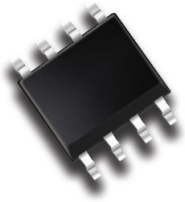

**INTERFACE APP NOTE**
**RS-485/RS-422 Protection**

**SO-8 PACKAGE**
**OBJECTIVE**

RS-485, also known as TIA-485(-A)/EIA-485, is a standard defining the electrical characteristics of drivers and receivers for use in serial communication systems. Electrical signaling is balanced and multi-point systems are supported.

**BENEFIT**

The integrated TVS Diode solution is designed to protect the interface against surge events by using one device to protect transceivers connected to the twisted pair, with 10 Ohm series resistance.

**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
- DO-160 Section 22, Waveform 5A (300V/300A)

**SOLUTION**

- 1 x SMDB712C in SO-8Package
- Stand-Off Voltage  $V_{WM}$ : -7V / +12V
- Breakdown Voltage  $B_{VMIN}$ : -8.5V / +13.3V
- $V_C @ I_p$ : 25.5V @ 40A / 32.9V @ 34A
- Leakage Current  $I_R$ : 10µA / 2µA
- Typ. Capacitance: 284pF

