

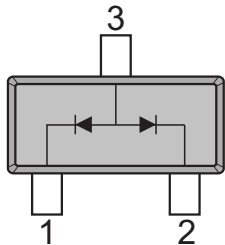
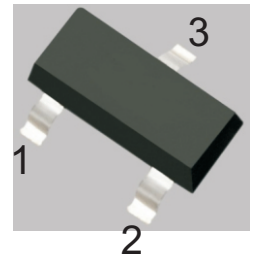


Switching Diodes

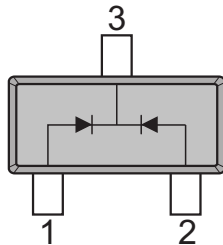
FEATURES

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

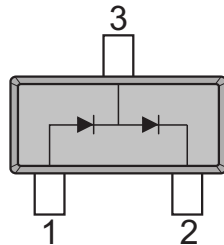
SOT-23



BAW56



BAV70



BAV99

Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	R_{thJA}	556	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55 ~ +150	°C

Electrical Characteristics@Ta=25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R=100\mu A$	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}	$V_R=150\text{mA}$			1.25	V
Reverse current	I_R	$V_R=70\text{V}$			2.5	μA
Capacitance between terminals	t_{rr}	$V_R=0, f=1\text{MHz}$			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



