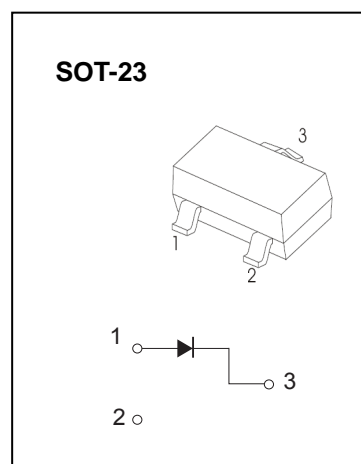


## SWITCHING DIODE

## FEATURES

- Low leakage current applications
- Medium speed switching times

## MARKING: JV



## Maximum Ratings @Ta=25°C

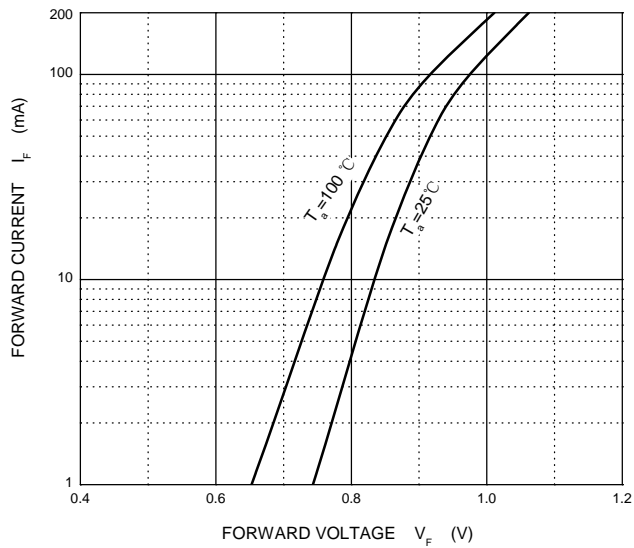
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	225	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

## Electrical Characteristics @Ta=25°C

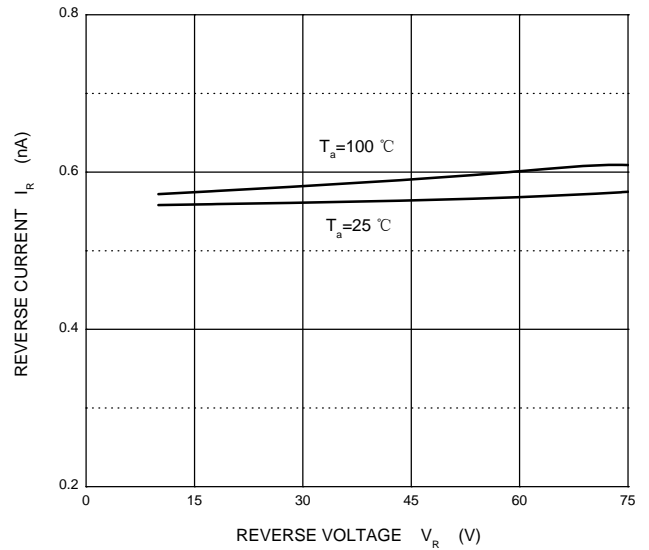
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75			V	$I_R=100\mu A$
Forward voltage	$V_{F1}$			0.9	V	$I_F=1mA$
	$V_{F2}$			1	V	$I_F=10mA$
	$V_{F3}$			1.1	V	$I_F=50mA$
	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse current	$I_R$			5	nA	$V_R=75V$
Diode capacitance	$C_{tot}$		2		pF	$V_R=0V, f=1MHz$
Reverse recovery time	$t_{rr}$			3	$\mu s$	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$

## Typical Characteristics

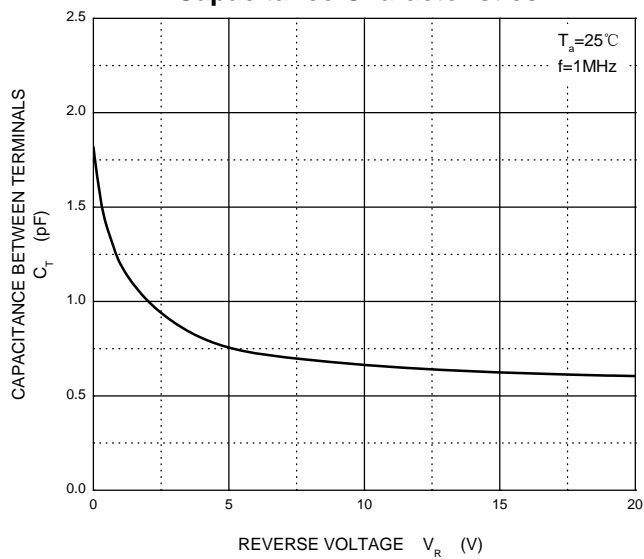
**Forward Characteristics**



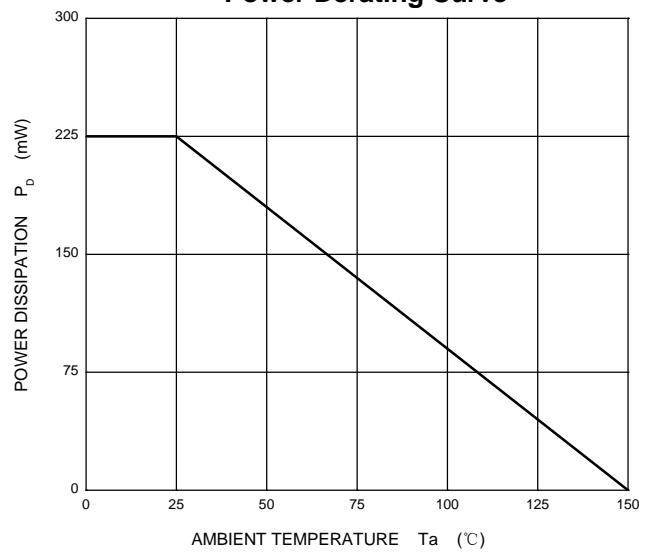
**Reverse Characteristics**



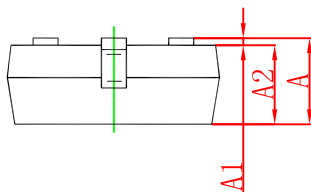
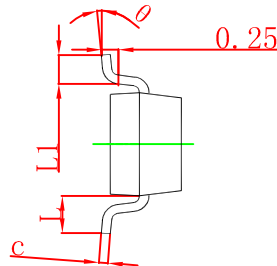
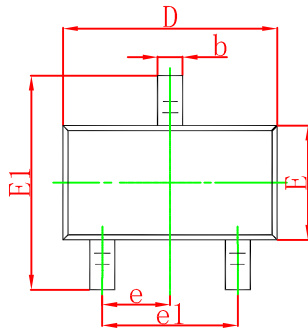
**Capacitance Characteristics**



**Power Derating Curve**

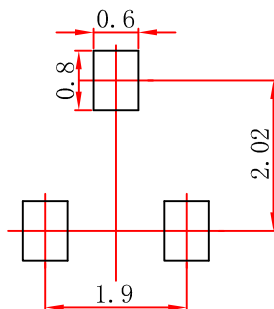


## SOT-23 Package Outline Dimensions



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.