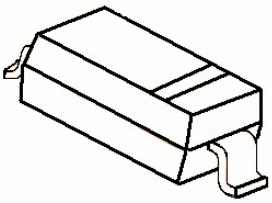
PROSEMI
www.prosemitech.com

1N5817W THRU 1N5819W

SOD-123 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop



SOD-123

Mechanical Data

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

Maximum Ratings & Thermal Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

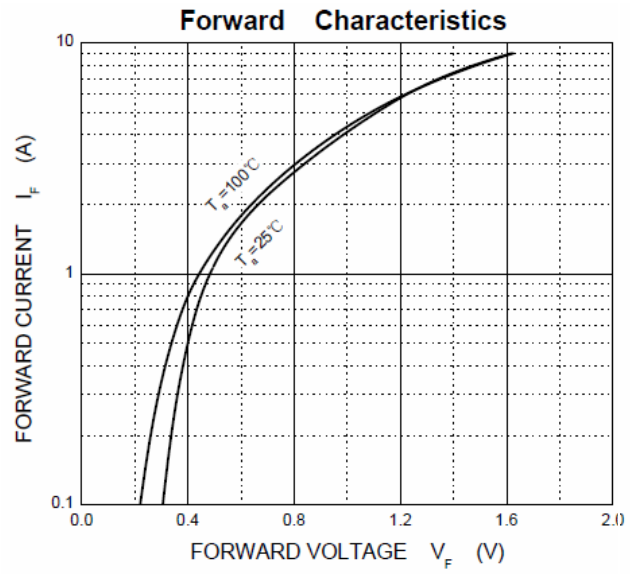
Parameters	Symbol	1N5817W	1N5818W	1N5819W	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current	I_{FM}	1.0			A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	9			A
Typical thermal resistance	$R_{\theta JA}$	250			℃/W
Power Dissipation	P_D	500			mW
Storage temperature range	T_{STG}	-50-+150			℃

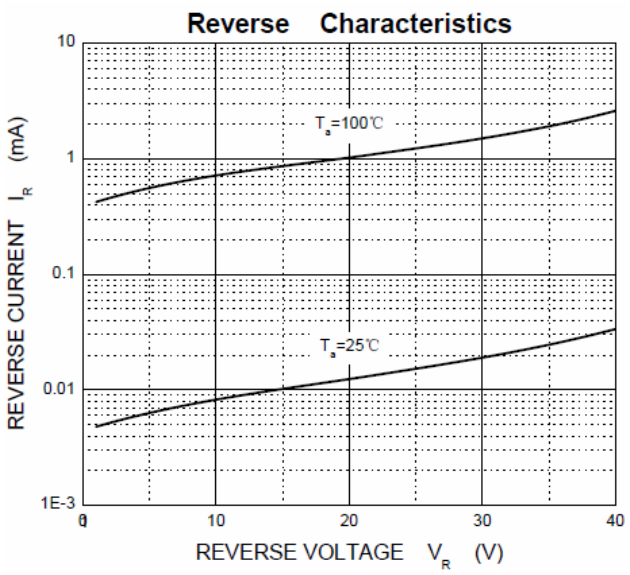
Electrical Characteristics

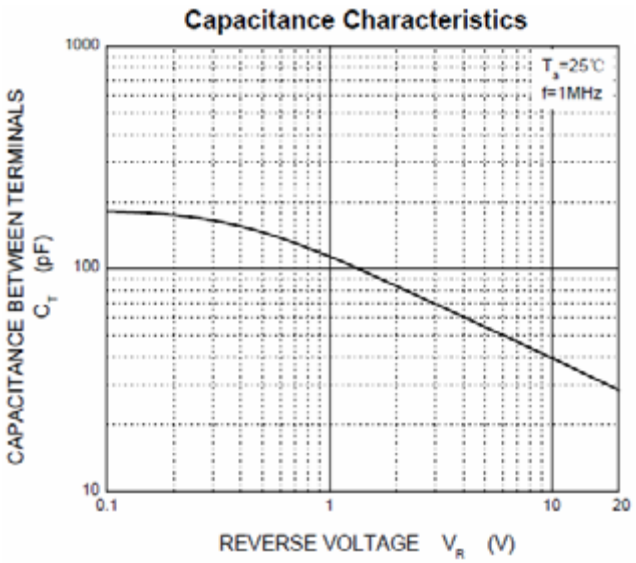
(Ratings at 25℃ ambient temperature unless otherwise specified).

