

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

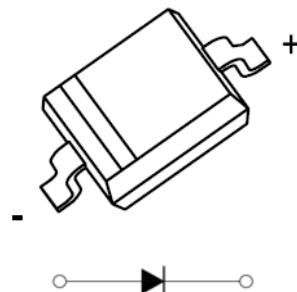
Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

- package:SOD-323
- Polarity: Color band denotes cathode end
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any.

SOD-323



Ordering Information

Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
BAT46WS	SOD-323	S9	Tape & Reel	3000 PCS	7 inches

Maximum Ratings & Thermal Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted.)

Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Forward continuous current	I_F	150	mA
Repetitive peak forward current (Note1)@ $t_p<1.0s$, Duty cycle<50%	I_{FRM}	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	750	mA
Typical thermal resistance	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Power Dissipation	P_D	200	mW
Junction temperature	T_J	125	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55-+150	$^{\circ}\text{C}$

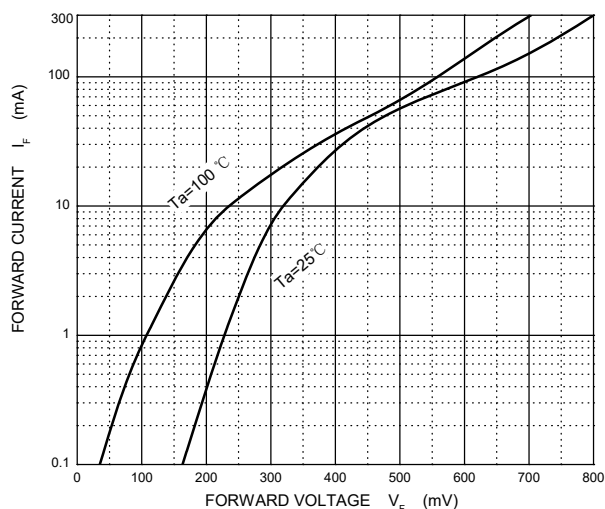


Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted.)

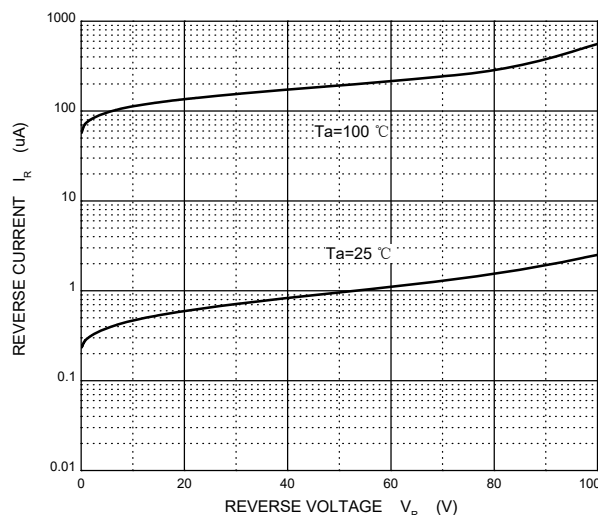
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage (Note 2)	VF1	IF = 0.1mA			250	mV
	VF2	IF = 10mA			450	
	VF3	IF = 250mA			1000	
Maximum reverse breakdown voltage	VR	IR=100uA	100			V
Maximum reverse current	IR	VR1=1.5V			0.3	uA
		VR2=10V			0.5	
		VR3=50V			1.0	
		VR4=75V			2.0	
Type junction capacitance	CT	VR = 0V, f = 1MHz		20		pF
		VR = 1.0V, f = 1MHz		12		

Typical Characteristics

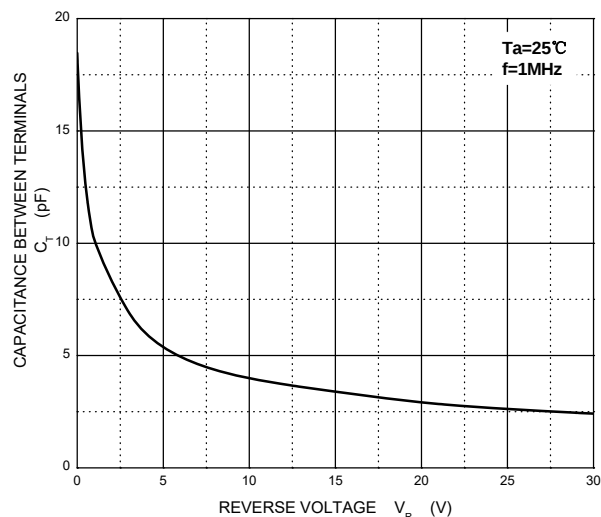
Forward Characteristics



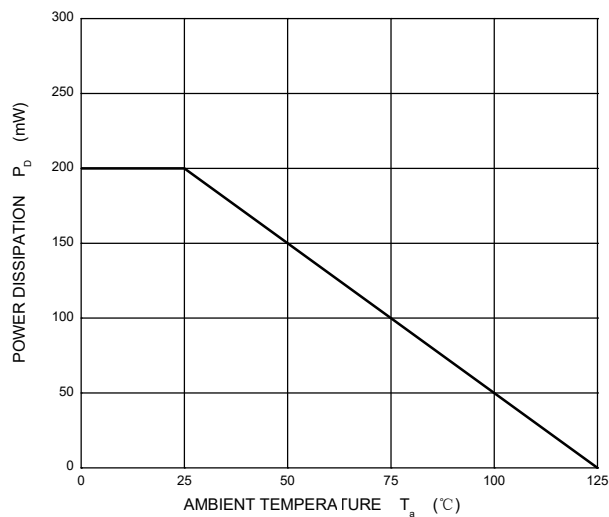
Reverse Characteristics



Capacitance Characteristics

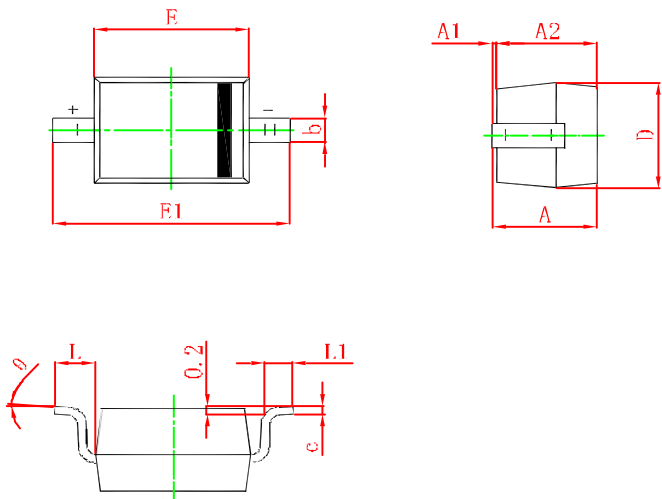


Power Derating Curve





SOD-323 Package Outline Dimensions



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°