

PortNote® SOLUTIONS

Negative Battery Voltage SLIC Protection

ITU-T Solution

Solution Products



TBU-PL085-200-WH



MOV-10D391K

Objective

The SLIC (Subscriber Line Interface Circuit) provides all the BORSCHT functions such as battery, ringing and supervision between the codec and telephone hand set. This PortNote® solution discusses negative battery voltage solutions against surge and power contact threats.

Solution

1 TBU® High-Speed Protector: TBU-PL085-200-WH
2 MOV Devices: MOV-10D391K

Compliance

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

- 230 V_{rms}, 23 A, 900 seconds withstand.
- 600 V_{rms}, 1 A, 0.2 seconds withstand.
- Increased surge withstand to 4 kV 10/700 µs without a primary protector.

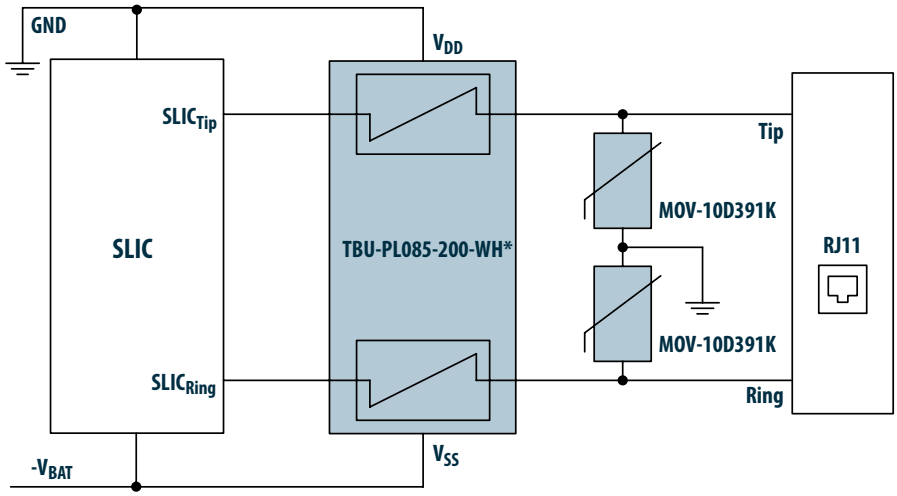
Alternate Recommendations

Other PortNote® Solutions:

- Dual Supply Voltage SLIC Protection - ITU-T Solution
- Negative Battery Voltage SLIC Protection - GR-1089-CORE Intra-building Solution
- SLIC Protection - GR-1089-CORE Intra-building Solution

Benefit

This solution provides a high level of protection in a small PCB area.



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.

**Note: The VE950 series (e.g. Le9500, Le9520, Le9530, Le9540) require a 200 mA $I_{trigger}$ TBU® High-Speed Protector for normal operation. All other SLICs may use 100 mA $I_{trigger}$ TBU® HSP devices.*

REV 10/12

Design Kit



PN-DESIGNKIT-42

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

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