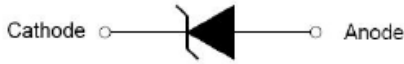


SOD-123



Marking: B0520W: SD
B0540W: SF

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	B0520W	B0540W	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	0.5		A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	5.5		A
Typical thermal resistance	RθJA	500		°C/W
Power Dissipation	PD	200		mW
Storage temperature range	TSTG	-50-+150		°C

Electrical Characteristics

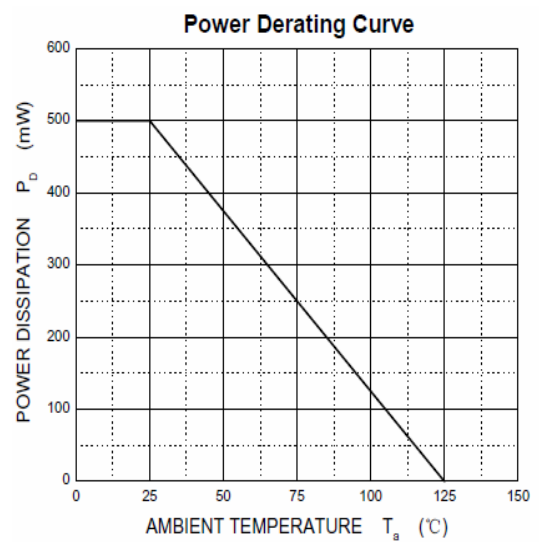
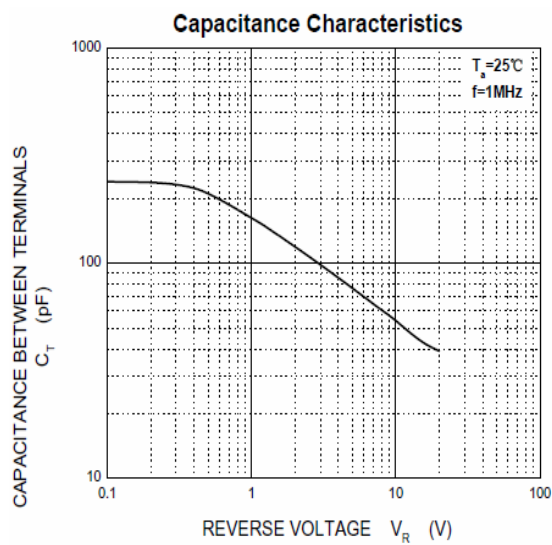
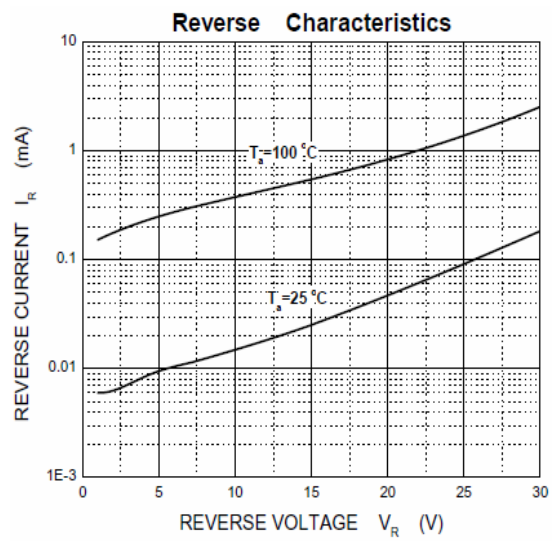
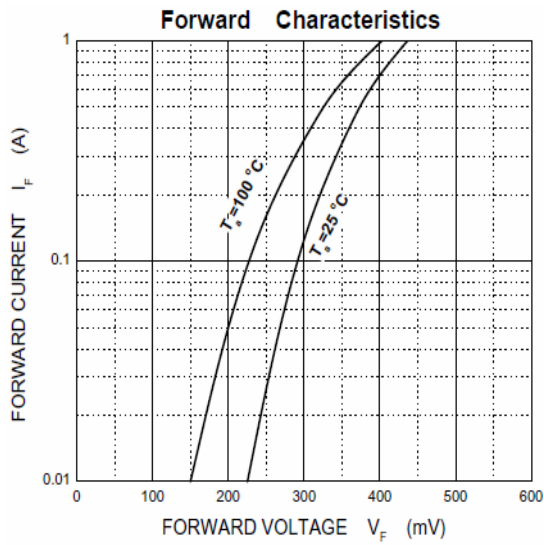
(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Test conditions	B0520W	B0540W	Unit
Maximum forward voltage	VF	IF = 0.1A	0.330	---	V
		IF = 0.5A	0.390	0.510	
		IF = 1.0A	---	0.620	
Maximum reverse breakdown voltage	VR	IR=250uA	20	---	V
		IR=200uA	---	---	
		IR=20.0uA	---	40	
Maximum reverse current	IR	VR=10V	75	---	uA
		VR=15V	---	---	
		VR=20V	250	10	
		VR=30V	---	---	
		VR=40V	---	20	
Capacitance between terminals	CT	VR = 0V, f = 1MHz	170		pF

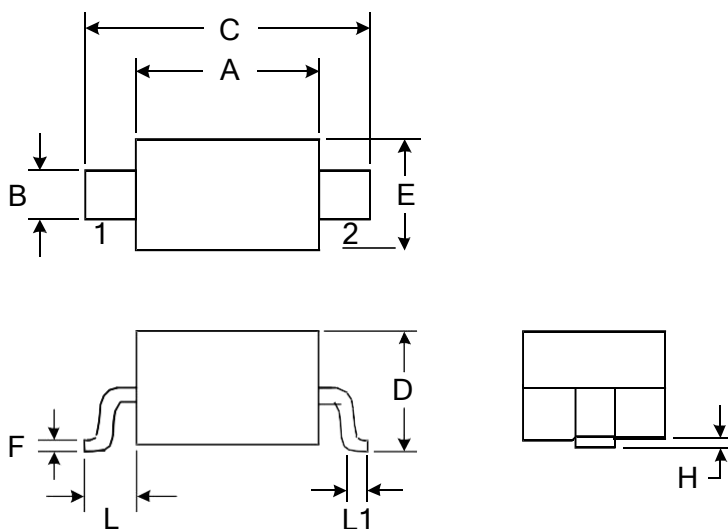
Summary of Packing Options

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