

Shanghai Sinble
Electronics Co.,Ltd

B5817WS~B5819WS
Schottky Barrier Diode

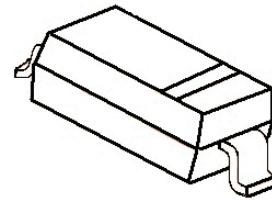
FEATURES

- * High Current Capability
- * Low Forward Voltage Drop

MECHANICAL DATA

- * SOD-323 Small Outline Plastic Package
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

SOD-323



Marking: B5817WS: SJ

B5818WS: SK

B5819WS: SL

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

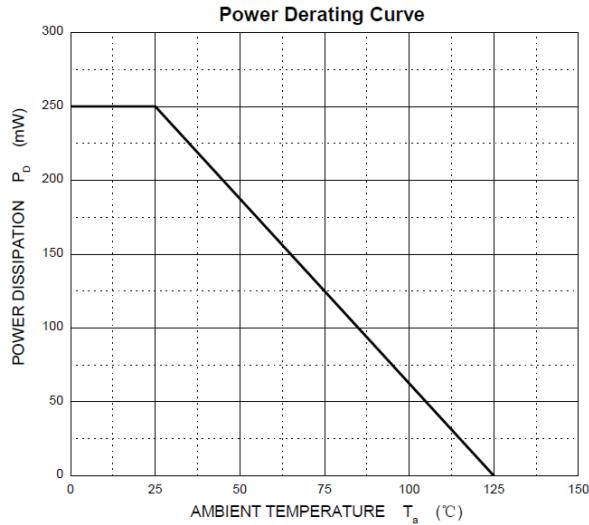
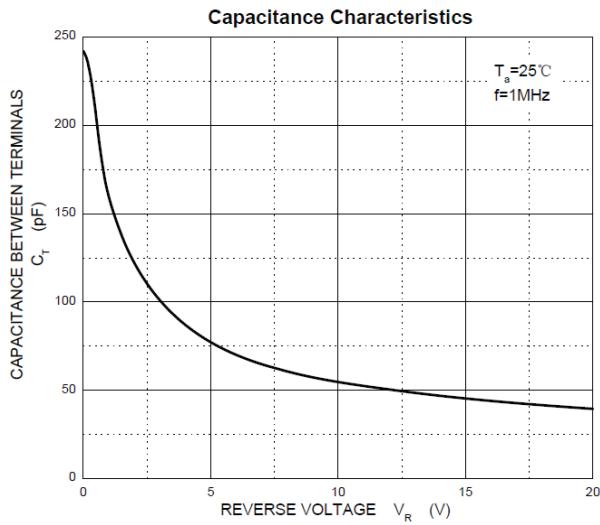
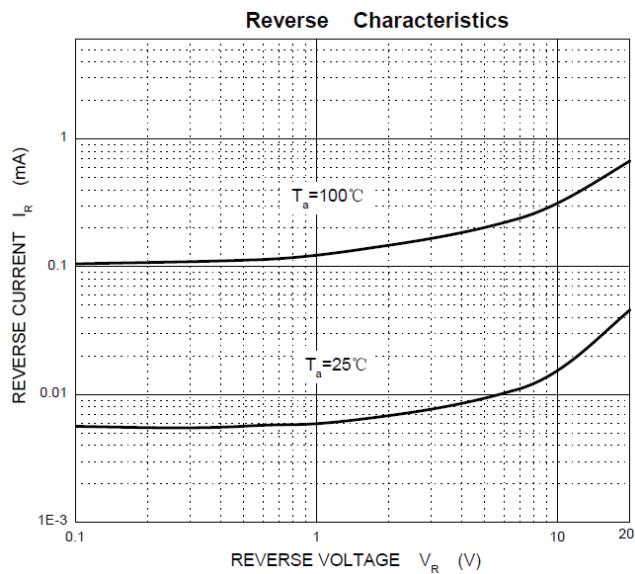
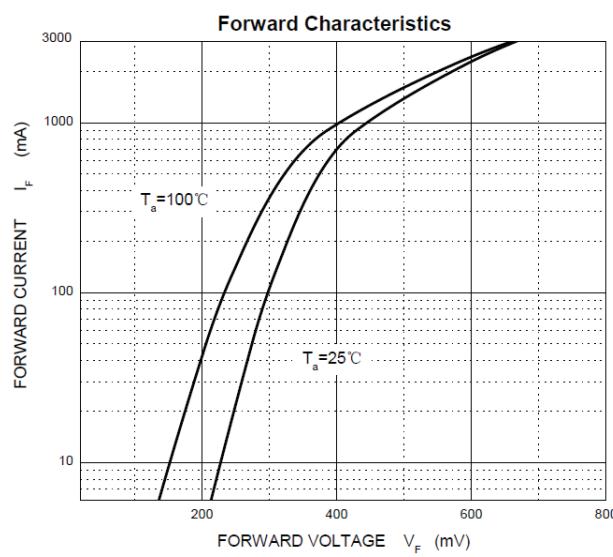
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	B5817WS	B5818WS	B5819WS	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IFM		1.0		A
Peak forward surge current 8.3 ms single half sine-wave	IFSM		10		A
Typical Current Squared Time	I^2T		0.415		A^2S
Typical thermal resistance	$R_{\theta JA}$		400		$^{\circ}C/W$
Power Dissipation	PD		250		mW
Operating junction temperature	T _j		125		$^{\circ}C$
Storage temperature range	TSTG		-50~+150		$^{\circ}C$

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

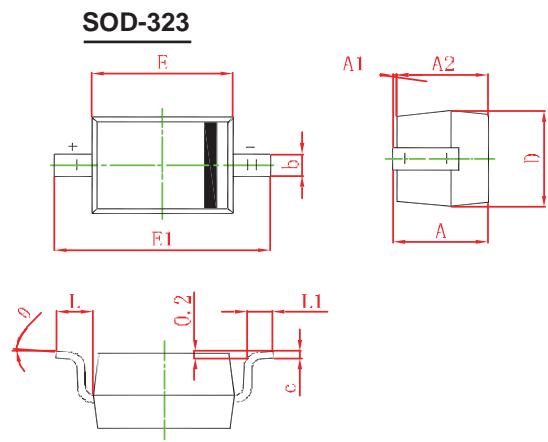
Parameters	Symbol	Test conditions	B5817WS	B5818WS	B5819WS	Unit
Maximum forward voltage	VF	IF = 1.0A IF = 3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	VR	IR=1mA	20	30	40	V
Maximum reverse current	IR	VR=20V B5817WS VR=30V B5818WS VR=40V B5819WS		1.0		mA
Type junction capacitance	C _j	VR = 4.0V, f = 1MHz		120		pF

RATING AND CHARACTERISTICS CURVES (B5817WS THRU B5819WS)



SOD-323 PACKAGE OUTLINE

Plastic surface mounted package



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°