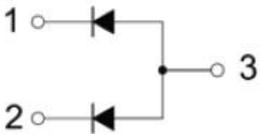
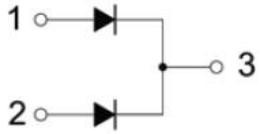
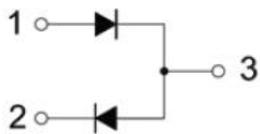
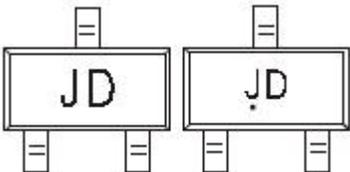
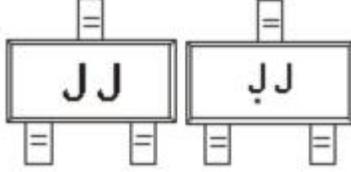
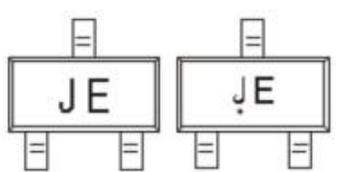


BAW56T/BAV70T/BAV99T SWITCHING DIODE



Features

- Low Forward Voltage Drop
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

BAW56T	BAV70T	BAV99T
		
MARKING:JD	MARKING:JJ	MARKING:JE
		

Solid dot = Green molding compound device, if none, the normal device.

Maximum Ratings@T_A=25°C unless otherwise specified

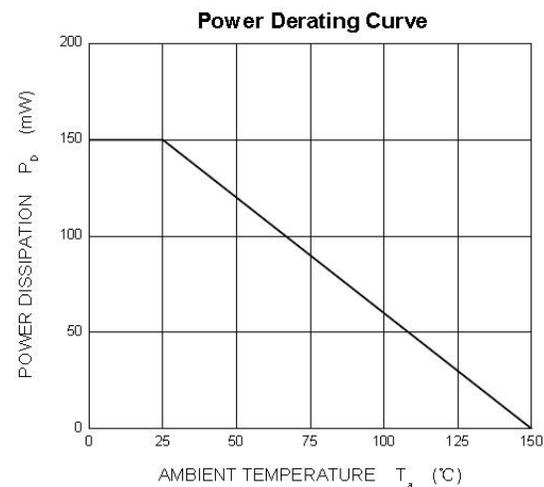
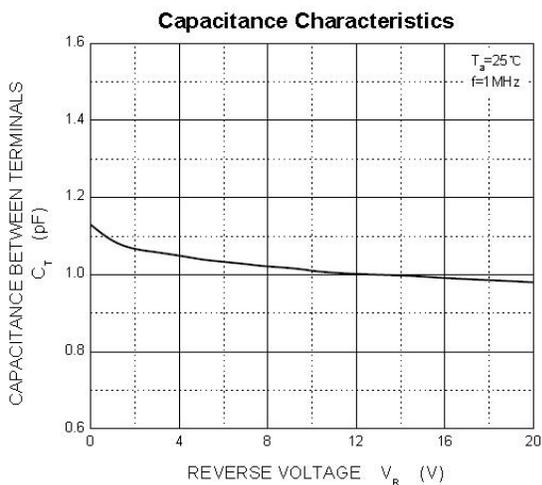
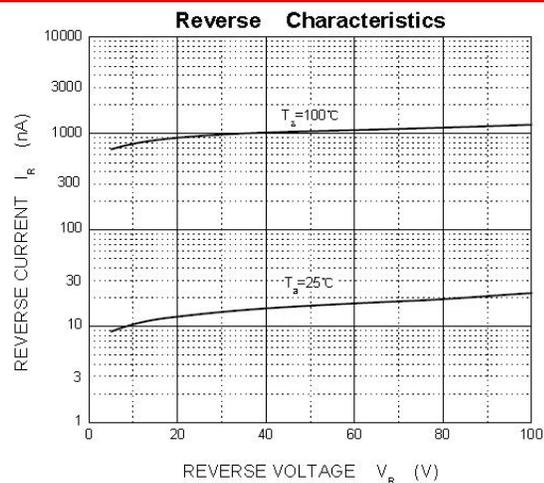
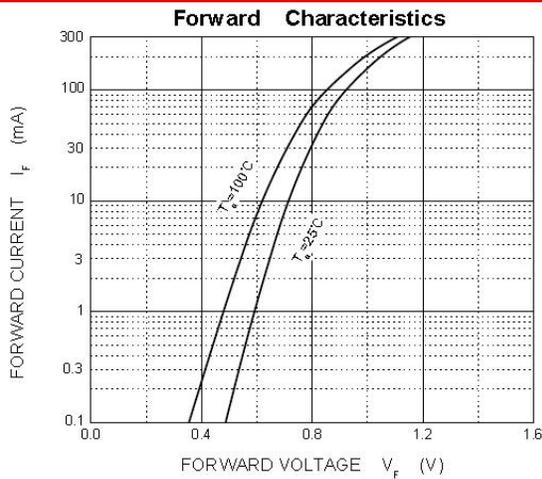
Parameter	Symbol	Limit	Units
Reverse Voltage	V _R	85	V
Forward Current	I _F	75	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	833	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Units
Reverse breakdown voltage*	$V_{(BR)}$	$I_R=1\mu\text{A}$	85	-	V
Reverse voltage leakage current*	I_{R1}	$V_R=75\text{V}$	-	2	μA
	I_{R2}	$V_R=25\text{V}$	-	0.03	μA
Forward voltage*	V_F	$I_F=1\text{mA}$	-	715	mV
		$I_F=10\text{mA}$	-	855	
		$I_F=50\text{mA}$	-	1000	
		$I_F=150\text{mA}$	-	1250	
Diode capacitance	C_D	$V_R=0\text{V}, f=1\text{MHz}$	-	1.5	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

