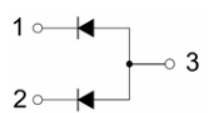
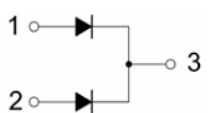
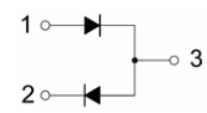
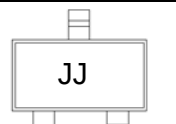


Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



SOT-523 top view

BAW56T	BAV70T	BAV99T
		
Marking: JD	Marking: JJ	Marking: JE
		



Halogen-Free

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

Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	85	V
I_F	Forward Current	75	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	833	$^{\circ}\text{C/W}$
T_J, T_{STG}	Operating and Storage Temperature Range	-55~ +150	$^{\circ}\text{C}$

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

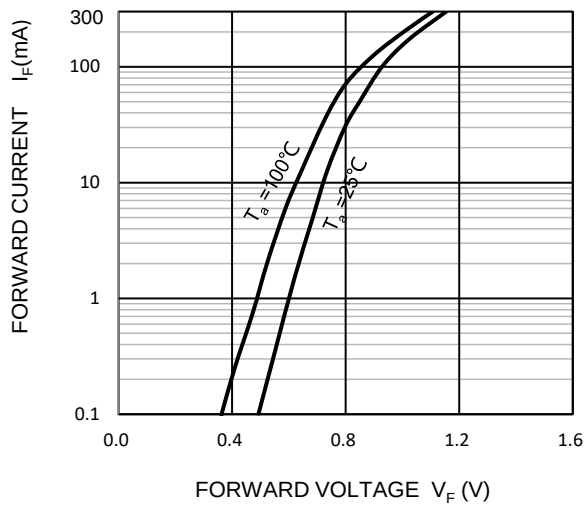
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=1\mu\text{A}$	85	--	--	V
I_{R1}	Reverse current	$V_R=75\text{V}$	--	--	2.5	μA
I_{R2}		$V_R=25\text{V}$	--	--	0.03	
V_F	Forward voltage	$I_F=1\text{mA}$	--	--	715	mV
		$I_F=10\text{mA}$	--	--	855	
		$I_F=50\text{mA}$	--	--	1000	
		$I_F=150\text{mA}$	--	--	1250	
C_D	Diode capacitance	$V_R=0, f=1\text{MHz}$	--	--	1.5	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_R=0.1*I_R, R_L=100\Omega$	--	--	4	ns

Ordering Information (Example)

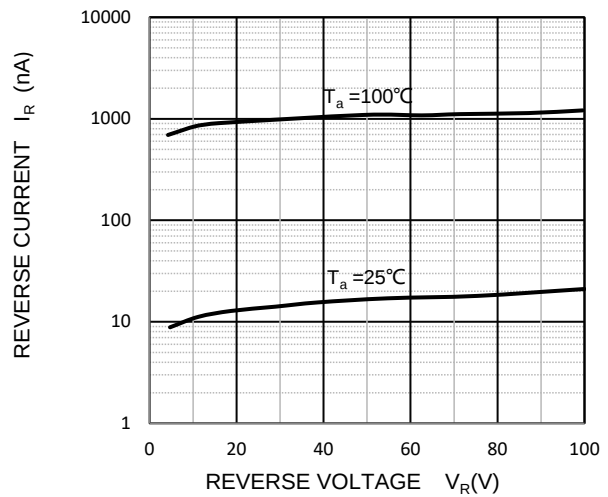
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
BAW56T	SOT-523	JD	3,000	45,000	180,000	7"reel
BAV99T	SOT-523	JE	3,000	45,000	180,000	7"reel
BAV70T	SOT-523	JJ	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

