



## Zener Diodes in SMF (DO-219AB) Package With Surge Current Specification



### KEY BENEFITS

- Silicon planar Zener diodes
- SMF (DO-219AB) package with low profile height of 1.0 mm
- Zener and surge current specification
- Low leakage current
- Excellent stability
- Meets MSL level 1 per J-STD-020, LF maximum peak of 260 °C
- Meets JESD 201 class 2 whisker test
- ESD capability according to AEC-Q101:
  - Human body model: > 8 kV
  - Machine model: > 800 V
- Operating temperature range of -65 °C to +175 °C
- AEC-Q101 qualified, Automotive Grade versions available
- RoHS-compliant, halogen-free available
- Wave and reflow solderable

### APPLICATIONS

- Automotive, electronic lighting, industrial, SMPS (switch mode power supplies), voltage stabilization / voltage regulation, overvoltage surge protection

### RESOURCES

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



**DIODES****BZD Series**

Vishay's BZD Series Zener diodes offer a full voltage range of 3.6 V to 200 V to cover all applications. The SMF (DO-219AB) flat lead surface-mount package meets the requirements of our customers' state of the art PCB designs. The BZD Series is available with 2 % Zener voltage tolerance to reduce the design efforts of our customers. Halogen-free versions meet the latest environmental specifications. The BZD Series has a  $T_J$  max of 175 °C with available Automotive Grade versions for automotive applications.

VISHAY P/N	<a href="#">BZD27B Series</a>	<a href="#">BZD27B-M Series</a>	<a href="#">BZD27C Series</a>	<a href="#">BZD27C-M Series</a>
QUALIFICATION LEVEL				
ENVIRONMENTAL STATUS	RoHS-compliant	Halogen-free	RoHS-compliant	Halogen-free
$T_J$ MAX (°C)	175	175	175	175
ZENER VOLTAGE TOLERANCE (%)	2	2	5	5
ZENER VOLTAGE RANGE (V)	3.6 to 200	3.6 to 200	3.6 to 200	3.6 to 200
TEST CURRENT $I_{ZT}$	5 to 100	5 to 100	5 to 100	5 to 100
$V_{BR}$ (V)	7.35 to 196	7.35 to 196	7 to 188	7 to 188
$V_{WM}$ (V)	6.2 to 160	6.2 to 160	6.2 to 160	6.2 to 160
$P_{PPM}$ (W)	150	150	150	150
$V_Z$ SPECIFICATIONS	Pulse current	Pulse current	Pulse current	Pulse current
CIRCUIT CONFIGURATION	Single	Single	Single	Single
POLARITY	Uni-directional	Uni-directional	Uni-directional	Uni-directional