

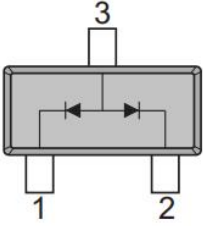
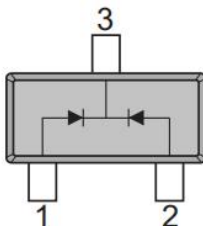
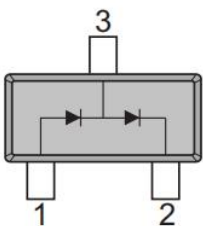


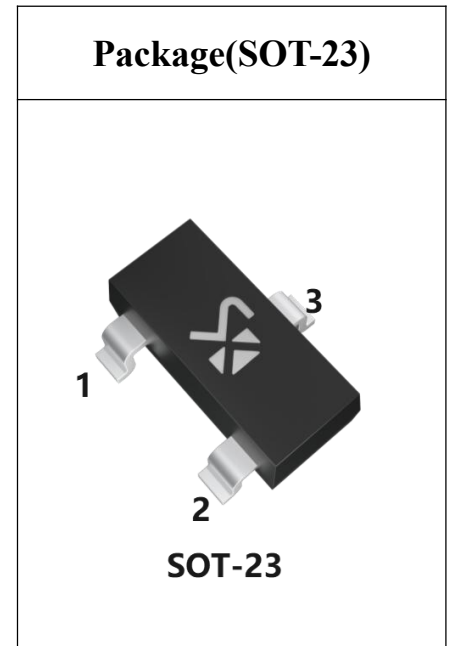
BAW56/BAV70/BAV99

Switching Diode

Features

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

BAW56	BAV70	BAV99
		
MARKING:A1	MARKING:A4	MARKING:A7



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=1\text{ms}$	I_{FSM}	1.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	R_{thJA}	556	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$	70			V
Forward voltage	V_{F1}	$I_F=1\text{mA}$			0.715	V
	V_{F2}	$I_F=10\text{mA}$			0.855	V
	V_{F3}	$I_F=50\text{mA}$			1	V
	V_{F4}	$I_F=150\text{mA}$			1.25	V
Reverse current	I_R	$V_R=70\text{V}$			2.5	μA
Capacitance between terminals	C_T	$V_R=0, f=1\text{MHz}$			1.5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			6	ns



