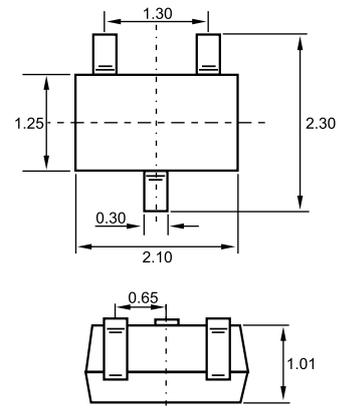

SOT-323

Features

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

Marking: A2

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^{\circ}\text{C}$

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 μs @=1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	K/W
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-65~+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	$V_{(BR)R}$	$I_R=10\mu\text{A}$	75		V
Reverse voltage leakage current	I_R	$V_R=75\text{V}$ $V_R=20\text{V}$		1 25	μA nA
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}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$		4	nS

Typical Characteristics

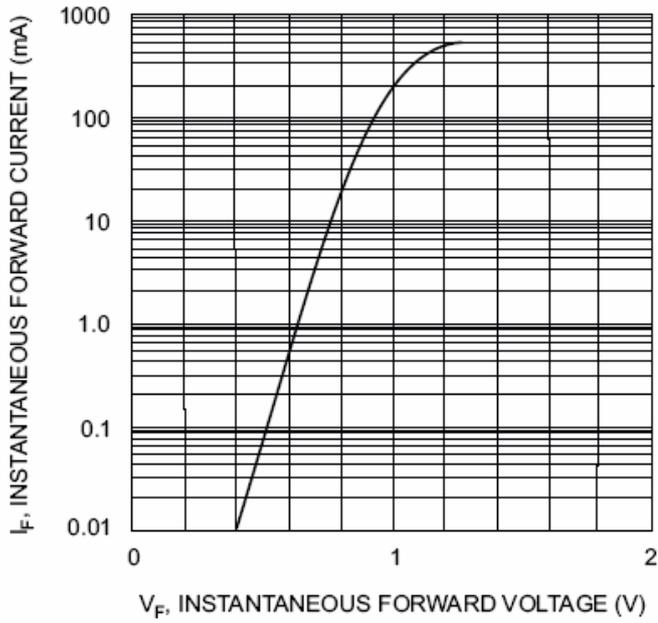


Fig. 1 Forward Characteristics

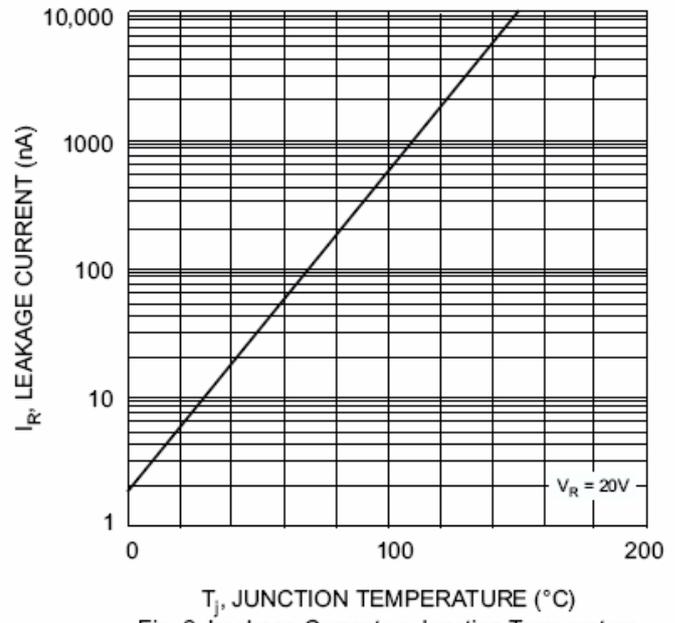


Fig. 2 Leakage Current vs Junction Temperature