SLIC Protection
ITU-T 4 kV Solution, Negative Voltage Tracking

Solution Products

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
• 230 Vrms, 23 A, 900 seconds withstand.
• 600 Vrms, 1 A, 0.2 seconds withstand.
• Increased surge withstand level to 10/700 µs 4 kV without a primary protector.

Alternate Recommendations
Other PortNote® Solutions:
• SLIC Protection: ITU-T Enhanced 6kV Solution, Negative Voltage Tracking
• SLIC Protection: GR-1089-CORE Intra-building, Negative Voltage Tracking

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.