

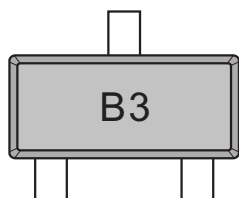


Switching Diodes

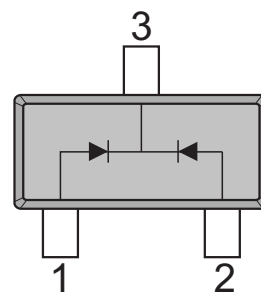
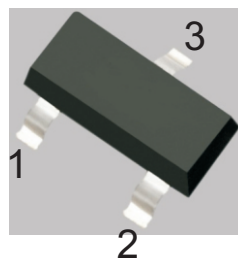
FEATURES

- Low forward voltage : $V_F(3) = 0.9\text{ V(Typ.)}$
- Fast reverse recovery time: $t_{rr} = 1.6\text{ ns(Typ.)}$
- Small Total Capacitance : $C_T = 0.9\text{ pF(Typ.)}$

MARKING: B3



SOT-23



Maximum Ratings @ $T_a=25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Peak Reverse voltage	V_{RM}	85	V
DC Blocking Voltage	V_R	80	V
Average Rectified Output Current	I_o	100	mA
Peak forward surge current	I_{FM}	300	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

Electrical Characteristics@ $T_a=25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$	80			V
Forward voltage	V_{F1}	$I_F=1\text{ mA}$		0.6		V
	V_{F2}	$I_F=10\text{mA}$		0.72		V
	V_{F3}	$I_F=100\text{mA}$		0.9	1.2	V
Reverse voltage leakage current	I_{R1}	$V_R=30\text{V}$			0.1	μA
	I_{R2}	$V_R=80\text{V}$			0.5	μA
Capacitance between terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$		0.9	3.0	pF
Reverse recovery time	t_{rr}	$I_F=10\text{mA}$		1.6	4.0	ns



