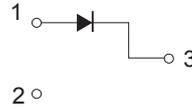


**Features**

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



Schematic Diagram



SOT-23

**Absolute Maximum Ratings**

(T<sub>A</sub>=25°C unless otherwise specified)

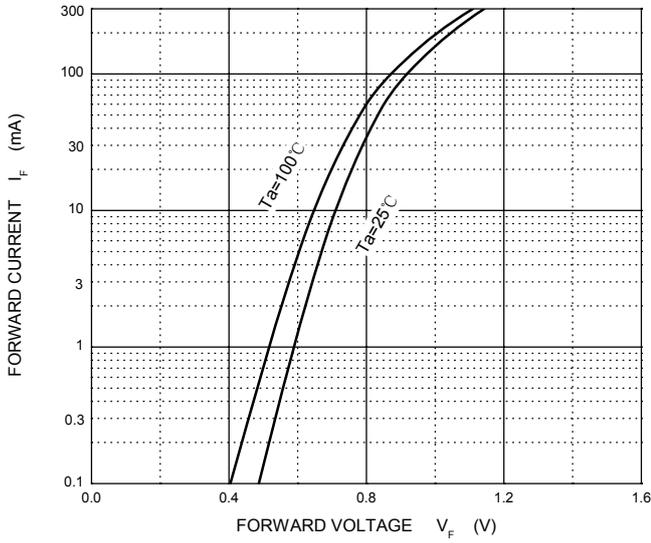
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
Average Rectified Output Current	I <sub>O</sub>	300	mA
Non-Repetitive Peak Forward Surge Current @8.3ms	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	357	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

**Electrical Characteristics** (T<sub>A</sub>=25°C unless otherwise specified)

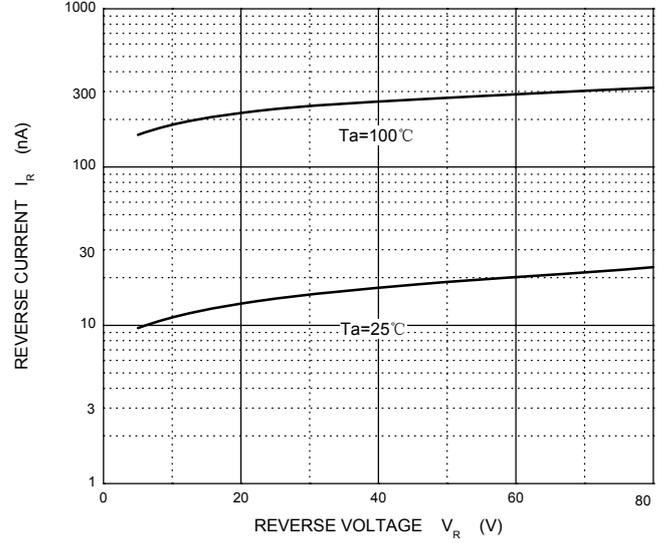
Parameter	Symbol	Min	Max	Unit	Conditions
Reverse Breakdown Voltage	V <sub>(BR)</sub>	100		V	I <sub>R</sub> =100μA
Forward Voltage	V <sub>F1</sub>		715	mV	I <sub>F</sub> =1mA
	V <sub>F2</sub>		855	mV	I <sub>F</sub> =10mA
	V <sub>F3</sub>		1000	mV	I <sub>F</sub> =50mA
	V <sub>F4</sub>		1250	mV	I <sub>F</sub> =150mA
Reverse Current	I <sub>R1</sub>		1	uA	V <sub>R</sub> =75V
	I <sub>R2</sub>		25	nA	V <sub>R</sub> =20V
Diode Capacitance	C <sub>D</sub>		2	pF	V <sub>R</sub> =0, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>		4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1*I <sub>R</sub>

