



## FEATURES

- Fast Switching Speed:max.50nS.
- Continuous Reverse Voltage:max.200V.
- Low Leakage Current: 100nA at Room Temperature.
- Surface Mount Package Ideally Suited for Automatic Insertion.



SOD-323



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAS321	SOD-323	A7	3000

## MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{RM}$	Non-repetitive Peak Reverse Voltage	250	V
$V_{RRM}$	Peak Repetitive Peak Reverse Voltage	200	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_R$	DC Blocking Voltage		
$I_{FM}$	Forward Continuous Current(Note 1)	250	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current@t=1μS	4.5	A
$I_{FRM}$	Repetitive Peak Forward Current(Note 1)	1	A
$P_d$	Power Dissipation(Note 1)	325	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient(Note 1)	385	°C/W
$T_J$	Operation Junction Temperature Range	-40~+150	°C
$T_{STG}$	Storage Temperature Range	-55~+150	°C

## ELECTRICAL CHARACTERISTICS(Ta=25 unless otherwise noted)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage(Note 2)	$I_R=100\mu A$	250			V
$I_R$	Reverse current(Note 2)	$V_R=200V$			100	nA
		$V_R=200V, T_J=150^\circ C$			100	μA
$V_F$	Forward voltage	$I_F=100mA$			1.1	V
		$I_F=100mA$			1.25	V
$C_T$	Capacitance Between Terminals	$V_R=0V, f=1MHz$		5		pF
$t_{rr}$	Reverse recovery time	$I_F=I_R=30mA$ $I_{rr}=0.1I_R, R_L=100\Omega$			50	nS

Notes: 1. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com>.

