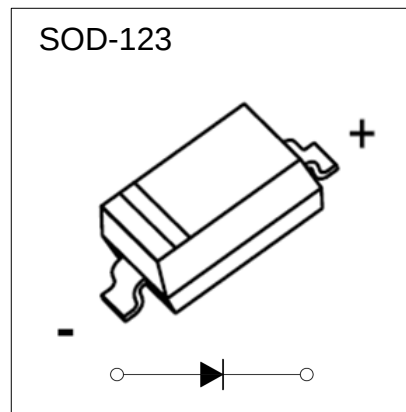


■ Features

- High Current Capability
- Low Forward Voltage Drop

■ 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
BAT46W	SOD-123	S9	Tape & Reel	3000 PCS	7 inches

■ 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

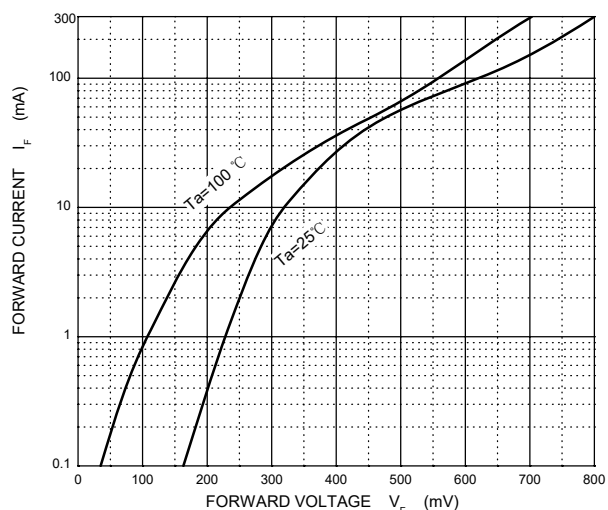


■ **Electrical Characteristics**(Ratings at 25℃ ambient temperature unless otherwise specified)

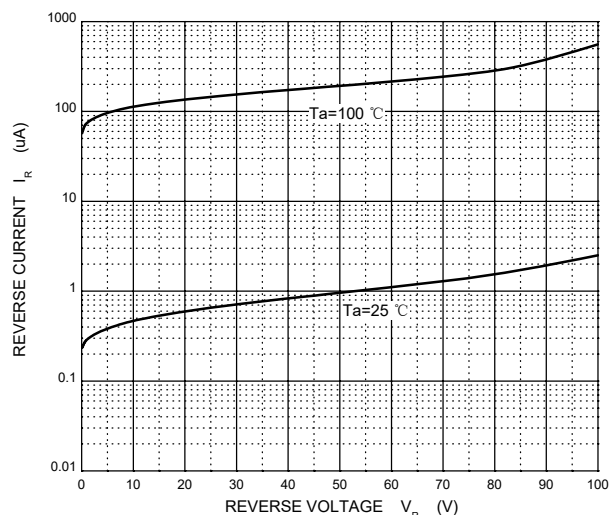
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	VF1	IF = 0.1mA			250	mV
	VF2	IF = 10mA			450	
	VF3	IF = 250mA			1000	
Maximum reverse breakdown voltage	VR	IR=100uA	100			V
Maximum reverse current	IR	VR1=1.5V			0.3	uA
		VR2=10V			0.5	
		VR3=50V			1.0	
		VR4=75V			2.0	
Type junction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

■ **Typical Characteristics**

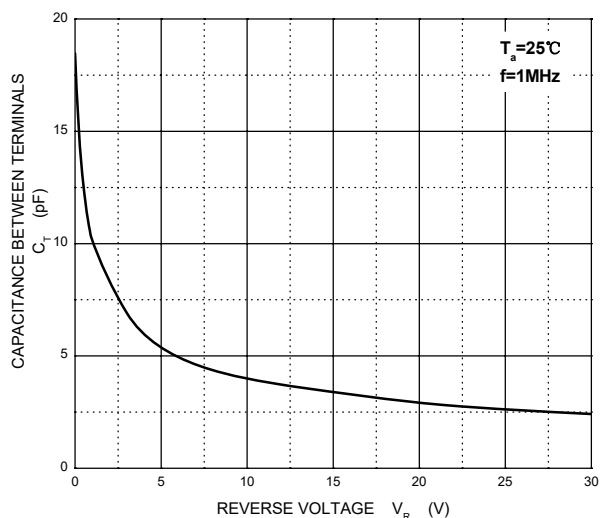
Forward Characteristics



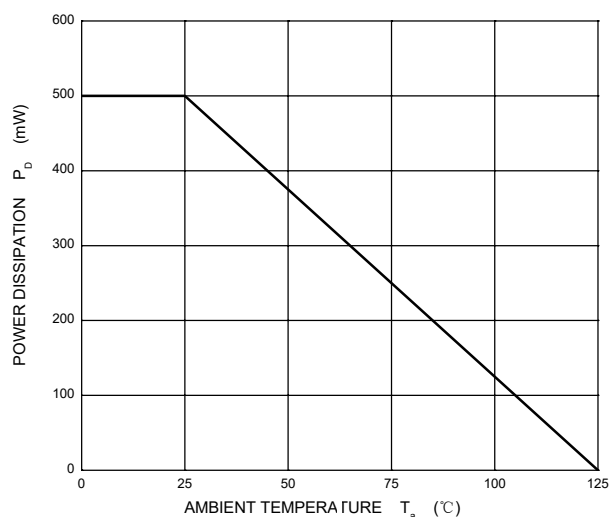
Reverse Characteristics



Capacitance Characteristics

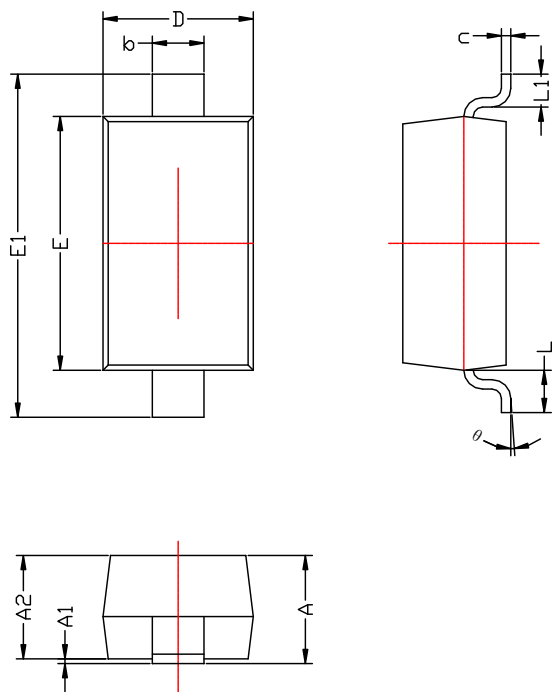


Power Derating Curve





■ 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°