

# BAS21H

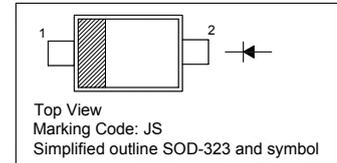
## 200mW SOD-323 Fast Switching Diode

### Features

- Fast Switching Device (TRR <50 nS)
- Power Dissipation of 200mW
- High Stability and High Reliability
- Low reverse leakage
- Surface mount package ideally suited for automatic insertion

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Reverse Voltage	$V_R$	250	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	$I_{FM}$	400	mA
Repetitive Peak Forward Current	$I_{FRM}$	625	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	2.5 0.5	A
		at $t = 1\text{ }\mu\text{s}$ at $t = 1\text{ s}$	
Power Dissipation	$P_{tot}$	200	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	250	-	V
Reverse Current at $V_R = 200\text{ V}$	$I_R$	-	100	nA
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	$V_F$	-	1 1.25	V
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$	$C_T$	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{RR} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	$t_{rr}$	-	50	ns

# BAS21H

## 200mW SOD-323 Fast Switching Diode

### Typical Characteristics

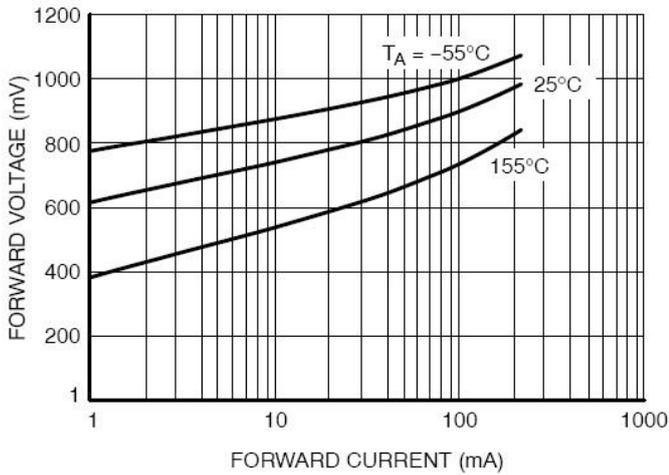


Figure 2. Forward Voltage

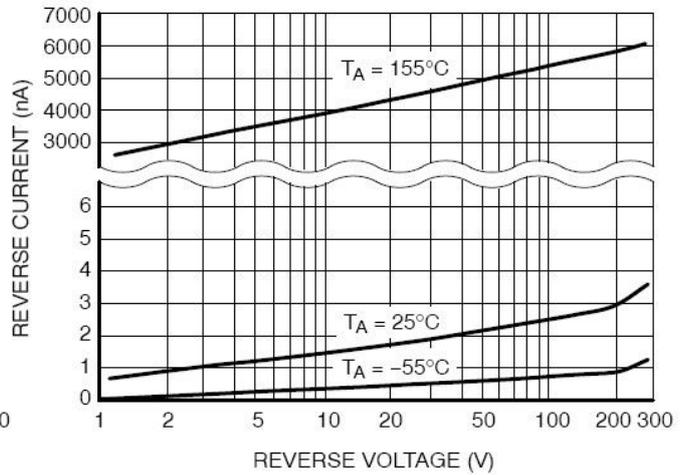


Figure 3. Reverse Leakage

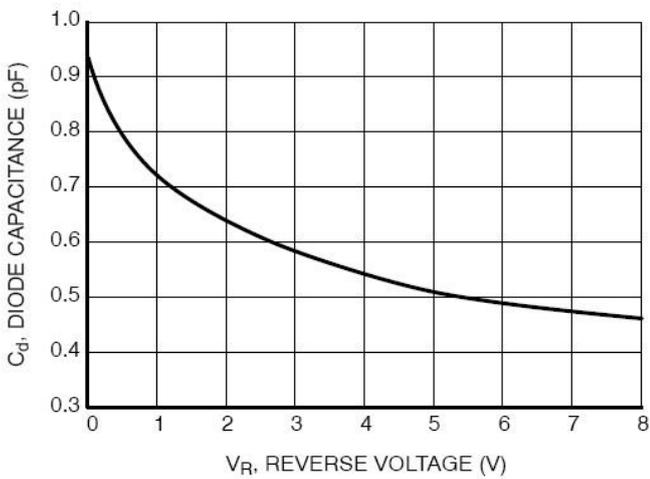


Figure 4. Diode Capacitance

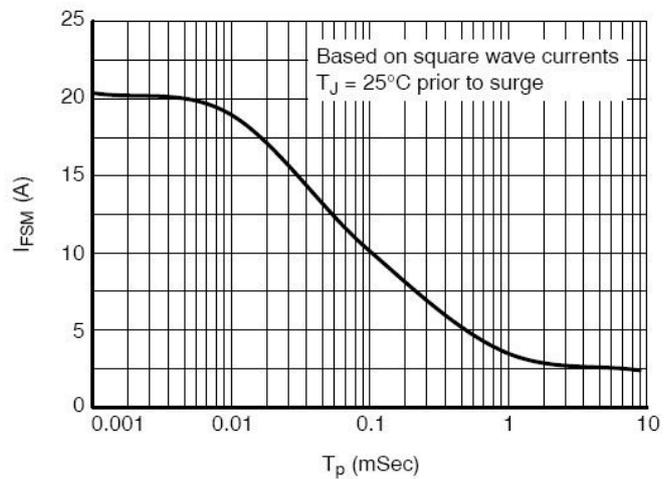
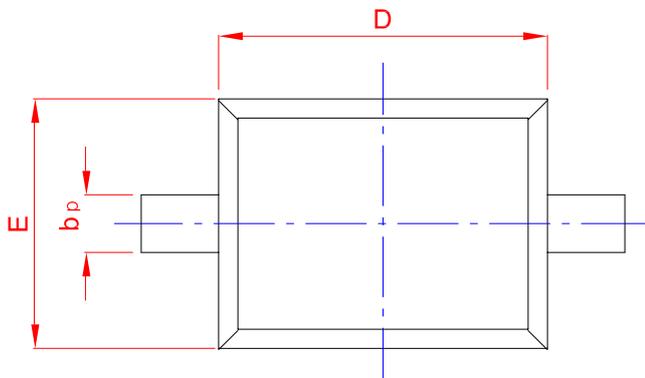
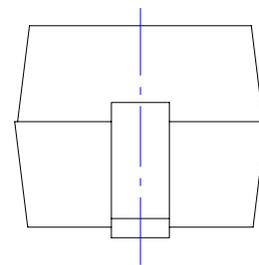
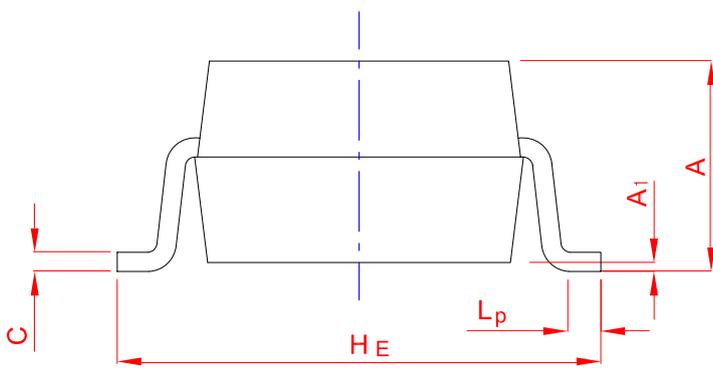
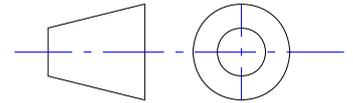


Figure 5. Maximum Non-repetitive Peak Forward Current as a Function of Pulse Duration, Typical Values

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	$b_p$	C	D	E	$H_E$	$A_1$	$L_p$
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20