



DESCRIPTION

The BAS316 is available in SOD-323 package

FEATURES

- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Available in SOD-323 package

ORDERING INFORMATION

Package Type	Part Number
SOD-323	BAS316
Note	SPQ: 3,000pcs/ Reel
AiT provides all RoHS Compliant Products	

MECHANICAL DATA

Case: SOD-323

Terminals: Solderable per MIL-STD-750,
Method 2026

Approx. Weight: 5.48mg / 0.00019oz

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS

at 25°C

V _{RRM} , Maximum Repetitive Peak Reverse Voltage	100V
V _{RMS} , Maximum RMS voltage	75V
I _F , Continuous Forward Current	300mA
I _{FSM} , Non-repetitive Peak Forward Surge Current at 1ms	4A
P _{tot} , Total Power Dissipation	400mW
T _J , T _{STG} , Operating and Storage Temperature Range	-55°C ~ 150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A = 25°C

Parameter	Symbol	Conditions	Value	Unit
Reverse Breakdown Voltage at I _R =1μA	V _{(BR)R}		75	V
Maximum Forward Voltage at 150mA	V _F		1.1	V
Peak Reverse Current	I _R	V _R = 75V, T _J =25°C	1	μA
		V _R = 75V, T _J =150°C	50	
Typical Junction Capacitance	C _J		5	pF
Maximum Reverse Recovery Time	t _{rr}		6 TYP	ns

NOTE1: Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A



TYPICAL CHARACTERISTICS

Figure 1. Forward Current Derating Curve

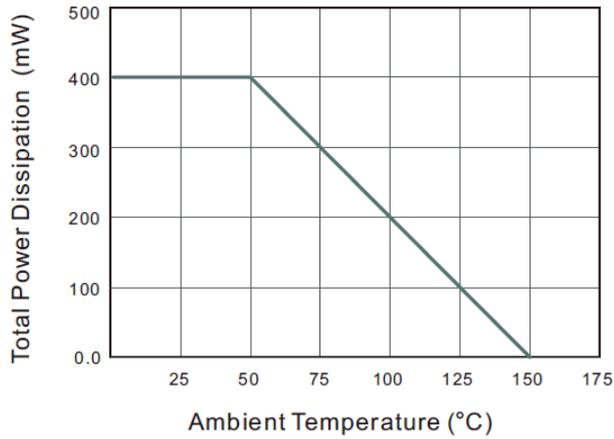


Figure 2. Typical Reverse Characteristics

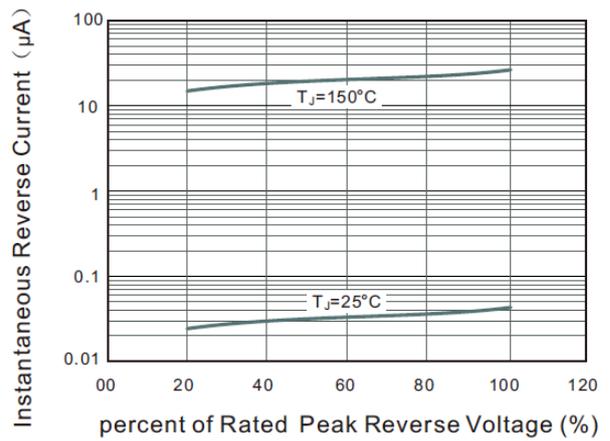


Figure 3. Instantaneous Forward Characteristics

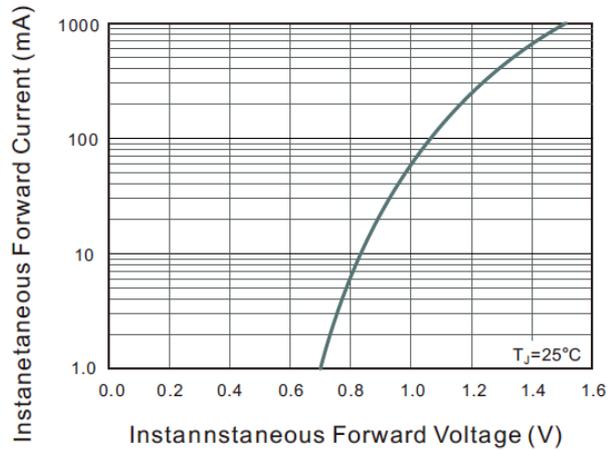
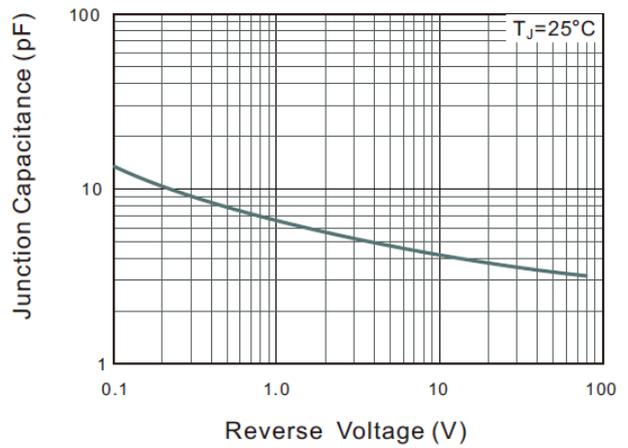


Figure 4. Typical Junction Capacitance

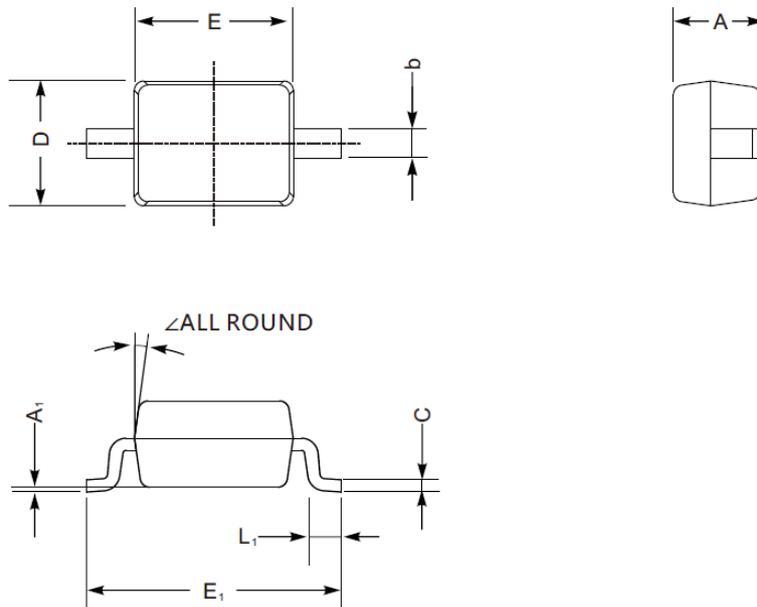




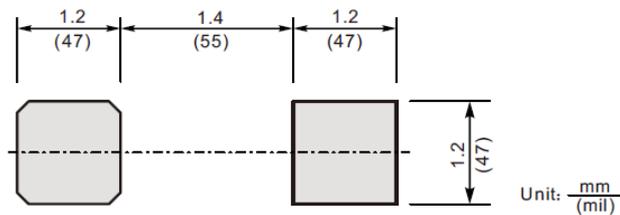
PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	-	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	-	



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