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VII.   <u>Switching Diode</u>

(c). SMD Type (SOD-323)
BAS16H   (Package: SOD-323)

FEATURES

- Fast switching speed.
- Ideally suited for automated assembly processes.
- For general purpose switching applications.
- Plastic material UL recognition flammability classification 94V-0.

MECHANICAL DATA

- Case : Molded plastic, SOD-323
- Mounting position : Any
- Polarity : Color band denotes cathode end

DEVICE MARKING CODE

- BAS16H :   A6

Case: SOD-323
Dimensions in millimeters

Ratings & Electrical Characteristics

Characteristic		Symbol	Limits	Unit
DC reverse voltage		V_R	75	Volts
Minimum reverse breakdown voltage (@ I_R=100µA)		$V_{(BR)R}$	75	Volts
Forward recovery voltage (Max) I_F=10mA, Tr=20ns		V_{FR}	1.75	Volts
Forward voltage (Max)	I_F=1mA I_F=10mA I_F=50mA I_F=150mA	V_F	0.715 0.855 1.000 1.250	Volts
Forward continuous current		I_O	200	mA
Peak forward surge current		$I_{FM(surge)}$	500	mA
Maximum reverse leakage current	V_R =75V V_R =75V, Tj=150 V_R =25V, Tj=150	I_R	1.0 50 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		Trr	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		Rth-JA	635	/W
Operating junction & storage temperature range		Tj, Tstg	-55 to +150	

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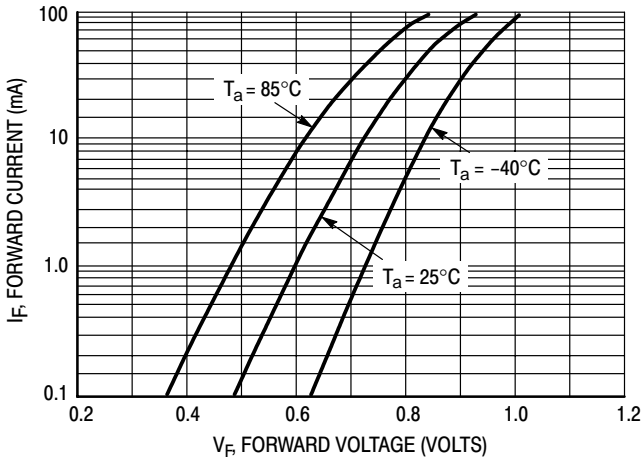## Ratings and Characteristic Curves of BAS16H
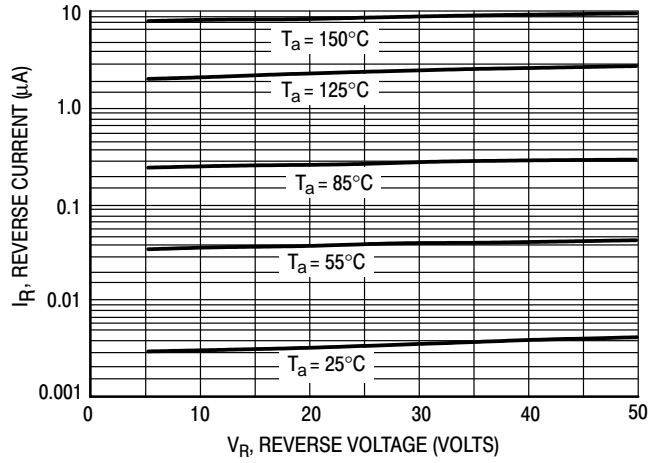
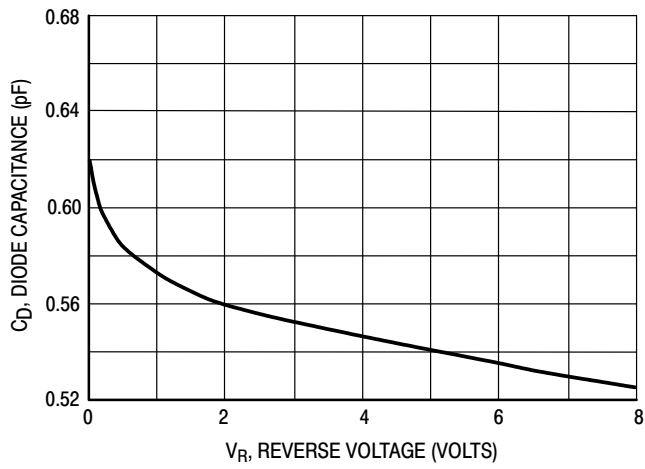**Figure 1. Forward Characteristics**

Figure 2. Reverse Characteristics

Figure 3. Typical Capacitance vs Reverse Voltage