* Pulse width < 300 μs , duty cycle < 2%

Ratings and Characteristics Curves

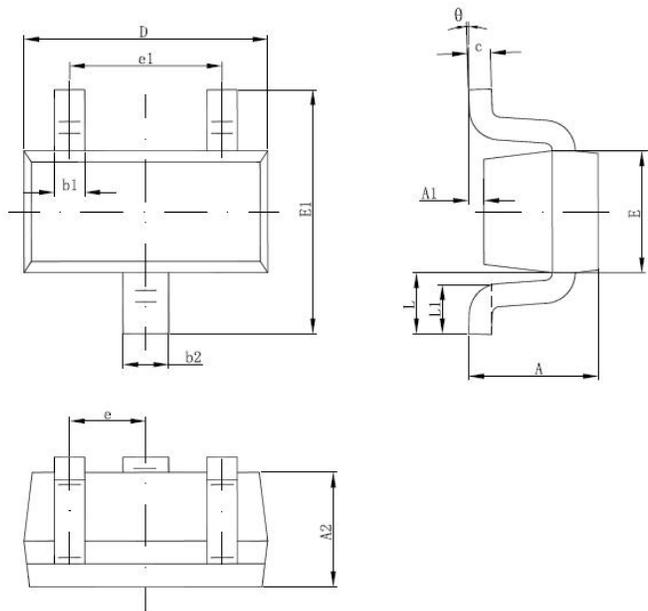


Ordering Information

Device	Package	Shipping
BAW56T/BAV70T/BAV99T	SOT-523(Pb-Free)	3000pcs / reel

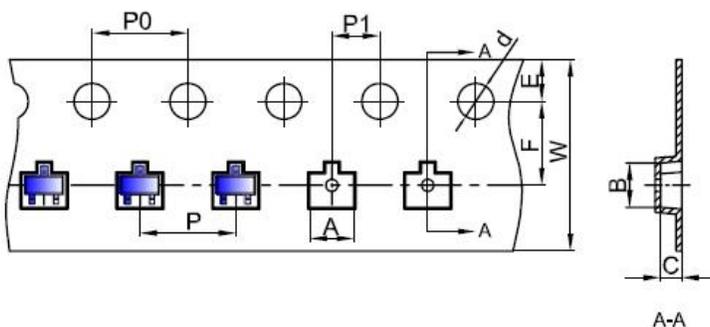
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Mechanical Dimensions SOT-523



SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Carrier Tape Specification SOT-523



SYMBOL	Millimeters	
	Min.	Max.
A	1.80	1.90
B	1.80	1.90
C	0.825	0.925
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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