Fig.1 Power Derating Curve

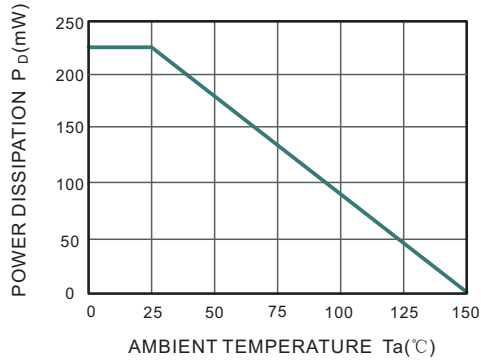


Fig.2 Reverse Characteristics

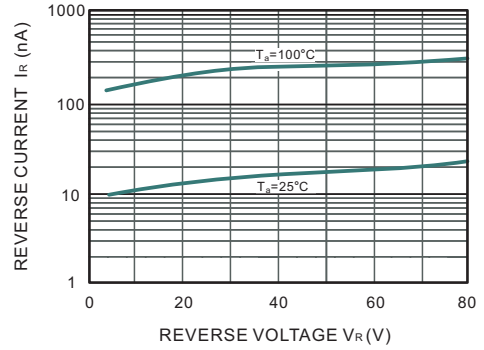


Fig.3 Forward Characteristics

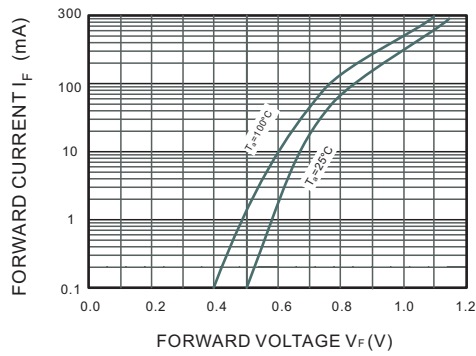
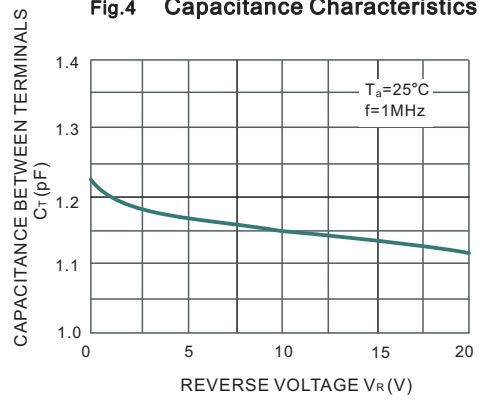
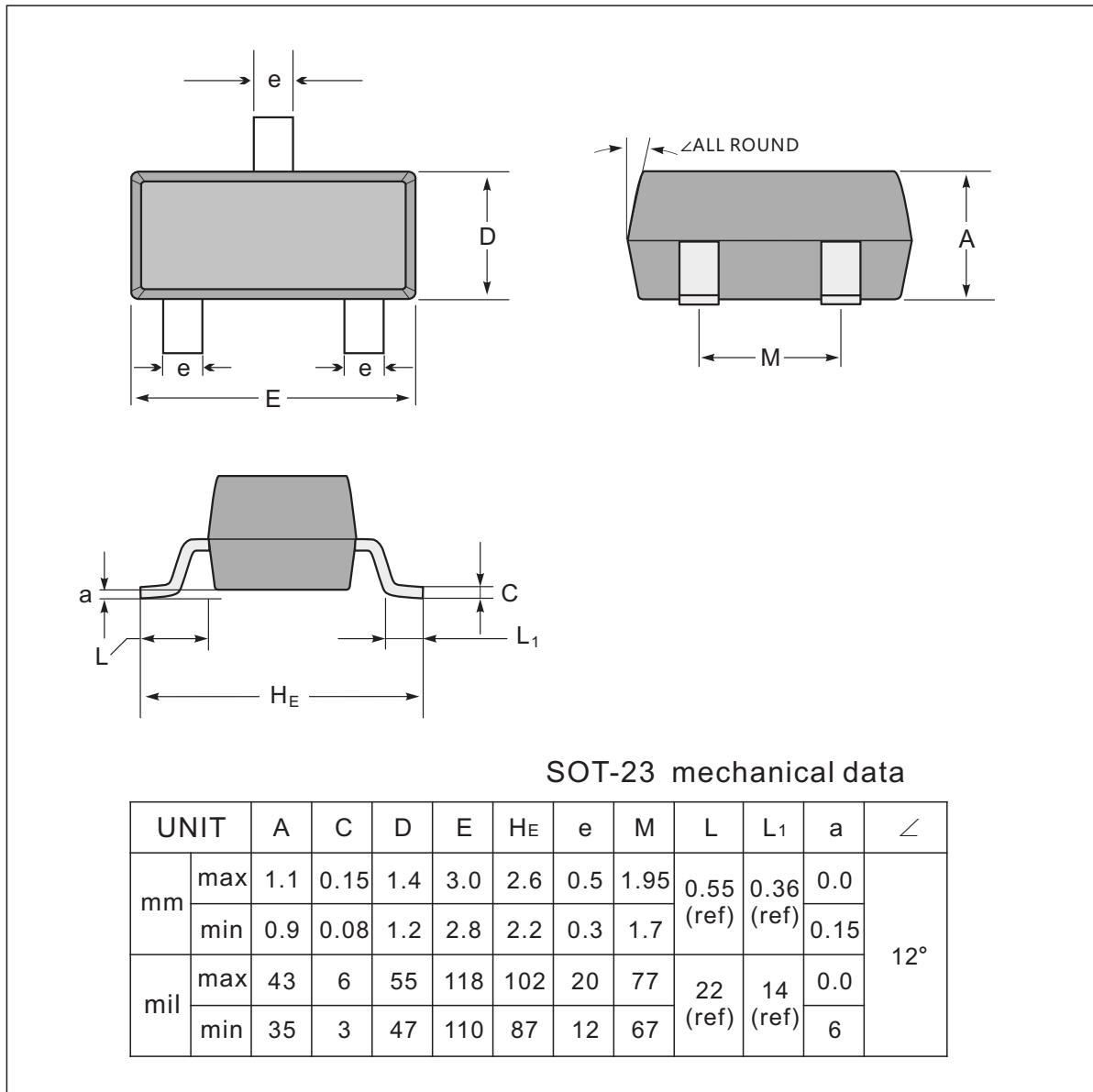


