



# Silicon Carbide (SiC) Schottky Diodes

## in Surface-Mount and Through-Hole Packages

Advanced merged PIN Schottky (MPS) structure

Excellent surge capability and low voltage drop at high current peaks

Low positive forward voltage temperature coefficient for high efficiency and easy paralleling

Low junction capacitance for low switching losses in active devices

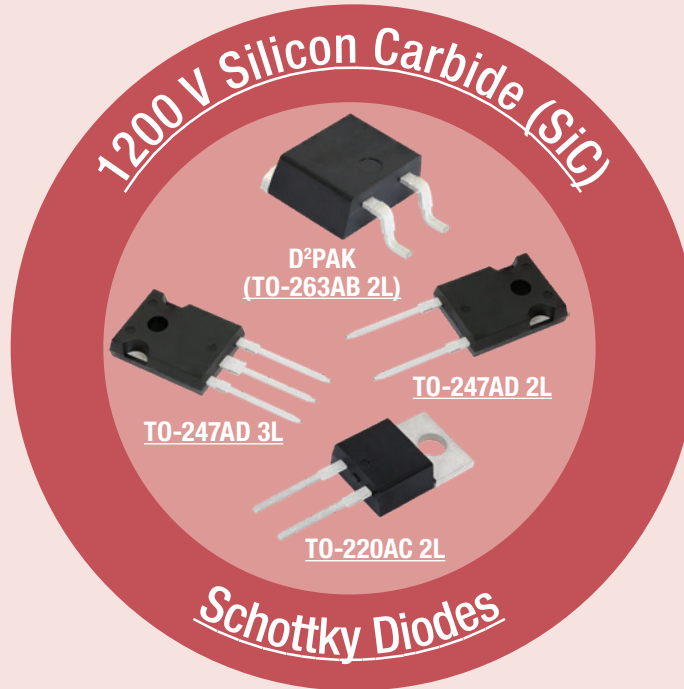
Low and stable leakage with temperature



**Current ratings from 5 A to 40 A**



**Repetitive peak reverse voltage of 1200 V**



### APPLICATIONS

AC/DC PFC and DC/DC ultra high frequency output rectification in FBPS and LLC converters for energy generation and exploration applications



SERVERS



UPS



TELECOM



SOLAR INVERTERS

### Vishay SiC Portfolio

Part Number	I	I <sub>FSM</sub> (A)	V <sub>F</sub> at I <sub>F</sub> (V)	T <sub>J</sub> Max. (°C)	Q <sub>C</sub> (nC)	Circuit Configuration	Package (JEDEC®) Code
<a href="#">VS-3C05ET12S2L-M3</a>	5	42	1.35	175	28	Single	D <sup>2</sup> PAK 2L (TO-263AB 2L)
<a href="#">VS-3C10ET12S2L-M3</a>	10	84	1.35	175	55	Single	D <sup>2</sup> PAK 2L (TO-263AB 2L)
<a href="#">VS-3C15ET12S2L-M3</a>	15	110	1.35	175	81	Single	D <sup>2</sup> PAK 2L (TO-263AB 2L)
<a href="#">VS-3C20ET12S2L-M3</a>	20	180	1.35	175	107	Single	D <sup>2</sup> PAK 2L (TO-263AB 2L)
<a href="#">VS-3C05ET12T-M3</a>	5	42	1.35	175	28	Single	TO-220AC 2L
<a href="#">VS-3C10ET12T-M3</a>	10	84	1.35	175	55	Single	TO-220AC 2L
<a href="#">VS-3C15ET12T-M3</a>	15	110	1.35	175	81	Single	TO-220AC 2L
<a href="#">VS-3C20ET12T-M3</a>	20	180	1.35	175	107	Single	TO-220AC 2L
<a href="#">VS-3C10EP12L-M3</a>	10	84	1.35	175	55	Single	TO-247AD 2L

Part Number	I	I <sub>FSM</sub> (A)	V <sub>F</sub> at I <sub>F</sub> (V)	T <sub>J</sub> Max. (°C)	Q <sub>C</sub> (nC)	Circuit Configuration	Package (JEDEC®) Code
<a href="#">VS-3C15EP12L-M3</a>	15	110	1.35	175	81	Single	TO-247AD 2L
<a href="#">VS-3C20EP12L-M3</a>	20	180	1.35	175	107	Single	TO-247AD 2L
<a href="#">VS-3C30EP12L-M3</a>	30	260	1.35	175	182	Single	TO-247AD 2L
<a href="#">VS-3C10CP12L-M3</a>	2 x 5	42	1.35	175	28	Common cathode	TO-247AD 3L
<a href="#">VS-3C20CP12L-M3</a>	2 x 10	84	1.35	175	55	Common cathode	TO-247AD 3L
<a href="#">VS-3C30CP12L-M3</a>	2 x 15	110	1.35	175	81	Common cathode	TO-247AD 3L
<a href="#">VS-3C40CP12L-M3</a>	2 x 20	180	1.35	175	107	Common cathode	TO-247AD 3L

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