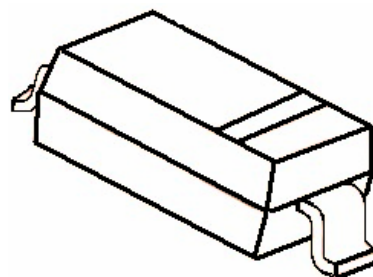


»Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



SOD-123

»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-123 Plastic Package

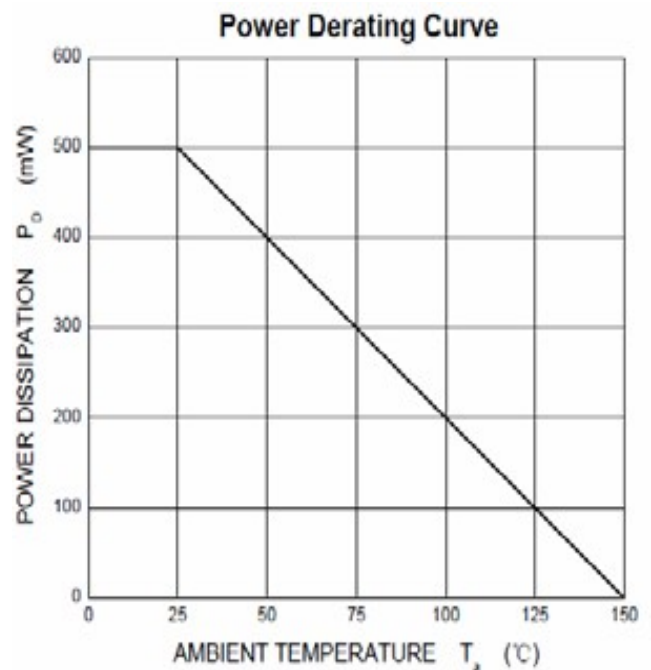
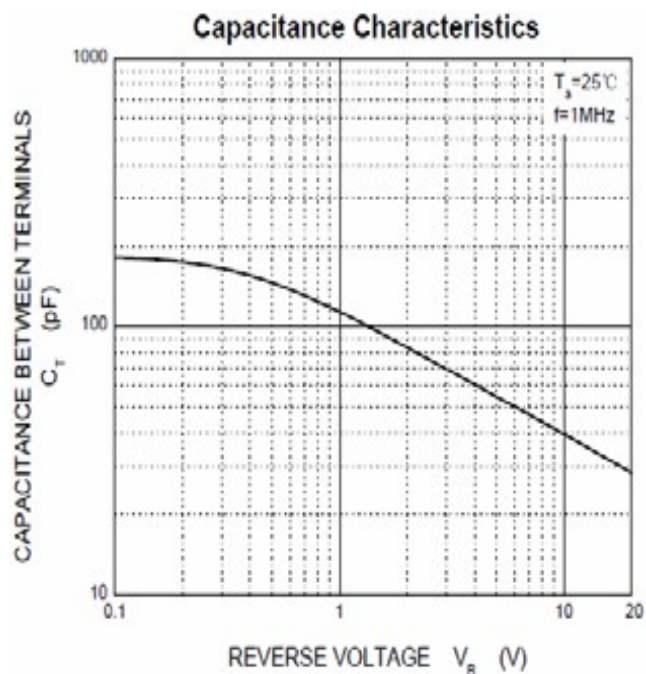
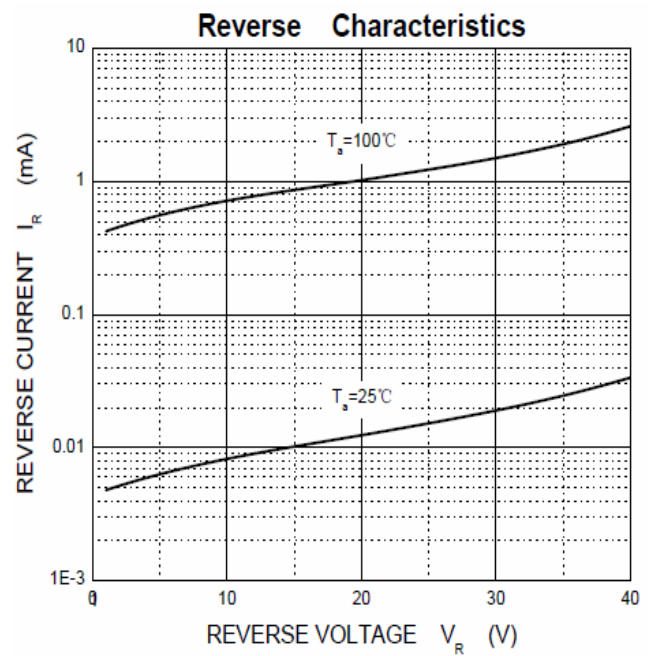
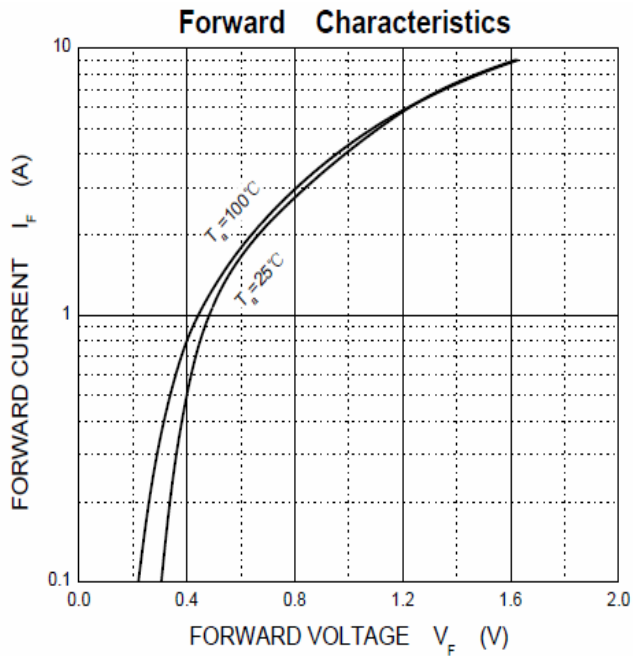
» Maximum Ratings @T_A=25°C unless otherwise noted

