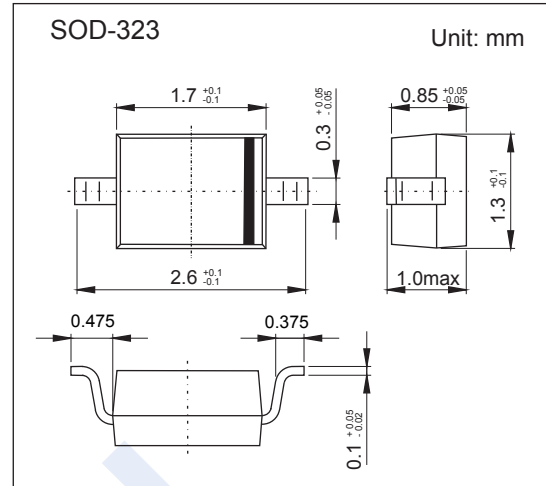


Switching Diode

BAS19H/BAS20H/BAS21H

■ Features

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



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	BAS19H	BAS20H	BAS21H	Unit
Non-Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	V
Working Peak Reverse Voltage	V_{RWM}	100	150	200	
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	140	
Average Rectified Output Current ⁽¹⁾	I_O	200			mA
Forward Continuous Current ⁽¹⁾	I_{FM}	400			
Peak Forward Surge Current @ $t=1\mu\text{s}$ @ $t=1\text{s}$	I_{FSM}	2.5			A
		0.5			
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient Air ⁽¹⁾	$R_{\theta JA}$	625			$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150			$^\circ\text{C}$
Storage Temperature range	T_{stg}	-65 to +150			

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage $I_R = 100 \mu\text{A}$	BAS19H	120			V
	BAS20H	200			
	BAS21H	250			
Forward voltage $I_F = 100\text{mA}$ $I_F = 200\text{mA}$	V_F			1	
				1.25	
Reverse voltage leakage current	I_R			100	nA
Total Capacitance ($V_R = 1.0\text{V}$, $f = 1.0\text{MHz}$)	C_j			5	pF
Reverse Recovery Time $I_F = I_R = 30\text{mA}$, $I_{rr} = 0.1 \cdot I_R$, $R_L = 100 \Omega$	t_{rr}			50	nS

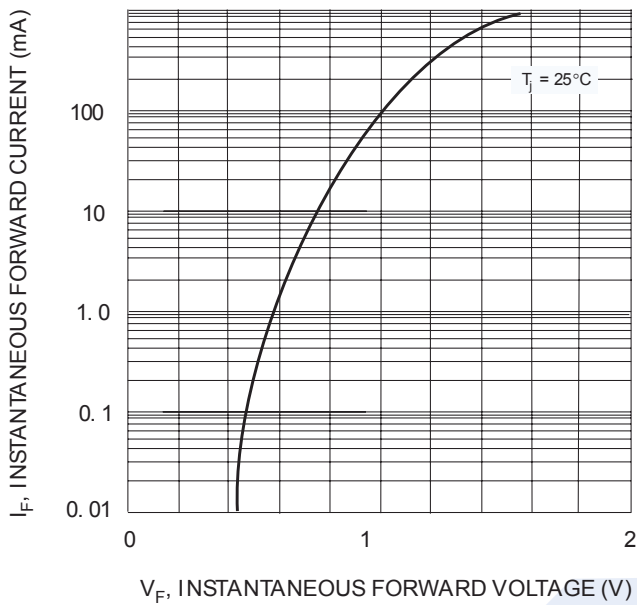
NOTE:1. Valid provided that terminals are kept at ambient temperature.

■ Marking

NO.	BAS19H	BAS20H	BAS21H
Marking	JP, A8	JR, T2	JS, T3

Switching Diode BAS19H/BAS20H/BAS21H

■ Typical Characteristics



Fi . 1 Forward Characteristics

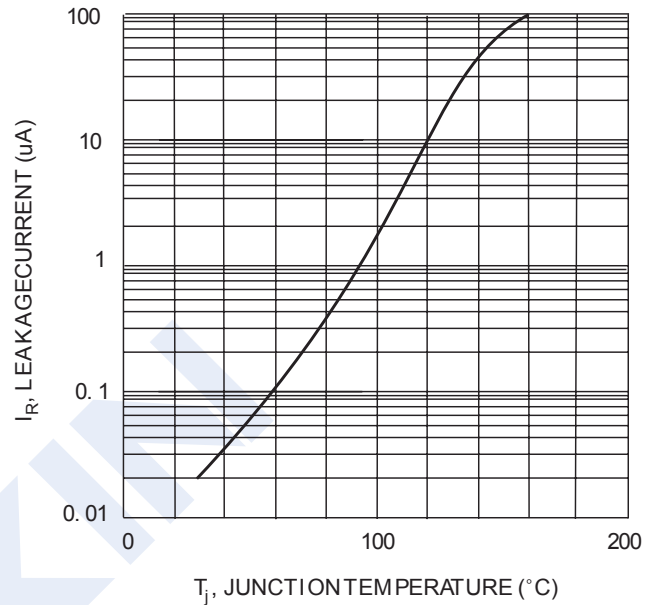


Fig. 2 Leakage Current vs Junction Temperature