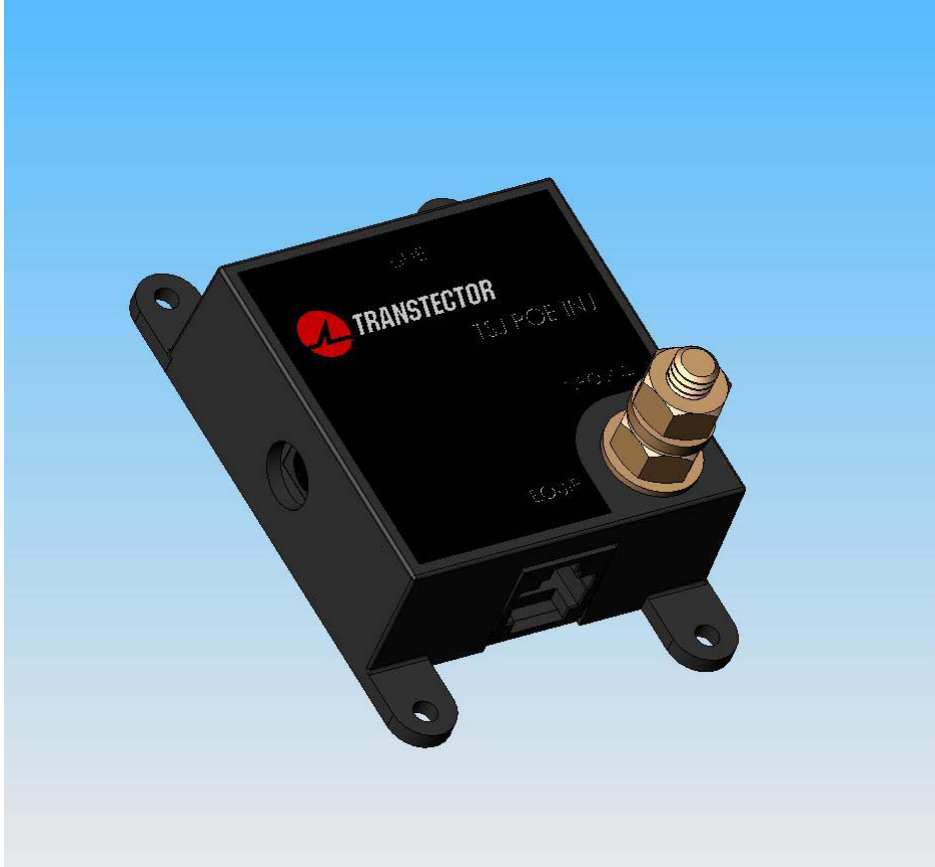



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REVISIONS

LTR	DESCRIPTION	ECO NUM.	DATE	APPROVED
01	Pre-Production Release	DD111	8/01/07	DLR
B	Delete Pass through on Section 2	7860	2/10/09	DWR



MATERIAL:	DRAWN: JDW	DATE 8/7/07	 Transtector Systems, Inc. 10701 Airport Road, Hayden, ID 83835 800.882.9110 208.772.8515 www.transtector.com			
	CHECKED: DPM	8/9/07				
	ENGR. APPD: MTH	8/9/07				
	PROJ. APPD: DLR	8/9/07				
	APPROVED:					
TITLE:			Specification TSJ-POE-INJ			
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SIZE A	CAGE 30992	DRAWING NUMBER 1400-624	REV B	SCALE = N/A		PAGE 1 OF 4

SURGE SUPPRESSOR MODELS: ALPU-SSM Series Broadband Communications Protector

Model TSJ-POE-INJ 24 Power Over Ethernet Protector
 Model TSJ-POE-INJ 48 Power Over Ethernet Protector

PN 1101-880
 PN 1101-881

1. GENERAL DESCRIPTION: The TSJ-POE-INJ Series surge suppressors are high-speed, high-current, solid-state device designed to protect equipment from transient over-voltages on Power Over Ethernet applications. The TSJ-POE-INJ series incorporates a power jack on the side for either 24 or 48 VDC power injection. The DC power jack is connected directly to the positive pins (4,5) and the negative pins (7,8) of both RJ45 jacks and when connected to a DC power supply it provides power for the Power Over Ethernet circuit. The suppression protects the Ethernet circuit by limiting the magnitude of transient over-voltages that are present on each pair relative to each other and relative to ground. Continuous bi-polar, bi-directional, non-interrupting protection is provided. **The TSJ-POE-INJ Series utilizes only silicon avalanche suppressor diodes** and automatically resets after each suppression function with no degradation of protection capabilities. They attach in series with the load to be protected.

