



**浩畅半导体**  
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**1SS181** Switching DIODES

**SOT-23 Plastic-Encapsulate Diodes**

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客户确认：

公司签章：

部门

工程部

品保部

采购部

签名

日期

**SOT-23 Plastic-Encapsulate Diodes****1SS181** Switching DIODES

## FEATURES

- Low forward voltage :  $V_{F(3)}=0.92V(\text{typ.})$
- Fast reverse recovery time :  $t_{rr}=1.6ns(\text{typ.})$

MARKING: A3

SOT-23



1. CATHODE
2. CATHODE
3. ANODE

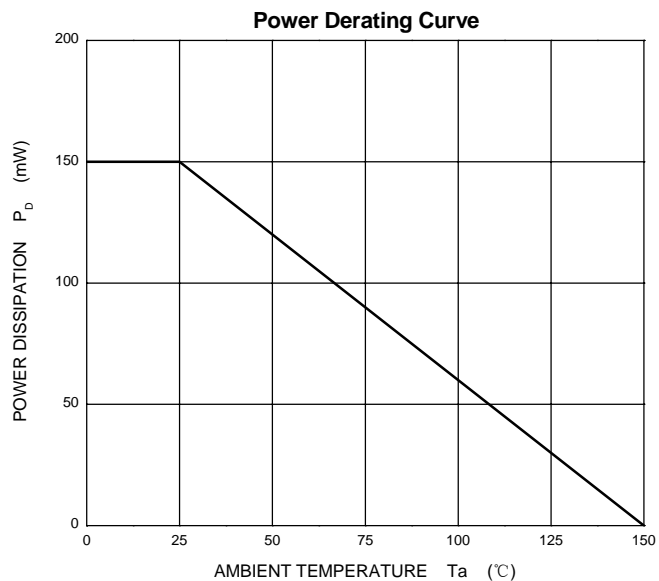
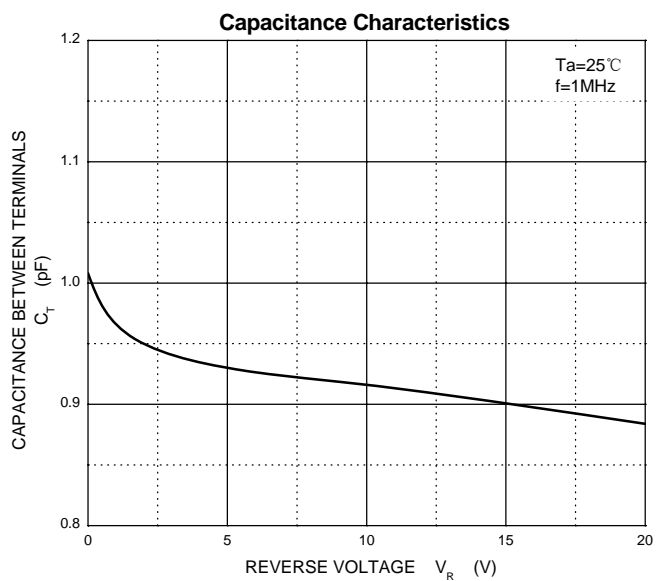
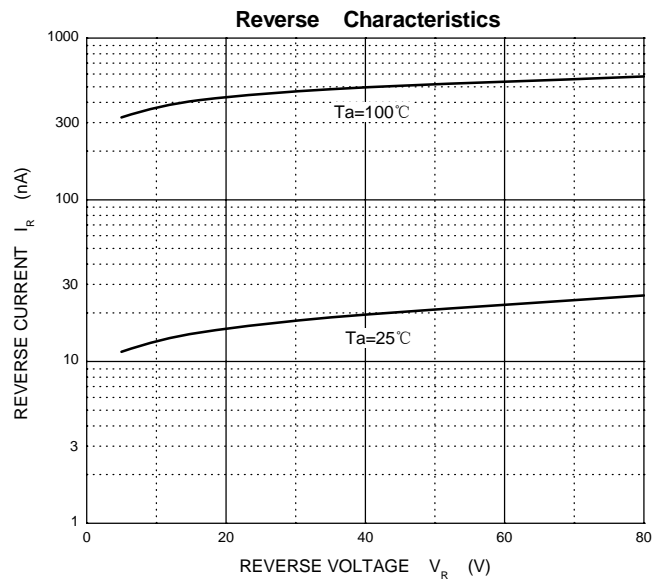
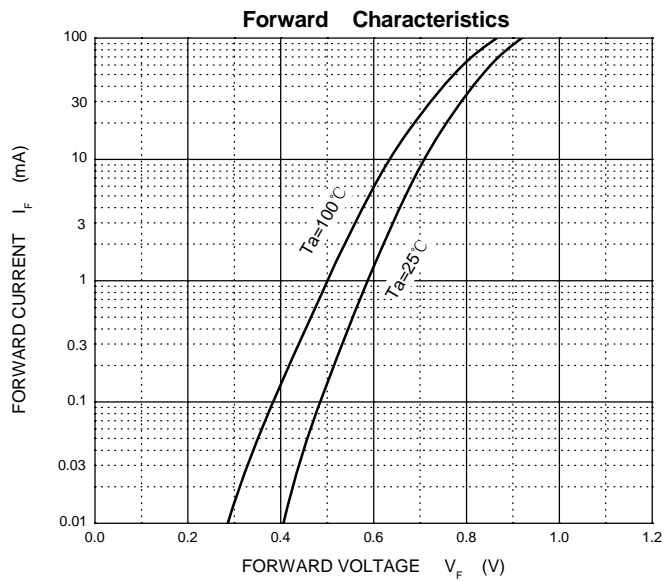
Maximum Ratings @ $T_A=25^\circ\text{C}$ 

Parameter Symbol		Limits	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
Power Dissipation	$P_D$	150	mW
Junction temperature	$T_J$	125	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55-125	$^\circ\text{C}$

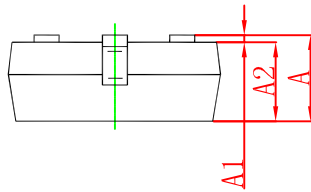
Electrical Characteristics @ $T_A=25^\circ\text{C}$ 

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

# Typical Characteristics



## SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

## SOT-23 Suggested Pad Layout



### Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.