Fig.1 Power Derating Curve

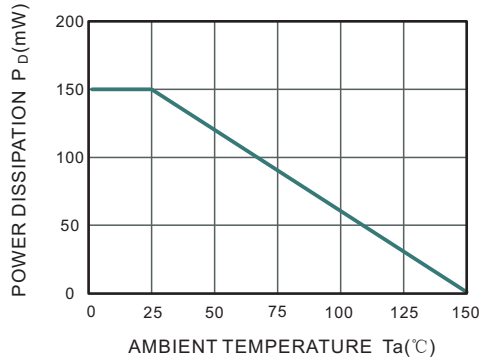


Fig.2 Reverse Characteristics

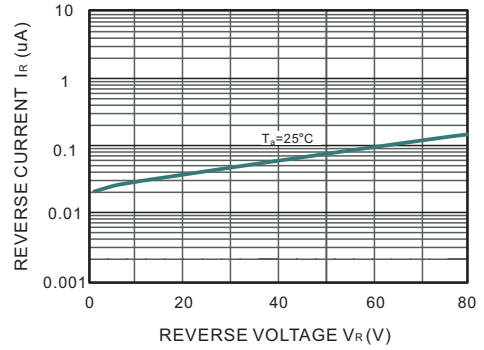


Fig.3 Forward Characteristics

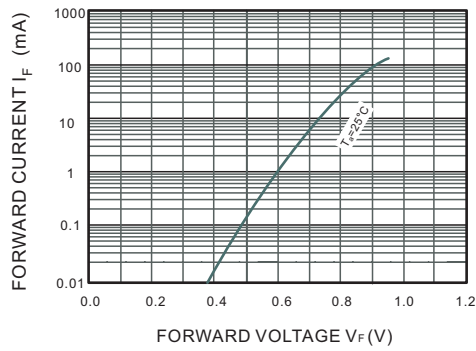
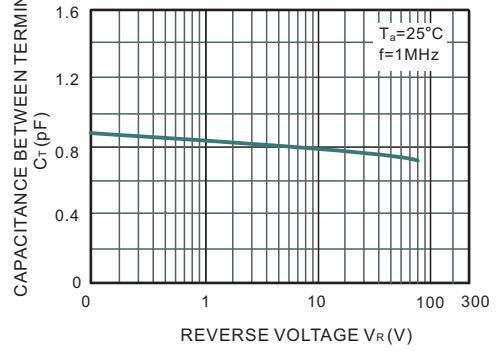
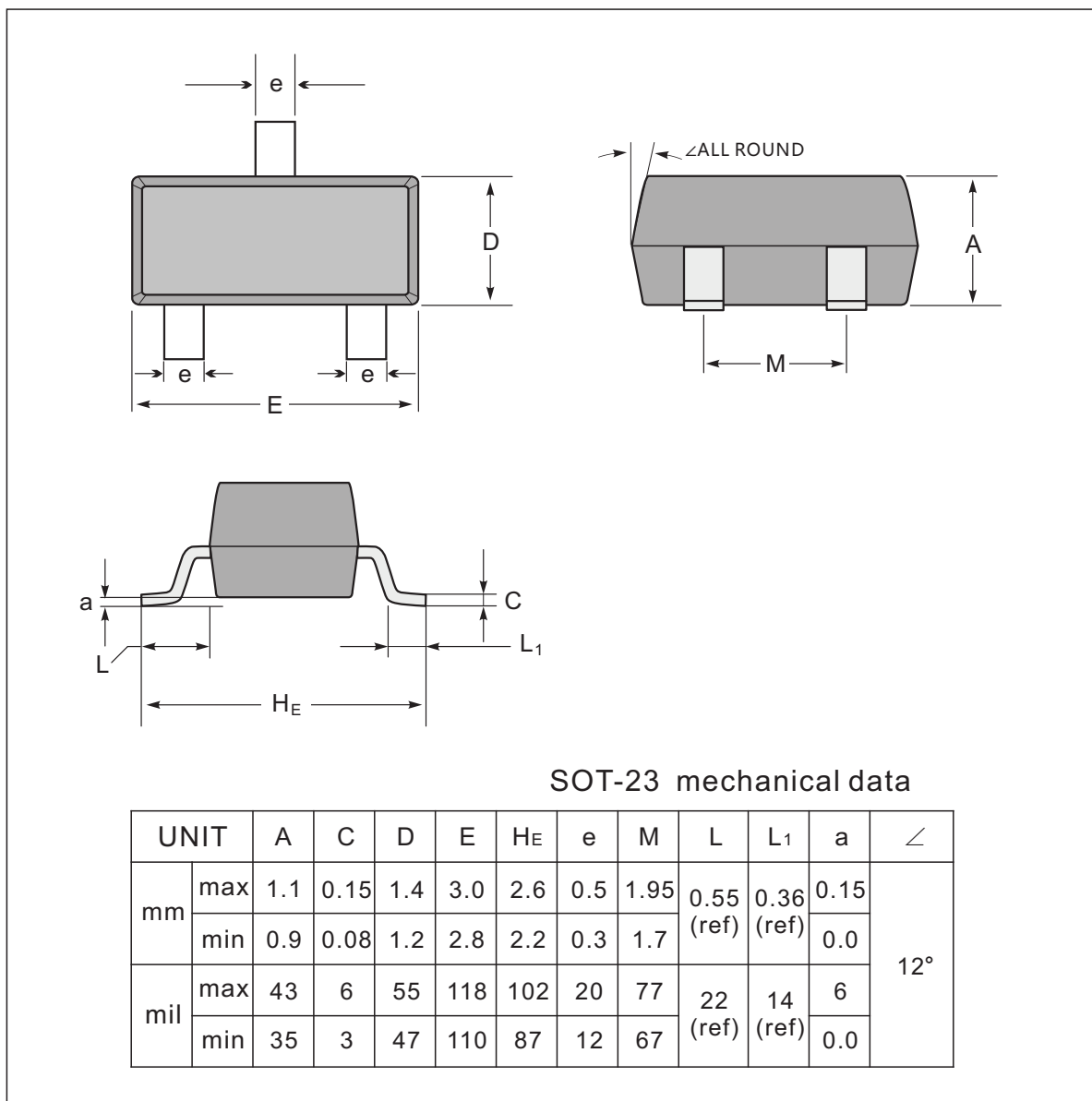


