

Switching Diode

FEATURES

- High-Speed Switching Applications
- Lead Finish: 100% Matte Sn (Tin)
- Qualified Reflow Temperature: 260 °C
- Extremely Small SOD-523 Package
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**
- **Polarity:** Color band denotes cathode end

SOD-523



MARKING: A6

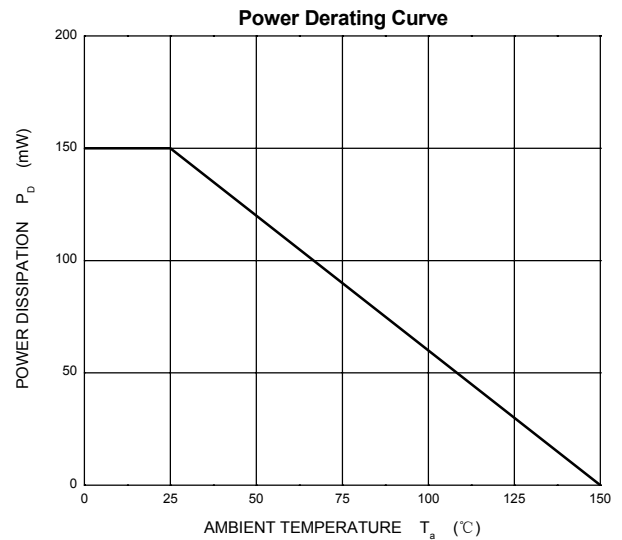
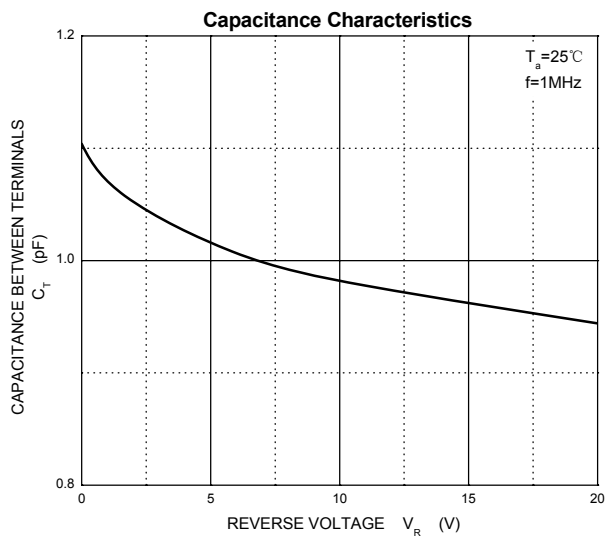
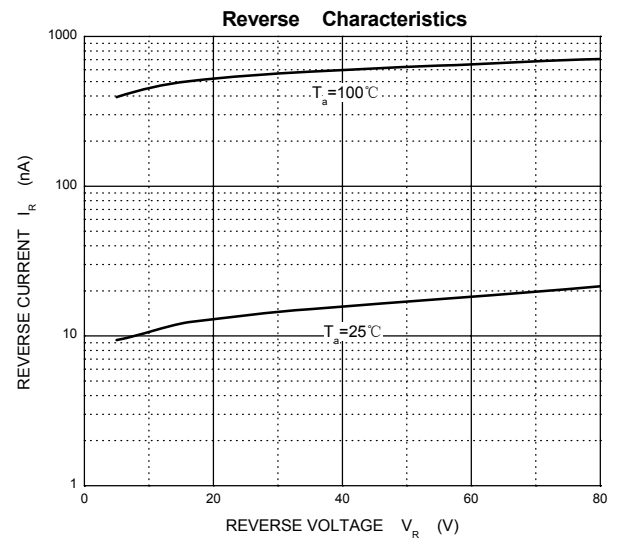
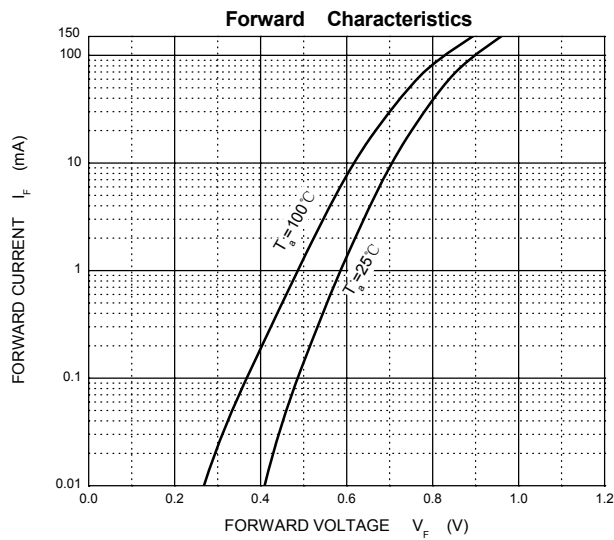
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	Limit	Unit
DC Reverse Voltage	V_R	75	V
Forward Current	I_F	200	mA
Pak Forward Surge Current	$I_{FM(surge)}$	500	mA
Total Device Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	°C/W
Operating/Junction and Storage Temperature	T_j, T_{stg}	-55~+150	°C

