

#### **Features**

- Forward Continuous Current: I<sub>F</sub> = 200 mA
- Power Dissipation of 200mw

### **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
BAS40WS	SOD-323	43	3000



#### Maximum Ratings (Ta=25°C unless otherwise noted)

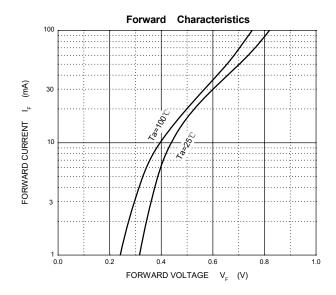
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage Working	$V_{RRM}$		
Peak Reverse Voltage	$V_{RWM}$	40	V
DC Blocking Voltage	$V_{R}$		
Forward Continuous Current	I <sub>F</sub>	200	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I <sub>FSM</sub>	600	mA
Power Dissipation	Pd	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Operating Junction Temperature Range	TJ	-40 ~ +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

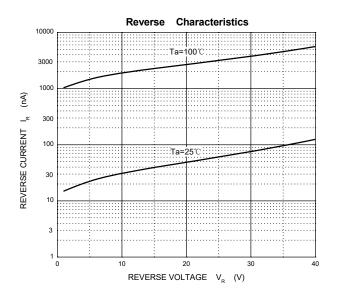
### **Electrical Characteristics(Ta=25°C unless otherwise specified)**

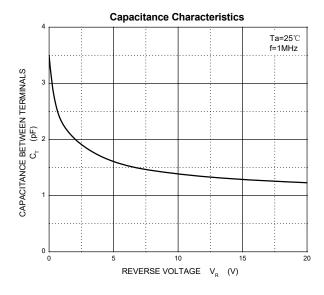
Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Reverse breakdown voltage	V (BR)	40			V	I <sub>R</sub> =10μA
Forward voltage	V <sub>F1</sub>			0.38	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.5	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1	V	I <sub>F</sub> =40mA
Reverse current	I <sub>R</sub>		20	200	nA	V <sub>R</sub> =30V
Capacitance between terminals	C <sub>T</sub>		4	5	pF	V <sub>R</sub> =0V,f=1MHz
Reverse recovery time	t <sub>rr</sub>			5	ns	$I_F = I_R = 10 \text{mA}$ $Irr = 0.1 \text{XI}_R, R_L = 100 \Omega$

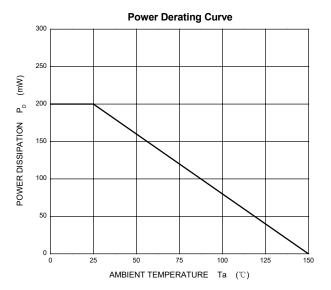


## **Typical Characteristics**



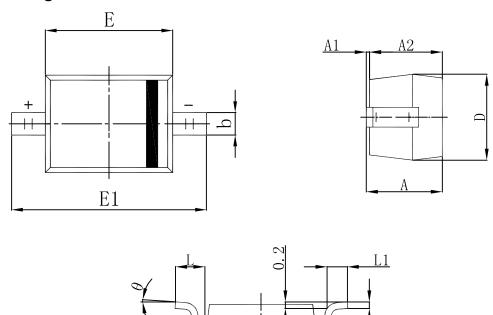








# **SOD-323 Package Outline Dimensions**



Symbol	Dimensions	In Millimeters	Dimensions In Inches		
	Min	Max	Min	Max	
Α		1.100		0.043	
A1	0.000	0.100	0.000	0.004	
A2	0.800	1.000	0.031	0.039	
b	0.250	0.350	0.010	0.014	
С	0.080	0.150	0.003	0.006	
D	1.200	1.400	0.047	0.055	
Е	1.600	1.800	0.063	0.071	
E1	2.500	2.750	0.098	0.108	
L	0.475 REF		0.019 REF		
L1	0.250	0.400	0.010	0.016	
θ	0°	8°	0°	8°	



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