

BAW56

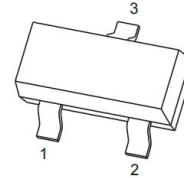
Switching Diode

FEATURE

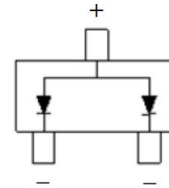
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Low Current Leakage
- Small Outline Surface Mount Package
- RoHS compliant / Green EMC

MARKING: A1

SOT-23



Schematic diagram



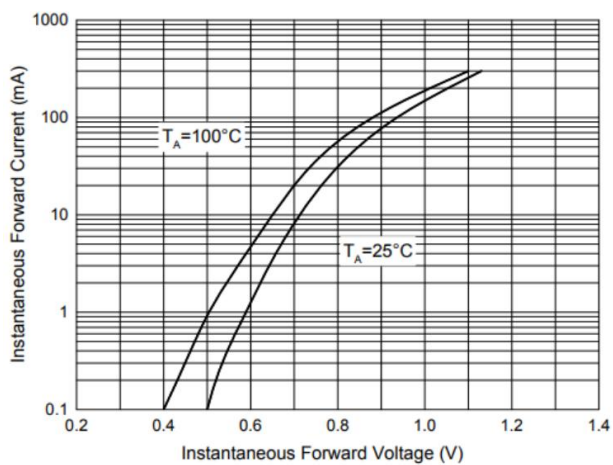
ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Forward Continuous Current	I_F	250	mA
Power Dissipation	P_{tot}	350	mW
Peak Forward Surge Current @ $t=1.0\text{S}$	I_{FSM}	1	A
Storage Temperature	T_{stg}	-55 to 150	$^\circ\text{C}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Thermal Resistance	R_{th}	357	$^\circ\text{C}/\text{W}$

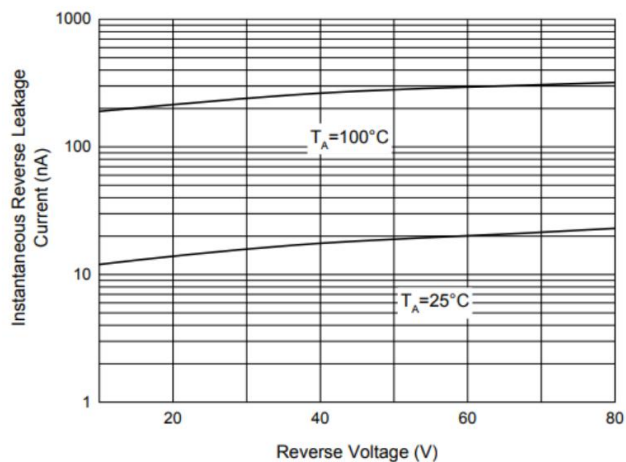
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Forward Voltage	V_F	$I_F=10\text{mA}$			0.855	V
Reverse Breakdown Voltage	V_R	$I_R=100\mu\text{A}$	75			V
Reverse Voltage Leakage Current	I_R	$V_R=75\text{V}$			2.5	μA
		$V_R=75\text{V}, T_j=150^\circ\text{C}$			50	μA
Typical Junction Capacitance	C_j	$V_R=0\text{V}, f=1.0\text{MHz}$			2	pF
Reverse Recovery Time	T_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L = 100\Omega$			4	nS

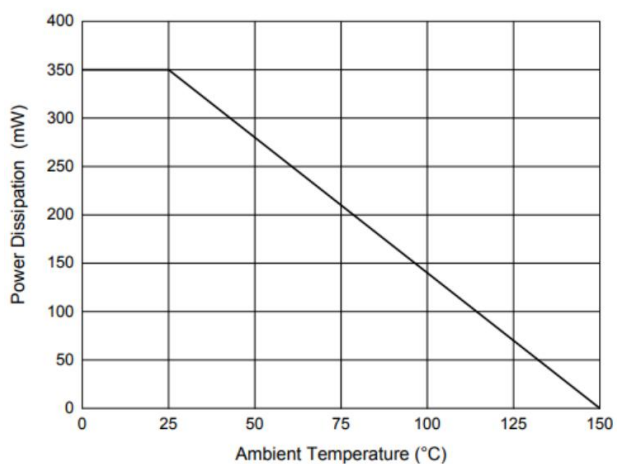
Typical Electrical



Typical Instantaneous Forward Characteristics



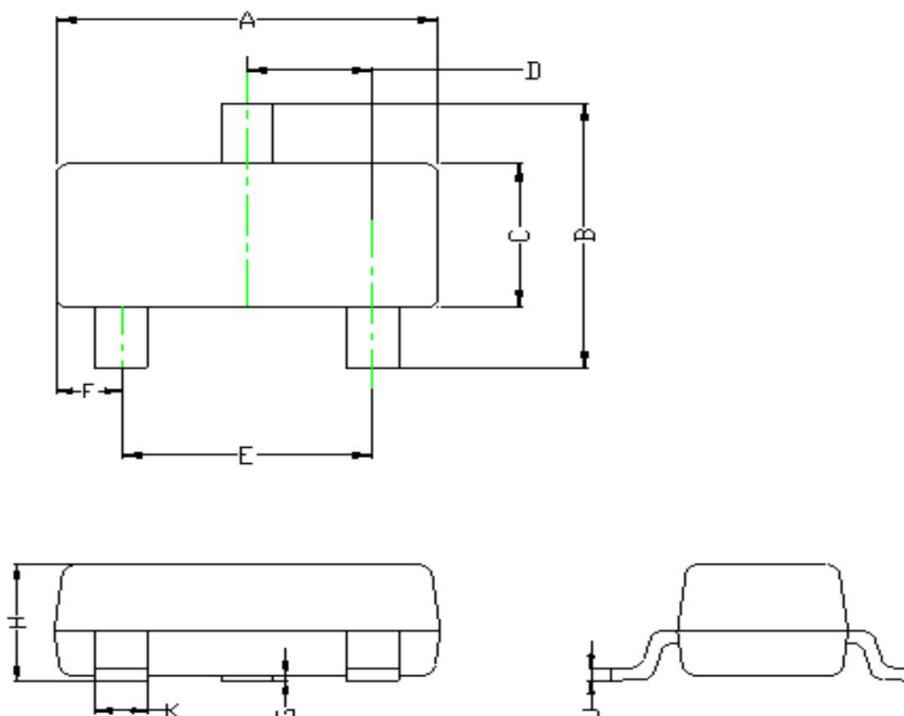
Typical Reverse Leakage Characteristics



Power Derating Curve

SOT-23 Package Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAW56	SOT23	Tape & Reel 3000pcs/7"Reel	8mm	4mm	Conductive	



Symbol	Dimensions In Millimeters		
	Min	Typ	Max
A	2.800	-	3.040
B	2.100	-	2.640
C	1.200	-	1-400
D	0.890	-	1.030
E	1.780	-	2.050
F	0.450	-	0.600
G	0.013	-	0.100
H	0.900	-	1.110
J	0.090	-	0.180
K	0.370	-	0.510
L	0.300	-	0500

1.Unit mm