ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number:	1540-02
Manufacturer:	Bourns Inc.
Package:	Bag
Availability:	Please confirm with sales

Product Page:

https://antrexco.com/product/details/bourns-inc/1540-02.html

Request a Quote:

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Contact Information

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Website: https://antrexco.com

Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Features

- GDT-TBU® High-Speed Protector technology
- Low impulse voltage let-through
- Low current let-through
- High surge current rating
- 10/100/1000 Mbps data compatibility
- Transparent to Mode A or Mode B
- Weather resistant enclosure
- Compatible with Class 4 power levels

Applications

- Data communications
- Highly exposed Ethernet
- Outdoor/uncontrolled environments
- Telecommunication and industrial installations
- Surveillance cameras
- Remote power and communication

1540 Series Outdoor PoE Ethernet Surge Protector

General Information

The Bourns® Model 1540 Series Outdoor PoE (Power over Ethernet) Surge Protectors incorporate state-of-the-art gas discharge tube and surge limiting technologies to provide the highest protection level offered by Bourns. The Model 1540 Series is designed to meet applicable Telcordia GR-1089 Level 1 and Level 2 Surge and AC Power Fault specifications on the data signal line while allowing operations up to 35 watts (employing both Mode A and B combination) at 57 volts. The Model 1540 Series enclosure is manufactured with a high impact resistant, flame retardant plastic and is designed for harsh environments.

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Characteristics

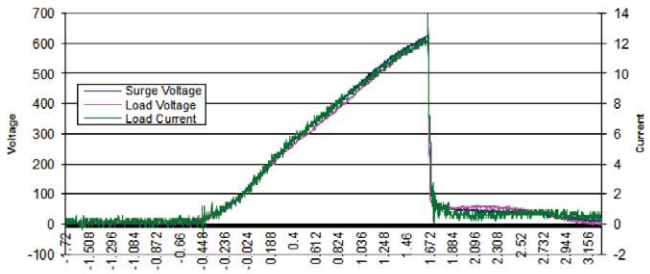
Test methods per UL 497B, GR-1089, CSA C22.2, IEC 61000-4-5, and IEEE 802.3at.

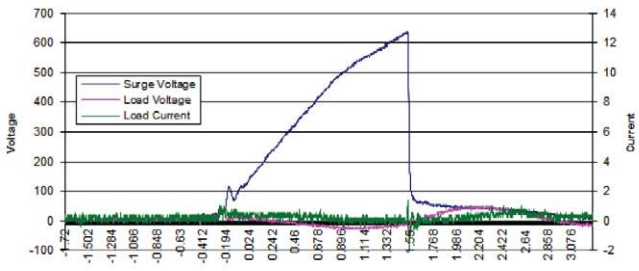
Parameter	Model 1540
DC Breakdown on Data Lines	150 V Typical Input / 7 V Typical Output
DC Breakdown - Power Lines	< 200 V Typ.
Power Rating	35 W
Line Series Resistance (Loop)	~ 6 Ω Typ.
Line Series Balance	0.5 Ω Typ. / 1.0 Ω Max
Capacitance Line to Line @ 1 MHz	10 pF Typ.
BER Performance Testing 10/100/1000 Mbps	> 100 meters
Surge Response Time	< 1 μs
Surge Withstand Capability (I_{max}) @ 8/20 μs	10 kA (-02 model only)
Surge Limiting Performance Let-Through Voltage Let-Through Current	 < 60 V < 1 A
First Level Surge 1 kV – 10/1000 μs, 100 A 2.5 kV – 2/10 μs, 500 A 800 V – 1.2/50 μs, 8/20 μs Combo Wave	 > 10 operations > 10 operations > 10 operations
Second Level Surge 2.5 kV – 2/10 μs, 500 A, Inductive Kick[1] 6 kV / 3 kA – 1.2/50 μs, 8/20 μs[1] Combo – 10/1000 μs, 100 A	 1 operation 1 operation > 10 operations
First Level Power Fault 220 mA Below Protection Threshold 600 V / 1 A / 1 Second 1000 V / 1 A / 1 Second 425 V / 0.5 A / 4 Seconds	 15 minutes > 60 operations > 60 operations > 1 operation
Second Level Power Fault 120 V / 25 A[1] 425 V / 40 A / 1.5 Second[1] 425 V / 7 A / 5 Seconds[1] 425 V / 2.2 A[1]	 15 minutes 1 operation 1 operation 15 minutes
Storage and Effective Temperature	-40 to +65 °C
UL Flame Rating	94 5V
Ingress Protection Ratings	67

Note:
1) Fuse may fail open and disconnect from circuit for Model 1540-1.

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.

Performance Graphs





* With impulse input @ 10/1000 μs, 1.5 kV, 100 A.

A. Applied to inputs Tip (A) or Ring (B) in reference to Ground (Earth) and measured at outputs Tip (A) or Ring (B) in reference to Ground (Earth) with 50 ohms load.

B. Applied between inputs Tip (A) or Ring (B) and measured between outputs Tip (A) or Ring (B) with 50 ohms load.

Wiring / Pin-Out Information

Pin No.	T568A Wire Color	T568B Wire Color	Data Line Information	Power Line Information
Pin 1	White / Green Stripe	White / Orange Stripe	TxRx A+	DC +
Pin 2	Green Solid	Orange Solid	TxRx A-	DC +
Pin 3	White / Orange Stripe	White / Green Stripe	TxRx B+	DC -
Pin 6	Orange Solid	Green Solid	TxRx B-	DC -
Pin 4	Blue Solid	Blue Solid	TxRx C+	DC +
Pin 5	White / Blue Stripe	White / Blue Stripe	TxRx C-	DC +
Pin 7	White / Brown Stripe	White / Brown Stripe	TxRx D+	DC -
Pin 8	Brown Solid	Brown Solid	TxRx D-	DC -

How to Order

1540 - XX

Model Number Designator

Configuration

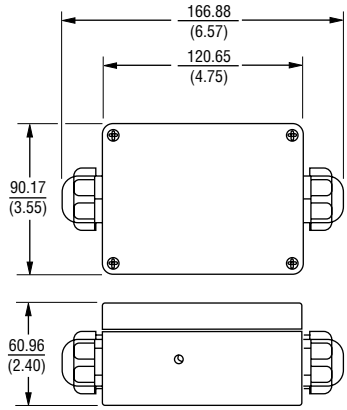
01 = RJ45 In / RJ45 Out

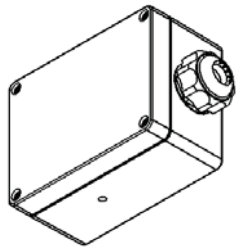
02 = Hardwired In / RJ45 Out

Agency Recognition

Agency	Category	Agency File No.
UL LISTED	UL 497B	E153537

Product Dimensions





DIMENSIONS: MM / (INCHES)

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