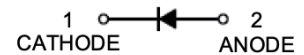


Features

- General purpose diode
- Fast switching devices
- SOD-323 thin SMD package
- RoHS compliant / Green EMC
- Matte tin (Sn) lead finish Cathode
- band / device marking



Schematic Diagram

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Repetitive Peak Forward Current	I_{FRM}	300	mA
Non-Repetitive Peak Forward Current	$t=1\mu\text{s}$	4	A
	$t=1\text{ms}$	1	
	$t=1\text{s}$	0.5	
Continuous Forward Current	I_F	250	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Min	Max	Unit
Breakdown Voltage	BV_R	$I_R=100\mu\text{A}$	100	-	V
		$I_R=5\mu\text{A}$	75	-	
Reverse Current	I_R	$V_R=20\text{V}$	-	30	nA
		$V_R=75\text{V}$	-	1	μA
		$V_R=100\text{V}$	-	5	μA
Forward Voltage	V_F	$I_F=1\text{mA}$	-	0.715	V
		$I_F=10\text{mA}$	-	0.855	
		$I_F=50\text{mA}$	-	1	
		$I_F=150\text{mA}$	-	1.25	
Capacitance	C	$V_R=0\text{V}, F=1\text{MHz}$	-	2	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$	-	4	nS

Characteristics Curves

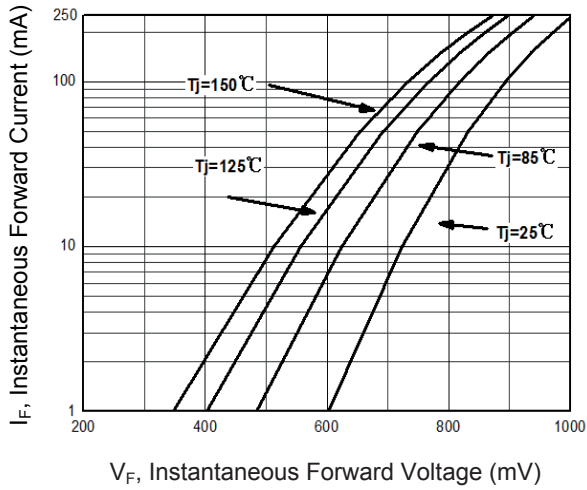


Figure 1. Typical Instantaneous Forward Characteristics

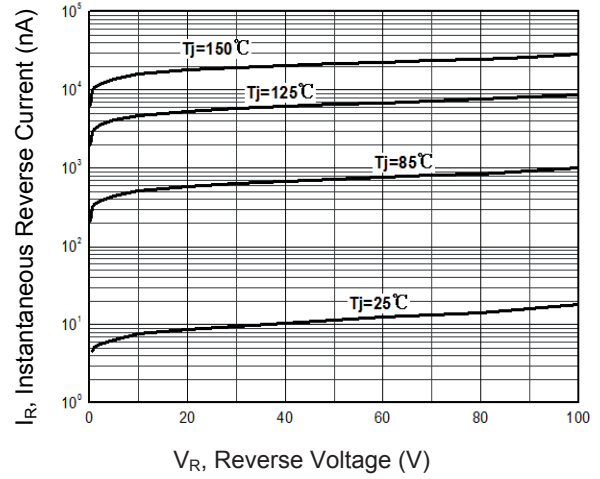


Figure 2. Typical Reverse Leakage Characteristics

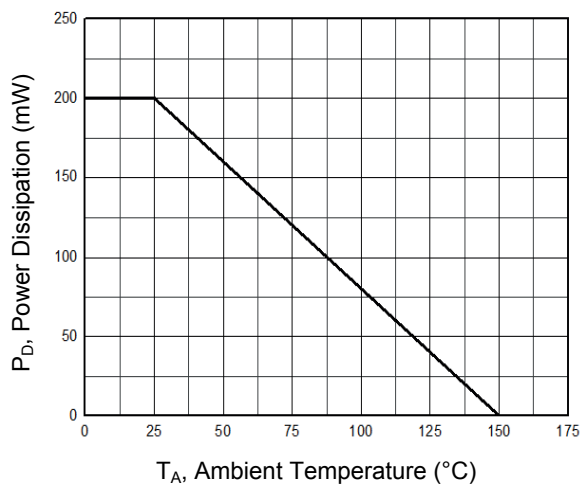


Figure 3. Power Derating Curve

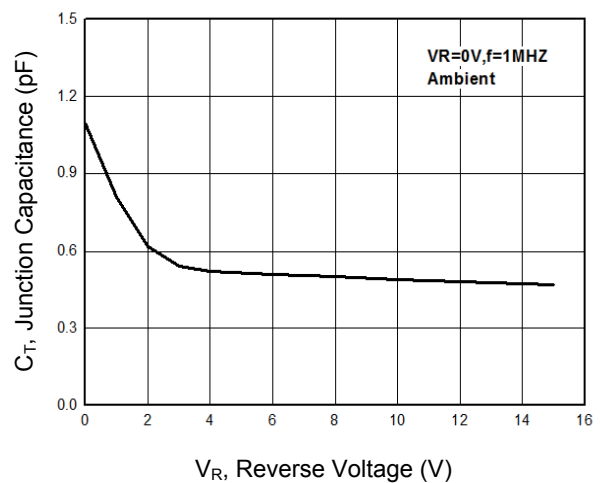
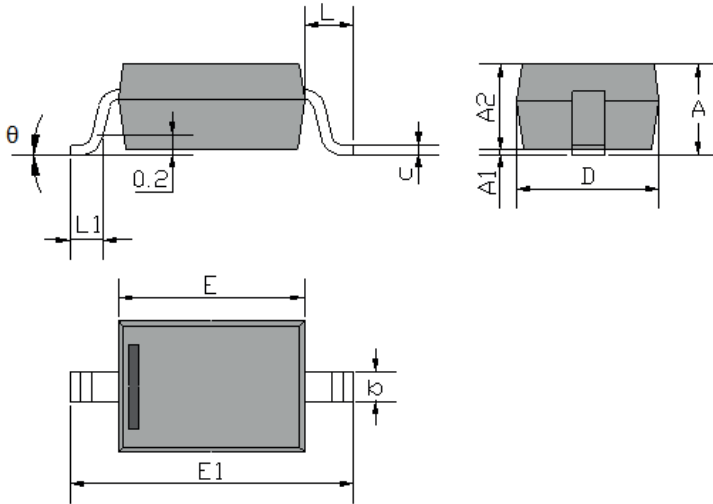


Figure 4. Capacitance vs. Reverse Voltage

Package Outline Dimensions (SOD-323)



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	2.500	2.700	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Ordering Information

Device	Package	Marking	Quantity	HSF Status
BAS316	SOD-323	A6	3,000pcs / Reel	RoHS Compliant