Fig.4 Capacitance Characteristics

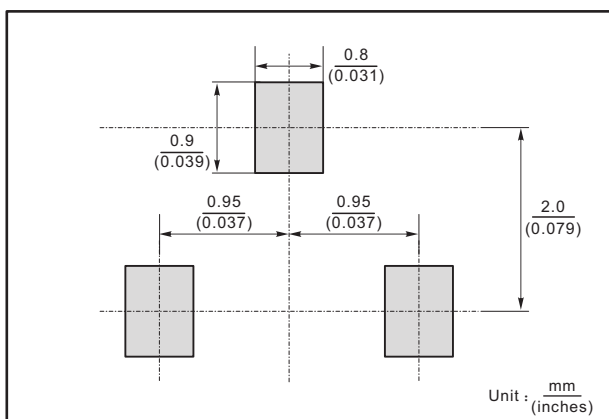




SOT-23 Package Outline Dimensions



The recommended mounting pad size



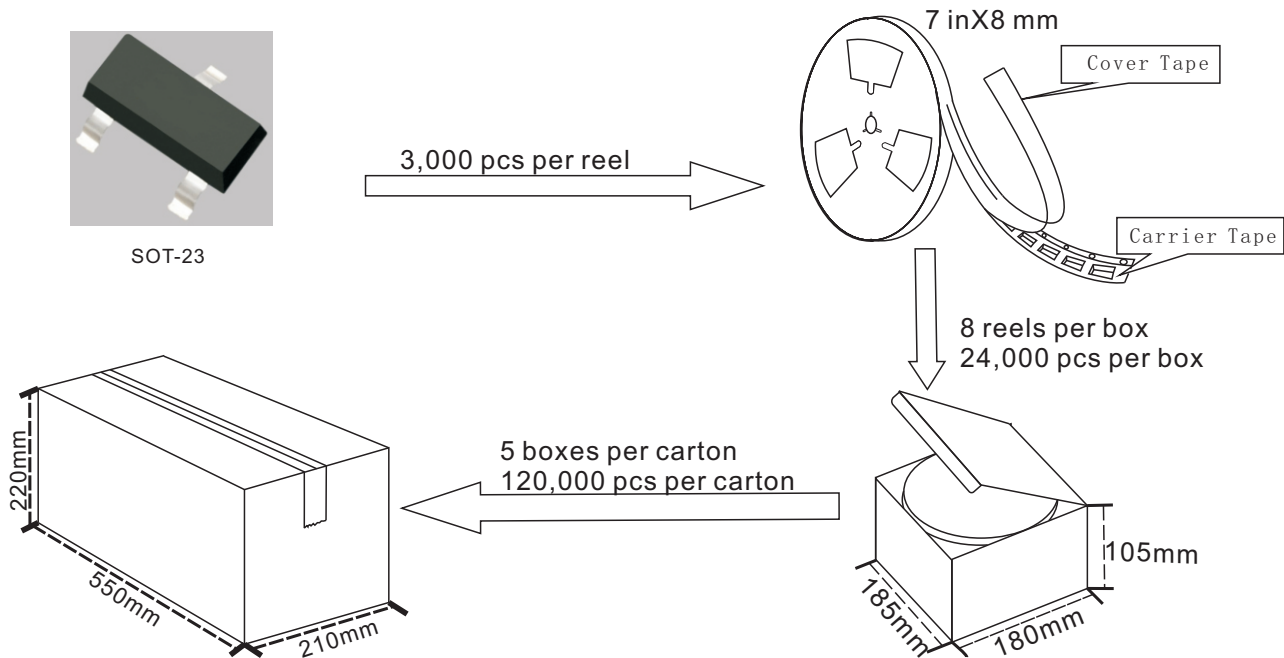
Marking

Type number	Marking code
1SS184	B3

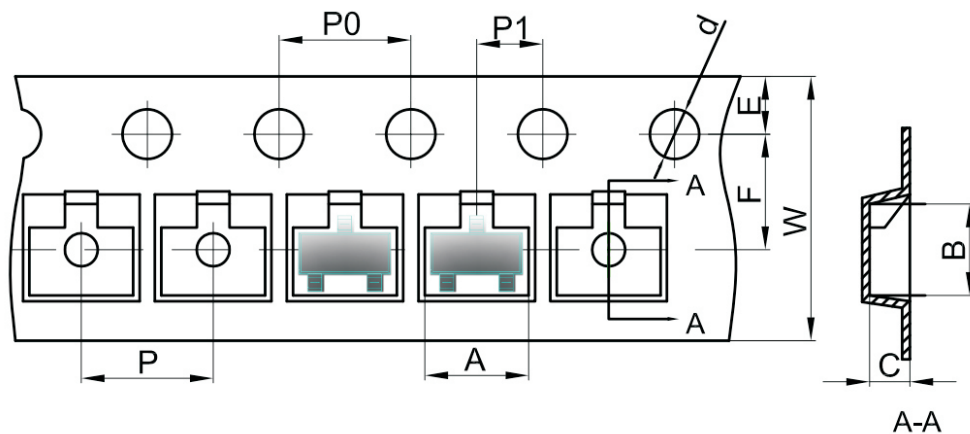


SOT-23 Packing

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

