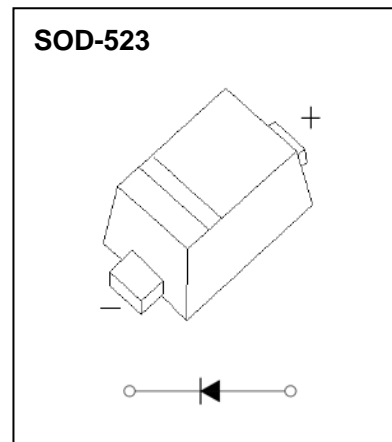


SOD-523 Plastic-Encapsulate Diodes

FAST SWITCHING DIODE

FEATURES

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- Pb free product for packing code suffix "G",
Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1



MARKING: 61 or 6

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Reverse Voltage	75	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	250	mA
I_{FSM}	Peak Forward Surge Current @ $t=1\mu\text{s}$	4	A
	Peak Forward Surge Current @ $t=1\text{s}$	0.5	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Operating/Storage Temperature	-55~+150	$^{\circ}\text{C}$

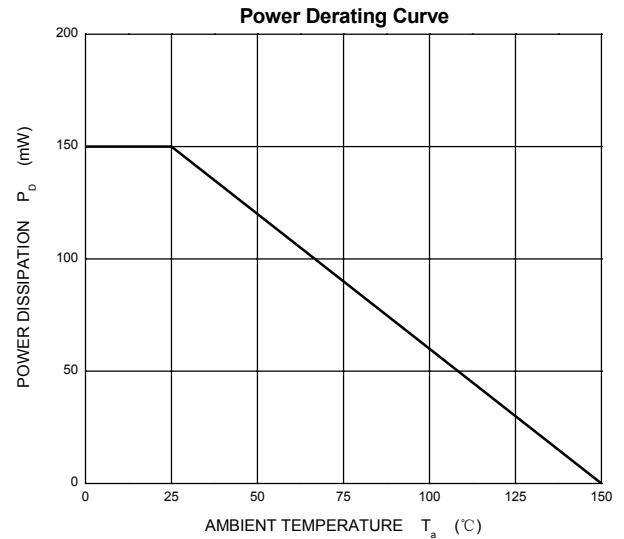
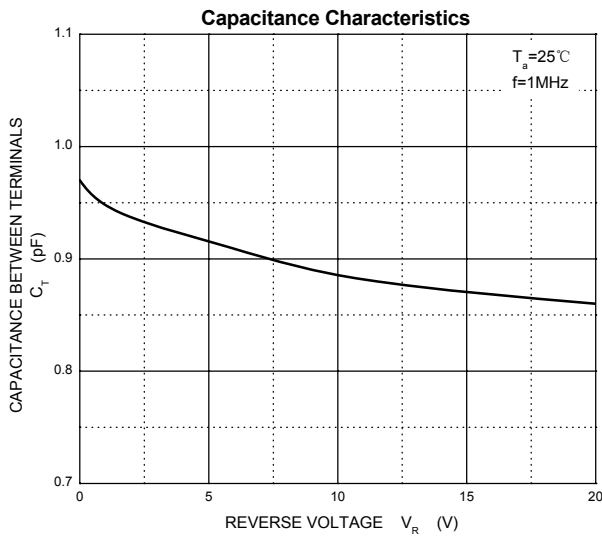
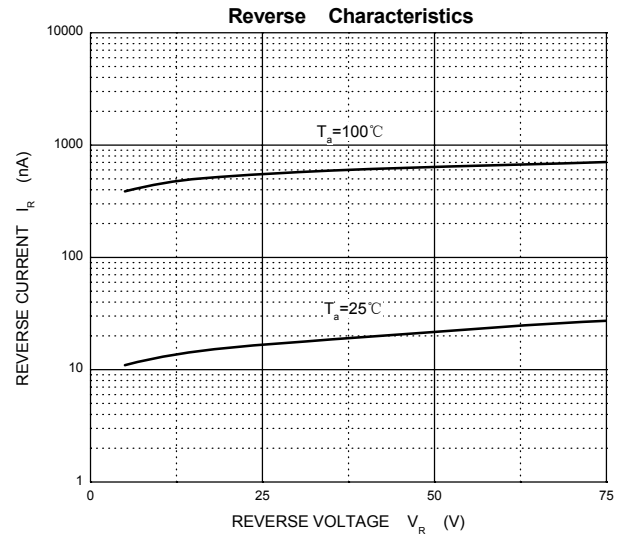
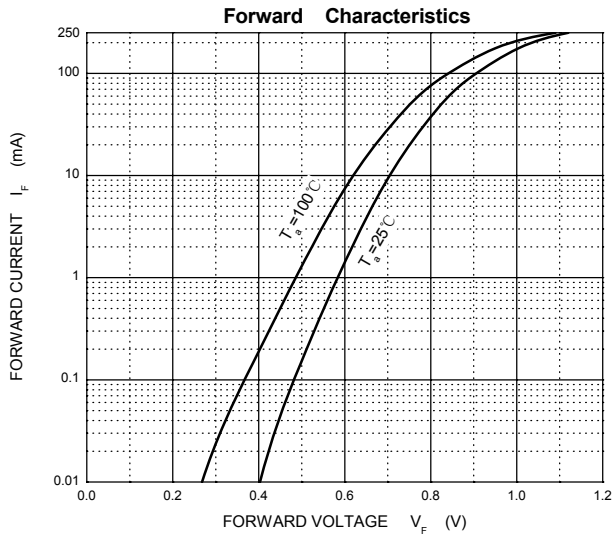
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75			V
Reverse current	I_R	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	μA
Forward voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	V
		$I_F=50\text{mA}$			1	V
		$I_F=150\text{mA}$			1.25	V
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			1	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$			4	ns



