



B16WS
SCHOTTKY BARRIER DIODES

FEATURES

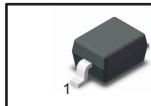
- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability

MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750 , Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

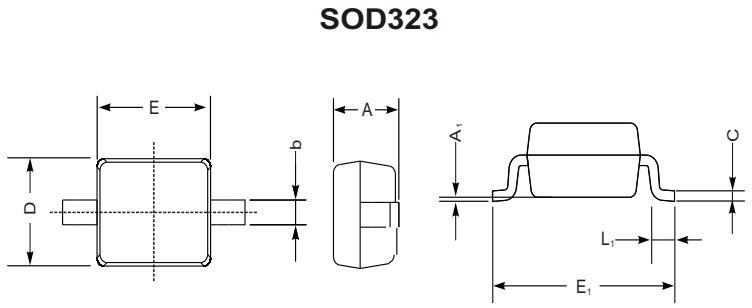
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode





Top View
 Marking Code: SM
 Simplified outline SOD-323 and symbol



UNIT		A	C	D	E	E ₁	b	L ₁	A ₁
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—
mil	max	43	5.9	55	70	108	16	16	8
	min	32	3.1	47	63	100	9.8	7.9	—

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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 @ VR=60V	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25	A
Maximum Instantaneous Forward Voltage	V _F	0.7 @ I _F =1.0A	V
Total capacitance VR=4V,f=1MHz	C _{tot}	120	pF
Total power dissipation	P _{tot}	250	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	400	°C/W
Junction Temperature	T _j	125	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

RATING AND CHARACTERISTIC CURVES (B16WS)

Fig.1 Power Derating Curve

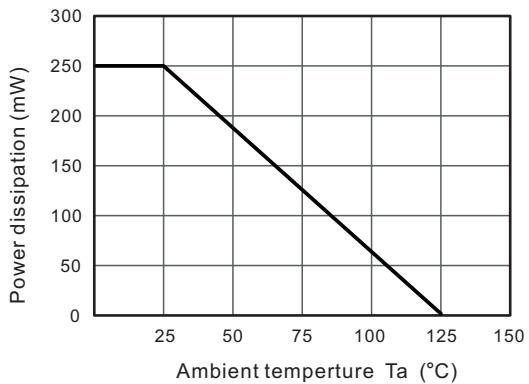


Fig.2 Typical Reverse Characteristics

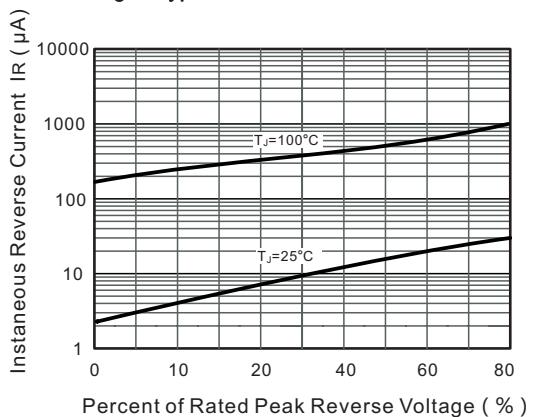


Fig.3 TYPICAL FORWARD VOLTAGE

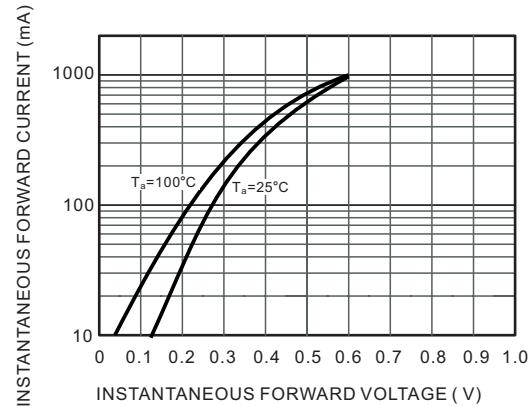


Fig.4 Typical Junction Capacitance

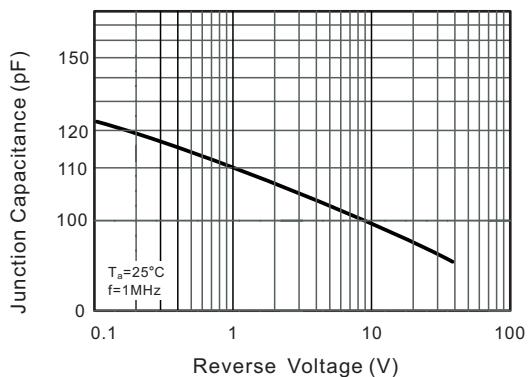


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

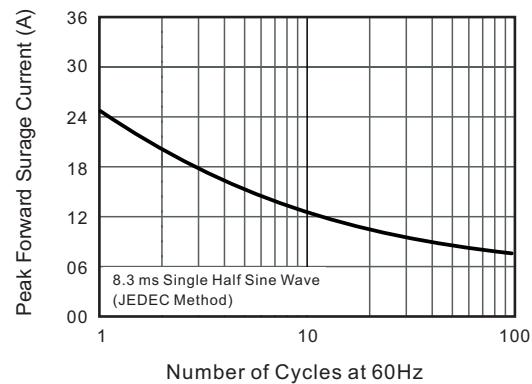


Fig.6 Typical Transient Thermal Impedance

