



SOD-323



Features

- Small plastic SMD package
- Continuous reverse voltage: max. 250 V
- Pb-Free package is available
- Moisture Sensitivity Level 1
- Polarity: Color band denotes cathode end
- Marking : JS

Ordering Information

Part No.	Remark	Package	Packing
BAS21H	General	SOD-323	3000 / Tape & Reel
BAS21H-H	Halogen Free		
BAS21H-Q	AEC-Q101 qualified		

Maximum Ratings (T_A=25°C unless otherwise specified)

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V _R	250	Vdc
Peak Forward Current	I _F	200	mAdc
Peak Forward Surge Current	I _{FM(surge)}	625	mAdc

Thermal Characteristics (T_A=25°C unless otherwise specified)

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board ⁽¹⁾ T _A = 25°C	P _D	200	mW
Derate above 25°C		1.57	mW/°C
Thermal Resistance from Junction to Ambient	R _{θJA}	635	°C/W
Operating/ Junction and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

1. FR-5 Minimum Pad

Electrical Characteristics (T_A=25°C unless otherwise specified)

Characteristic	Symbol	Min.	Max.	Unit
OFF Characteristics				
Reverse Breakdown Voltage (I _{BR} = 100 μAdc)	V _(BR)	250	-	V
Reverse Voltage Leakage Current (V _R = 200 V) (V _R = 200 V, T _J = 150°C)	I _R	-	0.1	μA
		-	100	
Forward Voltage (I _F = 100 mAdc) (I _F = 200 mAdc)	V _F	-	1000	mV
		-	1250	
Diode Capacitance (V _R = 0, f = 1.0 MHz)	C _D	-	5	pF
Reverse Recovery Time (I _F = I _R = 30 mA, R _L = 100 Ω)	t _{rr}	-	50	ns
		-		

