

AEC-Q101 Qualified Uni/Bidirectional 1500 W PAR[®] TVS Solutions Offer High Temperature Operation to +185 °C in SMB (DO-214AA) Package, Save Board Space While Offering High Stability for Automotive Applications

Product Benefits:

- Offered in compact SMB (DO-214AA) package
- 1500 W peak pulse power capability with a 10/1000 μ s waveform
- AEC-Q101 qualified
- High temperature operation to +185 °C
- Extremely stable breakdown voltages
- Excellent clamping capability
- Very fast response times
- Meet MSL level 1 standards per J-STD-020
- RoHS-compliant and halogen-free



Market Applications:

- Protection of sensitive electronics against voltage transients induced by inductive load switching and lightning
- Lighting, electro-mechanical brake (EMB), and fuel pump control; 48 V DC/DC converters and inverters; integrated starter generators, BMS, vehicle control units (VCU), and on-board chargers; and telematics control units (TCU) for audio, electronic stability control (ESC), and radar sensors

The News:

Vishay Intertechnology introduces two new series of uni/bidirectional 1500 W surface-mount PAR[®] transient voltage suppressors (TVS) in the SMB (DO-214AA) package. To meet the demands of automotive applications, the Vishay General Semiconductor T15BxxA and T15BxxCA series are AEC-Q101 qualified and offer high temperature operation to +185 °C.

- Compared to TVS in the SMC (DO-214AB) package, the Automotive Grade devices provide a 58 % smaller footprint to save board space and lower system costs

The Key Specifications:

Series	T15BxxA	T15BxxCA
Breakdown voltage	12 V to 51 V	12 V to 100 V
Clamping voltage	17.0 V to 70.1 V	17.0 V to 137 V
P _{PPM}	1500 W	
T _J max.	+185 °C	
Polarity	Unidirectional	Bidirectional
Package	SMB (DO-214AA)	



NEW PRODUCT INFORMATION



Product Group: Vishay General Semiconductor, TVS / **July 2025**

Availability:

Samples and production quantities of the uni/bidirectional TVS are available now, with lead times of 12 weeks.

To access the product datasheet on the Vishay Website, go to
<http://www.vishay.com/ppg?98360> (T15B12A thru T15B51A)

Contact Information:

THE AMERICAS

Diodes-Americas@vishay.com

EUROPE

Diodes-Europe@vishay.com

ASIA/PACIFIC

Diodes-Asia@vishay.com