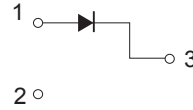


Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Schematic Diagram



SOT-23

Absolute Maximum Ratings

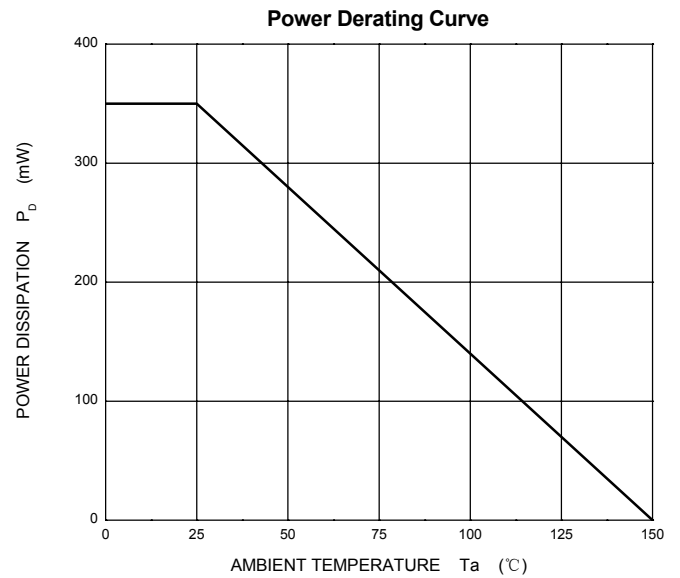
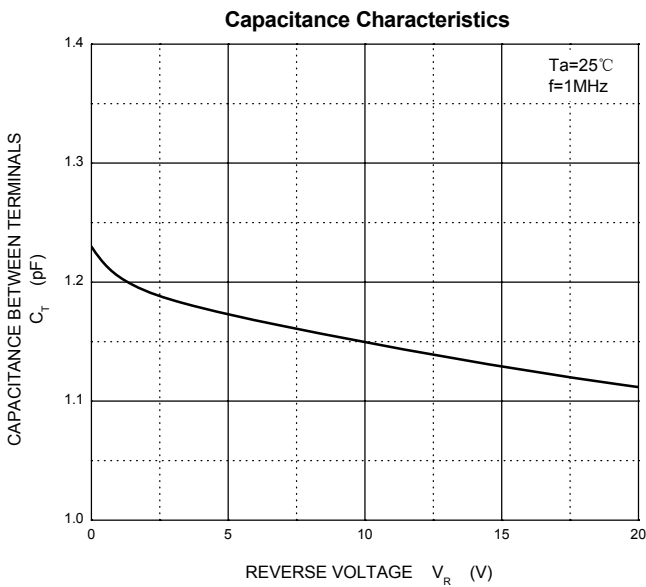
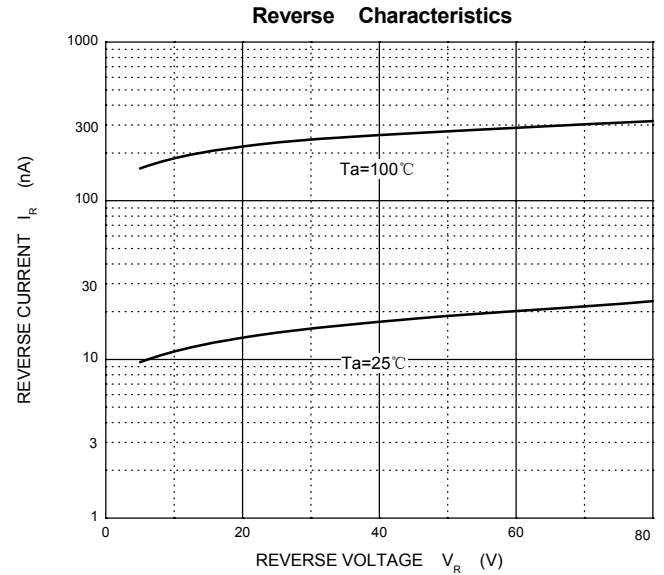
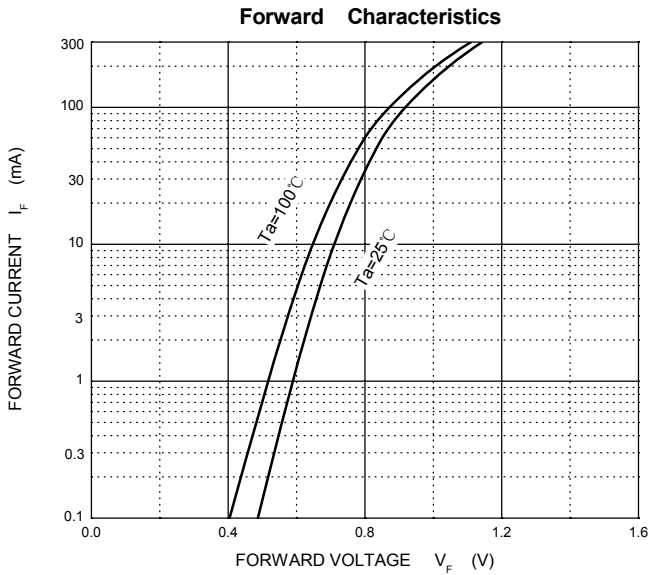
($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Rectified Output Current	I_O	300	mA
Non-Repetitive Peak Forward Surge Current @8.3ms	I_{FSM}	2	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

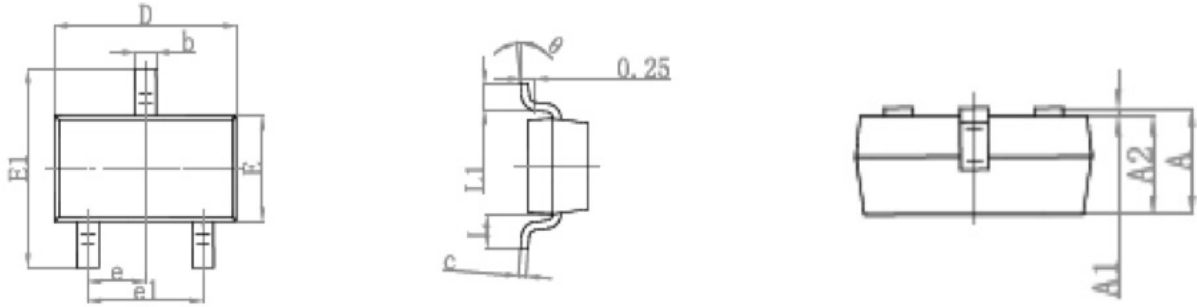
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	100		V	$I_R=100\mu\text{A}$
Forward Voltage	V_{F1}		715	mV	$I_F=1\text{mA}$
	V_{F2}		855	mV	$I_F=10\text{mA}$
	V_{F3}		1000	mV	$I_F=50\text{mA}$
	V_{F4}		1250	mV	$I_F=150\text{mA}$
Reverse Current	I_{R1}		1	μA	$V_R=75\text{V}$
	I_{R2}		25	nA	$V_R=20\text{V}$
Diode Capacitance	C_D		2	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}		4	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \cdot I_R$

Typical Characteristics Curves

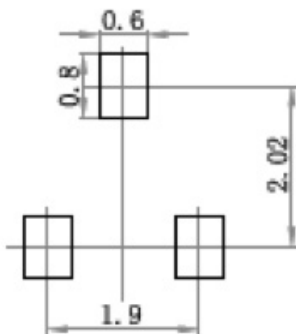


Package Outline Dimensions SOT-23



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°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.