Plastic-Encapsulate Diodes

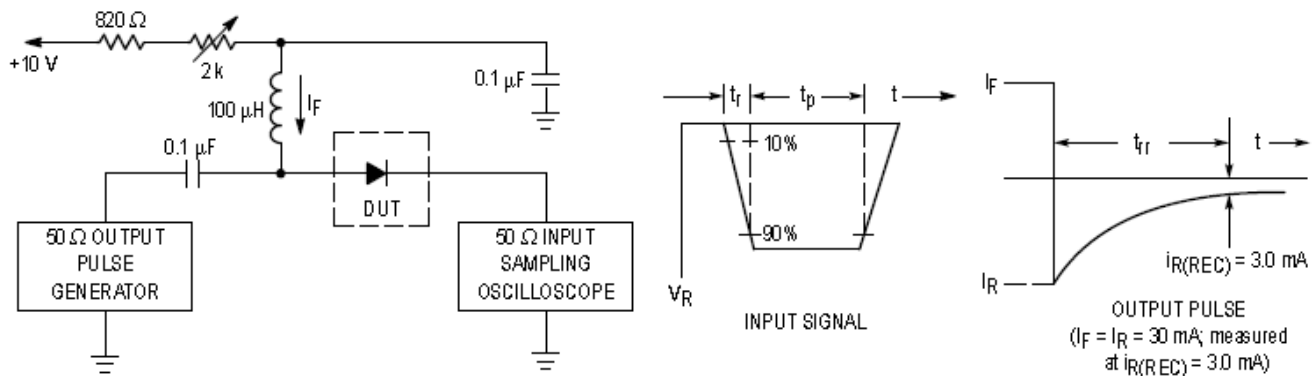


Figure 1. Recovery Time Equivalent Test Circuit

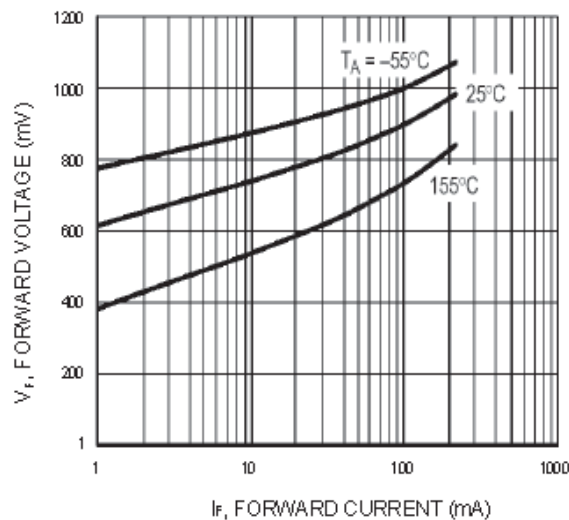


Figure 1. Forward Voltage

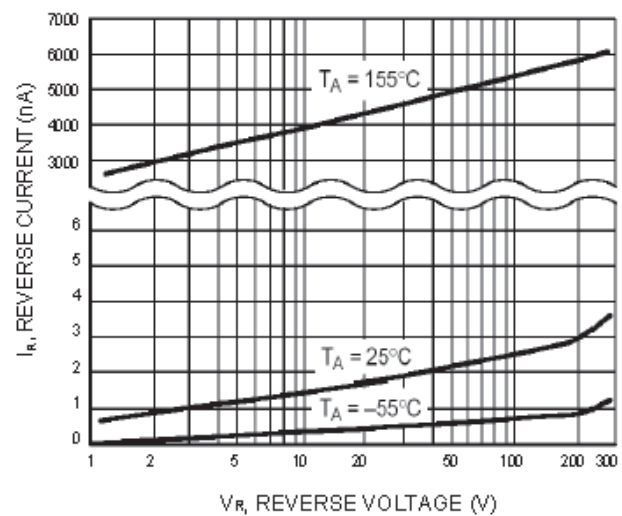
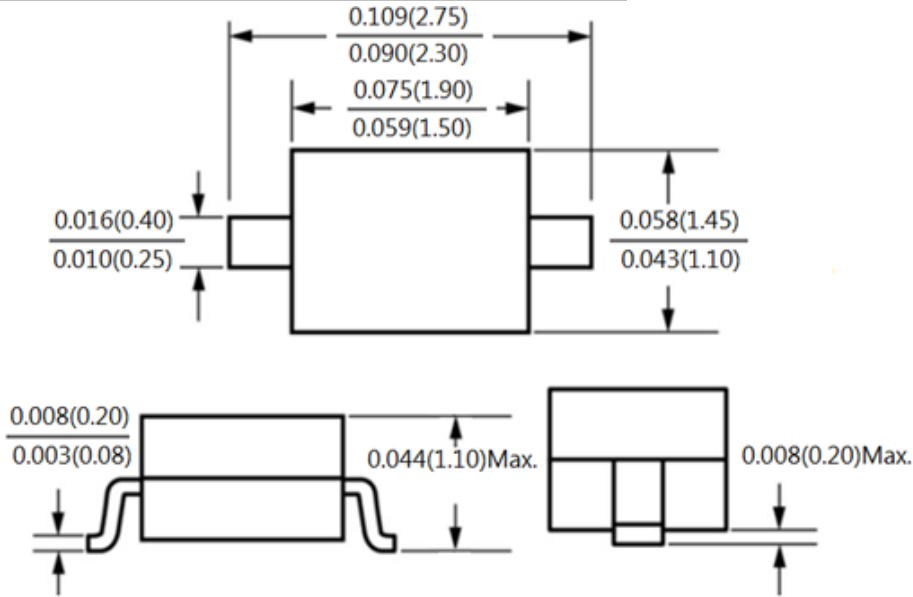


Figure 2. Reverse Leakage

Package Outline Dimensions

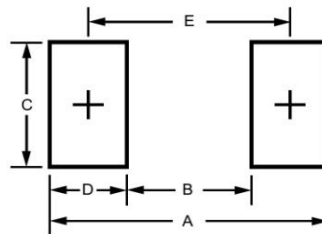


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Dimensions in inches and (millimeters)

Suggested Pad Layout

Symbol	Outline	SOD-323 millimeters
A		2.85
B		1.60
C		0.83
D		0.63
E		-



Tap & Reel Specification

Item	Symbol	SOD-323 (mm)
Carrier length	B	4.55±0.10
Carrier depth	C	2.4 Max.
Sprocket hole	d	1.0Min.
Reel outside diameter	D	178 Max.
Reel inner diameter	D1	50 Min.
Feed hole width	D2	13.0 ±0.5
Sprocket hole position	E	1.75 ±0.10
Punch hole position	F	3.5 ±0.05
Sprocket hole pitch	P0	4.0 ±0.10
Embossment center	P1	2.0 ±0.10
Tape width	W	8.4 +1.5/-0
Reel width	W1	10.9 Max.

