

VII. Switching Diode

(c). SMD Type (SOD-323)

BAS20H

(Package: SOD-323)

<p>FEATURES</p> <ul style="list-style-type: none"> • Fast switching speed. • Ideally suited for automated assembly processes. • For general purpose switching applications. • Plastic material UL recognition flammability classification 94V-0. <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : Molded plastic, SOD-323 • Mounting position : Any • Polarity : Color band denotes cathode end <p>DEVICE MARKING CODE</p> <ul style="list-style-type: none"> • BAS20H : JR 	<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 total thickness of 0.02 ~ 0.10 mm, with a base thickness 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	200	Volts
Minimum reverse breakdown voltage (@ $I_R=100\mu A$)	$V_{(BR)R}$	250	Volts
Repetitive peak reverse voltage	V_{RRM}	200	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	1.0 100	μA
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 BAS20H

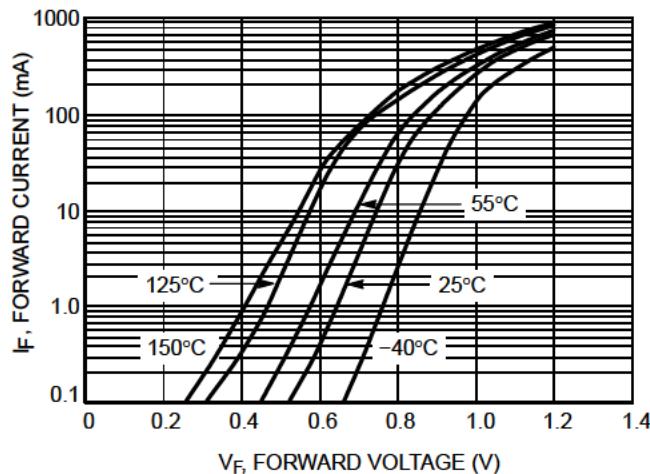


Figure 1. Forward Characteristics

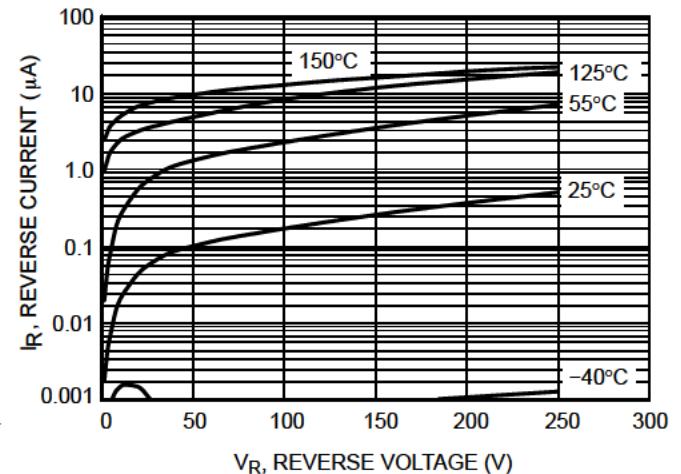


Figure 2. Reverse Characteristics

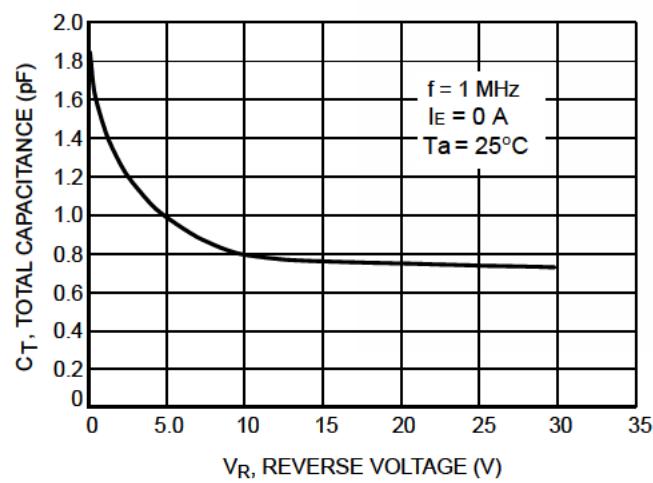


Figure 3. Typical Capacitance vs Reverse Voltage