



## ■ Alarm/Sound/Video Products

### PC642 Series RS-485/422 & 232 Circuit

The **PC642 Series** surge suppressor is a dual-pair (4-wire) module implementing 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 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](#).

#### 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
Technology	SAD Hybrid
Resistance (depending on model)	5Ω typical
Capacitance (average):	
Standard Models	1500pf
Low-Capacitance Models	50pf
Operating Temperature	-40°C to +85°C
Weight	2 oz.
Dimensions PC642 & PCB1B:	
H x W x L	2.0 in. x 1.0 in. x 2.4 in.

**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.

**M.A. SELMON CO., INC - 203-377-3525 - sales@maselmon.com**

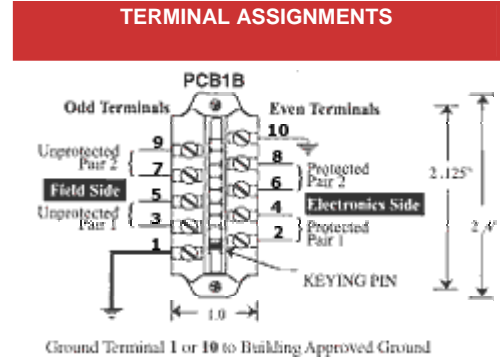
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Distributed by:  
M.A. Selmon Company, Inc  
4 Oxford Rd.  
Milford, CT 06460  
203-377-3525

FEATURES
• Lightning Protection for Low-Voltage Data Signal Lines
• Three-Stage Protection
• Sneak/Fault Current Protection
• Resettable Fusing—PTCs
• Low-Capacitance Option
• Plug-in Module
• Fast Response Time
• UL 497B Listed



ORDERING INFORMATION
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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

PC642C -		
VOLTAGE CLAMP		
8 Volts	0 0 8	no suffix -stage 2 clamp each line-to-ground
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	-stage 2 clamp line-to-line only
60 Volts	0 6 0	
*300 Volts	2 0 0	
		-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

\*not UL Listed