Fig.4 Capacitance Characteristics

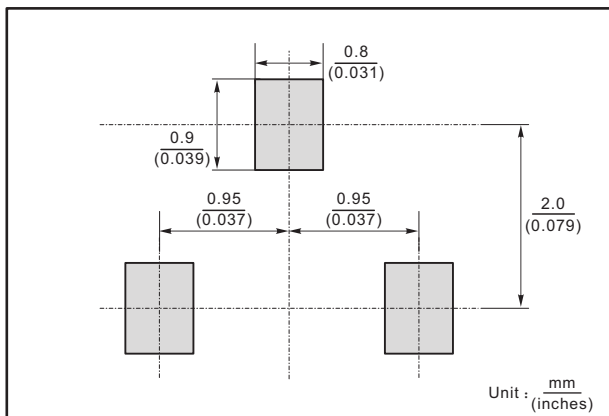




SOT-23 Package Outline Dimensions



The recommended mounting pad size



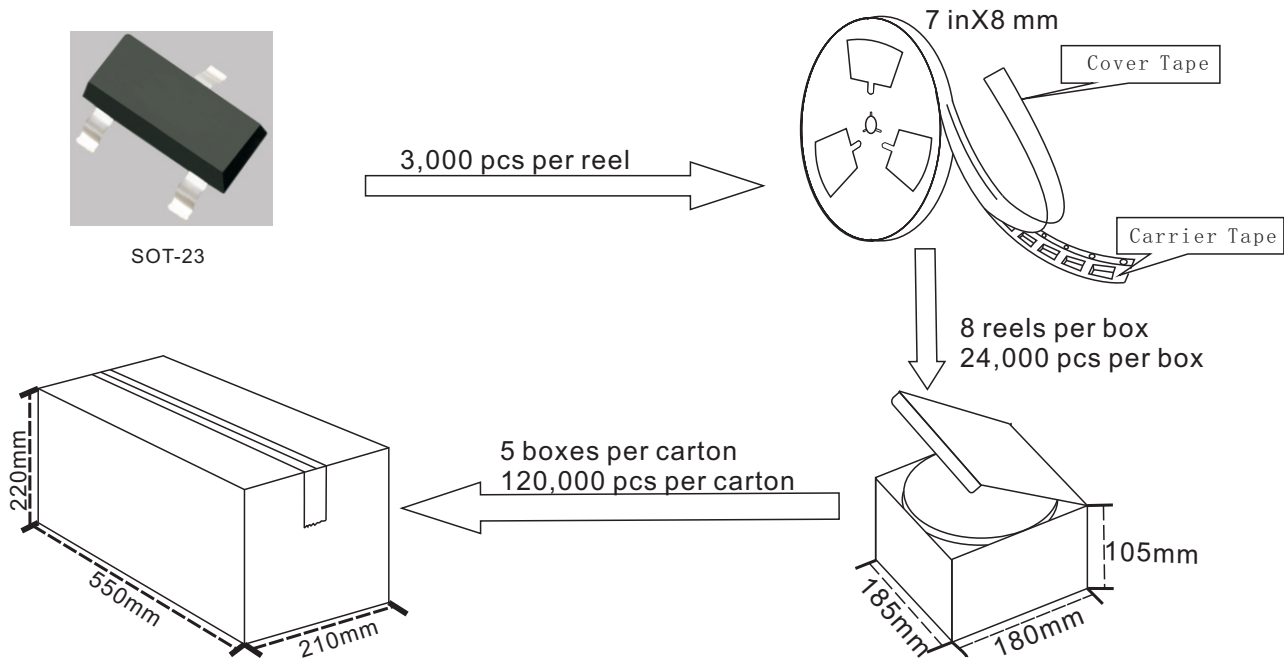
Marking

Type number	Marking code
BAW56	A1
BAV70	A4
BAV99	A7

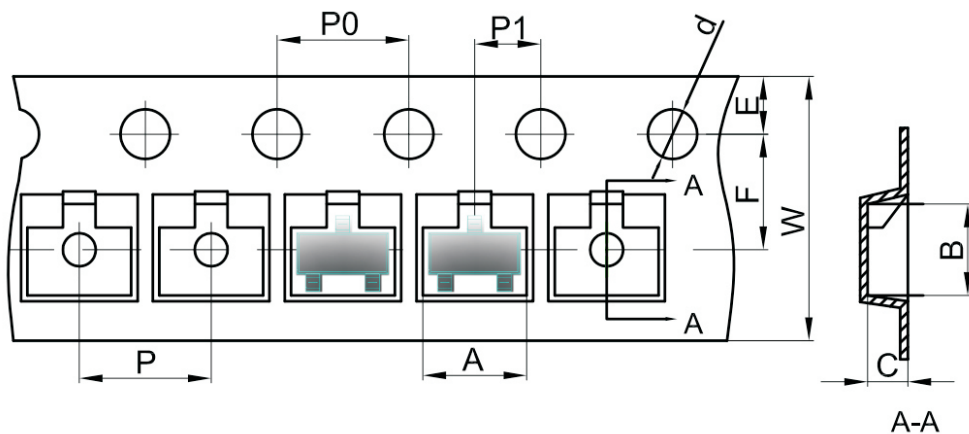


SOT-23 Packing

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



SOT-23 Embossed Carrier Tape



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

