

Switching Diode

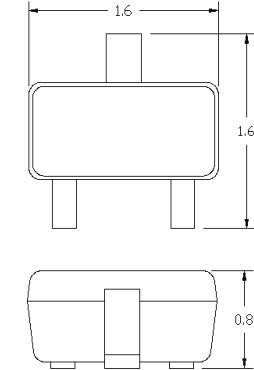
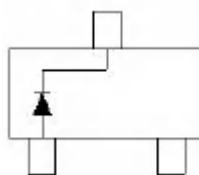
SOT523

Unit:mm

- ◇ Fast Switching Speed
- ◇ For General Purpose Switching Applications
- ◇ High Conductance
- ◇ Low Current Leakage
- ◇ Small Outline Surface Mount Package
- ◇ RoHS compliant / Green EMC

Device Marking Code	
BAS16T	A2

Internal Structure

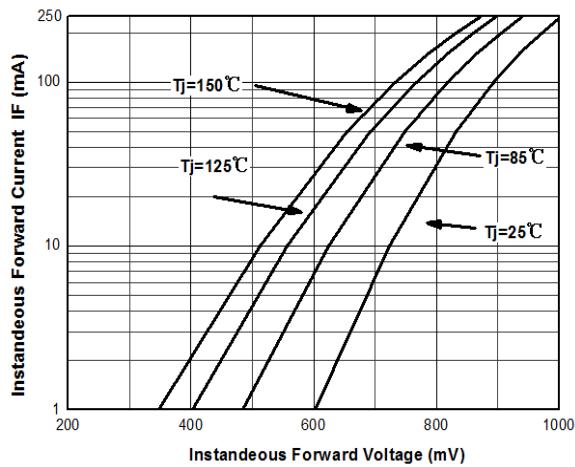

Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
VR	Reverse Voltage	100	V
VRM	Peak Reverse Voltage	100	V
Io	Average Rectified Current	150	mA
Pd	Power Dissipation	200	mW
TJ	Junction Temperature	150	°C
IFSM	NON-Repetitive Peak Forward Surge Current (@t=8.3ms.)	2	A
IF	Peak Forward Current	300	mA
Tstg	Storage Temperature	-55 to 155	°C
Rth	Thermal Resistance	625	°C/W

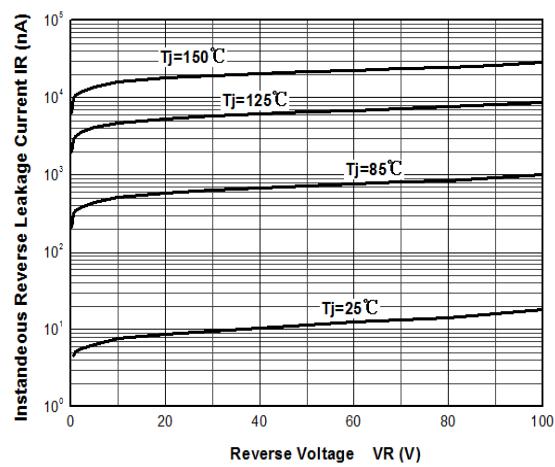
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Max	Units
VF	Forward Voltage	IF=1mA		0.715	V
		IF=10mA		0.855	V
		IF=50mA		1.0	V
		IF=150mA		1.25	V
VR	Reverse breakdown voltage	IR=1uA	75		V
IR	Reverse voltage leakage current	VR=75V		1	uA
		VR=20V		25	nA
CJ	Typical Junction Capacitance	VR=0V, f=1.0MHz		2	pF
Trr	Reverse recovery time	IF=IR=10mA, Irr=0.1x IR RL=100 Ω		4	nS

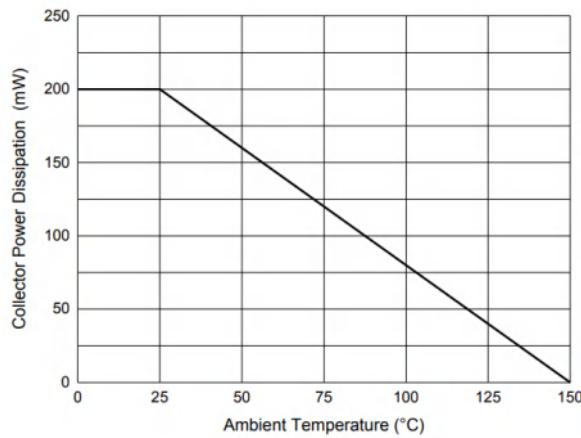
RATING AND CHARACTERISTICS CURVES(BAS16T)



