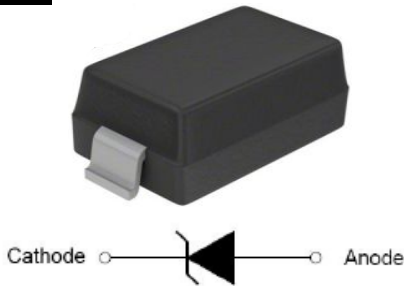


SOD-123



Marking: S9

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	Limit	Unit
Maximum repetitive peak reverse voltage	VRRM	100	V
Maximum average forward rectified current	IFM	350	mA
Peak forward surge current 8.3 ms single half sine-wave	IFSM	750	mA
Typical thermal resistance	RθJA	200	°C/W
Power Dissipation	PD	500	mW
Junction temperature	Tj	125	°C
Storage temperature range	TSTG	-55-+150	°C

Electrical Characteristics

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

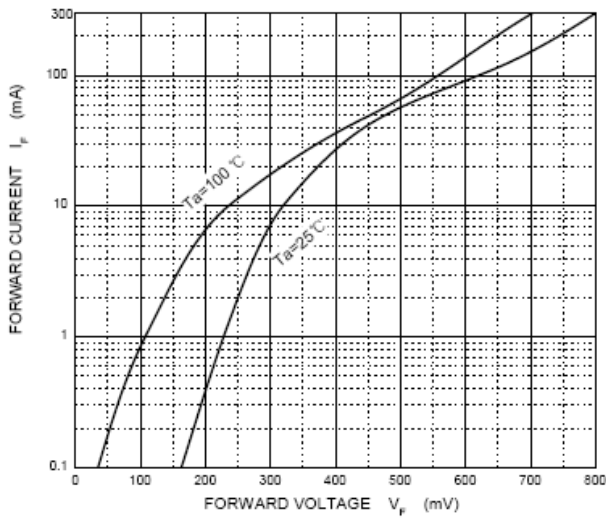
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	VF1	IF = 0.1mA			250	mV
	VF2	IF = 10mA			450	
	VF3	IF = 250mA			1000	
Maximum reverse breakdown voltage	VR	IR=100uA	100			V
Maximum reverse current	IR	VR1=1.5V			0.3	uA
		VR2=10V			0.5	
		VR3=50V			1.0	
		VR4=75V			2.0	
Type junction capacitance	CT	VR = 0V, f = 1MHz		20		pF
		VR = 1.0V, f = 1MHz		12		

Summary of Packing Options

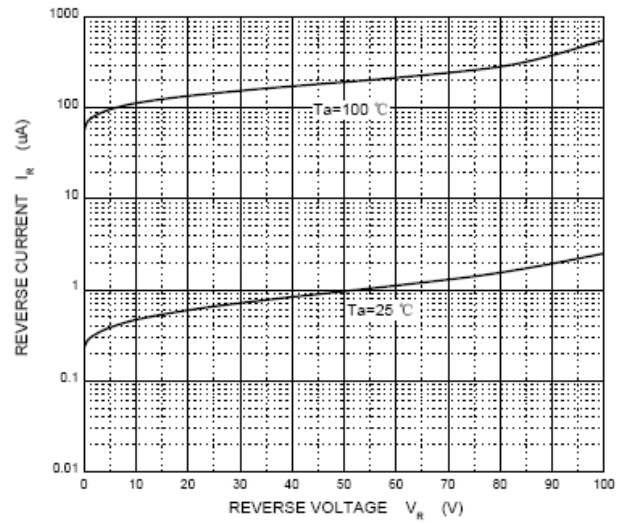
Package	Packing Description	Packing Quantity	Industry Standard
SOD-123	Tape/Reel,7" reel	3000	EIA-481-1

Ratings and Characteristic Curves

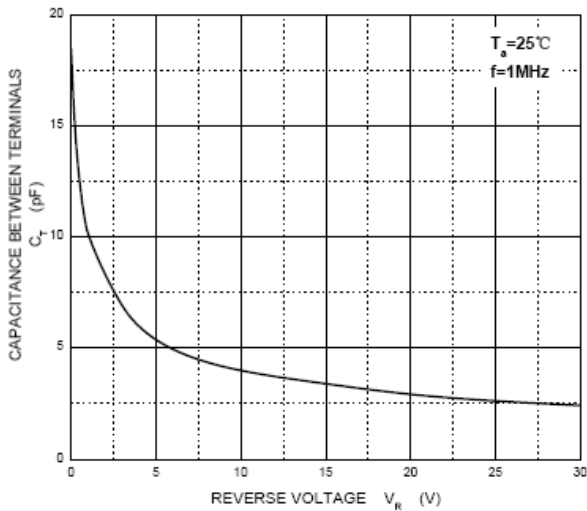
Forward Characteristics



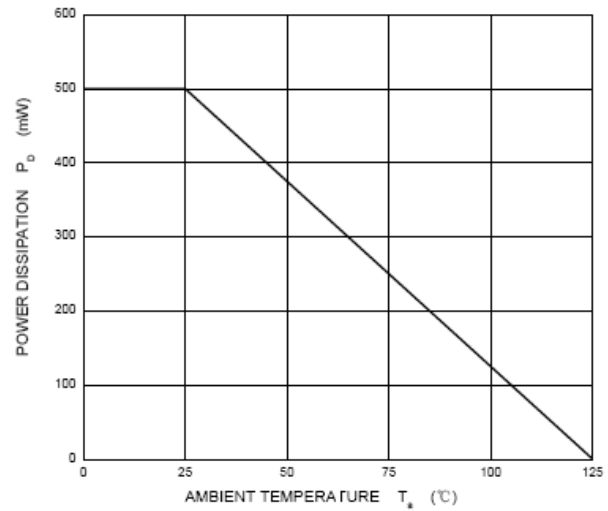
Reverse Characteristics



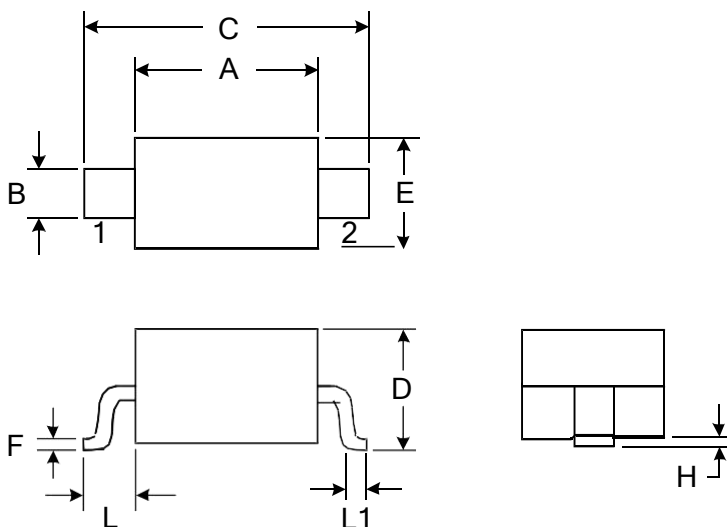
Capacitance Characteristics



Power Derating Curve



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