

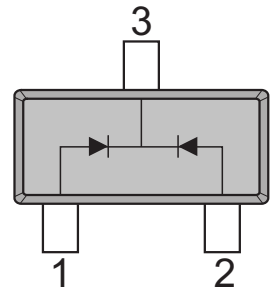
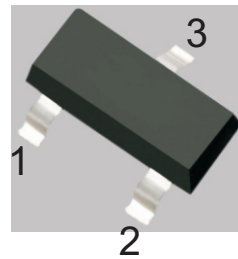
Switching Diodes

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 @Ta=25°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	°C
Storage temperature range	T_{STG}	-55 ~ +150	°C

Electrical Characteristics@Ta=25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \mu A$	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

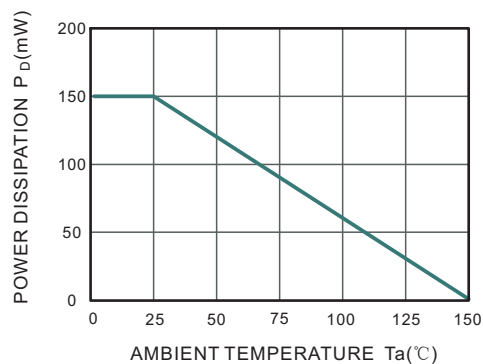


Fig.2 Reverse Characteristics

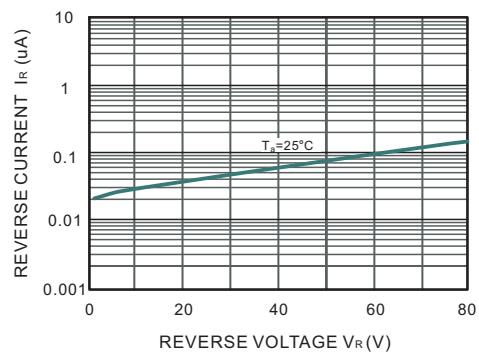


Fig.3 Forward Characteristics

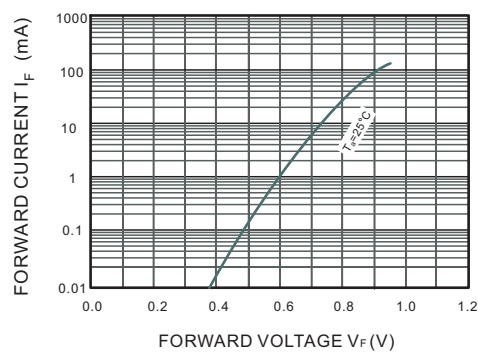
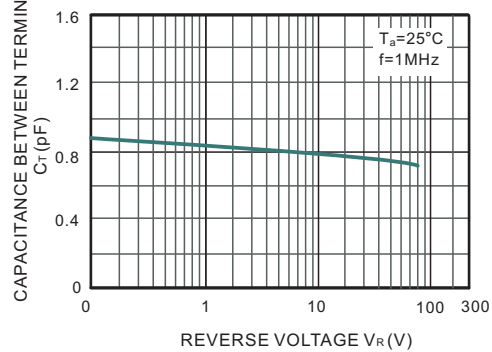
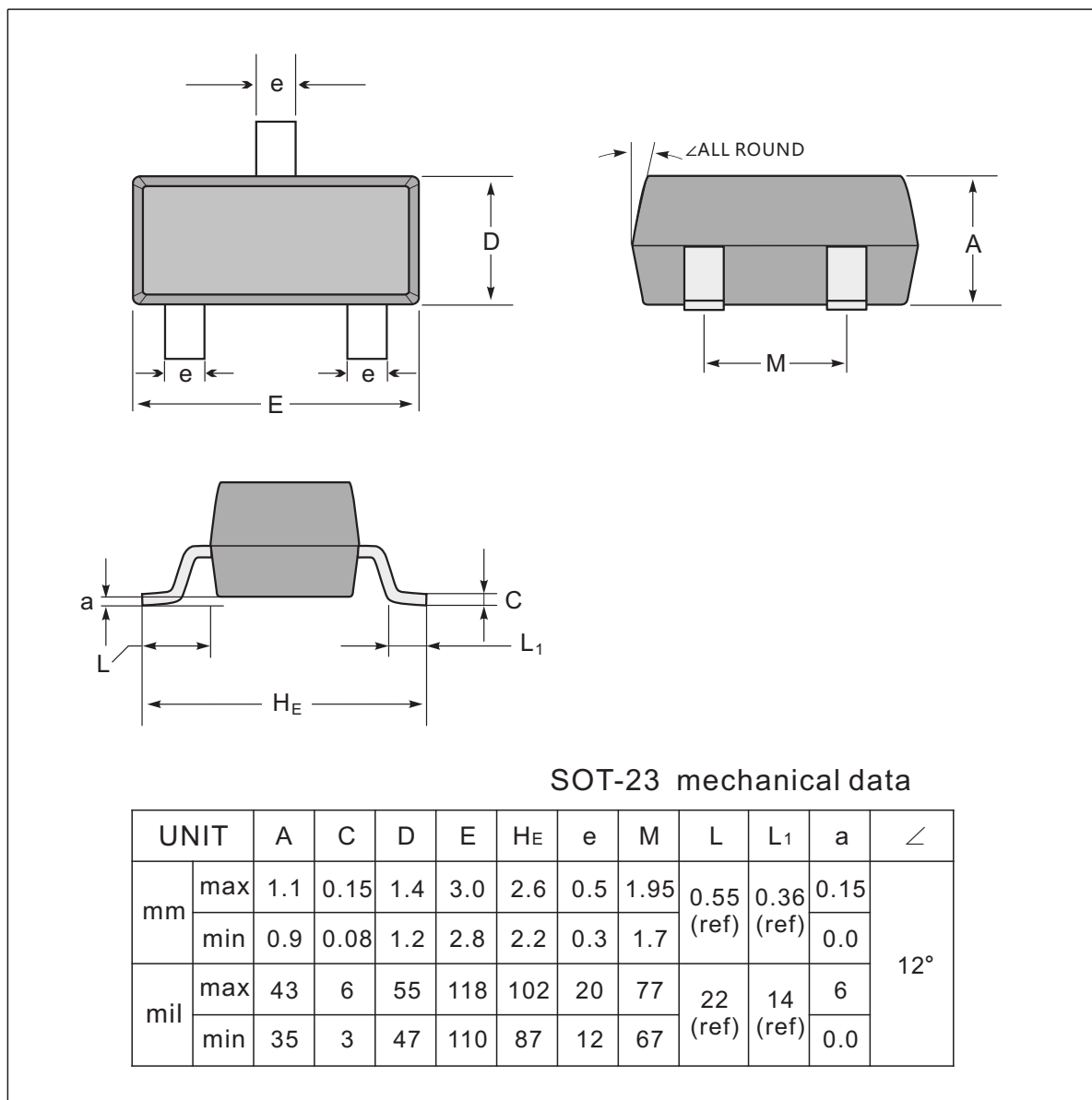


Fig.4 Capacitance Characteristics

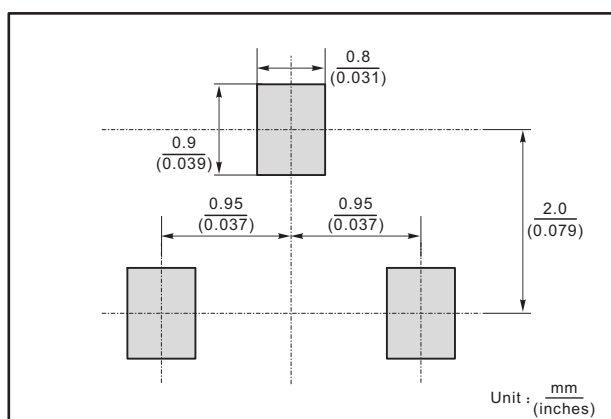




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
1SS184	B3