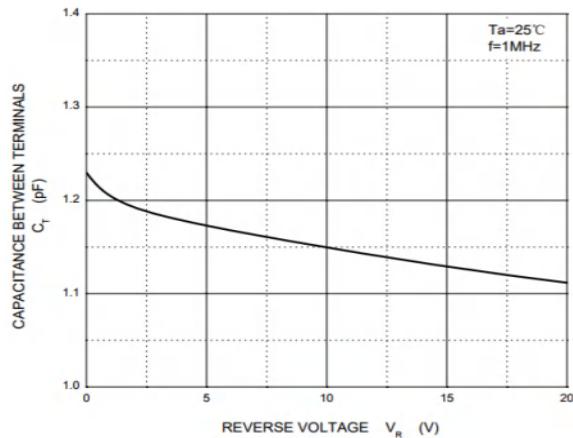
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Power Derating Curve

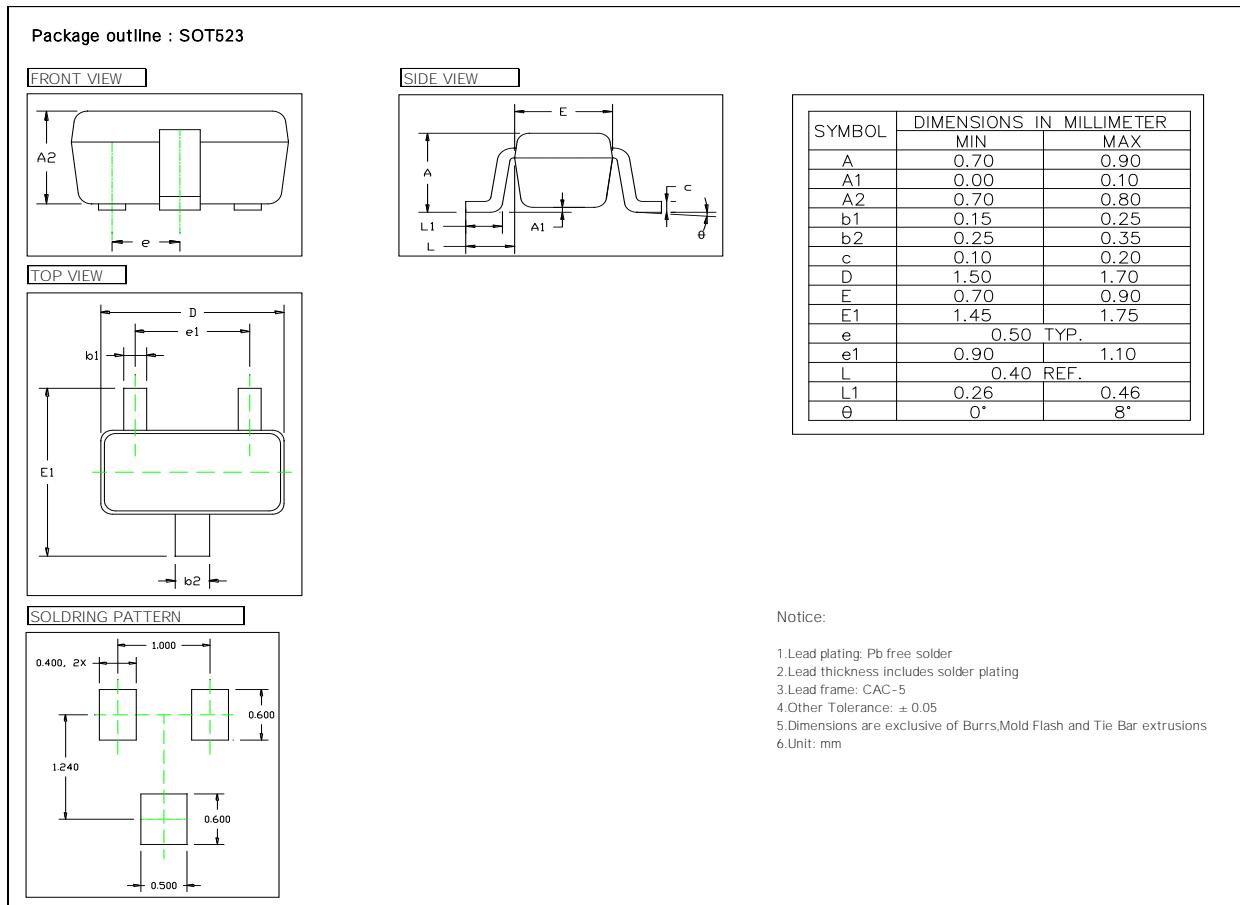


Capacitance Curve

Ordering Information

Package	Package Code	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
SOT523	-T	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

Package Dimensions



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