Parameters	Symbol	1N5817HW	1N5818HW	1N5819HW	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 _{θJA}	250			°C/W
Power Dissipation	PD	500			mW
Storage temperature range	T _{STG}	-50-+150			°C

»**Electrical Characteristics** @T_A=25°C unless otherwise noted

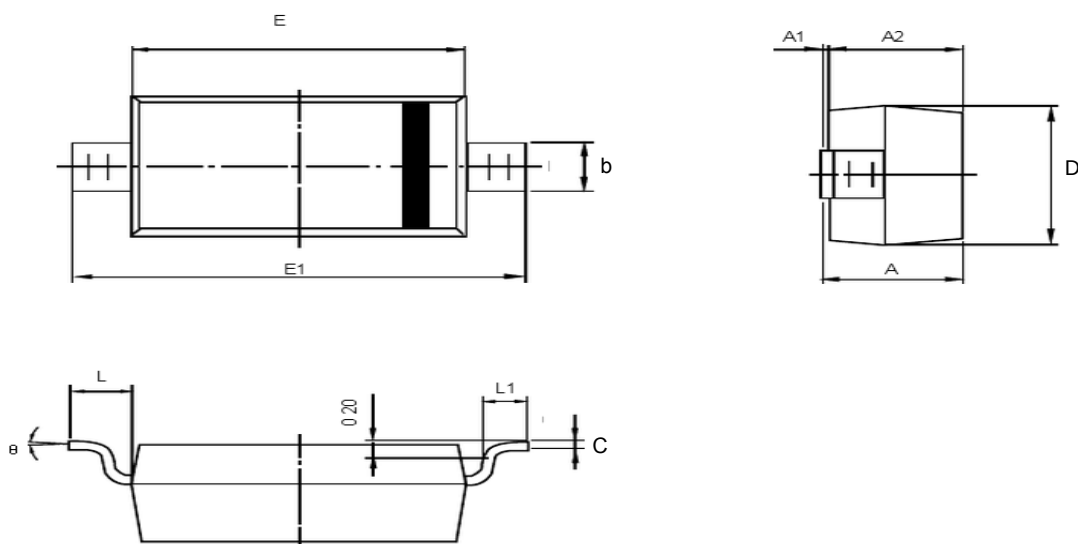
Parameters	Symbol	Test conditions	5817HW	5818HW	5819HW	Unit
Maximum forward voltage	V _F	I _F = 1.0A I _F = 3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	V _R	I _R =1mA	20	30	40	V
Maximum reverse current	I _R	V _R =20V B5817W V _R =30V B5818W V _R =40V B5819W	100			uA
Type junction capacitance	C _j	V _R = 4.0V, f = 1MHz	120			pF

»Typical Performance Characteristics (T_J = 25 °C, unless otherwise noted)



»Package Information

SOD-123



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500REF		0.020REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
1N5817HW	SOD-123	SJ	3K	Tape and reel
1N5818HW	SOD-123	SK	3K	Tape and reel
1N5819HW	SOD-123	SL	3K	Tape and reel