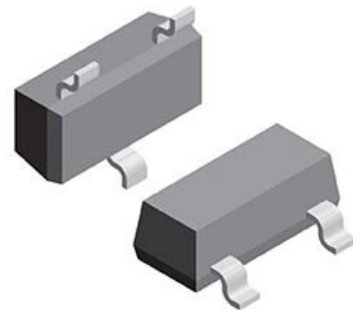


Automotive Grade 3.3 V to 36 V ESD Protection Diodes in SOT-23 Package Designed for High Current Rating Applications Up to 44 A at 8/20 μ s Pulse

Product Benefits:

- Offered in the SOT-23 package
- Single- and two-line diodes available
- Peak pulse power ratings up to 540 W at an 8/20 μ s pulse
- Current ratings up to 44 A at an 8/20 μ s pulse
- Low clamping voltage
- Low dynamic resistance
- Low thermal resistance
- Provide ESD immunity in accordance with IEC 61000-4-2 and ISO 10605 (\pm 30 kV air and contact discharge), in addition to the AEC-Q101 human body model: class H3B ($>$ 8 kV)
- Vishay Automotive Grade available
- Available in AEC-Q101 qualified versions
- RoHS-compliant, halogen-free, and Vishay Green



Market Applications:

- Automotive electronics and controls, fuel cells, and smart systems; energy monitoring and metering systems; industrial automation systems, motor drives, and power tools; computers and computer peripherals; consumer appliances and entertainment and healthcare devices; fixed and mobile telecom infrastructure; medical instrumentation; and military electronic warfare systems

The News:

Vishay Intertechnology introduces two new series of Automotive Grade 3.3 V to 36 V ESD protection diodes in the SOT-23 package. Offering low thermal resistance, the single-line VGSOTxx and two-line VGSOTxxC series ensure more efficient heat dissipation than the previous-generation GSOTxx / xxC devices, allowing for a more robust design that enables higher peak pulse power ratings up to 540 W and current ratings up to 44 A at an 8/20 μ s pulse.

- The VGSOTxx and VGSOTxxC series can both be used as unidirectional ESD protection devices. With their dual, common anode configuration, VGSOTxxC series components can also serve as bidirectional devices. If higher power is needed, their dual diodes can be used in parallel to double their surge power ratings, line capacitance, and reverse leakage current
- The devices fulfill the Vishay Automotive Grade requirements to ensure continuously excellent quality at the highest level
- VGSOTxx and VGSOTxxC series devices provide direct drop-in replacements for Vishay's previous-generation GSOT diodes and competing SOT series devices



The Key Specifications:

Series	VGSOTxx	VGSOTxxC
Reverse breakdown voltage	4 V to 47 V	
Reverse stand-off voltage	3.3 V to 36 V	
Peak pulse power (8/20 μ s)	400 W to 540 W	
Peak pulse current (8/20 μ s)	5.6 A to 44 A	
Peak pulse power (10 x 1000 μ s)	44 W	
ESD immunity (330 pF / 330 Ω)	\pm 30 kV	
T _j max.	+150 °C	
Polarity	Unidirectional	
Package	SOT-23	
Circuit configuration	Single	Dual, common anode

Availability:

Samples and production quantities of the new ESD protection diodes are available now, with lead times of 12 weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?86326> (VGSOT03 to VGSOT36)

<http://www.vishay.com/ppg?86325> (VGSOT03C to VGSOT36C)

Contact Information:

The Americas

Diodes-Americas@vishay.com

Europe

Diodes-Europe@vishay.com

Asia/Pacific

Diodes-Asia@vishay.com