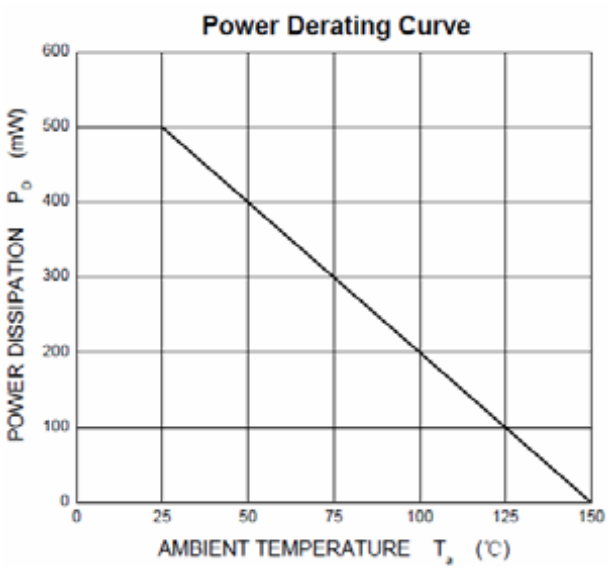
Parameters	Symbol	Test conditions	1N5817W	1N5818W	1N5819W	Unit
Maximum forward voltage	V_F	IF = 1.0A IF = 3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	V_R	IR=1mA	20	30	40	V
Maximum reverse current	IR	VR=20V 1N5817W VR=30V 1N5818W VR=40V 1N5819W	1.0			mA
Type junction capacitance	Cj	V_R = 4.0V, f = 1MHz	120			pF

Characteristic Curves

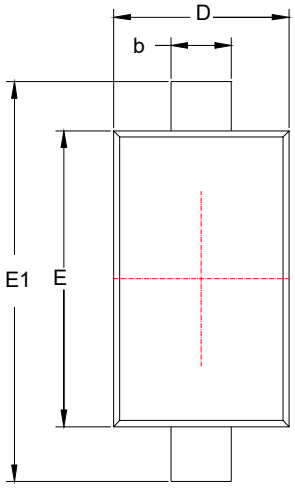


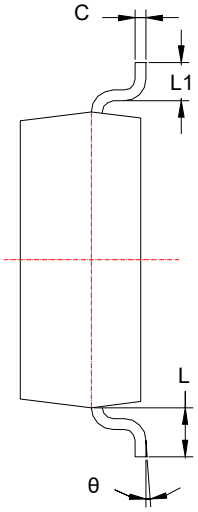




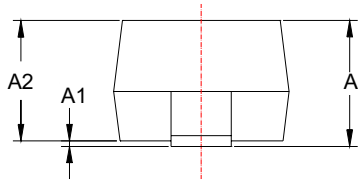


Package Outline

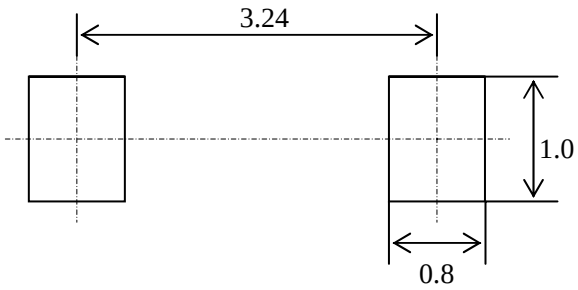




SYMBOL	DIMENSION	
	MIN	MAX
A	0.950	1.350
A1	0.000	0.100
A2	1.050	1.150
b	0.500	0.700
C	0.080	0.200
D	1.400	1.800
E	2.500	2.800
E1	3.600	3.900
L	0.05REF	
L1	0.250	0.450
θ	0°	8°



Precautions: PCB Design(Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs)



Marking Code

1N5817W	**SJ**
1N5818W	**SK**
1N5819W	**SL**

Package Information

Qty：3,000 /Tape and reel