



VETH100A1DD1 ESD Protection Diode for Automotive Ethernet Networks Features Space-Saving DFN1006-2B Package With Wettable Flanks, Complies With OPEN Alliance 100Base-T1 and 1000Base-T1

Product Benefits:

- Offered in compact DFN1006-2B package with wettable flanks
- Compliant with OPEN Alliance 100Base-T1 and 1000Base-T1 specifications
- Offers a ± 24 V working voltage
- Very low clamping voltage of 31 V typical at 1 A
- Low dynamic resistance of 0.4Ω typical
- Low maximum capacitance of 2 pF
- Provides transient protection for high speed data lines as per ISO 10605 and IEC 61000-4-2 at ± 15 kV (contact discharge) for 1000 pulses
- Available in an AEC-Q101 version
- Supports automated optical inspection (AOI)
- Moisture sensitivity level (MSL) of 1 in accordance with J-STD-020
- UL 94 V-0 flammability rating
- RoHS-compliant, halogen-free, and Vishay Green



Market Applications:

- ESD protection for automotive Ethernet networks, industrial automation systems, computers, consumer entertainment devices, home appliances, fixed telecom infrastructure, and medical instrumentation

The News:

Vishay Intertechnology releases a new Automotive Grade bidirectional single-line ESD protection diode in the compact DFN1006-2B package with wettable flanks. Optimized for automotive Ethernet networks in compliance with OPEN Alliance 100Base-T1 and 1000Base-T1 specifications, the space-saving VETH100A1DD1 offers low clamping voltage, dynamic resistance, and capacitance for the protection of high speed data lines against transient voltage signals.

- The VETH100A1DD1's DFN1006-2B package offers a smaller footprint and lower profile than other standard packages
- The device's low clamping voltage is a result of its snap-back technology with a trigger voltage > 100 V. Combined with its low dynamic resistance, the protection diode delivers improved ESD absorption performance and protection, while its low maximum capacitance enables higher signal integrity



The Key Specifications:

- Clamping voltage: 31 V typical at 1 A
- Dynamic resistance: 0.4 Ω typical
- Capacitance: 2 pF maximum
- Working voltage: ± 24 V
- Trigger voltage: > 100 V

Availability:

Samples and production quantities of the VETH100A1DD1 are available now, with lead times of 20 weeks.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?86195> (VETH100A1DD1)

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