Electrical Ratings @Ta=25°C

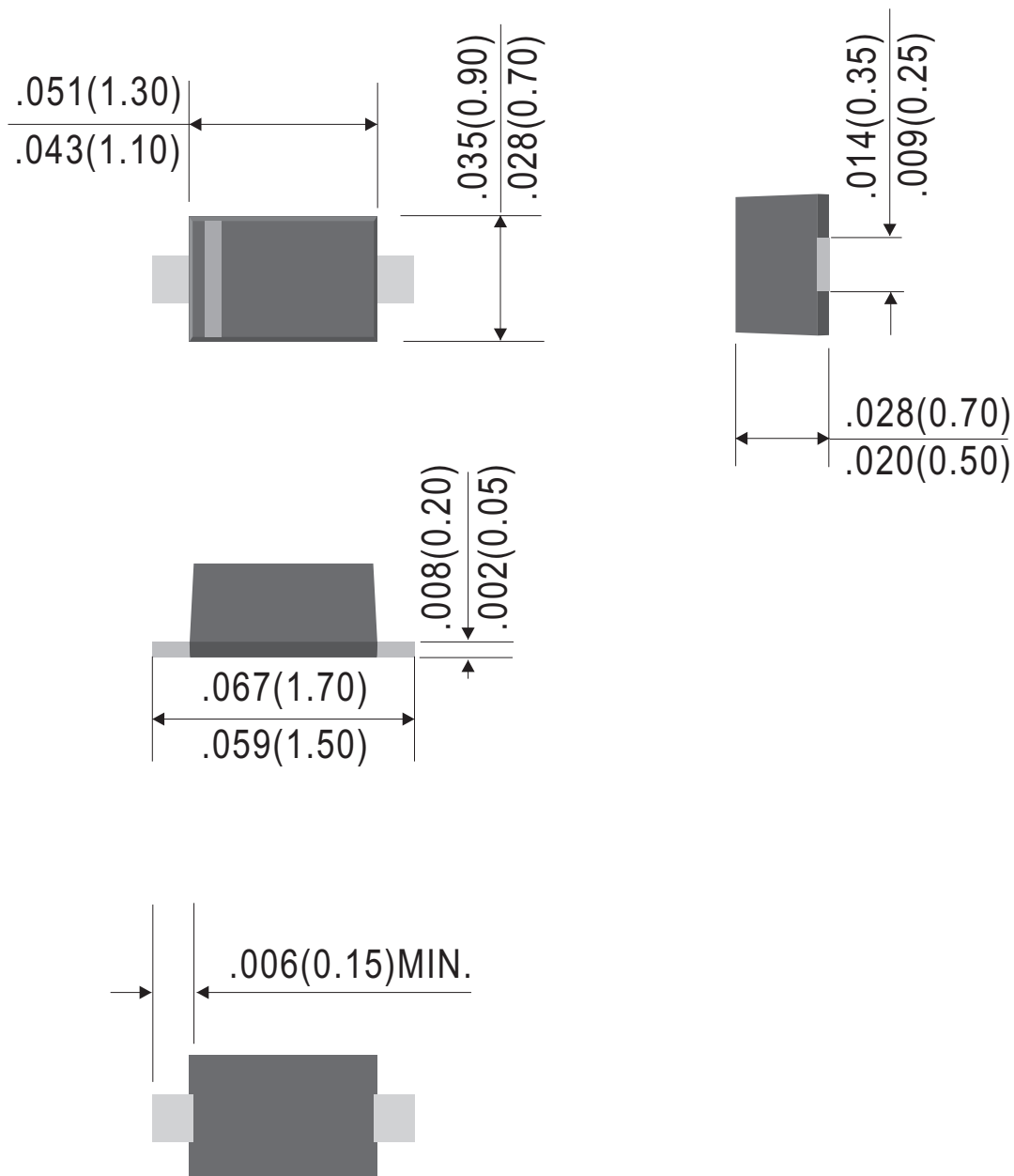
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75				$I_R=100\mu A$
Forward voltage	V_{F1}			715	mV	$I_F=1mA$
	V_{F2}			855		$I_F=10mA$
	V_{F3}			1000		$I_F=50mA$
	V_{F4}			1250		$I_F=150mA$
Reverse recovery Time	t_{rr}			6.0	ns	$I_F=I_R=10mA_{dc}, R_L=50\Omega$
Reverse current	I_R			1.0	μA	$V_R=75V$
Forward recovery voltage	V_{FR}			1.75	V	$I_F=10mA, t_r=20ns$
Diode capacitance	C_D			2.0	pF	$V_R=0V, f=1MHz$
Stored charge	Q_S			45	pC	$I_F=10mA, V_R=5.0V, R_L=500\Omega$

Typical Characteristics



Outline Drawing

SOD-523



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
BAS16X-T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 8 Kpcs/Reel

Note: (1) Packing code, Tape&Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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