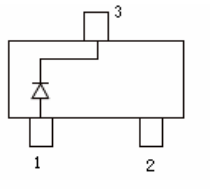
BAS16

SOT-23

FEATURES

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



Marking: A6

Maximum Ratings @T_A=25℃

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	100	V
Peak Repetitive Peak reverse voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	75	V
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 @=1.0μs **@=1.0s**	I_{FSM}	2.0 1.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	℃/W
Junction temperature	T_j	150	℃
Storage temperature	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

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

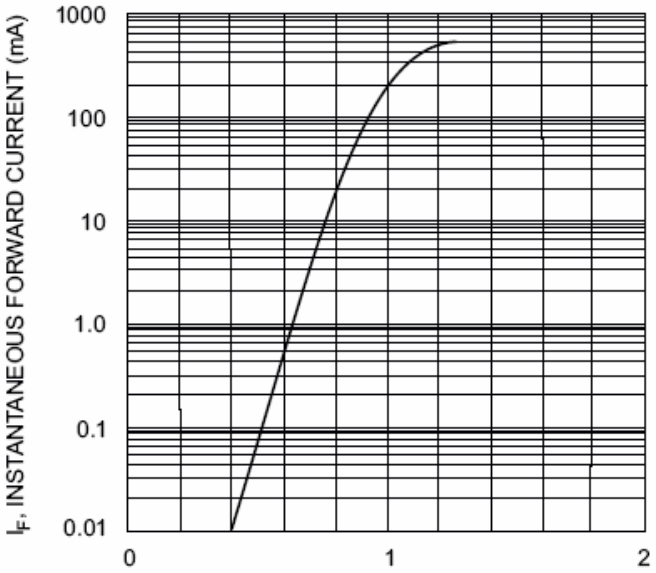


Fig. 1 Forward Characteristics

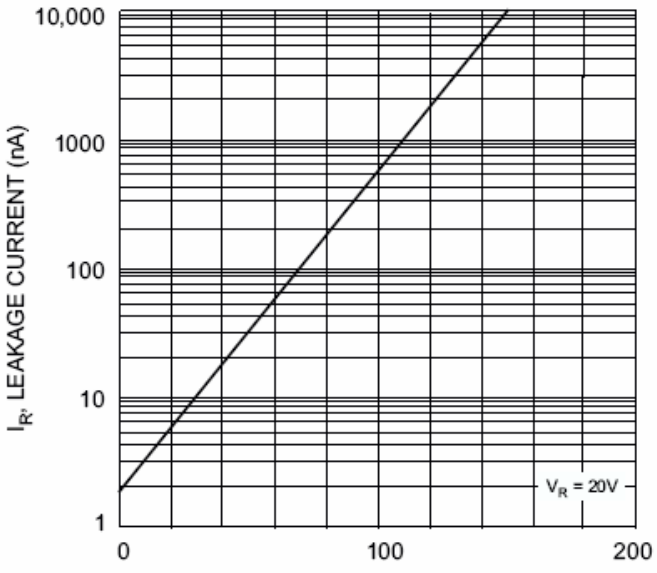


Fig. 2 Leakage Current vs Junction Temperature