



Vishay Intertechnology ESD Protection Diode for Automotive Ethernet Networks Features Space-Saving DFN1006-2B Package With Wettable Flanks

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New VETH100A1DD1 Device Is Compliant With OPEN Alliance 100Base-T1 and 1000Base-T1

MALVERN, Pa., Aug. 28, 2024 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today released 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.

Offering a smaller footprint and lower profile than other standard packages, the device released today features a very low clamping voltage of 31 V typical at 1 A, a result of its snap-back technology with a trigger voltage > 100 V. Combined with low dynamic resistance of 0.4 W typical, the protection diode delivers improved ESD absorption performance and protection, while its low maximum capacitance of 2 pF enables higher signal integrity.

The VETH100A1DD1 provides transient protection for data lines as per ISO 10605 and IEC 61000-4-2 at ± 15 kV (contact discharge) for 1000 pulses. For automotive applications, the protection diode is available in an AEC-Q101 version and offers a working voltage of ± 24 V. End products for the device include industrial automation systems, computers, consumer entertainment devices, home appliances, fixed telecom infrastructure, and medical instrumentation.

The protection diode offers a moisture sensitivity level (MSL) of 1 in accordance with J-STD-020 and a UL 94 V-0 flammability rating. RoHS-compliant, halogen-free, and [Vishay Green](#), the device supports automated optical inspection (AOI) for automotive systems.

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

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech**.[®] Vishay Intertechnology, Inc. is a Fortune 1,000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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Link to product datasheet:

<http://www.vishay.com/ppg286195> (VETH100A1DD1)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72177720319787760/>

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