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Typical Characteristics

Fig.1 Power Derating Curve

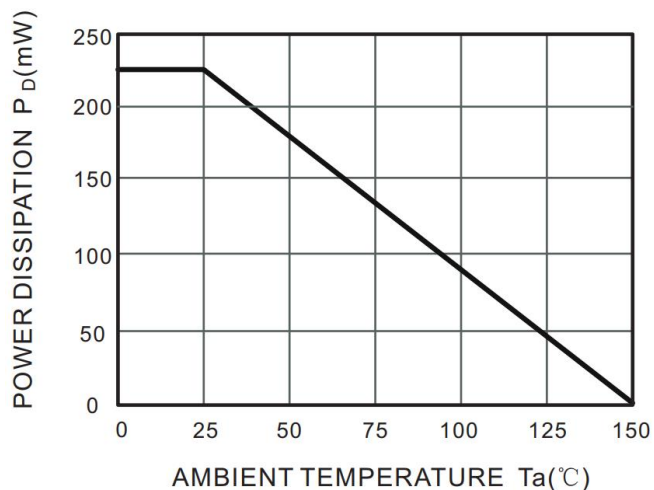


Fig.2 Reverse Characteristics

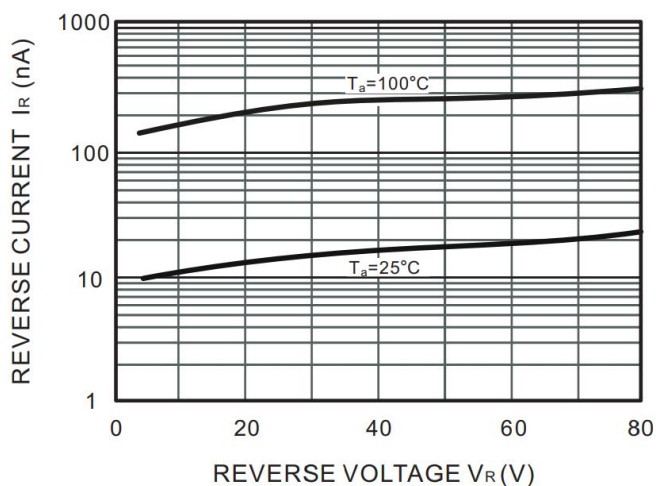


Fig.3 Forward Characteristics

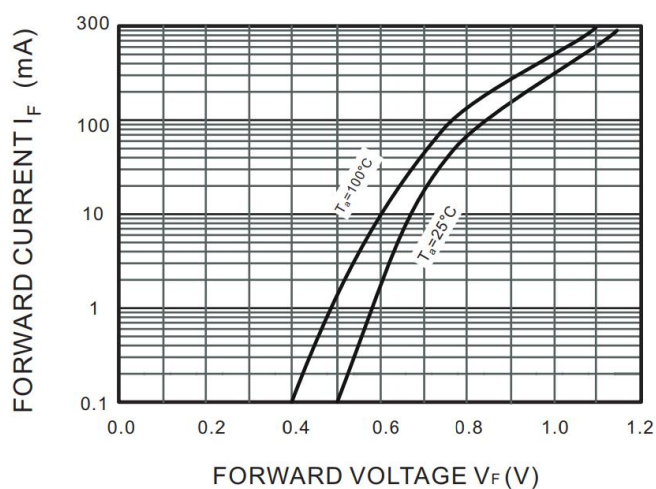
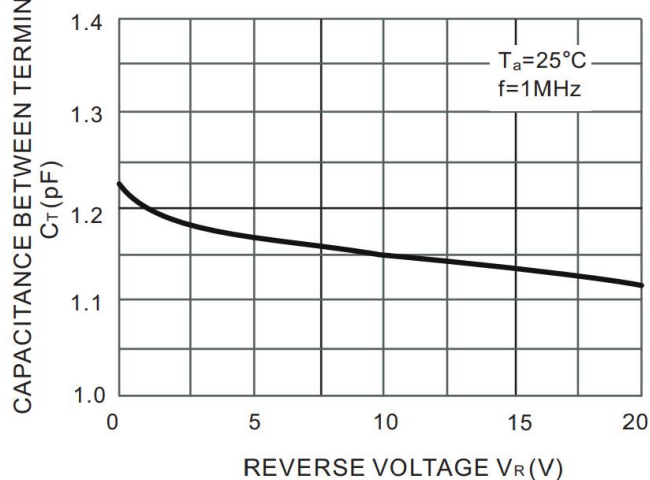


Fig.4 Capacitance Characteristics



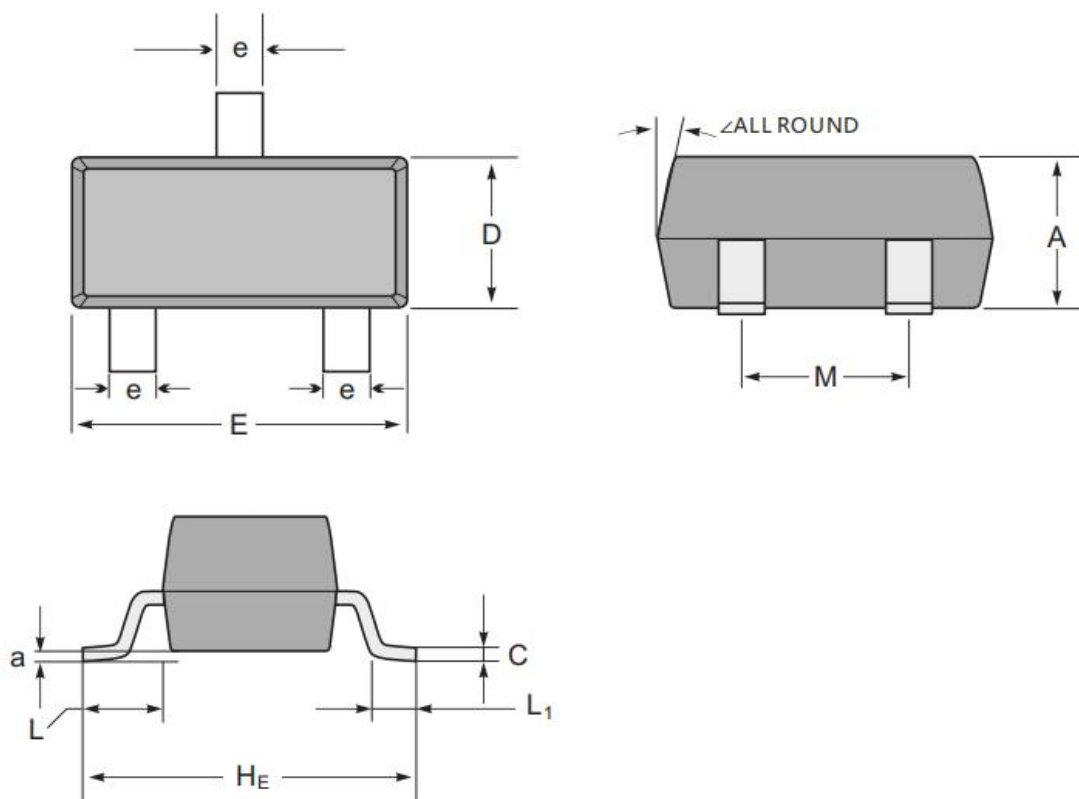


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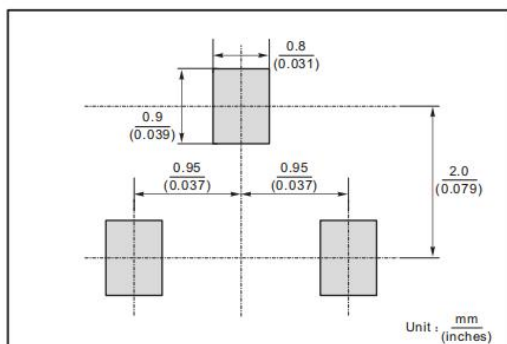
Package Information

SOT-23

Dimensions in mm



The recommended mounting pad size



UNIT		A	C	D	E	HE	e	M	L	L ₁	a	∠
mm	max	1.1	0.20	1.4	3.0	2.6	0.6	1.95	0.55 (ref)	0.36 (ref)	0.15	12°
	min	0.9	0.08	1.2	2.8	2.2	0.35	1.7			0.0	
mil	max	43	7.9	55	118	102	24	77	22 (ref)	14 (ref)	6	
	min	35	3.1	47	110	87	13	67			0.0	