**Typical Characteristics Curves**

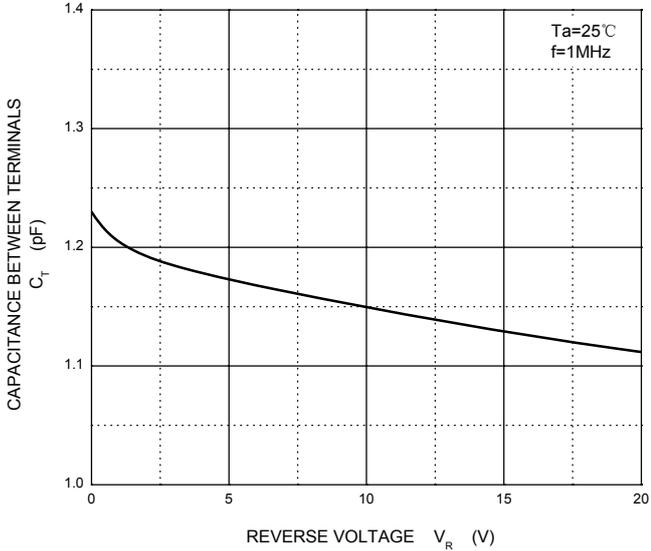
**Forward Characteristics**



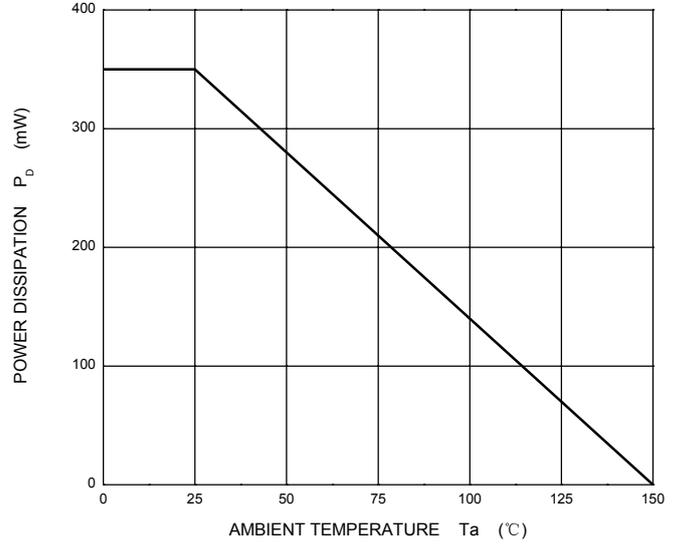
**Reverse Characteristics**



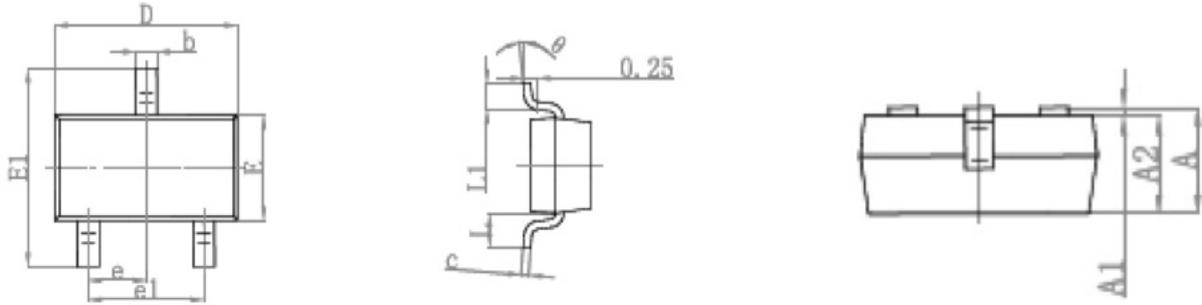
**Capacitance Characteristics**



**Power Derating Curve**

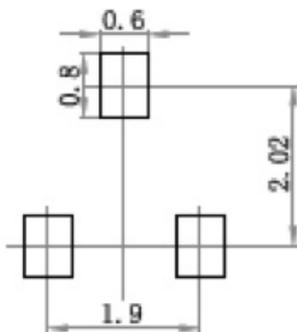


**Package Outline Dimensions SOT-23**



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:  $\pm 0.05$ mm.
3. The pad layout is for reference purposes only.