



Ethernet

Power Contact and Surge Protection

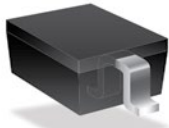
Solution Products



PT61020EL



TCS-DL004-250-WH



CDSOD323-T05C



MF-RM055/240-0

Design Kit



PN-DESIGNKIT-45

Objective

Ethernet interfaces are digital signals operating on a 125 MHz clock. This solution protects these communication ports against surge and power contact threats.

Solution

- 1 Quad Transformer: PT61020EL
- 4 TCS™ High-Speed Protectors: TCS-DL004-250-WH
- 4 TVS Diodes: CDSOD323-T05C
- 8 Multifuse® PPTC Resetttable Fuses: MF-RM055/240-0

Compliance

ITU-T K.20, K.21, K.45 Basic

Alternate Recommendations

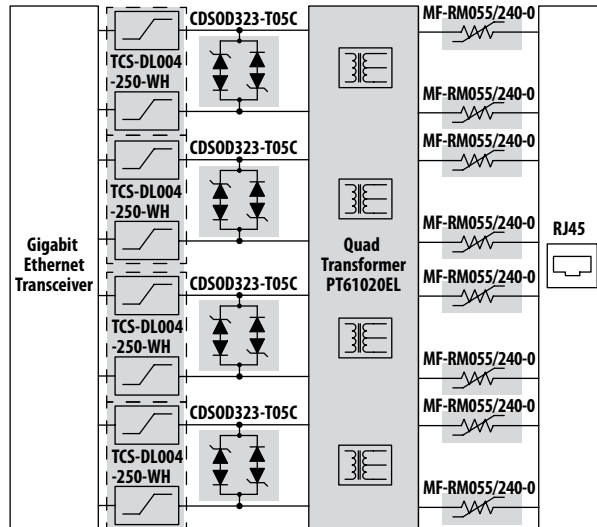
Other PortNote® Solutions:

- Ethernet - ESD Protection
- Ethernet - Power Over Ethernet (PoE) PD Solution
- Ethernet - Power Over Ethernet (PoE) PSE Solution
- Ethernet - Power over Ethernet (PoE) 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 above illustrates the application protection and does not constitute the complete circuit design. Customers should verify actual device performance in their specific applications.