

BAS16T

SWITCHING DIODE

VOLTAGE	85 Volt	POWER	200 mW
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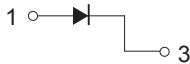
SOT-523 Unit:mm

FEATURES

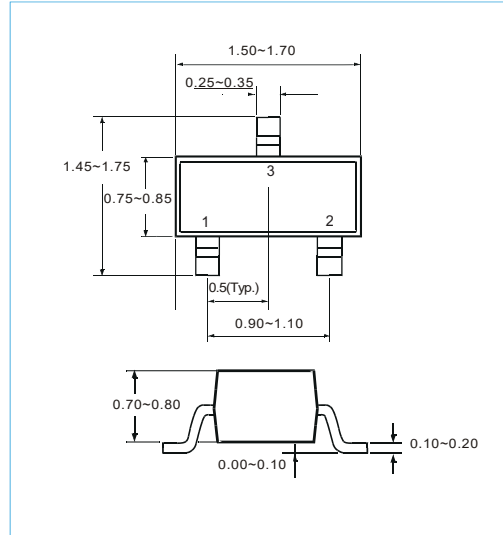
- Fast Switching Speed
- For General Purpose Switching Applications
- Lead free in compliance with EU RoHS
- Marking code: A2

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



2 °



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

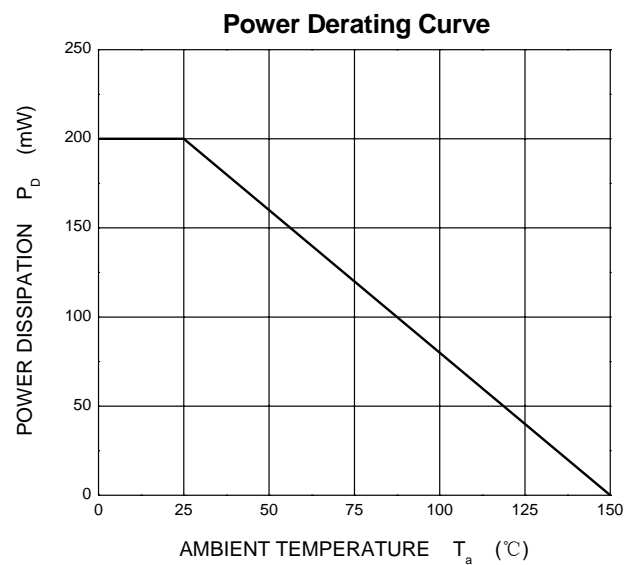
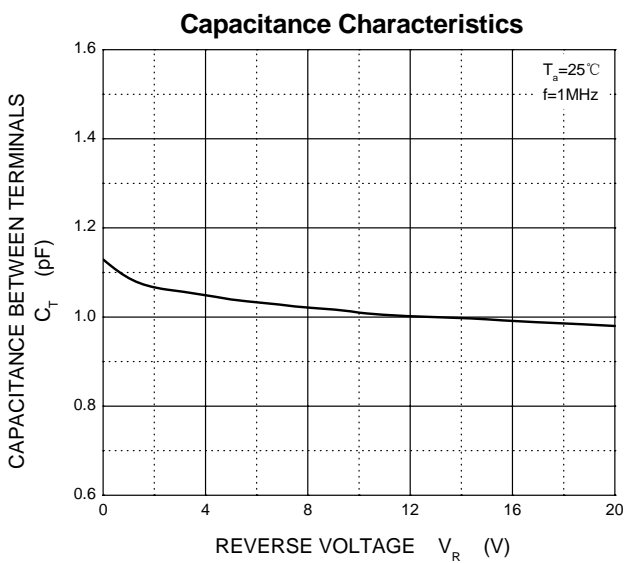
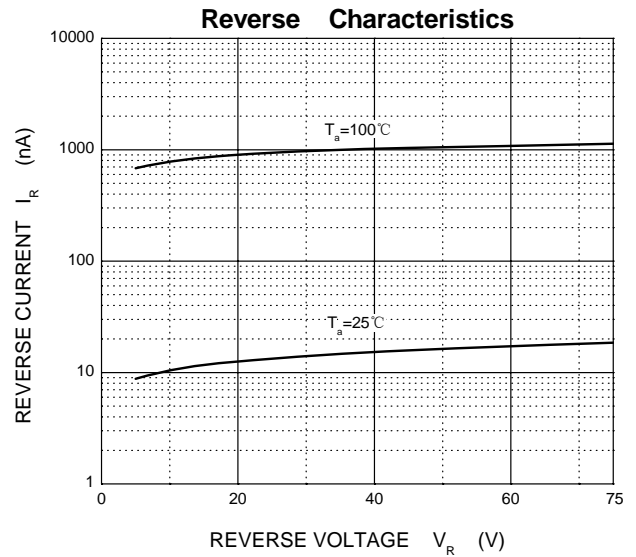
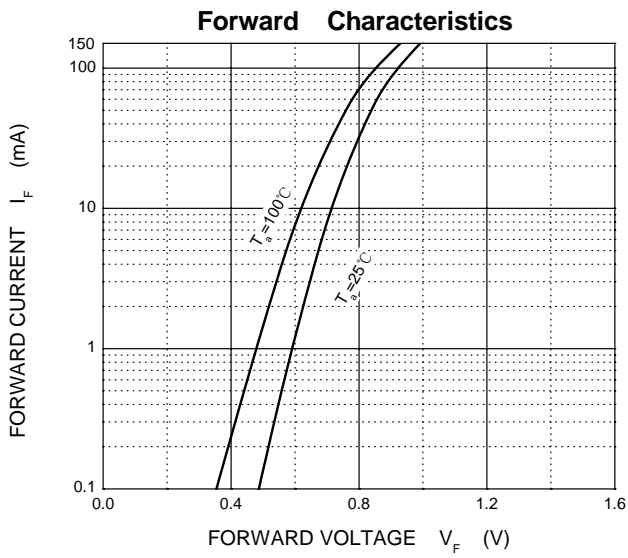
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=1\mu\text{s}$	I_{FSM}	4.0	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^\circ\text{C}$

