

■ Features

- High Current Capability
- Low Forward Voltage Drop

■ Applications

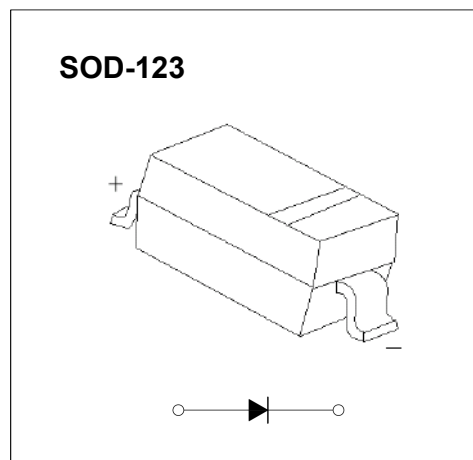
- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications

■ Mechanical Data

- package:SOD-123
- Polarity: Color band denotes cathode end
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any.

■ Ordering Information

Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
1N5817W	SOD-123	SJ	Tape & Reel	3,000 PCS	7 inches
1N5818W	SOD-123	SK	Tape & Reel	3,000 PCS	7 inches
1N5819W	SOD-123	SL	Tape & Reel	3,000 PCS	7 inches



■ Maximum Ratings & Thermal Characteristics(Ratings at 25 °C ambient temperature unless otherwise specified.)

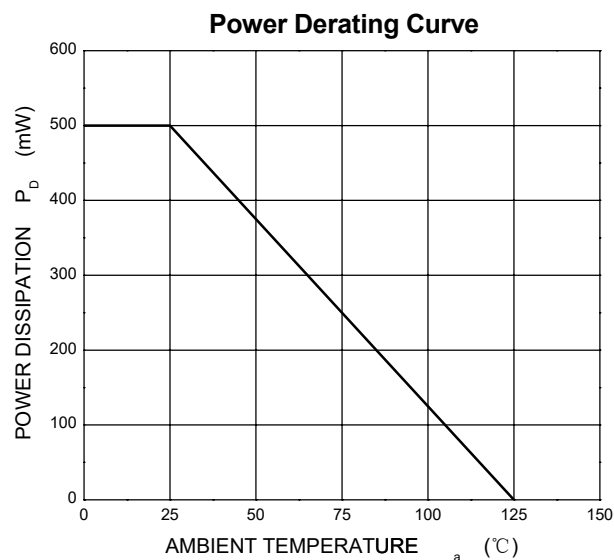
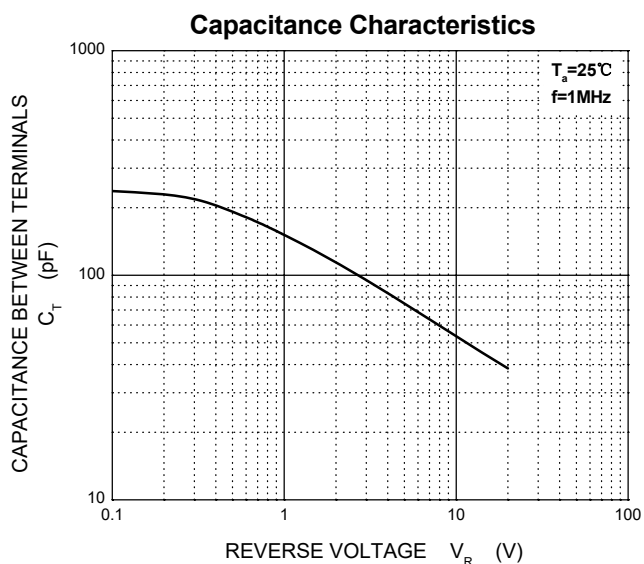
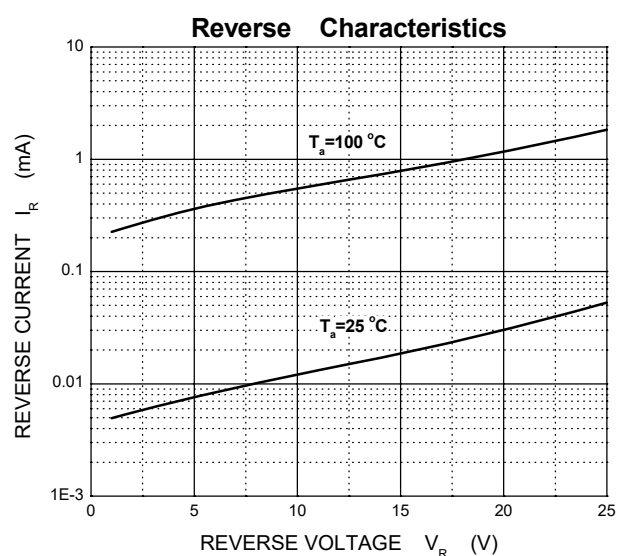
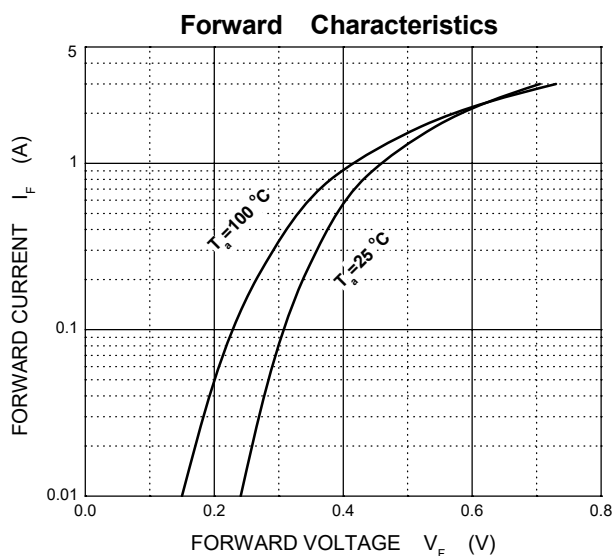
Parameters	Symbol	1N5817W	1N5818W	1N5819W	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IFM	1			A
Peak forward surge current 8.3ms single half sine-wave	IFSM	9			A
Power Dissipation	PD	500			mW
Typical thermal resistance	RθJA	250			°C/W
Operating junction temperature	Tj	125			°C
Storage temperature range	TSTG	-50-+150			°C



