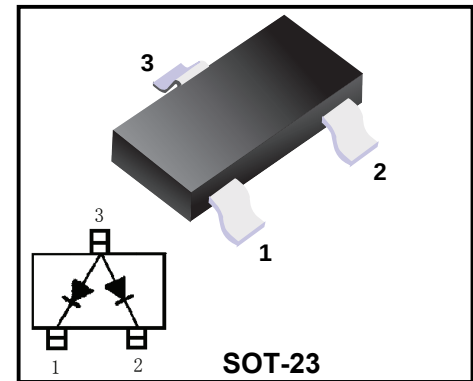


Switching Diodes

Features

- Low forward voltage. : $V_F(3)=0.92V$ (Typ.)
- Fast reverse recovery time : $t_{rr}=1.6ns$ (Typ.)
- Small total capacitance : $C_T=2.2pF$ (Typ.)



Marking Code

1SS181	A3
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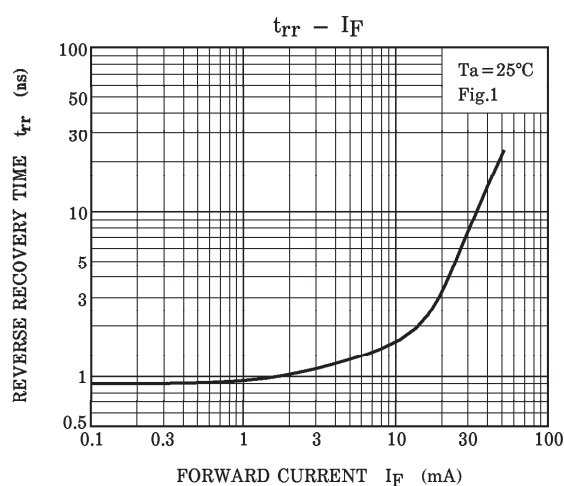
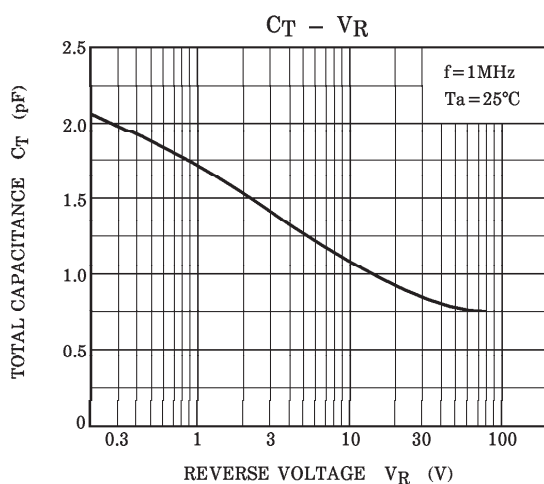
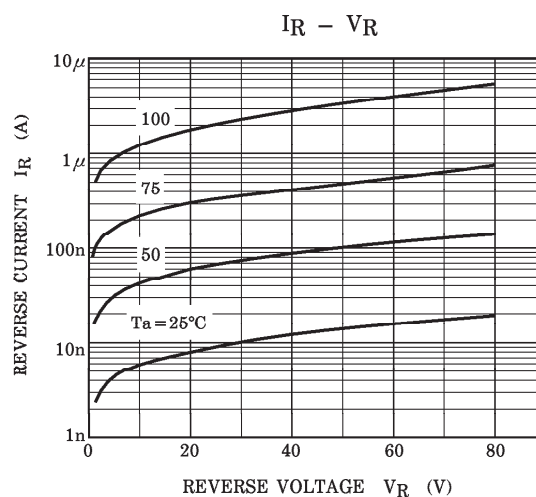
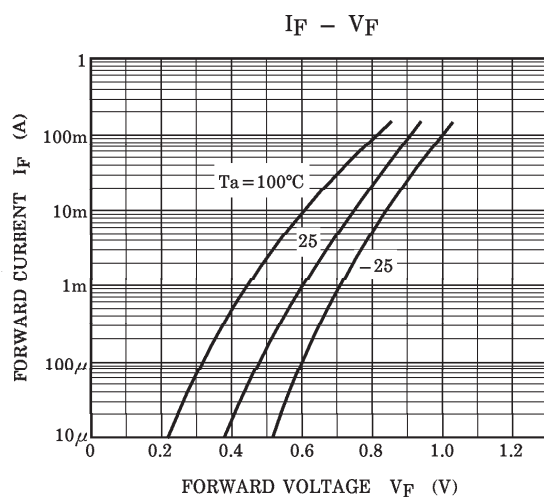
Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Peak reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Average forward current	I_o	100	mA
Peak forward current	I_{FM}	300	mA
Surge current (10ms)	I_{FSM}	2	A
Power dissipation	P	150	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics (Ta=25°C unless otherwise specified.)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R=100\mu A$	80			V
Forward voltage	V_{F1}	$I_F=1\text{ mA}$		0.61		
	V_{F2}	$I_F=10\text{ mA}$		0.74		
	V_{F3}	$I_F=100\text{ mA}$		0.92	1.2	
Reverse voltage leakage current	I_{R1}	$V_R=30\text{ V}$			0.1	uA
	I_{R2}	$V_R=80\text{ V}$			0.5	
Capacitance between terminals	C_T	$V_R=0\text{ V}, f=1\text{ MHz}$		2.2	4	pF
Reverse recovery time	t_{rr}	$I_F=10\text{ mA}$		1.6	4	ns

Typical Characteristics



Ordering information

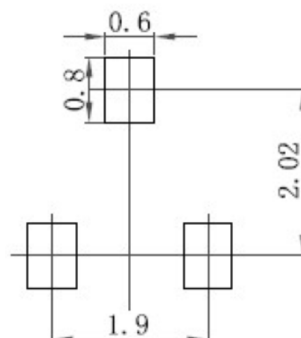
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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