

### DESCRIPTION

The BAS321 is available in SOD-323 Package.

## FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

# ORDERING INFORMATION

Package Type	Part Number		
SOD-323	BAS321		
Note	3,000pcs/Reel		
AiT provides all RoHS Compliant Products			

#### **PIN DESCRIPTION**





## ABSOLUTE MAXIMUM RATINGS

T <sub>A</sub> = 25°C		
VRRM, Repetitive Peak Reverse Voltage	250V	
V <sub>R</sub> , DC Reverse Voltage	200V	
V <sub>RWM</sub> , Working Peak Reverse Voltage	200V	
V <sub>R(RMS)</sub> , RMS Reverse Voltage	141V	
I₀, Average Rectified Output Current	400mA	
A New Demetitive Deals Ferward Surrey Current	@t=1.0µs	2.5A
IFSM, Non-Repetitive Peak Forward Surge Current	@t=1.0s	0.5A
I <sub>F</sub> , Peak Forward Current	200mA	
IFRM, Repetitive Peak Forward Surge Current	625mA	
P <sub>D</sub> , Power Dissipation	200mW	
R <sub>0JA</sub> , Thermal Resistance Junction to Ambient Air	625°C/W	
T <sub>J</sub> , Junction Temperature	150°C	
T <sub>STG</sub> , Storage Temperature Range	-65°C ~+150°C	

## ELECTRICAL CHARACTERISTICS

#### $T_A = 25^{\circ}C$ , unless otherwise noted

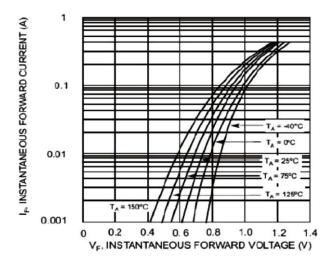
Parameter	Symbol	Conditions	Min	Тур.	Max	Unit
Forward Voltage	VF	I <sub>F</sub> = 100mA	-	-	1.0	V
		I <sub>F</sub> = 200mA	-	-	1.25	
Reverse Current	IR	V <sub>R</sub> = 200V	-		100	μA
Capacitance between	Ст	V <sub>R</sub> = 0, f = 1MHz	-	-	5	pF
terminals						
Reverse Recovery Time	trr	IF=I <sub>R</sub> =30mA,		-	50	ns
		$I_{rr}$ =0.1x $I_R$ , RL=100 $\Omega$				



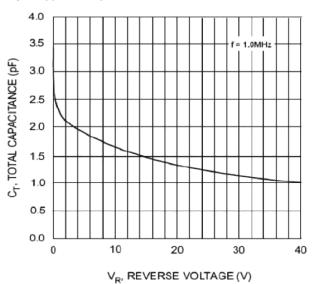
## TYPICAL CHARACTERISTICS

#### T<sub>A</sub> = 25°C

Fig.1 Typical Forward Characteristics



#### Fig.3 Typical Capacitance between terminals



#### Fig.2 Typical Reverse Characteristics

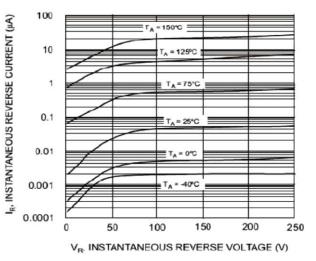
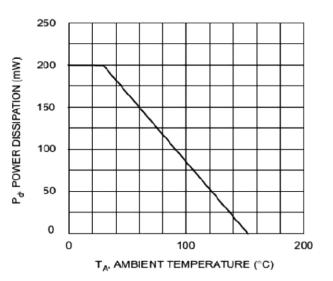


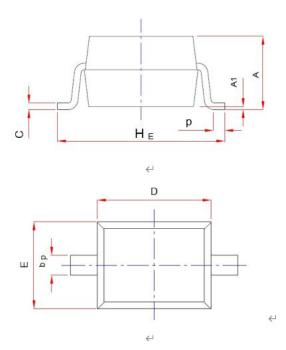
Fig.4 Power Derating Curve, Total Package





# PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)



Symbol	MIN.	MAX.		
А	0.900	1.200		
bp	0.250	0.400		
С	0.100 0.150			
D	1.600	1.800		
E	1.150	1.350		
HE	2.300	2.800		
A1	0.010	0.100		
р	0.200	0.250		



#### IMPORTANT NOTICE

AiT Components (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Components' integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or servere property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Components assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.