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

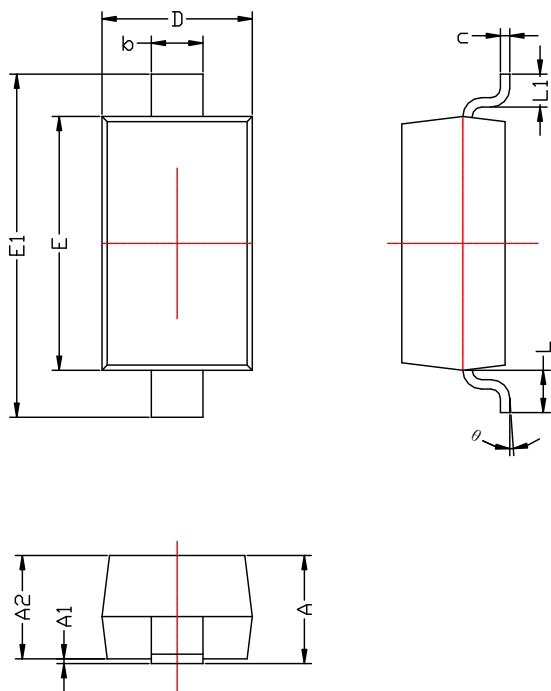
Parameters	Symbol	Test conditions	1N5817W	1N5818W	1N5819W	Unit
Maximum forward voltage	V_F	$I_F = 1.0A$ $I_F = 3.0A$	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	V_R	$I_R=1mA$	20	30	40	V
Maximum reverse current	I_R	$V_R=20V$ 1N5817W $V_R=30V$ 1N5818W $V_R=40V$ 1N5819W	1.0	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

■ **Typical Characteristics**





■ SOD-123 Package Outline Dimensions



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
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°