

## VII. Switching Diode

### (c). SMD Type (SOD-323)

**BAS21H**

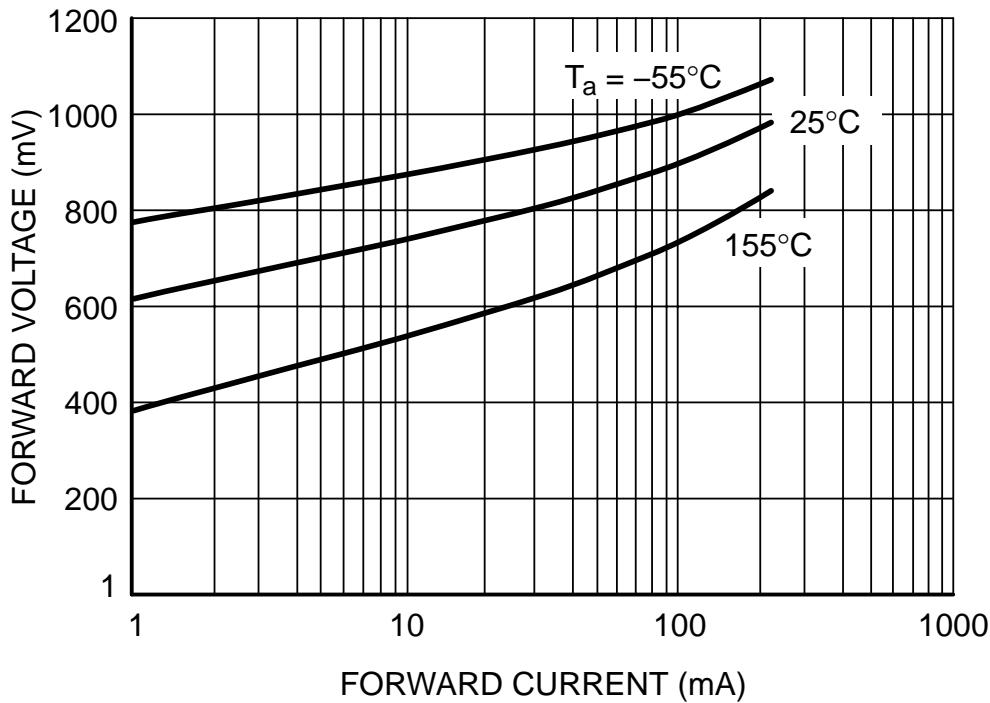
**(Package: SOD-323)**

<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Fast switching speed.</li> <li>• Ideally suited for automated assembly processes.</li> <li>• For general purpose switching applications.</li> <li>• Plastic material UL recognition flammability classification 94V-0.</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Case : Molded plastic, SOD-323</li> <li>• Mounting position : Any</li> <li>• Polarity : Color band denotes cathode end</li> </ul> <p><b>DEVICE MARKING CODE</b></p> <ul style="list-style-type: none"> <li>• BAS21H : JS</li> </ul>	<p>The technical drawing illustrates the physical dimensions of the SOD-323 package. The top view shows a rectangular case with a central rectangular window. Dimensions include a total width of 2.6 ~ 2.7 mm, a height of 1.275~1.325 mm, and a side wall thickness of 0.9 Typ. The side view shows a height of 0.1 Typ. and a lead thickness of 0.02 ~ 0.10 mm, with a lead spacing of 0.27 ~ 0.37 mm.</p> <p>Case: SOD-323 Dimensions in millimeters</p>
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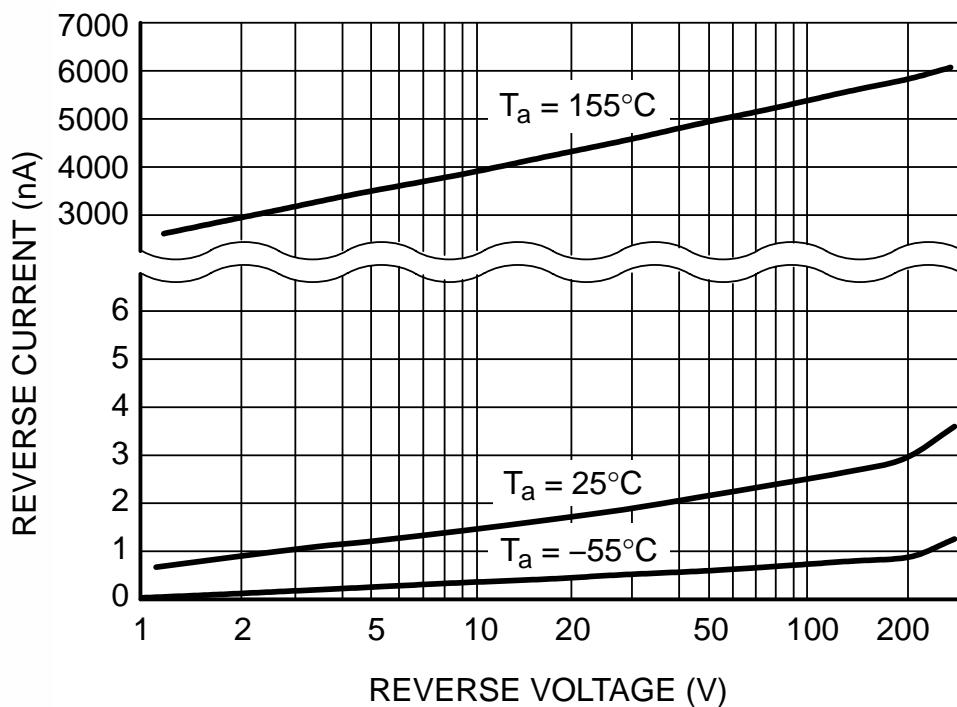
## Ratings & Electrical Characteristics

Characteristic	Symbol	Limits	Unit
DC reverse voltage	$V_R$	250	Volts
Minimum reverse breakdown voltage (@ $I_R=100\mu A$ )	$V_{(BR)R}$	250	Volts
Repetitive peak reverse voltage	$V_{RRM}$	250	Volts
Forward voltage (Max) $I_F=100mA$ $I_F=200mA$	$V_F$	1.00 1.25	Volts
Forward continuous current	$I_o$	200	mA
Non-Repetitive peak forward surge current	$I_{FSM}$	625	mA
Maximum reverse leakage current $V_R = 200V$ $V_R = 200V, T_j=150$	$I_R$	0.1 100	$\mu A$
Power dissipation	$P_D$	200	mW
Diode capacitance (Max) $V_R=0V, f=1.0MHz$	$C_D$	5	PF
Reverse recovery time (Max) $I_F=I_R=30mA, R_L=100$	$T_{rr}$	50	ns
Thermal resistance, junction to ambient air	$R_{th-JA}$	635	/W
Operating junction & storage temperature range	$T_j, T_{stg}$	-55 to +150	

## Ratings and Characteristic Curves of BAS21H



**Figure 1. Forward Characteristics**



**Figure 2. Reverse Characteristics**