2. ELECTRICAL:

2.1 TSJ-POE-INJ 24 (PN 1101-880)

- 2.1.1 Connector Style (Data) RJ45 Cat5 unshielded 100ohm, 50ohm single ended
- 2.1.2 Connector Style (DC) 2.1 X5.5 mm Power Jack
- 2.1.3 Ethernet Protected Pins (1,2) and (3,6)
 - 2.1.3.1 Data Rate up to 100Mb/s
 - 2.1.3.2 Nominal Operating Voltage 5Vpeak
 - 2.1.3.3 Maximum Continuous Operating Voltage 6Vpeak
 - 2.1.3.4 Impedance 85 to 115ohms
 - 2.1.3.5 Frame Transmission 100% Transmission @ 100Mb/s
 - 2.1.3.6 Attenuation < -1dB @ 16MHz
 - 2.1.3.7 Isolation/Crosstalk < -60dB @ 32MHz
 - 2.1.3.8 Surge Suppression (per GR-1089) <25Vpeak @ 100A 10/1000us
- 2.1.4 DC Power Protected Pins (4,5) and (7,8)
 - 2.1.4.1 Nominal Operating Voltage 24Vpeak
 - 2.1.4.2 Maximum Continuous Operating Voltage 30Vpeak
 - 2.1.4.3 Surge Suppression (per GR-1089) <75Vpeak @ 100A 10/1000us

2.2 TSJ-POE-INJ 48 (PN 1101-881)

- 2.2.1 Connector Style (Data) RJ45 Cat5 unshielded 100ohm, 50ohm single ended
- 2.2.2 Connector Style (DC) 2.1 X5.5 mm Power Jack
- 2.2.3 Ethernet Protected Pins (1,2) and (3,6)
 - 2.2.3.1 Data Rate up to 100Mb/s
 - 2.2.3.2 Nominal Operating Voltage 5Vpeak
 - 2.2.3.3 Maximum Continuous Operating Voltage 6Vpeak
 - 2.2.3.4 Impedance 85 to 115ohms
 - 2.2.3.5 Frame Transmission 100% Transmission @ 100Mb/s
 - 2.2.3.6 Attenuation < -1dB @ 16MHz
 - 2.2.3.7 Isolation/Crosstalk < -60dB @ 32MHz
 - 2.2.3.8 Surge Suppression (per GR-1089) <25Vpeak @ 100A 10/1000us
- 2.2.4 DC Power Protected Pins (4,5) and (7,8)
 - 2.2.4.1 Nominal Operating Voltage 48Vpeak
 - 2.2.4.2 Maximum Continuous Operating Voltage 60Vpeak
 - 2.2.4.3 Surge Suppression (per GR-1089) <75Vpeak @ 100A 10/1000us

3. ENVIRONMENTAL:

- 3.1. Operating/Storage Temperature: -40°C to +75°C
- 3.2. Relative Humidity: 99% (non-condensing)



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4. MECHANICAL:

- 4.1. Dimensions/Mounting Data See Below
- 4.2. Weight 0.15 lb. [0.068kg]
- 4.3. Material UL Flame Rating 94-V0
- 4.4. Installation: One (1) RJ-45 receptacle (input), One (1) RJ-45 receptacle (output), One (1) 1/4-20 ground lug (Ground wire provided).

Note: Ground lug must be connected to a system ground for optimum suppressor performance.

