

## PC642 SERIES



The **PC642 Series** surge suppressor is a dual pair (four wire) module implementing three stage hybrid technology. This module addresses over voltage transients with gas tubes and silicon avalanche components. In addition, sneak and fault currents are mitigated with resettable fuses (PTC's). The PTC's increase resistance several orders of magnitude when overcurrents exceed safe levels. A normal state resumes when overcurrents are removed. The ability to self restore in this manner significantly increases suppressor performance and survivability.

The **PC642** card edge module is gold-plated, double sided and is designed to mate with the **PCB1B** 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 **PCB1B** must be attached to Building Approved ground per EDCO **TECHNICAL BULLETIN # 2015**.

### FEATURES

- Lightning Protection for Low Voltage Data Signal Lines
- Three-Stage Protection
- Sneak/Fault Current Protection
- Resettable Fusing - PTC's
- Low Capacitance Option \*
- Plug-in Module
- Fast Response Time
- UL 497B Listed



### SPECIFICATIONS

Peak Surge Current (10 times):

8 x 20µs.....	10kA
10 x 700µs.....	500A per line

Life Expectancy:

8 x 20µs (2000A).....	>100 occurrences
10 x 700µs (400A).....	

Response Time..... <1 nanosecond

Voltage Clamp ..... 8, 15, 20, 30, 36, 43, 50, 60 or 200

Technology..... SAD Hybrid

Resistance (depending on model)..... 4.7W to 15W per line

Capacitance (average):

Standard models.....	1500pf
Low Capacitance models.....	50pf

Operating Temperature..... -40°C to +85°C

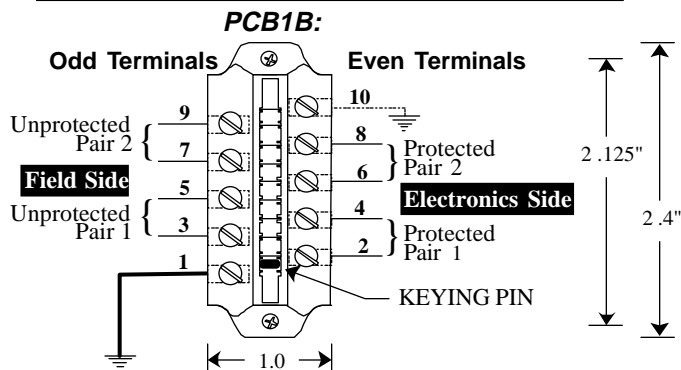
Weight..... 2.0 oz.

Dimensions PC642 & PCB1B:  
HxWxL..... 1.8" x 1.0" x 2.4"

**Caution:** The hybrid design of this product includes series resistance. Do not place this product in service on any signal line capable of supplying more than 150 milliamperes continuously.

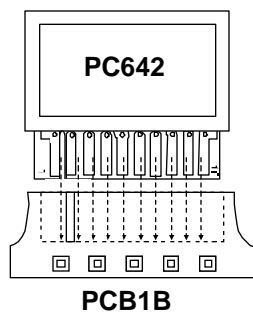
\*Wire wound resistors are used instead of "PTC's" on low capacitance models (PC642C-\_\_\_ LC) and models clamping above 60 volts (PC642C-200, 200D, 200X, 200LC).

### TERMINAL ASSIGNMENTS



Ground Terminal **1** or **10** to Building Approved Ground

### ORDERING INFORMATION



#### APPLICATION:

- |                        |                      |
|------------------------|----------------------|
| RS485, RS422:          | PC642C-008LC & PCB1B |
| RS423, Token Ring:     | PC642C-008LC & PCB1B |
| RS232                  | PC642C-020 & PCB1B   |
| E-NET, 10 BASE T:      | PC642C-030LC & PCB1B |
| 4-20 ma:               | PC642C-036 & PCB1B   |
| Telephone (C.O. line): | PC642C-200 & PCB1B   |
| Telephone T1 Data:     | PC642C-060LC & PCB1B |

<b>PC642C -</b>										
<b>VOLTAGE CLAMP</b>										
8 Volts	0	0	8	<table border="0"> <tr><td></td><td>D</td></tr> <tr><td></td><td>X</td></tr> <tr><td></td><td>LC</td></tr> </table> <p>no suffix stage 2 clamp each line-to-ground stage 2 clamp line-to-line only stage 2 clamp line-to-line and each line to ground low capacitance option stage 2 clamp line-to-line and each line to ground (see note: ♦)</p>		D		X		LC
	D									
	X									
	LC									
15 Volts	0	1	5							
20 Volts	0	2	0							
30 Volts	0	3	0							
36 Volts	0	3	6							
43 Volts	0	4	3							
50 Volts	0	5	0							
60 Volts	0	6	0							
♦*300 Volts	2	0	0							

\* Not UL Listed

TELECOM / DATACOM / SIGNAL