



New 1 A to 3 A TMBS[®] Rectifiers Feature Reverse Voltages From 45 V to 150 V and Forward Voltage Drop Down to 0.36 V



KEY BENEFITS

- Offered in the eSMP[®] series low profile SMF (DO-219AB) package
 - Measures 3.7 mm by 1.8 mm by 0.98 mm
- Current ratings of 1 A, 2 A, and 3 A
- Reverse voltages from 45 V to 150 V
- Low forward voltage drop down to 0.36 V for 1 A, 0.40 V for 2 A, and 0.43 V for 3 A devices
- Available in AEC-Q101 qualified versions
- Maximum operating junction temperature up to +175 °C
- MSL moisture sensitivity level of 1, per J-STD-020, LF maximum peak of +260 °C
- RoHS-compliant and halogen-free

APPLICATIONS

- High frequency inverters, DC/DC converters, and freewheeling and polarity protection diodes for commercial, industrial, and automotive applications

RESOURCES

- Datasheets: please see next page for the list of products
- For technical questions, contact: DiodesAmericas@vishay.com, DiodesEurope@vishay.com, DiodesAsia@vishay.com
- Material categorization: for definitions of compliance, please see <http://www.vishay.com/doc?99912>

RoHS HALOGEN
COMPLIANT **FREE**

A **WORLD OF**
SOLUTIONS[™]

TMBS[®] Rectifiers in SMF Package

Vishay Intertechnology expands its offerings of surface-mount TMBS[®] Trench MOS Barrier Schottky rectifiers with 15 new 1 A, 2 A, and 3 A devices in the eSMP[®] series low profile SMF (DO-219AB) package. Providing space-saving alternatives to Schottky rectifiers in the SMA package, the Vishay General Semiconductor devices feature reverse voltages from 45 V to 150 V, while their 3 A rating is the industry's highest for the SMF package.

- Increase power density by offering the high 3 A current rating typically available in the larger SMA package
 - SMF is 46 % thinner, while occupying 49 % less board space
- With their low forward voltage drop, the rectifiers reduce power losses and improve efficiency
- Ideal for automated placement

TMBS [®] IN SMF								
PART #	I _{F(AV)} (A)	V _{RRM} (V)	I _{FSM} (A)	V _F at I _F and T _J			T _J MAX. (°C)	AEC-Q101 AVAILABLE
				V _F (V)	I _F (A)	T _A (°C)		
V1FL45	1.0	45	30	0.36	1	125	150	Yes
V1F6	1.0	60	30	0.45	1	125	150	Yes
V1FM10	1.0	100	30	0.59	1	125	175	Yes
V1FM12	1.0	120	30	0.61	1	125	175	Yes
V1FM15	1.0	150	30	0.64	1	125	175	Yes
V2FL45	2.0	45	40	0.40	2	125	150	Yes
V2F6	2.0	60	50	0.45	2	125	150	Yes
V2FM10	2.0	100	40	0.62	2	125	175	Yes
V2FM12	2.0	120	40	0.65	2	125	175	Yes
V2FM15	2.0	150	40	0.69	2	125	175	Yes
V3FL45	3.0	45	50	0.43	3	125	150	Yes
V3F6	3.0	60	60	0.49	3	125	150	Yes
V3FM10	3.0	100	55	0.62	3	125	175	Yes
V3FM12	3.0	120	60	0.64	3	125	175	Yes
V3FM15	3.0	150	40	0.66	3	125	175	Yes