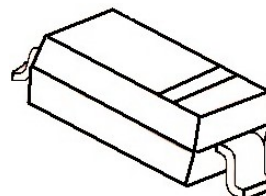


Plastic-Encapsulate Schottky Barrier Diode
Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

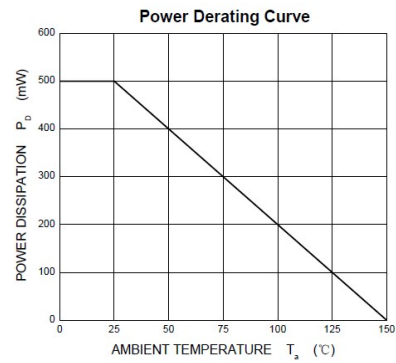
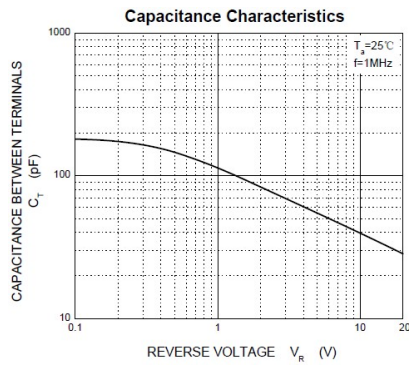
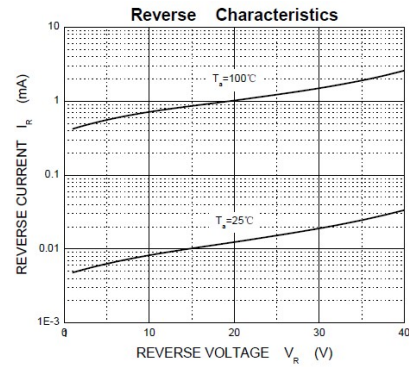
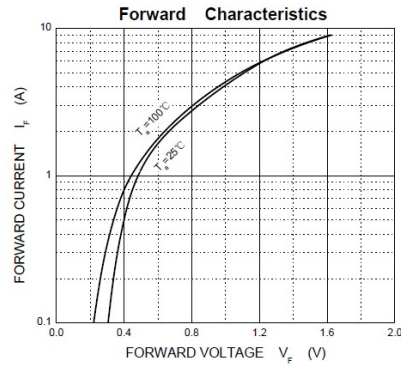
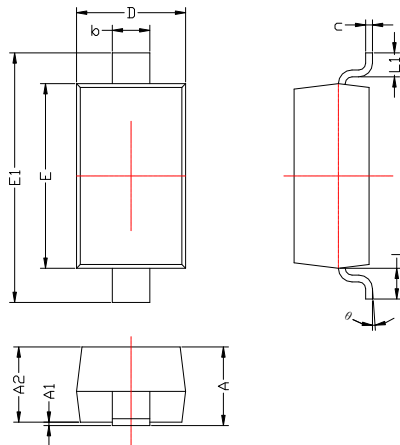
- SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any
- Green molding compound device

SOD-123

Marking: B5817W: SJ
B5818W: SK
B5819W: SL
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	B5817W	B5818W	B5819W	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	9			A
Typical thermal resistance	RθJA	250			°C/W
Power Dissipation	PD	500			mW
Storage temperature range	TSTG	-50-+150			°C
Operating temperature range	Tj	-40 to +125			°C

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

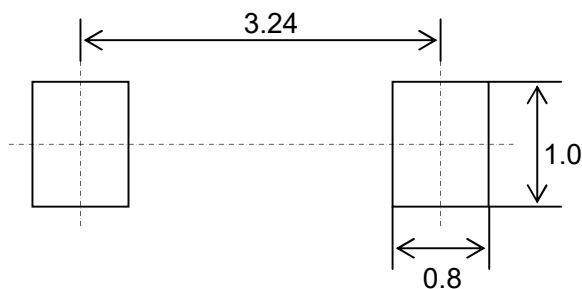
Parameters	Symbol	Test conditions	B5817W	B5818W	B5819W	Unit
Maximum forward voltage	VF	IF = 1.0A	0.450	0.550	0.600	V
		IF = 3.0A	0.750	0.875	0.900	
Maximum reverse breakdown voltage	VR	IR=1mA	20	30	40	V
Maximum reverse current	IR	VR=20V B5817W VR=30V B5818W VR=40V B5819W	0.01 (Typ.) 0.10 (Max)			mA
Type junction capacitance	Cj	VR = 4.0V, f = 1MHz	120			pF

Characteristic Curves

SOD-123 PACKAGE OUTLINE Plastic surface mounted package


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E1	2.600	2.800
L	0.500REF	
L1	0.250	0.450
θ	0 $^\circ$	8 $^\circ$

Precautions: PCB Design

(Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs)



Note:
 1. Controlling dimension; in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

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