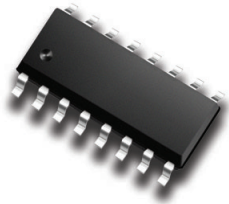

INTERFACE APP NOTE
ETHERNET 10/100 RTCA DO-160 Protection

SO-16 PACKAGE
OBJECTIVE

Ethernet interfaces are 5V digital signals operating on a 125MHz clock. This solution provides ESD protection commonly required in indoor, short-cable applications where ESD is the primary threat. It also provides protection for secondary lightning surges as required by the RTCA DO-160 standard.

BENEFIT

This integrated TVS diode solution is designed to protect the interface against surge events by using two devices to protect both pairs of Ethernet lines.

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, 50A @ 8/20µs
- RTCA DO-160: W5L2, W4L2, W3L2

SOLUTION

- 2 x SMP6LLC05-2P in SO-16 Package
- Stand-Off Voltage V_{WM} : 5 Volts
- Breakdown Voltage $B_{V_{MIN}}$: 6 Volts
- $V_C @ I_p$: 26.0V @ 150A
- Leakage Current I_R : 300µA
- Typ. Capacitance: 5pF

ALTERNATE RECOMMENDATIONS

- 2 x SMP6LC05-2P

