

250mW SOD-323 Plastic-Encapsulate Schottky Barrier Diode

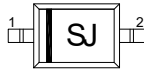
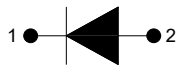
1. Features

- High current capability
- Power dissipation of 250mW
- Low forward voltage drop

2. Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Epoxy:94V-0

3. Marking and Circuit

B5817WS	B5818WS	B5819WS	Circuit
			

4. Specification

Absolute Maximum Rating & Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

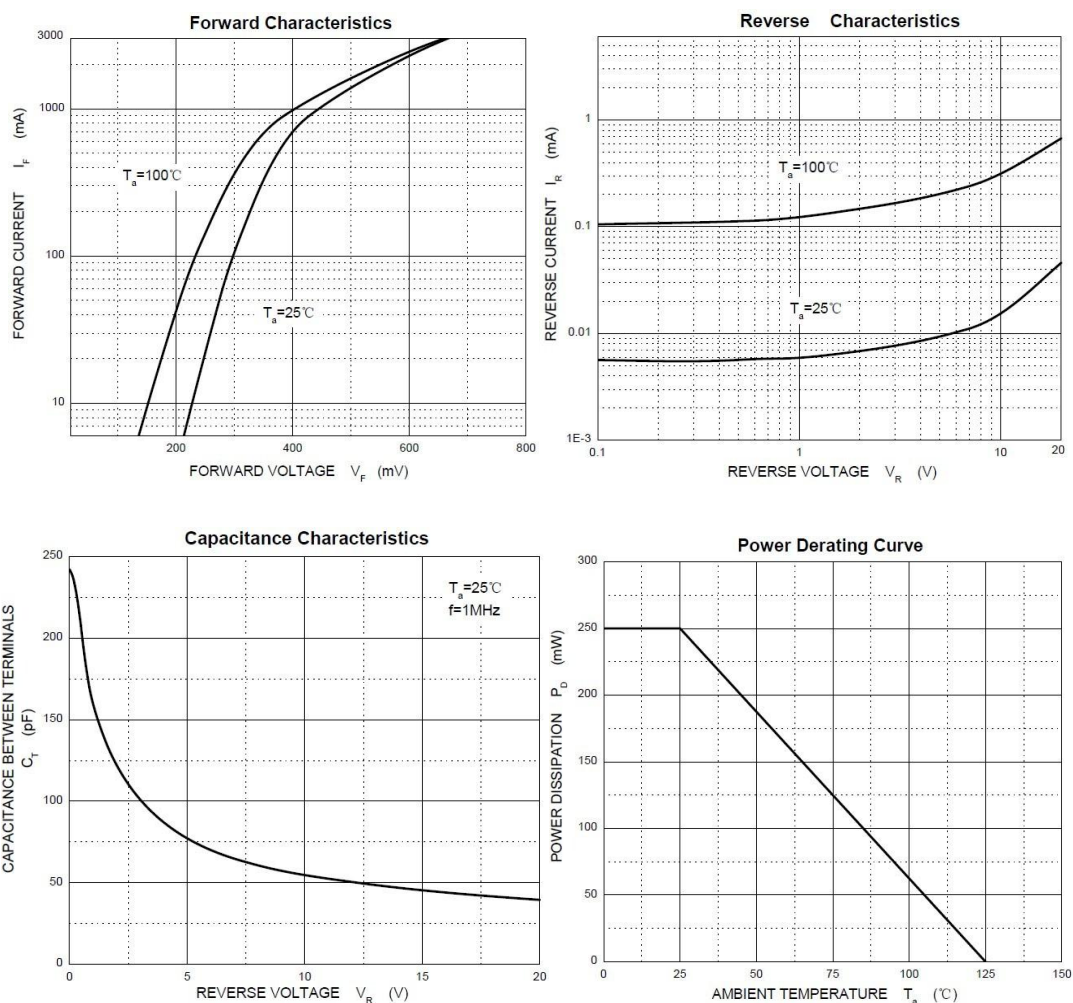
Parameters	Symbol	Value			Unit
		B5817WS	B5818WS	B5819WS	
Peak repetitive reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Power dissipation	P_D	250			mW
Operating junction temperature	T_J	125			°C
Storage temperature range	T_S	-50~150			°C
Thermal resistance from junction to ambient	$R_{\theta JA}$	400			°C/W
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	9			A
Maximum average forward rectified current	I_{FM}	1.0			A

