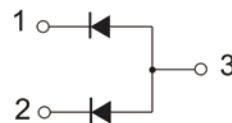


Features

- Low forward voltage
- Fast reverse recovery time



SOT23



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	85	V
V_R	DC Blocking Voltage	80	V
I_{FM}	Forward Continuous Current	300	mA
I_o	Average Rectified Output Current	100	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_d	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	833	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

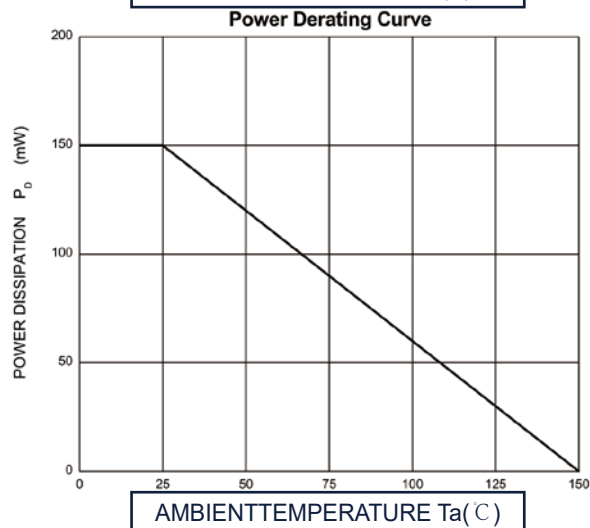
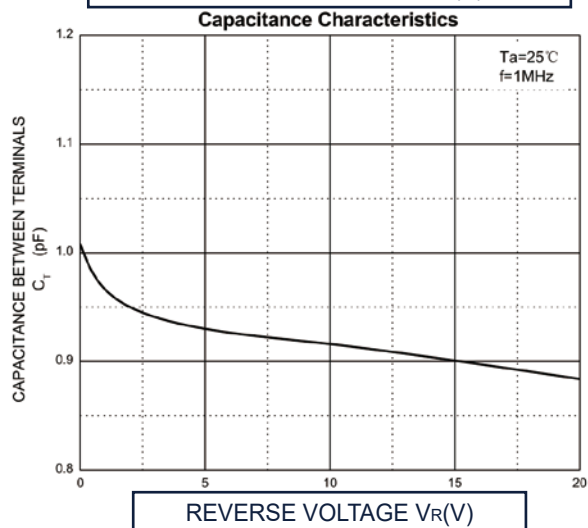
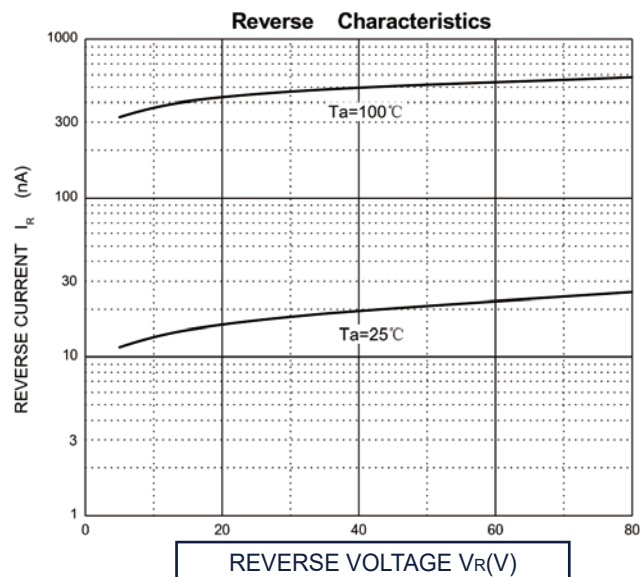
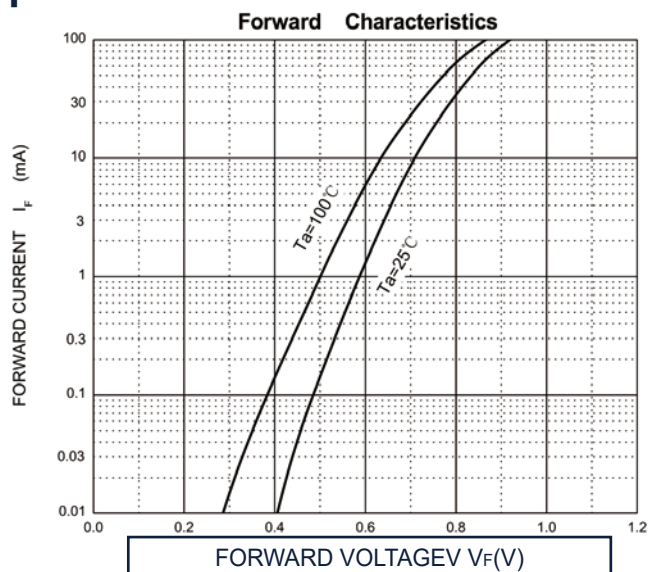
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu\text{A}$	80			V
V_{F1}	Forward voltage	$I_F=1\text{mA}$		0.61		V
V_{F2}		$I_F=10\text{mA}$		0.74		V
V_{F3}		$I_F=100\text{mA}$		0.92	1.2	V
I_{R1}	Forward voltage	$V_R=30\text{V}$			0.1	μA
I_{R2}		$V_R=80\text{V}$			0.5	μA
C_T	Capacitance between terminals	$V_R=0\text{V}, f=1\text{MHz}$		2.2	4.0	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$		1.6	4.0	nS

Ordering information

Product ID	Marking	Naming rule	Pack	Qty(PCS)
1SS181	A3	1SS181 产品名称 product name	SOT23	3000



Typical Characteristics





SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°