

PORTNOTE®

Ethernet Power over Ethernet (PoE) Surge Protection

Solution Products





TCS-DL004-250-WH





MOV10D820K



Design Kit



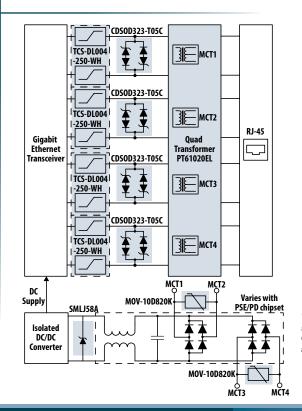
PN-DESIGNKIT-44

Objective

Power over Ethernet (PoE) interfaces combine V_{PP} differential signals and nominal 48 V_{DC} power. This solution provides protection for both the data and power signals and is compatible with 10/100/1000 Base-T.

Solution

- 1 Quad Transformer: PT61020EL
- 4 TCS™ High-Speed Protectors: TCS-DL004-250-WH Ethernet Power Over Ethernet (PoE)
- 4 TVS Diodes: CDSOD323-T05C
- 2 Metal Oxide Varistors (MOVs): MOV-10D820K
- 1 TVS Diode: SMLJ58A



Compliance

ITU-T K.20, K.21, K.45 Basic Telcordia GR-1089-CORE Issue 6 Port Type 4

Alternate Recommendations

Other PortNote® Solutions:

- Ethernet ESD Protection
- Ethernet Power Over Ethernet (PoE) PD Solution
- Ethernet Power Over Ethernet (PoE)
 PSE Solution
- Ethernet Power Contact and Surge Protection

Variations of this circuit are available depending on specific design constraints; contact your local Bourns technical representative for more information.

Benefit

The Bourns® TCS™ High-Speed Protector and TVS Diode combination provide robust surge protection without impairing the Ethernet signal.

The schematic here illustrates the application protection and does not constitute the complete circuit design.
Customers should verify actual device performance in their specific applications.

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recommendations for typical port threats.

Bourns® PortNote® solutions provide protection

For more information, go to:

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