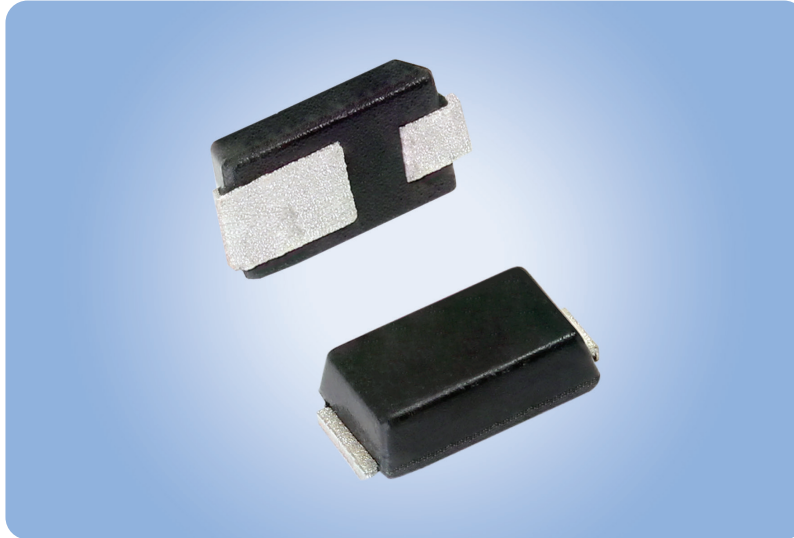




## DIODES

### 45 V to 150 V TMBS<sup>®</sup> Rectifiers

## 1 A and 2 A TMBS<sup>®</sup> Rectifiers in MicroSMP (DO-219AD) Package Save Space, Increase Power Density, and Improve Efficiency



### KEY BENEFITS

- Current ratings of 1 A and 2 A
- Compact MicroSMP (DO-219AD) package
  - 2.5 mm by 1.3 mm with a low profile of 0.65 mm
- Low forward voltage drop down to 0.36 V (1 A devices) and 0.40 V (2 A devices)
- Reverse voltages from 45 V to 150 V
- AEC-Q101 qualified

### APPLICATIONS

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

### RESOURCES

- Datasheets: see next page for products
- For technical questions contact: [DiodesAmerica@vishay.com](mailto:DiodesAmerica@vishay.com), [DiodesAsia@vishay.com](mailto:DiodesAsia@vishay.com), [DiodesEurope@vishay.com](mailto:DiodesEurope@vishay.com)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**DIODES****45 V to 150 V TMBS<sup>®</sup> Rectifiers**

Surface-mount 1 A and 2 A TMBS<sup>®</sup> Trench MOS Barrier Schottky rectifiers in the eSMP<sup>®</sup> series MicroSMP (DO-219AD) package provide space-saving alternatives to Schottky rectifiers in the SOD-123W package, and feature reverse voltages from 45 V to 150 V. The 2 A TMBS<sup>®</sup> devices offer forward voltage as low as 0.40 V.

- Increase power density by offering the high 2 A current rating typically available in the larger SOD-123W and SMA (DO-214AC) packages
- MicroSMP package is 35 % thinner than the SOD-123W package, while occupying 45 % less board space
- With their low forward voltage drop, the rectifiers reduce power loss and improve efficiency
- Ideal for automated placement

Part Number	I <sub>F(AV)</sub> (A)	V <sub>RRM</sub> (V)	I <sub>FSM</sub> (A)	V <sub>F</sub> at I <sub>F</sub> (T <sub>A</sub> = 125 °C)		T <sub>J</sub> max. (°C)	AEQ-101 Qualified
				V <sub>F</sub> (V)	I <sub>F</sub> (A)		
<a href="#">V1P6</a>	1	60	25	0.45	1	150	Yes
<a href="#">V1P22</a>	1	200	25	0.65	1	175	Yes
<a href="#">V1PL45</a>	1	45	25	0.36	1	150	Yes
<a href="#">V1PM10</a>	1	100	25	0.58	1	175	Yes
<a href="#">V1PM12</a>	1	120	25	0.61	1	175	Yes
<a href="#">V1PM15</a>	1	150	25	0.64	1	175	Yes
<a href="#">V2P6</a>	2	60	30	0.51	2	150	Yes
<a href="#">V2P22</a>	2	200	30	0.70	2	175	Yes
<a href="#">V2PL45</a>	2	45	30	0.40	2	150	Yes
<a href="#">V2PM10</a>	2	100	30	0.62	2	175	Yes
<a href="#">V2PM12</a>	2	120	30	0.65	2	175	Yes
<a href="#">V2PM15</a>	2	150	30	0.68	2	175	Yes