

3.3 V to 36 V ESD Protection Diodes in SOT-23 Package VGSOT Series Designed for High Current Rating Applications Up to 44 A at 8/20 µs Pulse





# ADVANTAGE

Automotive Grade single- and two-line devices in common anode configuration feature extended current and power ratings

# **KEY PRODUCT FEATURES**

- ✓ Working range V<sub>RWM</sub> from 3.3 V to 36 V
- ✓ Peak pulse power up to 540 W at 8/20 µs pulse
- ✓ ESD immunity ± 30 kV acc. to IEC 61000-4-2 and ISO 10605 (air and contact discharge)
- ✓ Low clamping voltage and dynamic resistance
- ✓ Lower thermal resistance
- ✓ Available in AEC-Q101 qualified versions

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# RESOURCES







<u>Contact Us</u> <u>Americas</u>





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## CONSUMER

infrastructure

CONNECTIVITY

- Entertainment and healthcare
- Consumer appliances

MARKETS AND APPLICATIONS

Mobile and fixed telecom

# MOBILITY

- Automotive
- Automotive electrification
- Automotive fuel cell transmission
- Micro mobility and transportation



- Medical instrumentation

# INDUSTRIAL

- Automation
- Drives and tools





## **ADDITIONAL BENEFITS**

- Both series can be used as unidirectional ESD protection devices. 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
- Direct drop-in replacements for Vishay's previous-generation GSOT diodes and competing SOT series devices

# **KEY SPECIFICATIONS**

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

# MODES / PLACEMENT



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