SOD- 323 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop

RoHS COMPLIANT

Mechanical Data

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

Marking: **SOD-323**

B5817WS: SJ
B5818WS: SK
B5819WS: SL

Maximum Ratings & Thermal Characteristics (T_A =25°C unless otherwise noted)

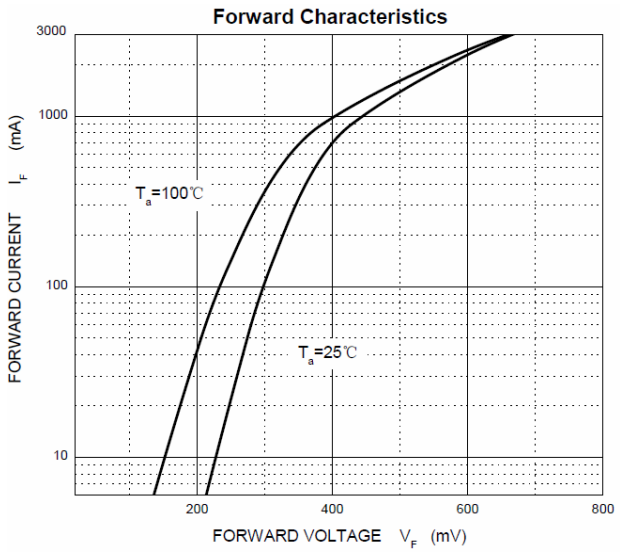
Parameters	Symbol	B5817WS	B5818WS	B5819WS	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Non-repetitive Peak Forward Current	I_{FM}	1.0			A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	9			A
Power Dissipation	P_D	250			mW
Typical thermal resistance	$R_{\theta JA}$	400			℃/W
Storage temperature range	T_{STG}	-50-+150			℃
Junction temperature	T_J	125			℃

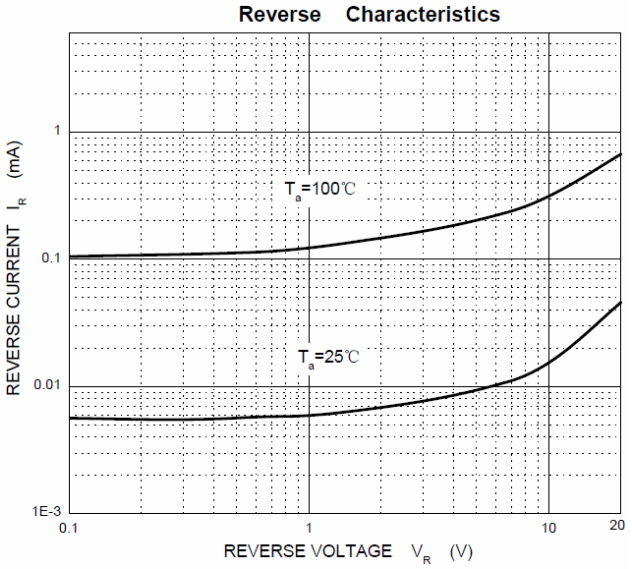
Electrical Characteristics (T_A =25°C unless otherwise noted)

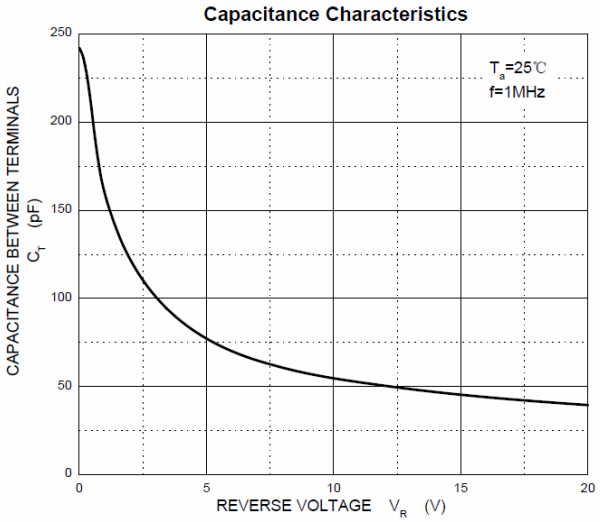
Parameters	Symbol	Test conditions	B5817WS	B5818WS	B5819WS	Unit
Maximum forward voltage	V_F	IF = 1.0A	0.450	0.550	0.600	V
		IF = 3.0A	0.750	0.875	0.900	
Maximum reverse breakdown voltage	V_R	IR=1mA	20	30	40	
Maximum reverse current	I_R	VR=20V B5817WS	1			mA
		VR=30V B5818WS				
		VR=40V B5819WS				
Type junction capacitance	C_T	VR = 4V, f =1MHz	120			pF

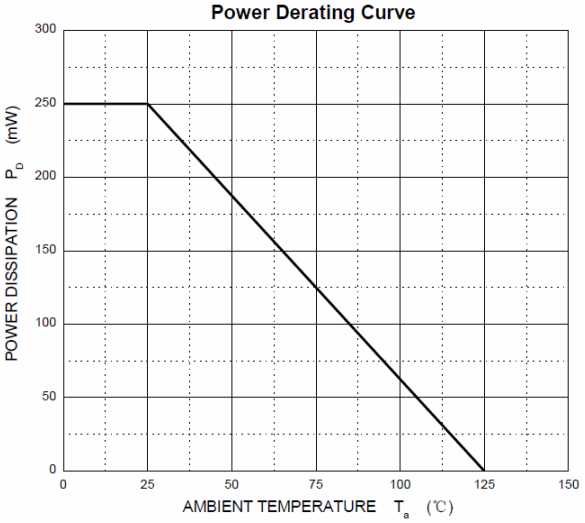
Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)



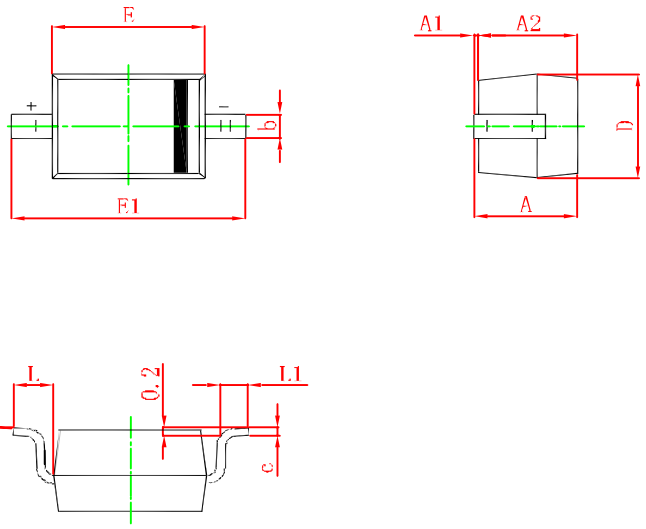






Package Outline Dimensions

millimeters



Symbol	Min	Max
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°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2013.05.08	First issue

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