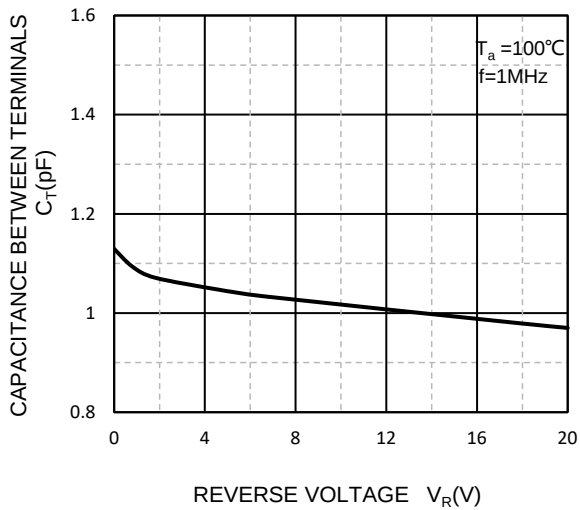
Forward Characteristics



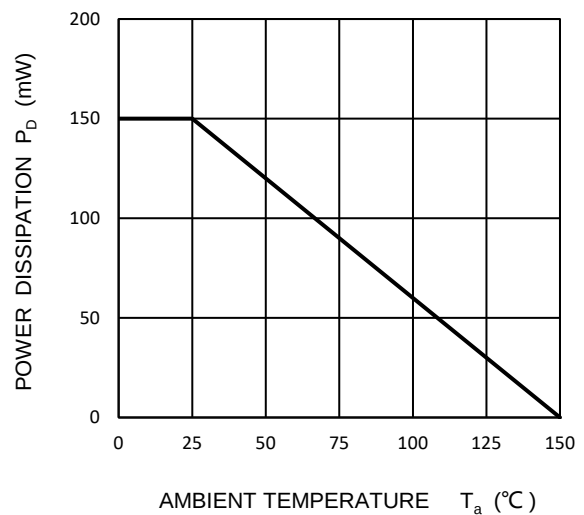
Reverse Characteristics



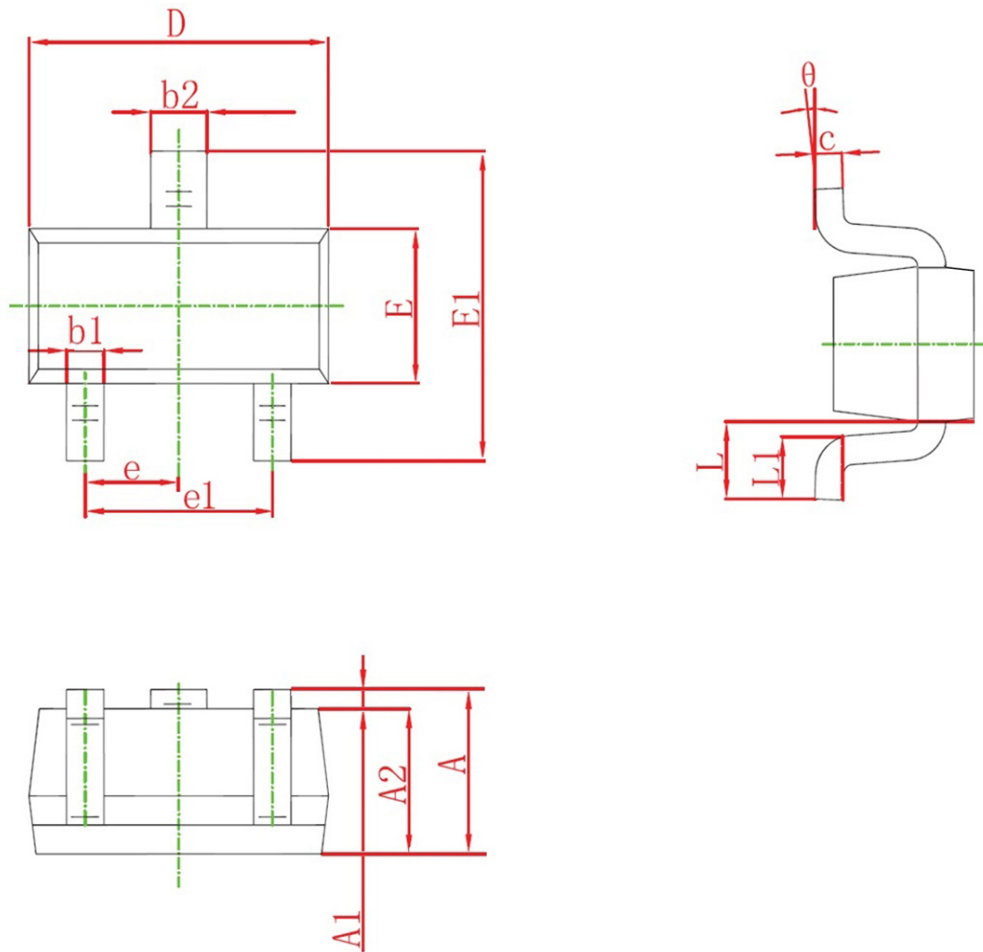
Capacitance Characteristics



Power Derating Curve



SOT-523 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In 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	0.500TYP		0.020TYP	
e1	0.900	1.100	0.035	0.043
L	0.400REF		0.016REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°