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Product data sheet

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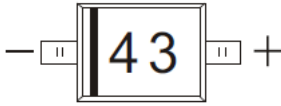
SOD-323



FEATURES

- Low Turn-on Voltage
- Designed for Surface Mount Application
- PN Junction Guard for Transient and ESD Protection
- Fast Switching
- Plastic Material –UL Recognition Flammability Classification 94V-0

MARKING: 43



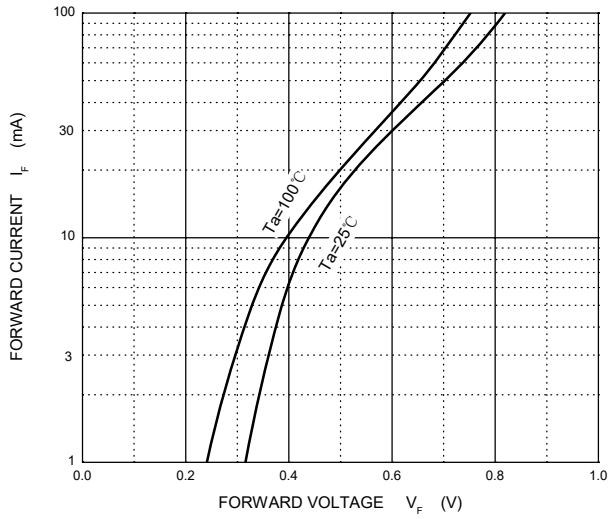
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbo	Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	600	mA
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

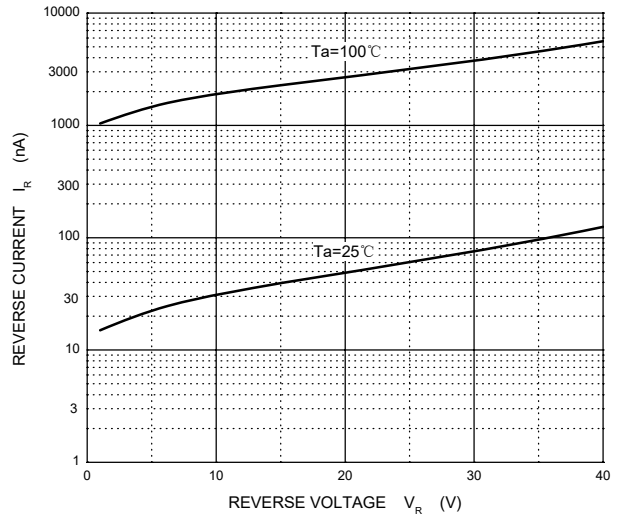
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	40			V	$I_R=10\mu A$
Forward voltage	V_{F1}			0.38	V	$I_F=1mA$
	V_{F2}			0.5	V	$I_F=10mA$
	V_{F3}			1	V	$I_F=40mA$
Reverse current	I_R		20	200	nA	$V_R=30V$
Capacitance between terminals	C_T		4	5	pF	$V_R=0V, f=1MHz$
Reverse recovery time	t_{rr}			5	ns	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

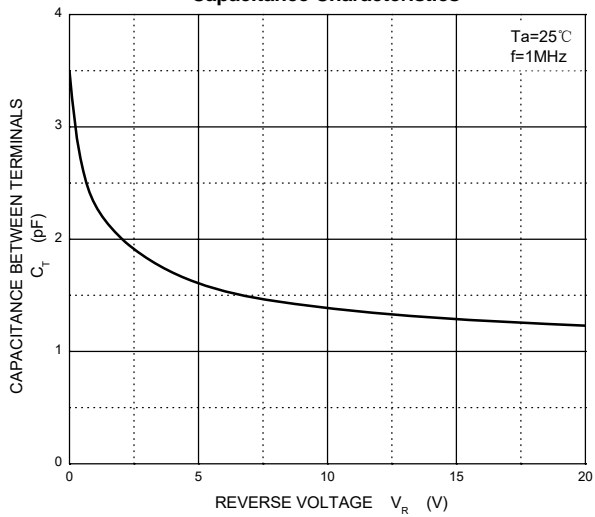
Forward Characteristics



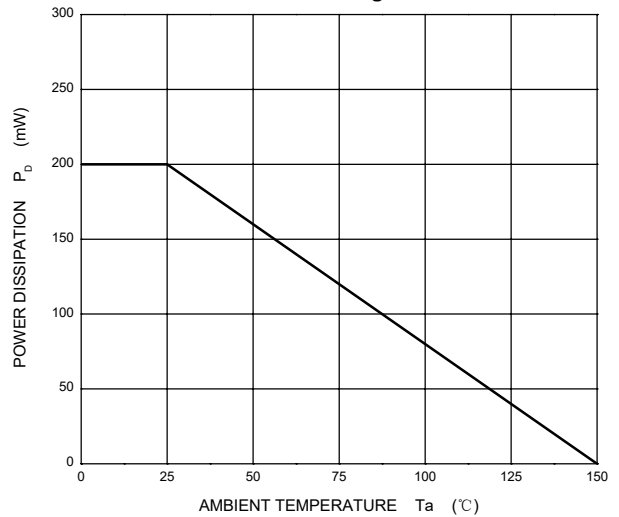
Reverse Characteristics



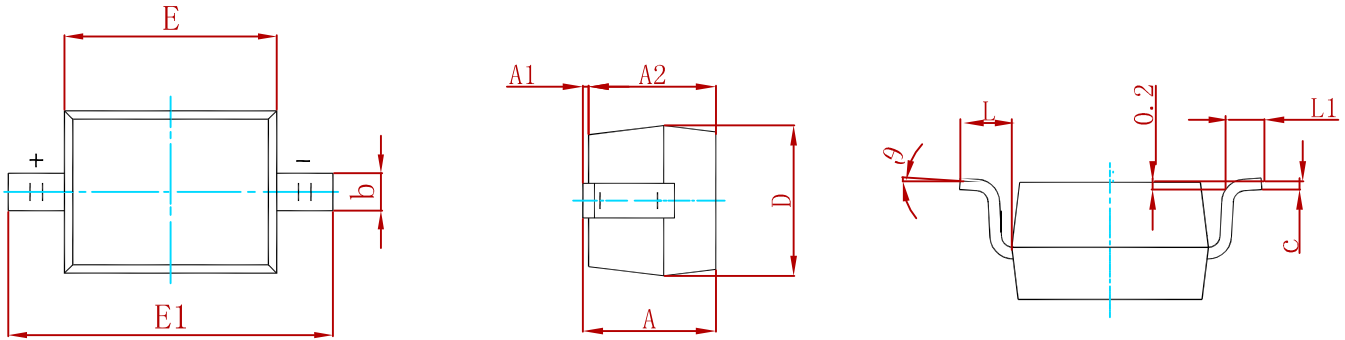
Capacitance Characteristics



Power Derating Curve

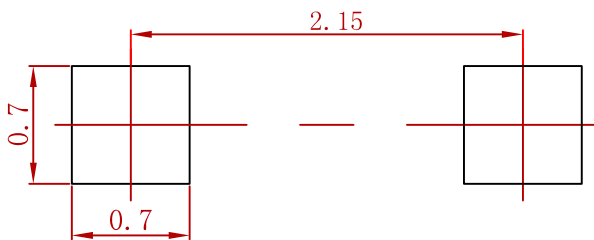


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
BAS40WS	SOD-323	3000

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