

### Solution Products



CDSOT236-0504C



CDNBS04-B08200



SMBJ58A



SM51108PEL

### Design Kit



PN-DESIGNKIT-34

### Objective

10/100 Base-T Power over Ethernet (PoE) interfaces combine data and 48 V DC to provide remote power to a Powered Device (PD). This solution provides ESD and overcurrent protection for the PD unit.

### Solution

- 1 TVS Diode Array: CDSOT236-0504C
- 2 Bridge Rectifiers: CDNBS04-B08200
- 1 TVS Diode: SMBJ58A
- 1 Transformer: SM51108PEL

### Compliance

- IEEE 802.3af and IEEE 802.11af
- IEC 61000-4-2 Level 4 (8 kV / 15 kV)

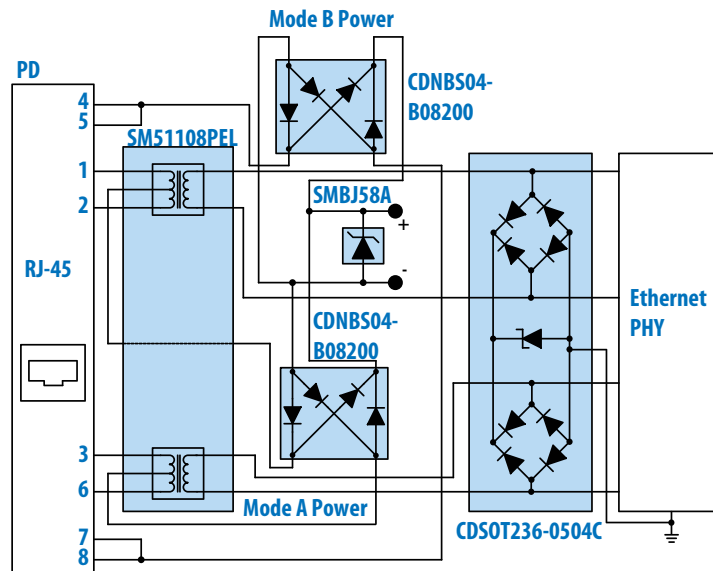
### Alternate Recommendations

*Other PortNote<sup>®</sup> Solutions:*

- Ethernet - ESD Protection
  - Ethernet - Power Contact and Surge Protection
  - Ethernet - 10/100 Base-T Power over Ethernet (PoE) PSE Unit Protection
- Contact Bourns for PoE+ or Gbit PoE port solutions.*

### Benefit

This solution provides ESD protection for 10/100 Base-T PoE PD devices 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.*