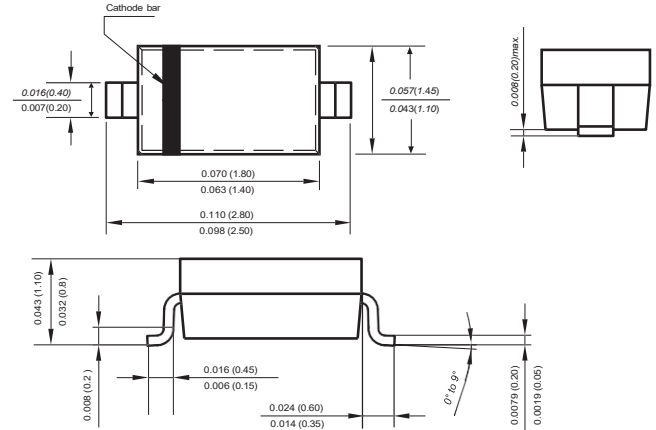


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

SOD-323



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	B12WS	B14WS	B16WS	B18WS	B110WS	B112WS	B115WS	B120WS	UNITS
Marking code		B12S	B14S	B16S	B18S	110S	112S	115S	120S	
Maximum repetitive peak reverse voltage	V_{RMM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum average forward rectified current	$I_{(AV)}$	1.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25								A
Maximum instantaneous forward voltage at 1.0A	V_F	0.55	0.70	0.85	0.90					V
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	0.3 10		0.2 5		0.1 2				mA
Typical junction capacitance (NOTE 1)	C_J	110	80							pF
Operating junction temperature range	T_J	-55 to +125								°C
Storage temperature range	T_{STG}	-55 to +150								°C

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.

Typical Characteristics

Fig.1 Forward Current Derating Curve

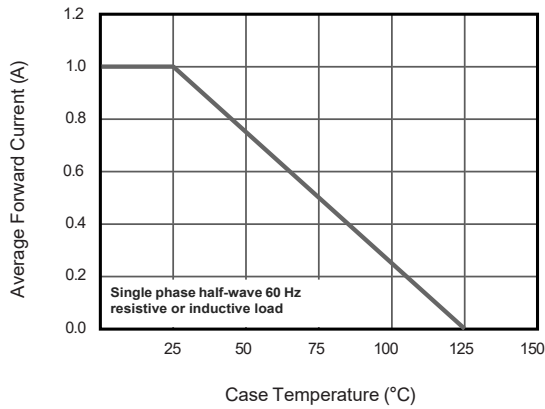


Fig.2 Typical Reverse Characteristics

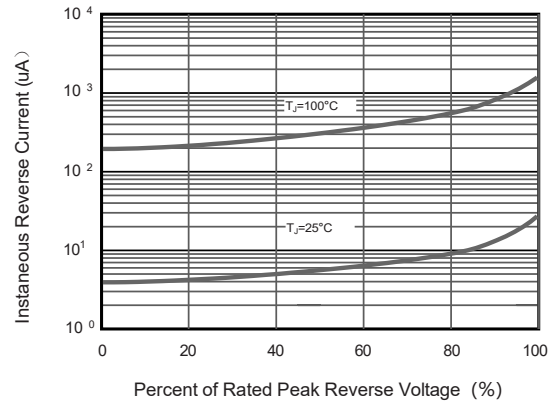


Fig.3 Typical Forward Characteristic

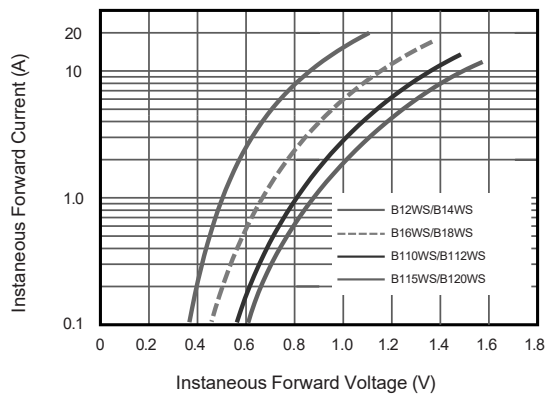


Fig.4 Typical Junction Capacitance

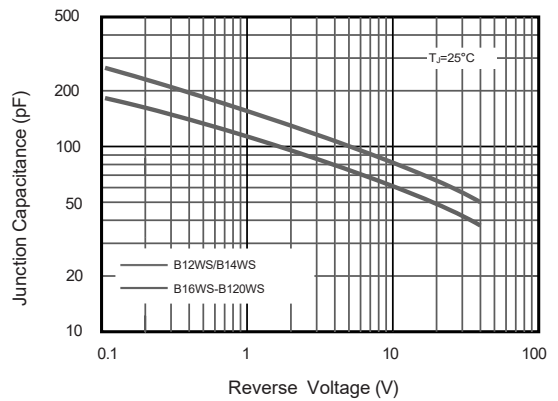
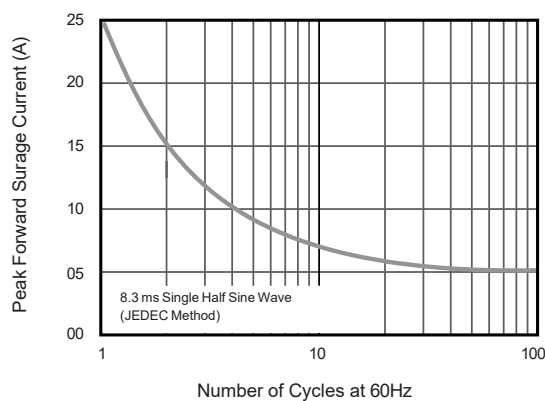


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.