

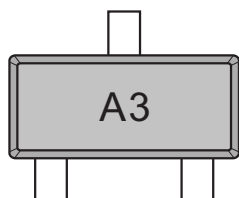


## Switching Diodes

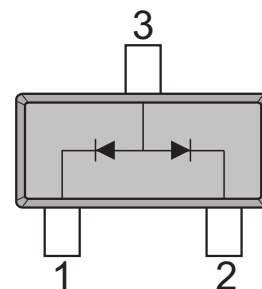
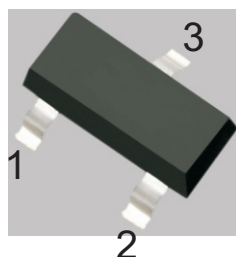
### FEATURES

- Low forward voltage
- Fast reverse recovery time

MARKING: A3



### SOT-23



### Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	85	V
DC Blocking Voltage	$V_R$	80	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_o$	100	mA
Non-Repetitive Peak Forward Surge Current @t=1ms	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	150	mW
Thermal Resistance from Junction to Ambient	$R_{thJA}$	833	°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	$V_{(BR)}$	$I_R=100\mu A$	80			V
Forward voltage	$V_{F1}$	$I_F=1\text{ mA}$		0.61		V
	$V_{F2}$	$I_F=10\text{ mA}$		0.74		V
	$V_{F3}$	$I_F=100\text{ mA}$		0.92	1.2	V
Reverse current	$I_{R1}$	$V_R=30\text{ V}$			0.1	uA
	$I_{R2}$	$V_R=80\text{ V}$			0.5	uA
Capacitance between terminals	$C_T$	$V_R=0, f=1\text{ MHz}$		2.2	4.0	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{ mA}, I_{rr}=0.1 \times I_R$		1.6	4.0	ns



