B5817WS-B5819WS
Schottky Barrier Diode

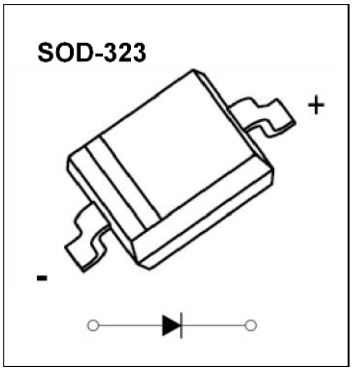
General description
Schottky Barrier Diode in a SOD-323 Plastic Package.

FEATURES

- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.004g

Device Marking Code

Device Type	Device Marking
B5817WS	SJ
B5818WS	SK
B5819WS	SL



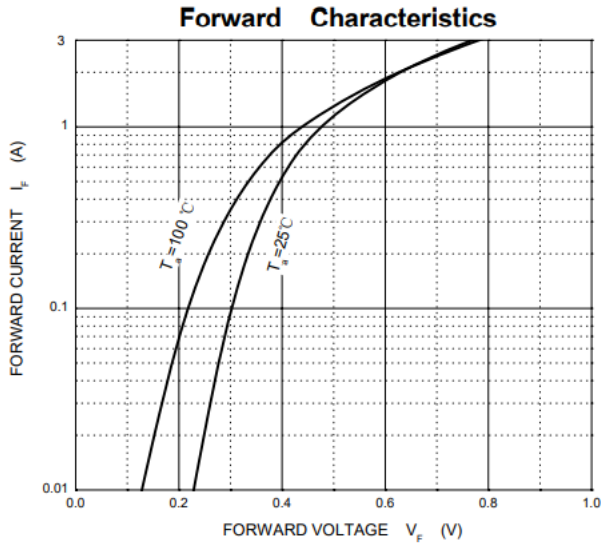
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

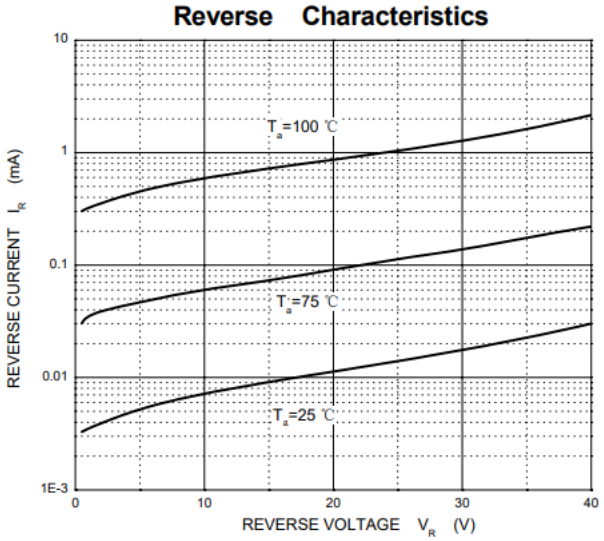
Parameter	Symbol	B5817WS	B5818WS	B5819WS	Unit
Non-repetitive peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS reverse voltage	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	I_O	1			A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Repetitive peak forward current	I_{FRM}	1.5			A
Power dissipation	Pd	250			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400			℃/W
OperationJunction temperature Range	T_J	-40~+125			℃
Storage temperature Range	T_{STG}	-55~+150			℃

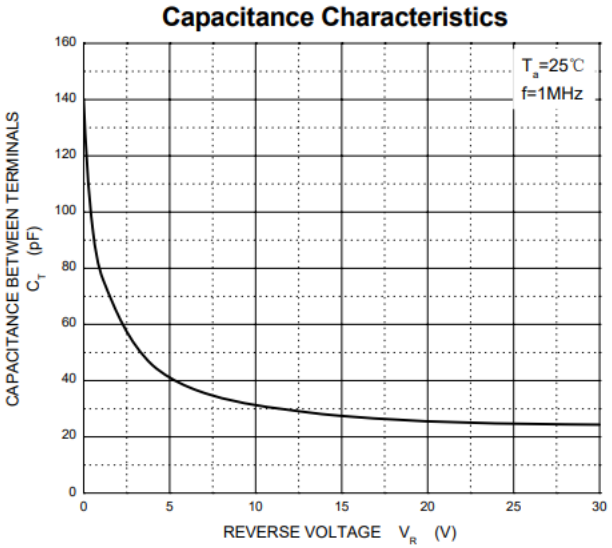
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

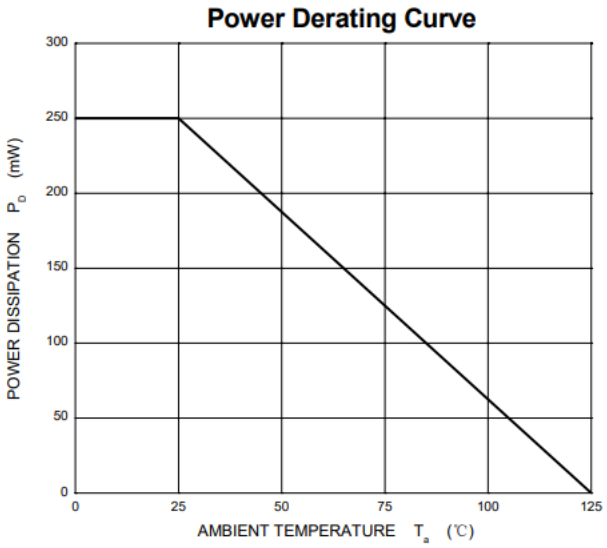
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 1mA B5817WS B5818WS B5819WS	 20 30 40		V
Reverse voltage leakage current	I_R	V_R=20V B5817WS V_R=30V B5818WS V_R=40V B5819WS		1	mA
Forward voltage	V_F	B5817WS I_F=1A		0.45	V
		I_F=3A		0.75	
		B5818WS I_F=1A		0.55	V
		I_F=3A		0.875	
		B5819WS I_F=1A		0.6	V
		I_F=3A		0.9	
Diode capacitance	C_D	V_R=4V, f=1MHz		120	pF

Typical Characteristics

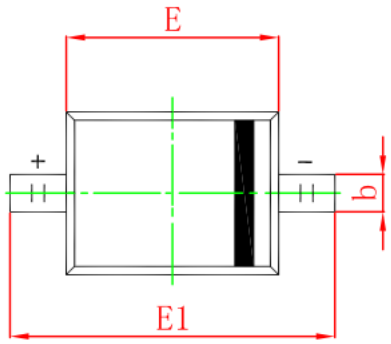


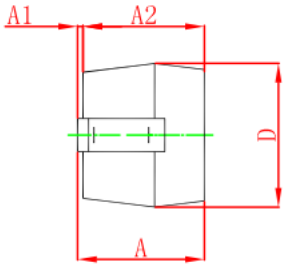


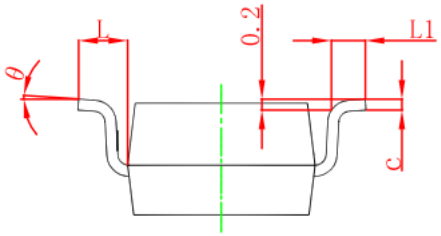




SOD-323 Package Outline







Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

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