



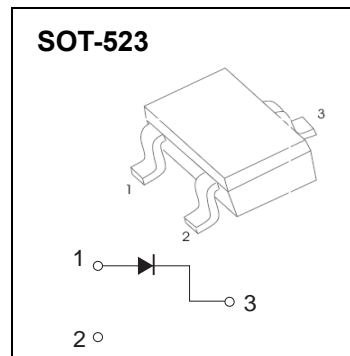
## SOT-523 Plastic-Encapsulate Diodes

### BAS21T

#### SWITCHING DIODE

#### FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**



#### MARKING :T3

#### Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	400	mA
Average Rectified Output Current	$I_O$	200	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	@ t = 1.0µs 2.5	A
		@ t = 1.0s 0.5	
Power Dissipation	$P_D$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	°C/W
Operating Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

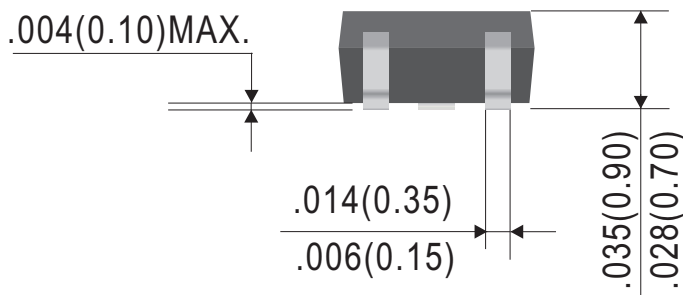
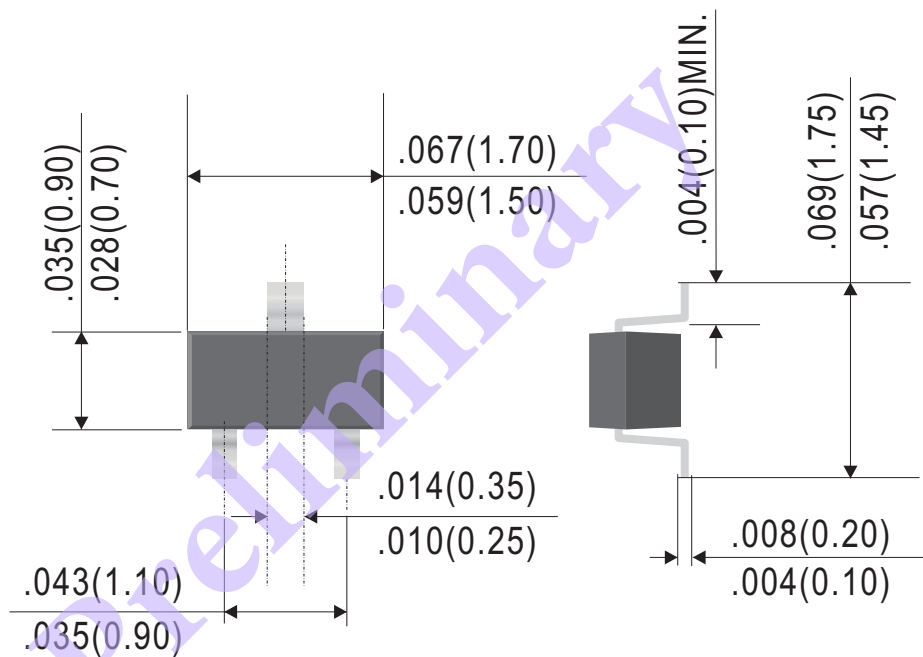
#### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	250		V
Reverse voltage leakage current	$I_R$	$V_R=200V$		100	nA
Forward voltage	$V_F$	$I_F=100mA$ $I_F=200mA$		1 1.25	V
Total capacitance	$C_T$	$V_R=0V, f=1MHz$		5	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=30mA, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$		50	ns



# Outline Drawing

# SOT-523



Dimensions in inches and (millimeters)