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

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	($I_R = 1\mu\text{A}$)	75			V
Reverse Leakage	I_R	($V_R = 75\text{ V}$) ($V_R = 20\text{ V}$)			2 25	μA nA
Forward Voltage	V_F	($I_F = 1.0\text{ mA}$) ($I_F = 10\text{ mA}$) ($I_F = 50\text{ mA}$) ($I_F = 150\text{ mA}$)			0.715 0.855 1.00 1.25	V
Total Capacitance	C_T	($V_R = 0\text{ V}$, $f = 1.0\text{ MHz}$)			2.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}$, $I_R=10\text{mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100\ \Omega$			4.0	ns

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Typical Characteristics

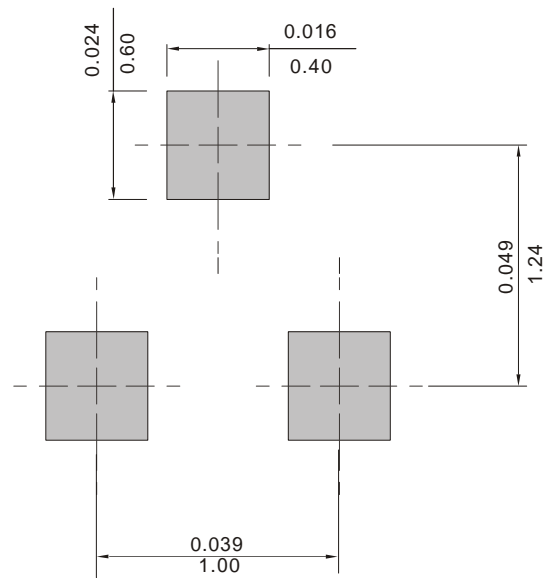


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MOUNTING PAD LAYOUT

SOT-523

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAS16T	SOT-523	7 Inch	3000