2. Short duration pulse test used to minimize self-heating effect.



### Typical Characteristics

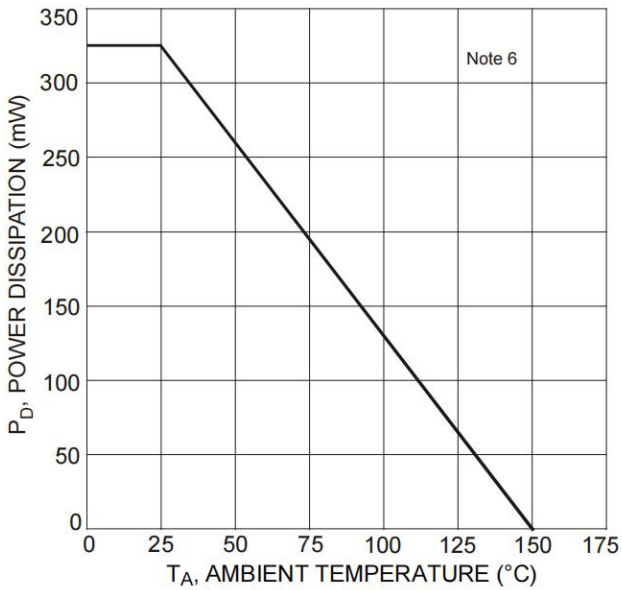


Fig 1. Power Derating Curve

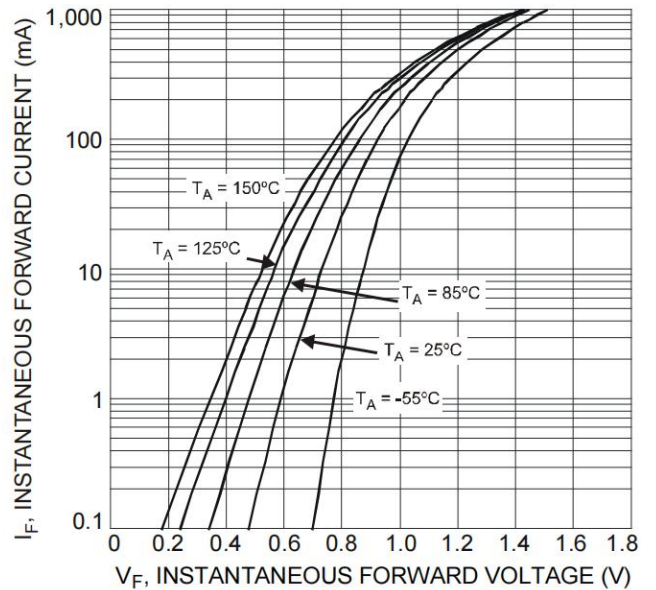


Fig 2. Typical Forward Characteristics

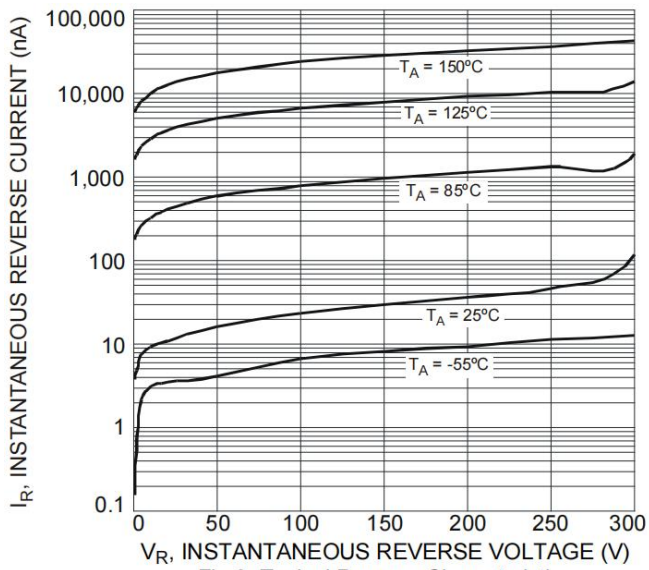


Fig 3. Typical Reverse Characteristics

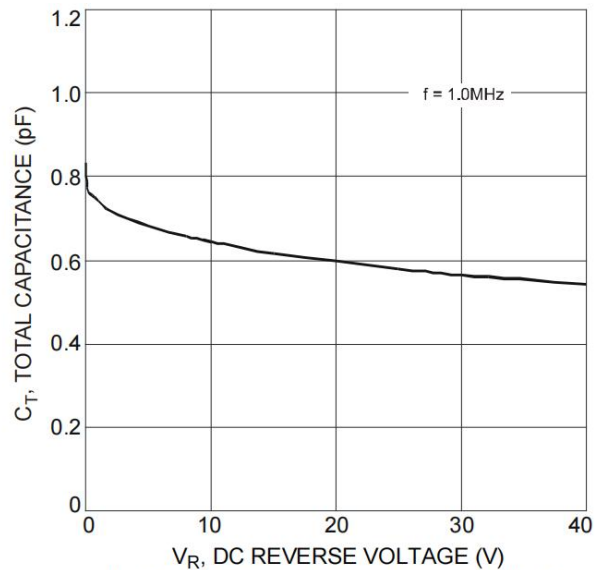
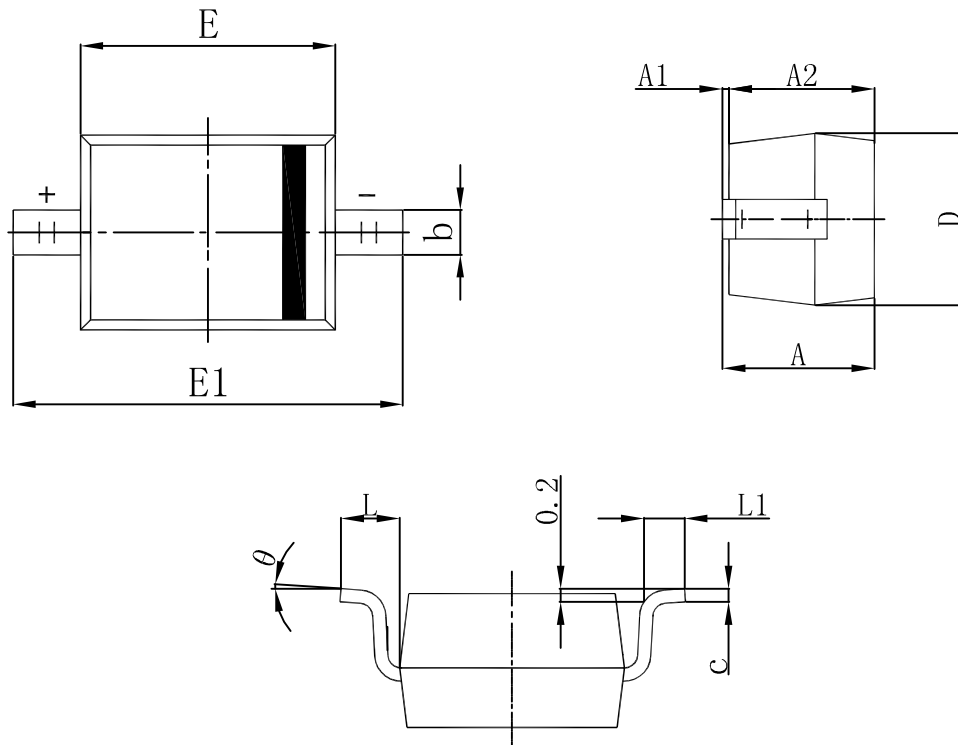


Fig 4. Total Capacitance vs. Reverse Voltage



**SOD-323 Package Outline Dimensions**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		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
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	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
$\theta$	0°	8°	0°	8°



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