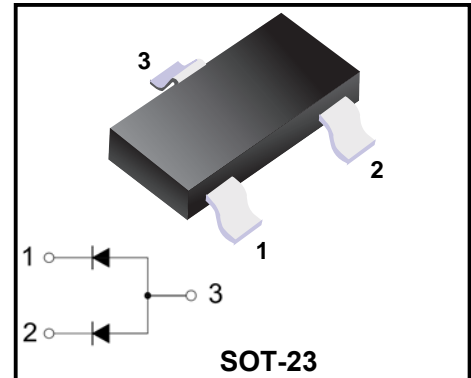


■ **Switching Diodes**

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



Marking Code	
BAW56	A1

Absolute Maximum Ratings (Ta=25°C)

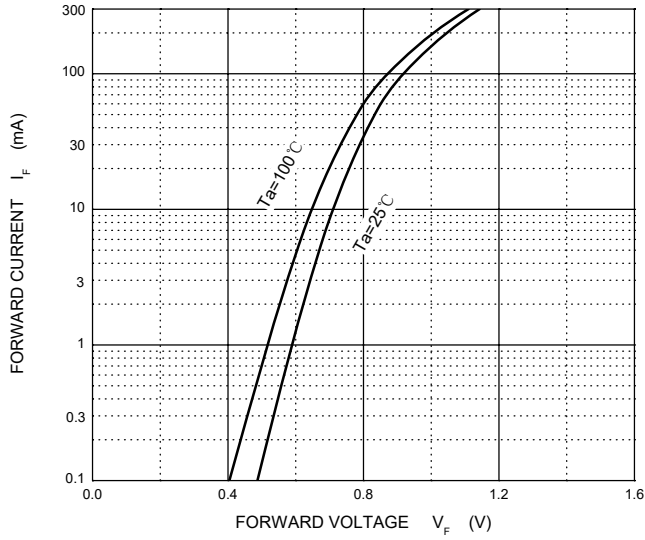
Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	75	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 μs	I _{FSM}	2.0	A
@ t = 1.0s		1.0	
Power Dissipation	P _d	350	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	357	°C/W
Operating and Storage Temperature Range	T, T _{STG}	-65 to +150	°C

Electrical Characteristics (Ta=25°C Unless otherwise noted)

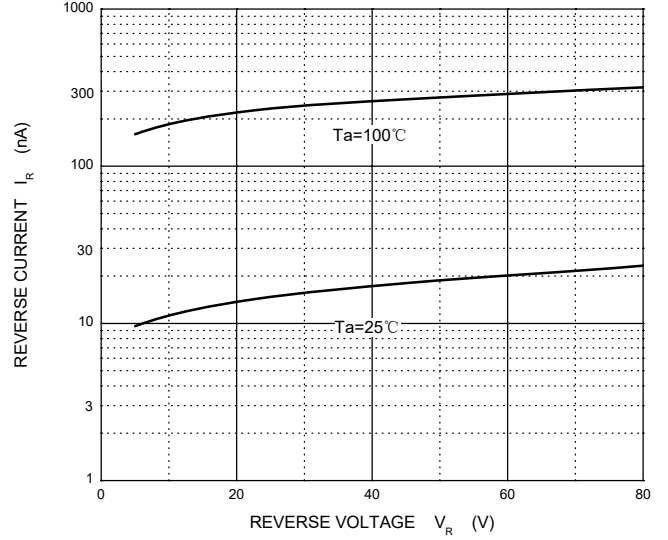
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F = 1.0mA			0.715	V
		I _F = 10mA			0.855	
		I _F = 50mA			1.0	
		I _F = 150mA			1.25	
Peak Reverse Current	I _{RM}	V _R = 75V			2.5	μA
		V _R = 75V, T _j = 150°C			50	μA
		V _R = 25V, T _j = 150°C			30	μA
		V _R = 20V			25	nA
Junction Capacitance	C _j	V _R = 0, f = 1.0MHz			2	pF
Reverse Recovery Time	t _{rr}	I _F = I _R = 10mA, I _{rr} = 0.1 X I _R , R _L = 100 Ω			4	ns

Typical Characteristics

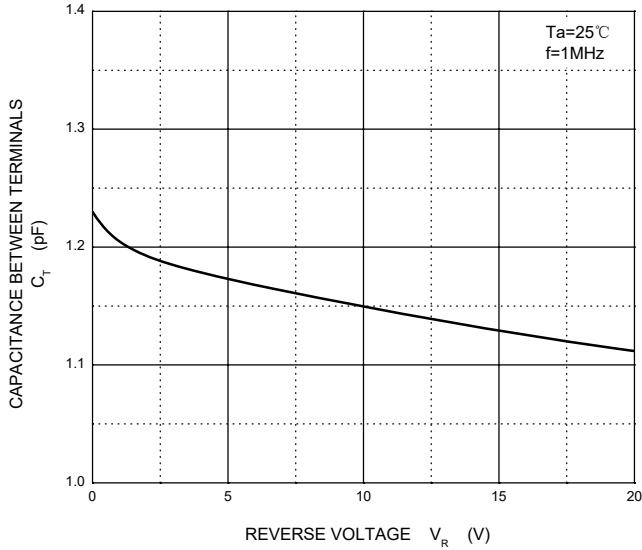
Forward Characteristics



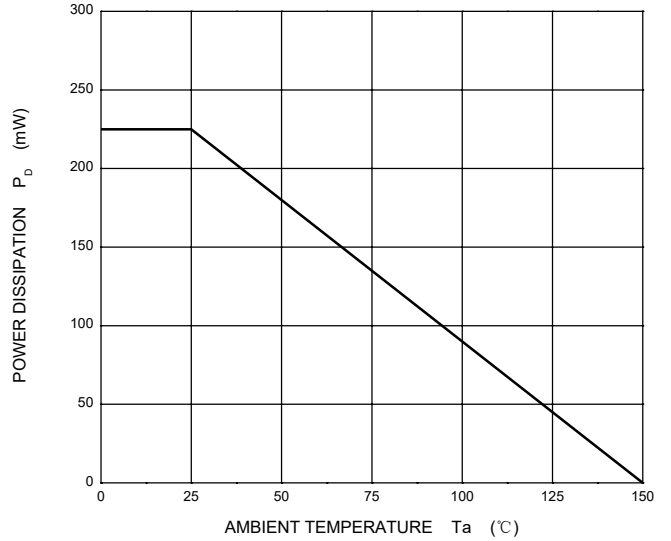
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



Ordering information

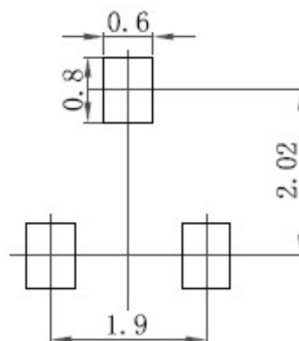
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



Disclaimer

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