

RS-485

Serial Port - ESD / EFT / Surge Protection

Bourns® PortNote® solutions provide protection recommendations for typical port threats.

Solution Products



TBU-CA065-300-WH



MOV-10D201K



CDSOT23-SM712

Objective

RS-485 (TIA/EIA-485) is a balanced data transmission scheme that uses voltage levels from -7 V to +12 V (max.) at data rates up to 10 Mbps. This solution provides protection against ESD, EFT, power and surge faults.

Solution

- 2 TBU® High-Speed Protectors:
TBU-CA065-300-WH
- 2 MOVs: MOV-10D201K
- 1 TVS Diode Array: CDSOT23-SM712

Compliance

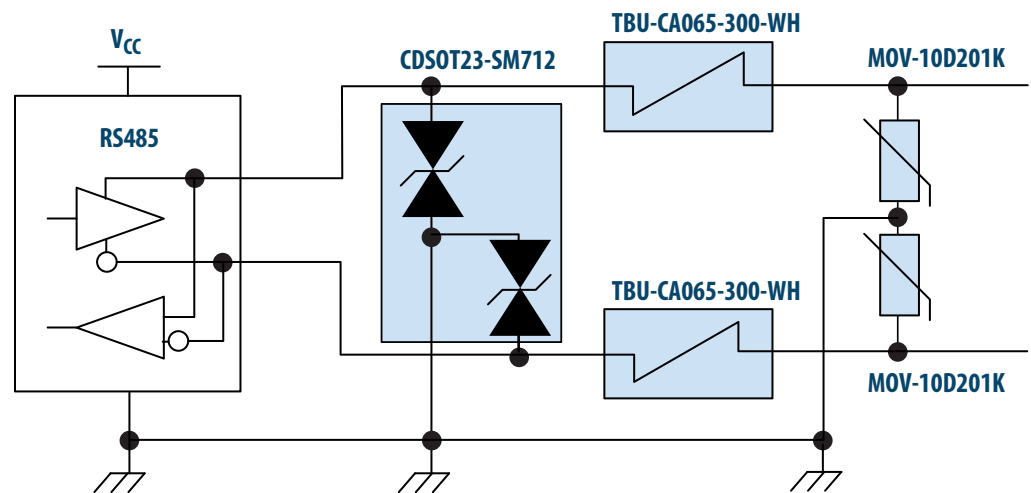
- IEC 61000-4-2 ESD Level 4 (8 kV / 15 kV)
- IEC 61000-4-4 EFT
- IEC 61000-4-5 Surge / Lightning

Alternate Recommendations

SMBJ6.5A and SMBJ12A TVS Diodes with MF-RM012/240 Multifuse® PPTC Resettable Fuse

Benefit

This solution provides excellent protection for both indoor and outdoor applications. It also protects against 28 V_{RMS} and 120 V_{RMS} power cross condition.



Request Sample

To order samples, click on the "Request Sample" button.

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.

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