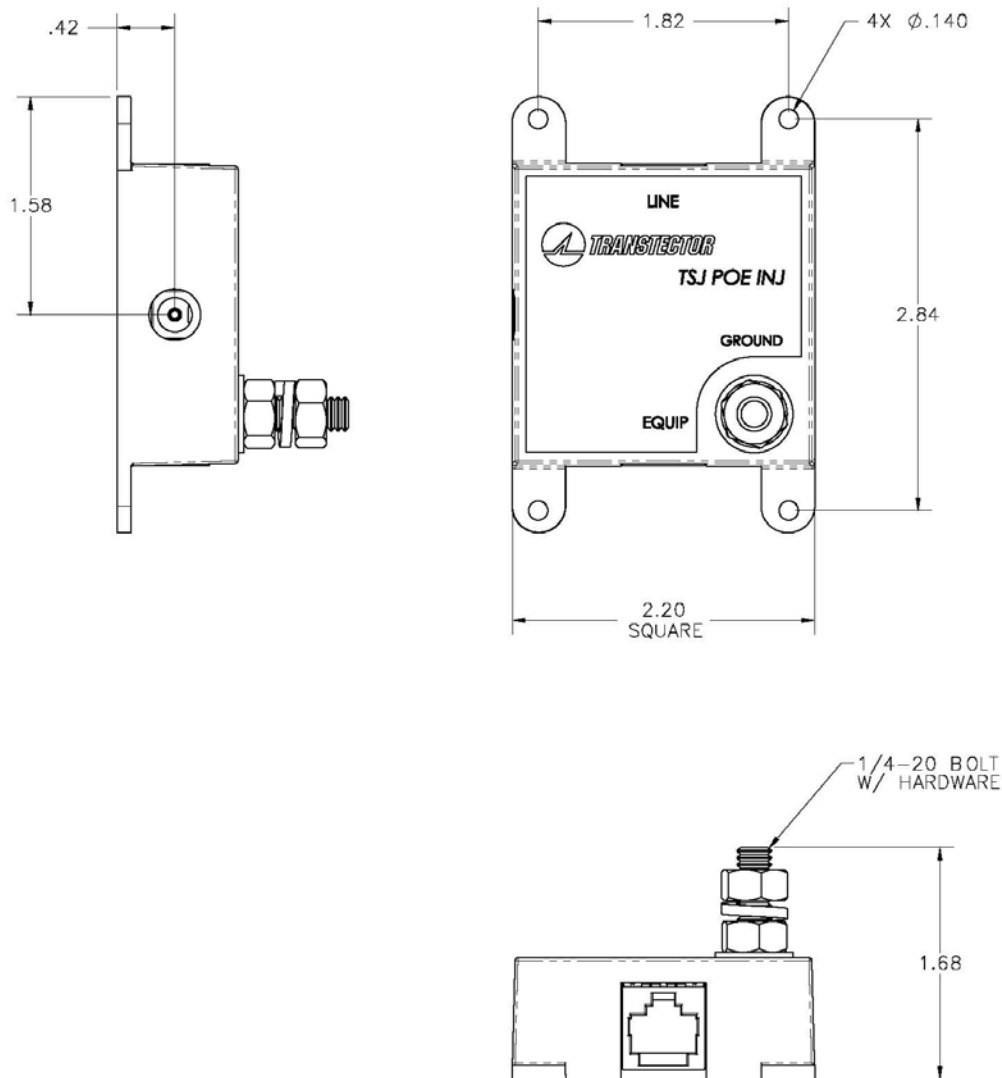


Figure 1. Mechanical outline drawing (inches)



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SIZE
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1400-624

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SCALE = N/A

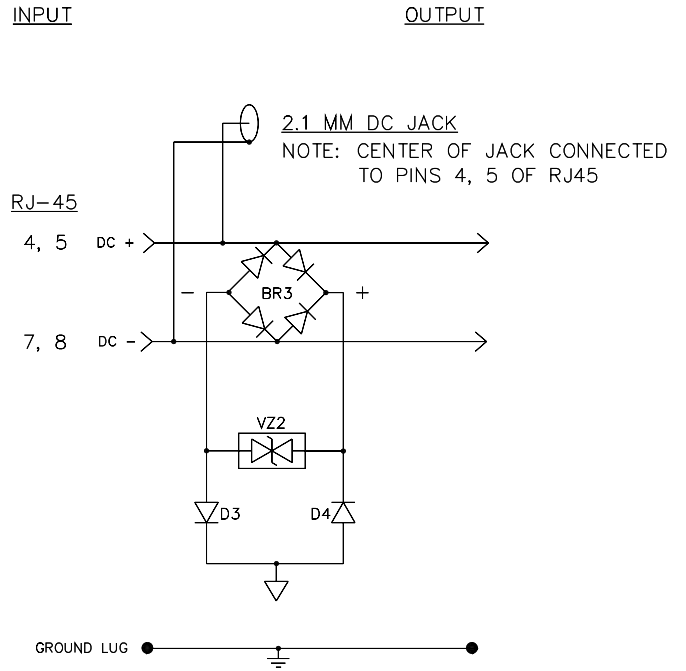
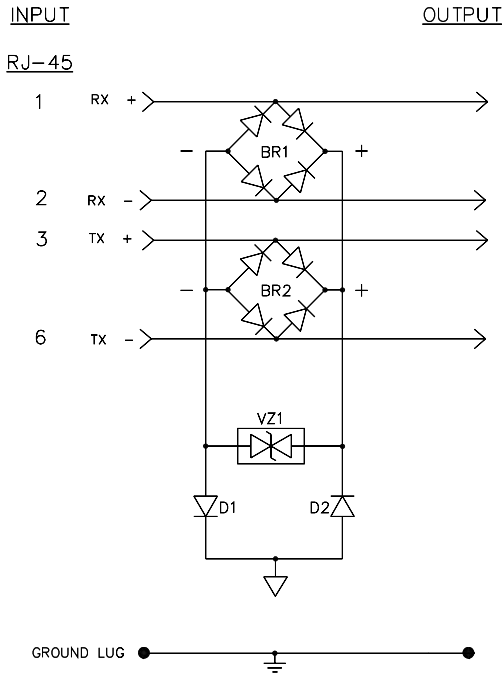


Figure 2. Product Schematic