

Features

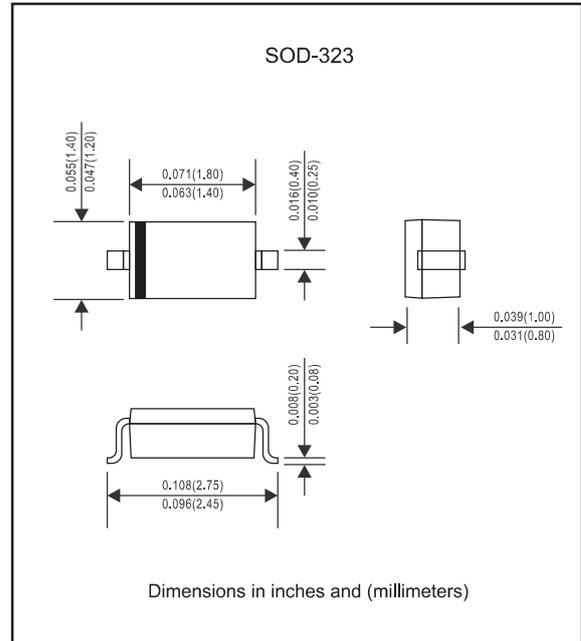
- ▶ For use in low voltage, high frequency inverters
- ▶ Free wheeling, and polarity protection applications

Mechanical data

- ▶ **Case:** JEDEC SOD-323 molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any



Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbols	B16WS	Units
Maximum recurrent peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Continuous forward current	I_F	1	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1 @ $V_R=60V$	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	10	A
Maximum Instantaneous Forward Voltage	V_F	0.7 @ $I_F=1.0A$	V
Total capacitance $V_R=4V, f=1MHz$	C_{tot}	120	pF
Total power dissipation	P_{tot}	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	400	$^\circ\text{C}/\text{W}$
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

Rating and characteristic curves

Fig.1 Power Derating Curve

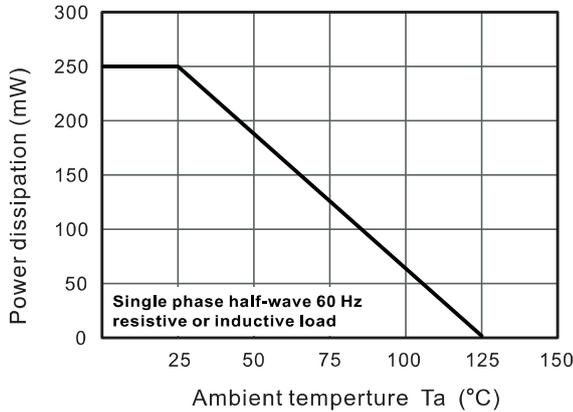


Fig.2 Typical Reverse Characteristics

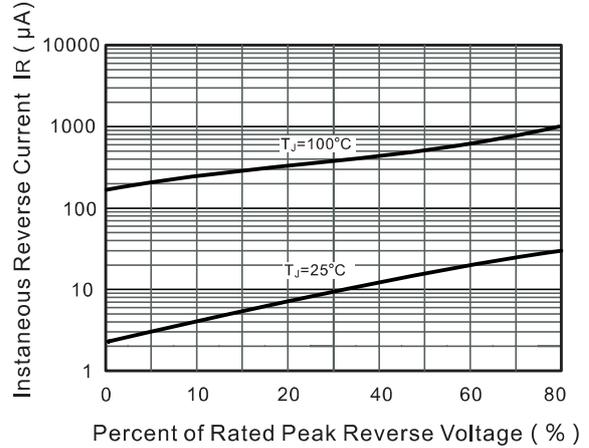


Fig.3 TYPICAL FORWARD VOLTAGE

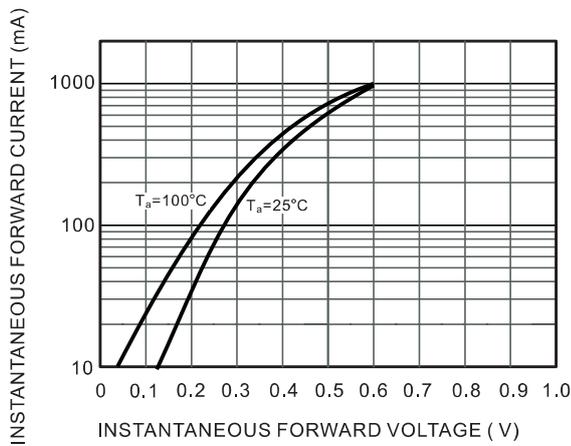
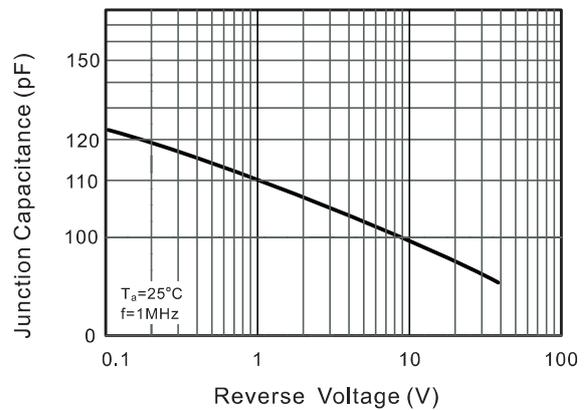


Fig.4 Typical Junction Capacitance



Marking

Type number	Marking code
B16WS	SM