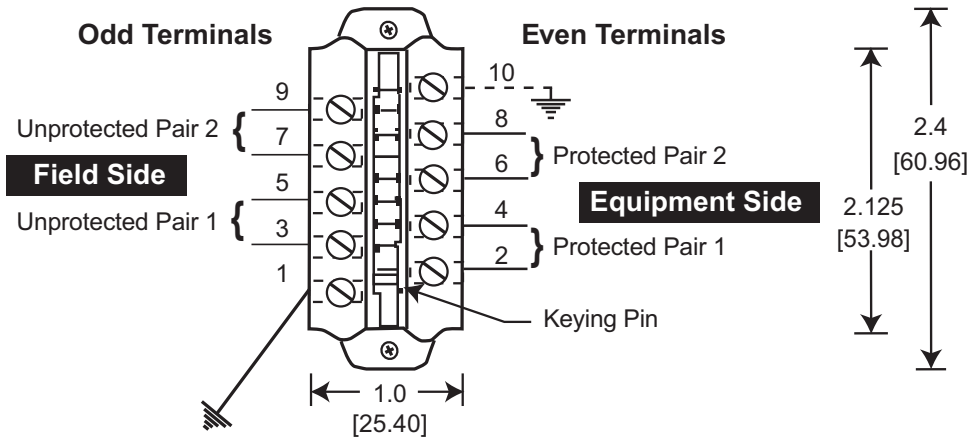
Catalog Number	Description
STC642036	5-36 Vdc Operating Voltage. Includes module base, designed to accommodate up to 10 AWG wire. The base offers Flat/Philips screws and can be mounted using 2 #6 size screws.
STC642DINKIT	Optional DIN Rail Mounting Clip for STC642DINKIT

Specifications

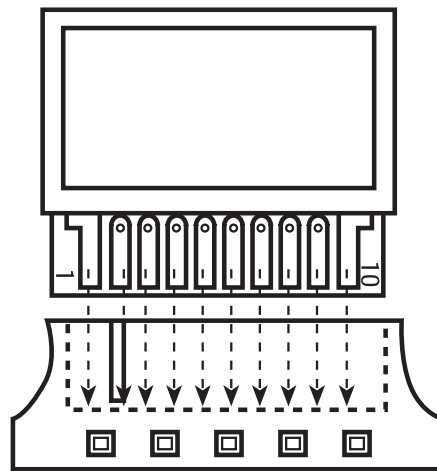
Description	STC642036
Peak Surge Current	8x20 μs at 10 kA
Life Expectancy	8x20 μs (2000 A) at >100 occurrences
Response Time	<1 nanosecond
Voltage Clamp	5-36 Vdc
Technology	GDT/PTC/SAD Hybrid
Resistance	5 Ohms (typical)
Capacitance (typical)	1500 pf
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Weight – oz (g)	2 (56.7)
Dimensions H x W x L – in (mm)	2.05 x 1.00 x 2.40 (52.1 x 25.4 x 61.0)
Warranty	5 year limited warranty

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Wiring Diagram (PIN Assignments)



Ground Terminal 1 or 10 (internally tied together) to building approved ground (preferably AC Power ground).



Module and Module Base Diagram