SOD-523 Plastic-Encapsulate Diodes

Typical Characteristics

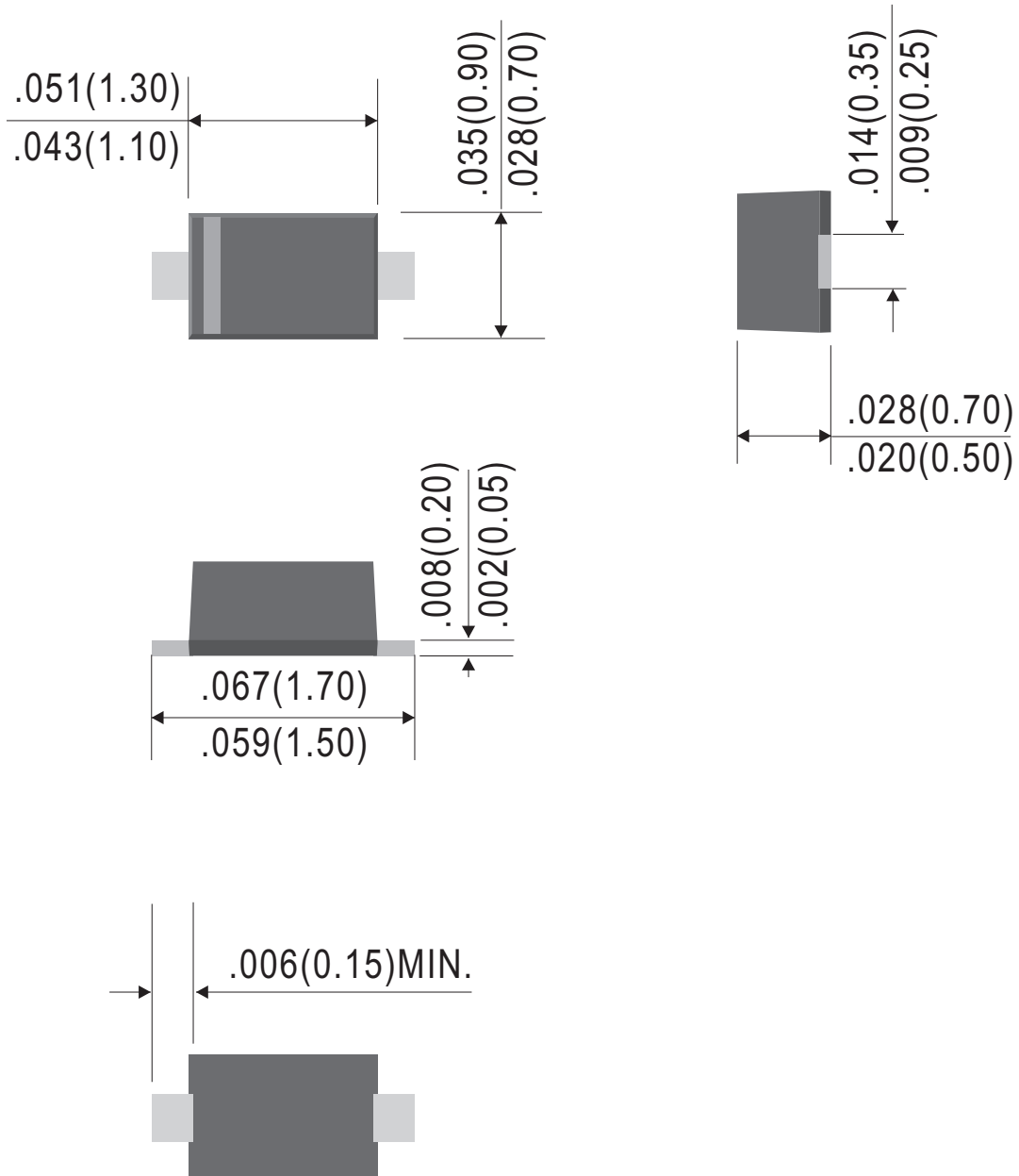




SOD-523 Plastic-Encapsulate Diodes

Outline Drawing

SOD-523



Dimensions in inches and (millimeters)



SOD-523 Plastic-Encapsulate Diodes

Ordering Information:

Device PN	Packing
BAS516T1 G ⁽¹⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

Disclaimer

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