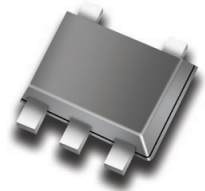


INTERFACE APP NOTE

Li-ion Battery Protection


SOT-953 PACKAGE

OBJECTIVE

This solution provides protection for the battery against overcurrent conditions as well as ESD protection for the control chip. As a result of the hot-pluggable nature, the interface may require protection against ESD, short circuits and faulty equipment.

BENEFIT

This integrated TVS diode solution is designed to protect the interface against surge events by using one device (VSMF05LC) for four data lines. In addition, the PLRO1206 can be used for overcurrent protection

COMPLIANCE

- IEC 61000-4-2 ±8kV Contact, ±15kV Air Discharge
- IEC 61000-4-4 EFT 40A, 5/50ns
- IEC 61000-4-5 Surge Secondary Lightning, 2A @ 8/20µs

SOLUTION

- 1 x VSMF05LC in SOT-953 Package
- Stand-Off Voltage V_{WM} : 5.0 Volts
- Breakdown Voltage B_{VMIN} : 6.0 Volts
- $V_C @ I_p$: 12V @ 2A
- Leakage Current I_p : 1.0µA
- Typ. Capacitance: 9.0pF

ALTERNATE RECOMMENDATIONS

- 1 x VSMF05LCC

