

Industry-First R3T2FPHM3 3 A, 600 V Standard Rectifier and 200 W TRANSZORB® TVS Two-in-One Solution in Compact FlatPAK 5 x 6 Package

Product Benefits:

- Features a standard rectifier and TVS in a single FlatPAK 5 x 6 package
 - The rectifier features a low forward voltage drop of 0.86 V to reduce power losses and improve efficiency
 - The TVS offers a breakdown voltage of 27 V
- Wide temperature range from -55 °C to +175 °C for high reliability automotive applications
- Available in an AEC-Q101 qualified version
- Oxide planar chip junction design
- Common cathode circuit configuration
- ESD capability in compliance with IEC 61000-4-2, air discharge and contact mode
- MSL moisture sensitivity level of 1, per J-STD-020, LF maximum peak of 260 °C
- Molding compound features a UL 94 V-0 flammability rating
- · RoHS-compliant and halogen-free

Market Applications:

 Secondary protection for sensor units, distributed airbag modules, and low power DC/DC converters in power distribution systems

The News:

Vishay Intertechnology introduces a new surface-mount solution for automotive applications that is the industry's first standard rectifier and transient voltage suppressor (TVS) two-in-one device. The Vishay General Semiconductor R3T2FPHM3 combines a 3 A, 600 V standard rectifier with a 200 W TRANSZORB® TVS in the compact FlatPAK 5 x 6 package.

- By combining two different technologies in a single package, the dual-chip solution saves PCB space, simplifies layouts, and lowers overall costs
- When paired in series with a standard TVS, the R3T2FPHM3 offers designers a complete > 24 V solution with a low clamping ratio

The Key Specifications:

- Package: FlatPAK 5 x 6
- Standard rectifier:
 - Maximum DC forward current: 3 A
 - Maximum repetitive peak reverse voltage: 600 A
 - Forward voltage drop: 0.86 V
- TVS:





NEW PRODUCT INFORMATION Product Group: Vishay General Semiconductor, Rectifiers / August 2023

Peak pulse power dissipation: 200 W

• Breakdown voltage: 27 V

Temperature range: -55 °C to +175 °C

Availability:

Samples and production quantities of the R3T2FPHM3 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?98398 (R3T2FPHM3)

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