

VII. Switching Diode

(c). SMD Type (SOD-323)

BAS16H

(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"> • BAS16H : A6 	<p>Case: SOD-323 Dimensions in millimeters</p>
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Ratings & Electrical Characteristics

Characteristic	Symbol	Limits	Unit
DC reverse voltage	V_R	75	Volts
Minimum reverse breakdown voltage (@ $I_R=100\mu A$)	$V_{(BR)R}$	75	Volts
Forward recovery voltage (Max) $I_F=10mA, T_r=20ns$	V_{FR}	1.75	Volts
Forward voltage (Max)	V_F	$I_F=1mA$ 0.715 $I_F=10mA$ 0.855 $I_F=50mA$ 1.000 $I_F=150mA$ 1.250	Volts
Forward continuous current	I_O	200	mA
Peak forward surge current	$I_{FM(surge)}$	500	mA
Maximum reverse leakage current	I_R	$V_R=75V$ 1.0 $V_R=75V, T_j=150$ 50 $V_R=25V, T_j=150$ 30	μA
Power dissipation	P_D	200	mW
Diode capacitance (Max) $V_R=0V, f=1.0MHz$	C_D	2	PF
Reverse recovery time (Max) $I_F=I_R=10mA, R_L=50$	T_{rr}	5	ns
Stored charge (Max) $I_F=10mA$ to $V_R=5.0V, R_L=500$	Q_S	45	PC
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 BAS16H

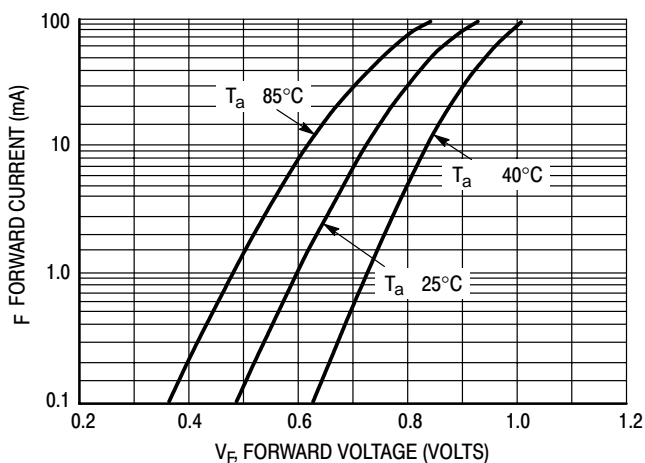


Figure 1. Forward Characteristics

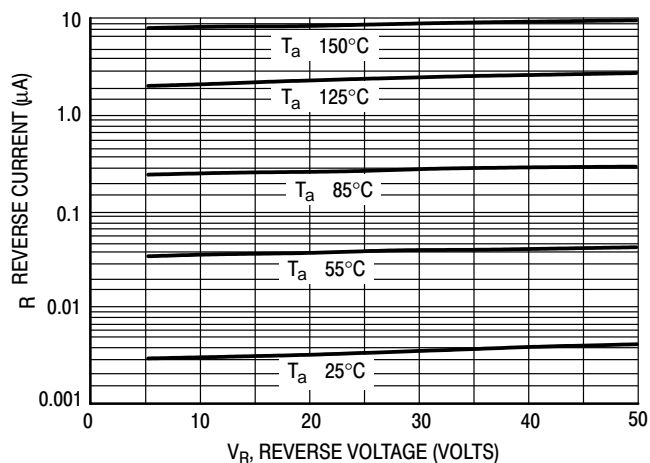


Figure 2. Reverse Characteristics

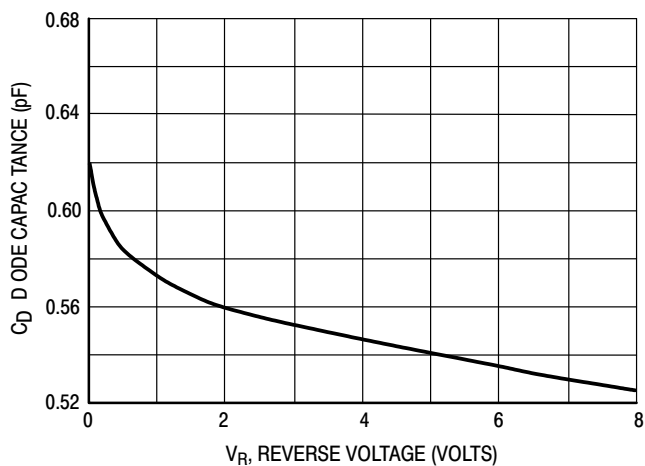


Figure 3. Typical Capacitance vs Reverse Voltage