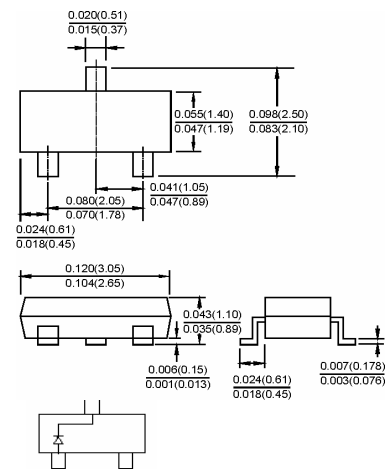


## SOT-23



Dimensions in inches and (millimeters)

## Features

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

Marking: A6

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

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	100	V
Peak Repetitive Peak reverse voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Peak forward surge current @=1.0 $\mu\text{s}$	$I_{FSM}$	2.0	A
@=1.0s		1.0	
Power Dissipation	$P_D$	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	$^{\circ}\text{C}/\text{W}$
Junction temperature	$T_j$	150	$^{\circ}\text{C}$
Storage temperature	$T_{STG}$	-55~+150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	75		V
Reverse voltage leakage current	$I_R$	$V_R=75\text{V}$		1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		0.715 0.855 1 1.25	V
Diode capacitance	$C_D$	$V_R=0, f=1\text{MHz}$		2	pF
Reveres recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$		6	nS

## Typical Characteristics

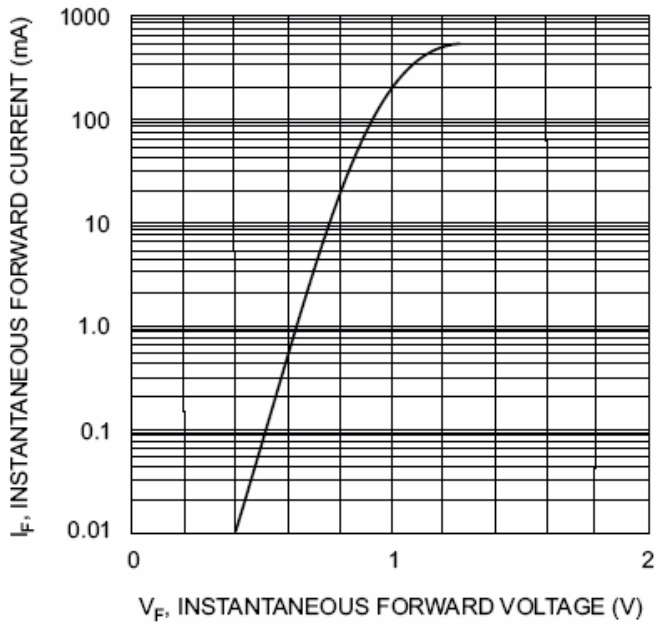


Fig. 1 Forward Characteristics

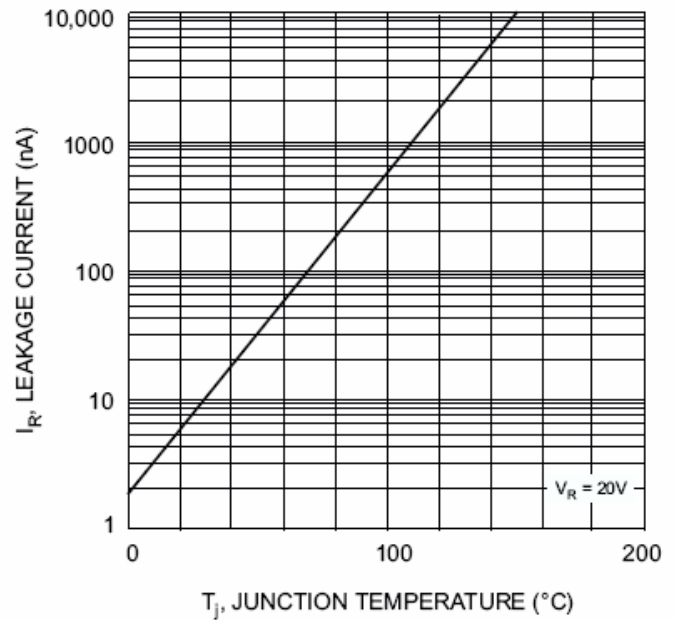


Fig. 2 Leakage Current vs Junction Temperature