

# TRAFFIC CONTROL / INTERCONNECT / DATA LINE

HE642C

### DESCRIPTION

The HE642C protector is a two pair module with gold-plated printed circuit board fingers designed to interface with a HESCO/RLS PCB1B10A ten-position connector. The mating contacts of the HESCO/RLS connector are gold-plated for extended reliability and non-corrosive mating contact.

The HE642C protector may be utilized as two independent signal pairs or four independent signal lines. Either way, the HE642C protector is of hybrid design and uses the very latest in hybrid suppression technology. An additional protection feature incorporates the use of a positive temperature coefficient component (PTC). This component performs as a "resettable fuse" on each line. The PTC will open upon a severe overload and reset as soon as the transient condition has passed. The internal design of the HE642C allows the data signals to pass through the protector in a series fashion as long as the protector is engaged with the Buchanan connector. The HE642C requires four input and output pins. Pins 1 and 10 are ground and are electrically connected internally. The data circuits are interrupted when the HE642C is disengaged from the connector. Input and output connections are made easily via the screw-down terminals in the Buchanan connector.

When installing the HE642C protector with the Buchanan connector, do not daisy chain the grounds. Each Buchanan connector must be grounded individually. Keep the ground leads as short as possible to insure the optimum protection. NOTE: Buchanan connector is sold separately.

# **SPECIFICATIONS**

### Peak Surge Current

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8 x 20uS	*10KA
10 x 700uS	
Lifetime Operations	
8 x 20us(2000A)	>100 occurrences
10 x 700uS(400A)	>100 occurrences
Response Time.	<1Ns
ClampVoltages	8, 15, 20, 30 or custom
Operating Current	
Second Stage Peak Pulse Capability	
Design	Hybrid
Series Resistance	4.7 to 15Ω per line
Peak Voltage @ 1ma	
Typical Capacitance:	
Standard	1500pF
Low Capacitance	
Operating Temperature	40°C to +85°C
Weight	51 grams

\*The 8 x 20us waveform is a standard test waveform.

#### **HESCO/RLS**

220 Springview Commerce Drive Unit 190 DeBary, FL 32713 Fax 386.668.2793

For more information and product support call us at...

1-800-547-4868



### FEATURES

- · Optimal Protection for Low Voltage Signal Lines
- Common and Differential Mode Protection
- Multi-Stage Protection
- Automatic Recovery
- Fast Time Response
- Resettable Fuse (PTC)
- Selectable Voltages
- · Easily Installed

# **PIN ASSIGNMENTS**



# **CONFIGURATION OPTIONS**



### 2nd Stage Clamp Configuration

- A Line to Line & Line to Ground (RS422)
- **B** Line to Line Only (Modem)
- C Each Line to Ground (RS232)
- **D** Line to Line & Line to Ground
  - Low Capacitance (T1 Carrier)