



# Automotive Ethernet Protection

## High Speed (1 GBit/s) In-Vehicle Data Line Protection Series for OPEN Alliance 100BASE-T1 and 1000BASE-T1 Applications

### FEATURES

Clamping voltage  $V_C = 32$  V typ.

Working range  $V_{RWM} = \pm 24$  V

Trigger voltage  $V_T > 100$  V

Capacitance  $C_D < 2$  pF

ESD immunity: 15 kV

This device has significant features in contrast to the competitor device:



**Very low clamping voltage**

**Very low dynamic resistance (0.4  $\Omega$ )**

### CERTIFICATION

Certificate of compliance to OPEN Alliance from independent institute (FTZ e.V. University of Applied Science Zwickau)



### APPLICATIONS



AUTOMOTIVE

[www.vishay.com](http://www.vishay.com)

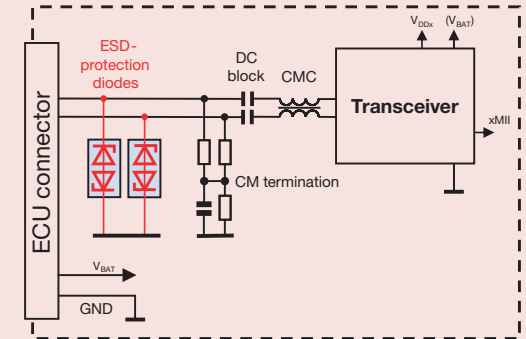


Single Test	Result	Comment / Resulting Class
S-parameter	Pass	
Damage ESD	Pass	
ESD discharge current measurement / CMC saturation class I	Pass <sup>(1)</sup>	± 3 kV: Class III ± 5 kV: Class III ± 6 kV: Class III ± 7 kV: Class III ± 15 kV: Class III
RF clamping	Pass <sup>(1)</sup>	Class III

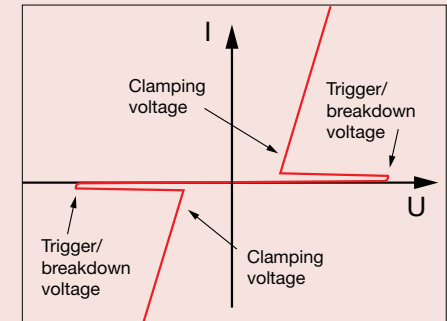
Note: <sup>(1)</sup> Result in Pass because of the maximum defined limit class is fulfilled by the ESD suppression device

For technical questions: [DiodesAmericas@vishay.com](mailto:DiodesAmericas@vishay.com), [DiodesEurope@vishay.com](mailto:DiodesEurope@vishay.com), or [DiodesAsia@vishay.com](mailto:DiodesAsia@vishay.com)

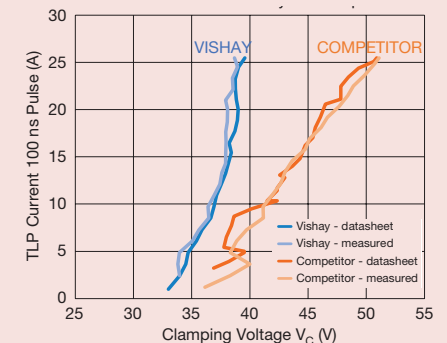
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### Snap-Back Behavior



### TLP Characteristic, Vishay vs. Competitor



IG31901762-2305