Valid provided that electrodes are kept at ambient temperature

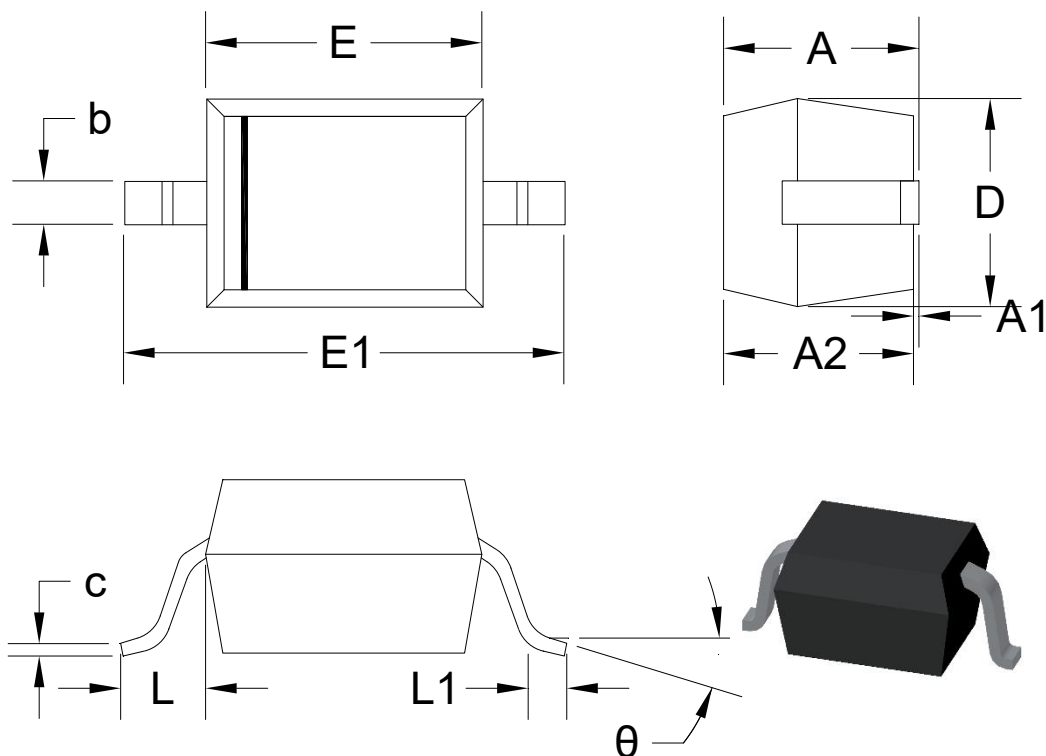
Electrical Characteristics (At TA = 25°C unless otherwise specified)

Parameters	Symbol	Test conditions	B5817WS	B5818WS	B5819WS	Unit
Maximum forward voltage	V_F	$I_F = 1.0A$	0.450	0.550	0.600	V
		$I_F = 3.0A$	0.750	0.875	0.900	
Maximum reverse breakdown voltage	V_R	$I_R = 1mA$	20	30	40	V
Maximum reverse current	I_R	$V_R = 20V$	1.0			mA
		$V_R = 30V$				
		$V_R = 40V$				
Junction Capacitance	C_j	$V_R = 4V, f = 1MHz$	120			pF

5. Typical Characteristic

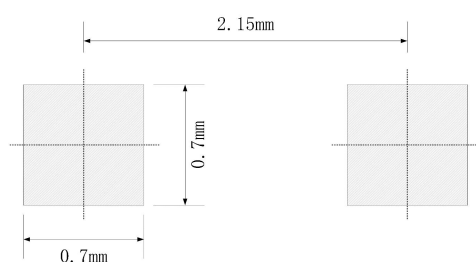


6. Dimension and Patterns (SOD-323)



Units: mm

Symbol	Min.	Max.	Symbol	Min.	Max.
A		1.000	E	1.600	1.800
A1	0.000	0.100	E1	2.550	2.750
A2	0.800	0.900	L	0.475REF	
b	0.250	0.350	L1	0.250	0.400
c	0.080	0.150	θ	0°	8°
D	1.200	1.400			



Note:

- Controlling dimension: in millimeters
- General tolerance: $\pm 0.05\text{mm}$
- The pad layout is for reference only
- Unit: mm

Notice

1. All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise. The right to explain is owned by CCX electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification.

Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. CCX shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.