Fig.1 Power Derating Curve

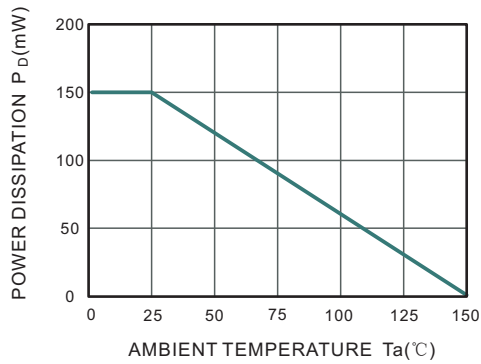


Fig.2 Reverse Characteristics

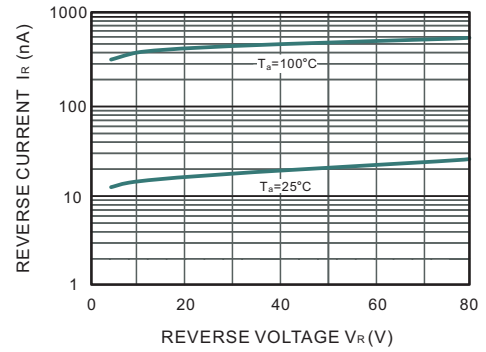


Fig.3 Forward Characteristics

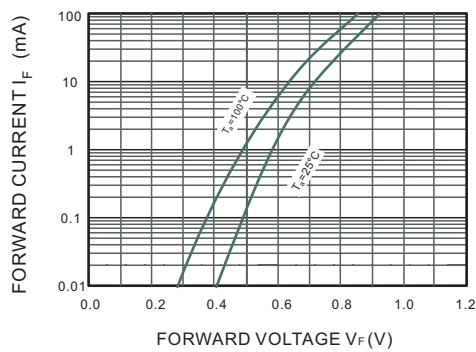
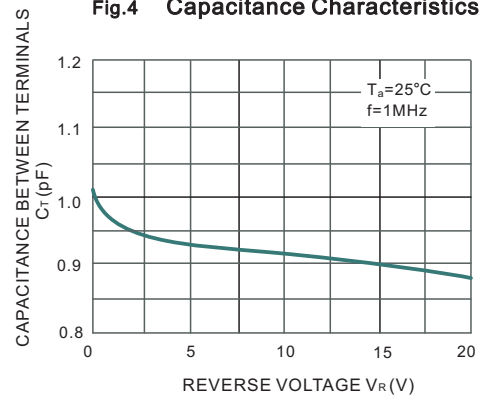
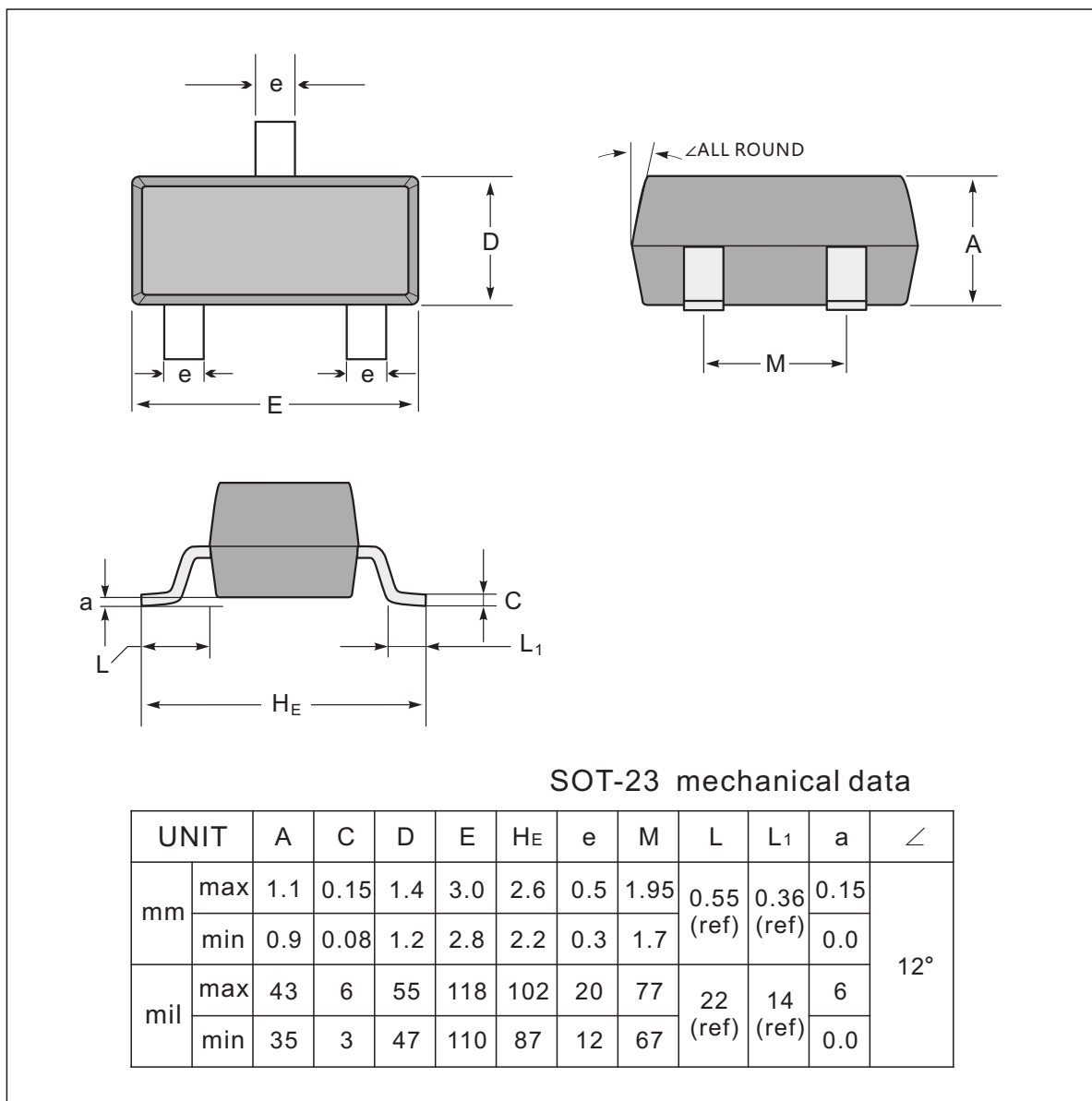


Fig.4 Capacitance Characteristics

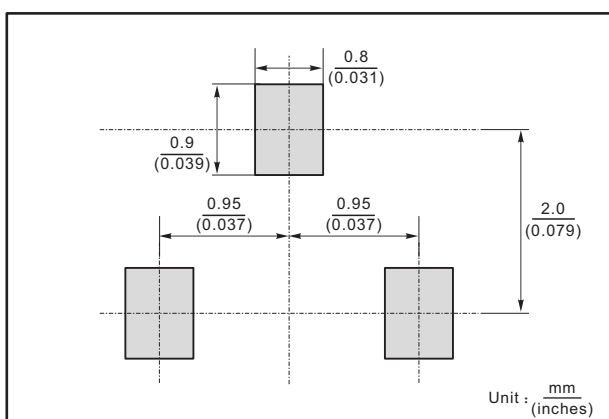




### SOT-23 Package Outline Dimensions



#### The recommended mounting pad size



#### Marking

Type number	Marking code
1SS181	A3