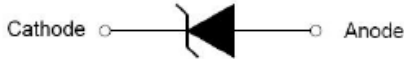




SOD-123



Marking: B5817W: SJ
B5819W: SL

Features

- High Current Capability
- Low Forward Voltage Drop
- Halogen free and RoHS compliant

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°C ambient temperature unless otherwise specified.)

Parameters	Symbol	B5817W	B5819W	Unit
Maximum repetitive peak reverse voltage	VRRM	20	40	V
Maximum RMS voltage	VRMS	14	28	V
Maximum DC blocking voltage	VDC	20	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

Electrical Characteristics

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

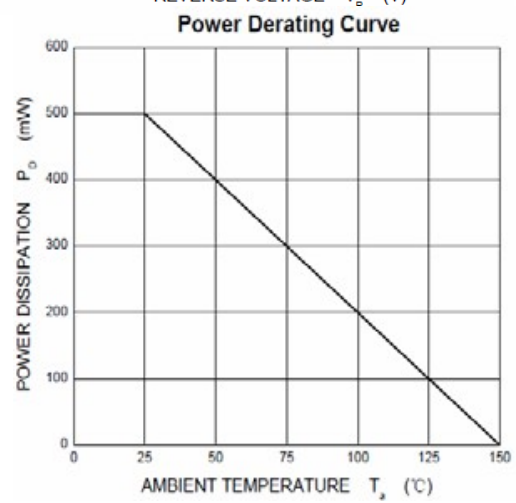
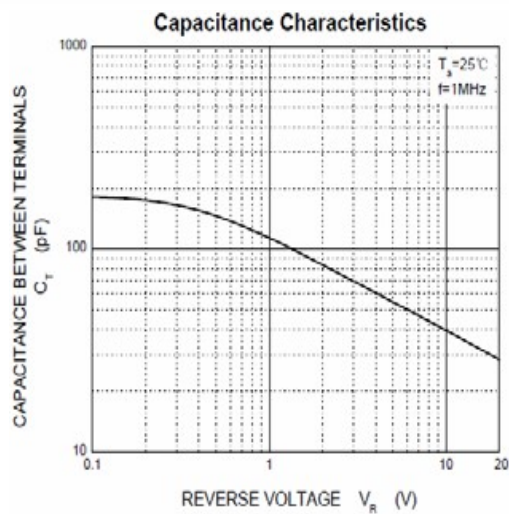
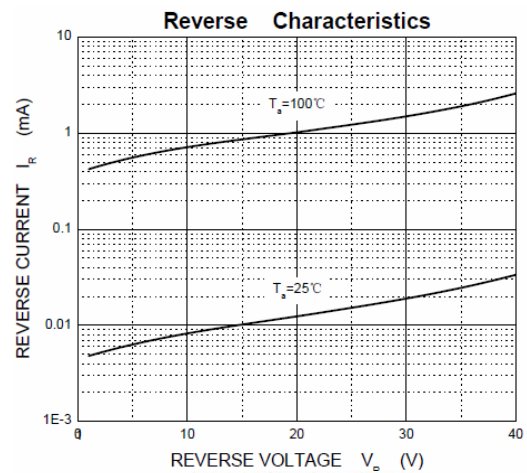
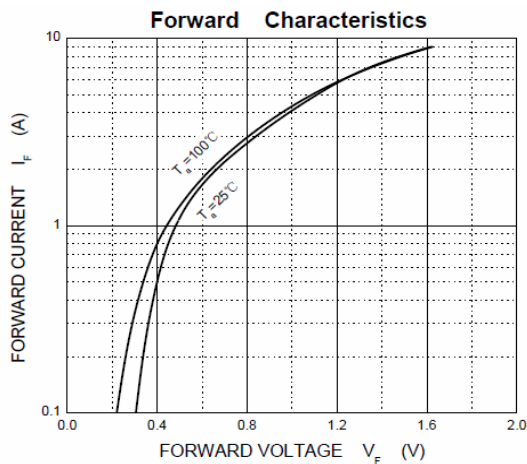
Parameters	Symbol	Test conditions	B5817W	B5819W	Unit
Maximum forward voltage	VF	IF = 1.0A IF = 3.0A	0.450 0.750	0.600 0.900	V
Maximum reverse breakdown voltage	VR	IR=1mA	20	40	V
Maximum reverse current	IR	VR=20V B5817W VR=40V B5819W	1.0		mA
Type junction capacitance	Cj	VR = 4.0V, f = 1MHz	120		pF

Summary of Packing Options

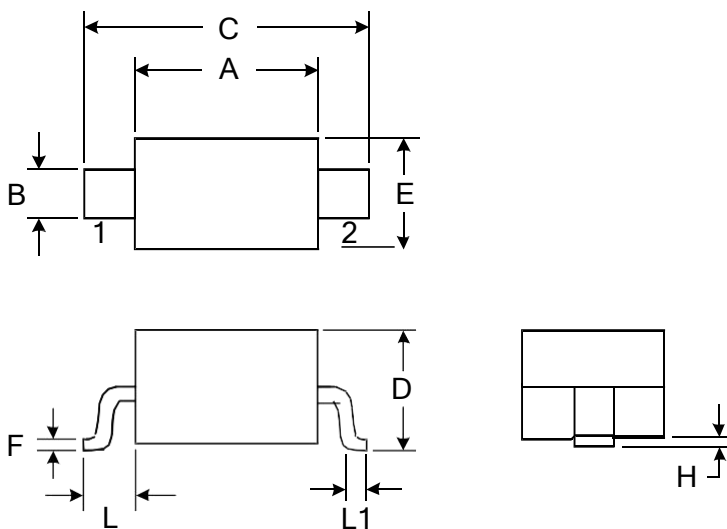
Package	Packing Description	Packing Quantity	Industry Standard
SOD-123	Tape/Reel,7" reel	3000	EIA-481-1



Ratings and Characteristic Curves



Package Outline Dimensions: SOD-123



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	2.600	2.800	0.102	0.110
B	0.450	0.650	0.018	0.026
C	3.550	3.850	0.139	0.152
D	1.050	1.250	0.041	0.049
E	1.500	1.700	0.059	0.067
F	0.080	0.150	0.003	0.006
L	0.500 REF		0.020REF	
L1	0.250	0.450	0.010	0.018
H	0.000	0.100	0.000	0.004