



BAS20 SWITCHING DIODE

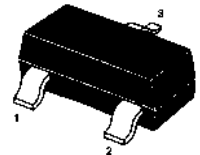
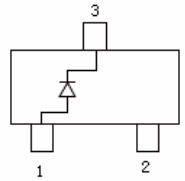
FEATURES

Fast Switching Speed

Surface Mount Package Ideally Suited for Automatic Insertion

For General Purpose Switching Applications

High Conductance



Marking: JR

SOT-23

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

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage DC Blocking Voltage	V_{RM} V_R	150	V
Average Rectified Output Current	I_O	200	mA
Power Dissipation	P_d	250	mW
Thermal Resistance. Junction to Ambient Air	$R_{\theta JA}$	500	$^{\circ}\text{C/W}$
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	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	$V_{(BR)R}$	$I_R=100\mu\text{A}$	150		V
Reverse voltage leakage current	I_R	$V_R=150\text{V}$		0.1	μA
Forward voltage	V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$		1 1.25	V
Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$		5	pF
Reveres recovery time	t_{rr}	$I_F=I_R=30\text{mA}$, $I_{rr}=0.1\times I_R$		50	nS

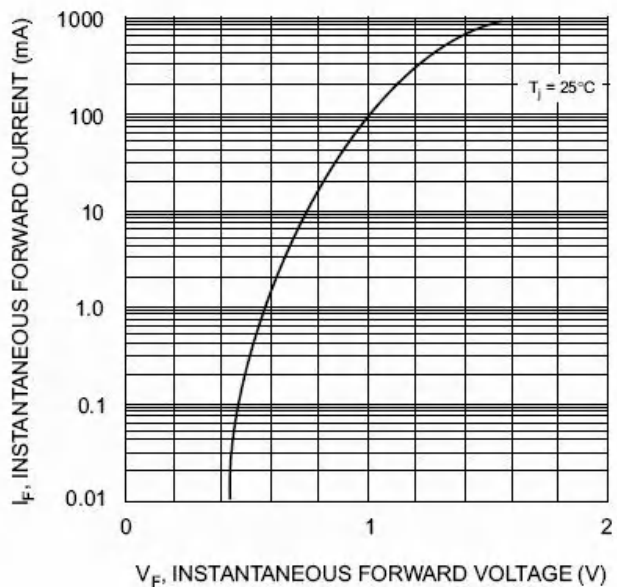


Fig. 1 Forward Characteristics

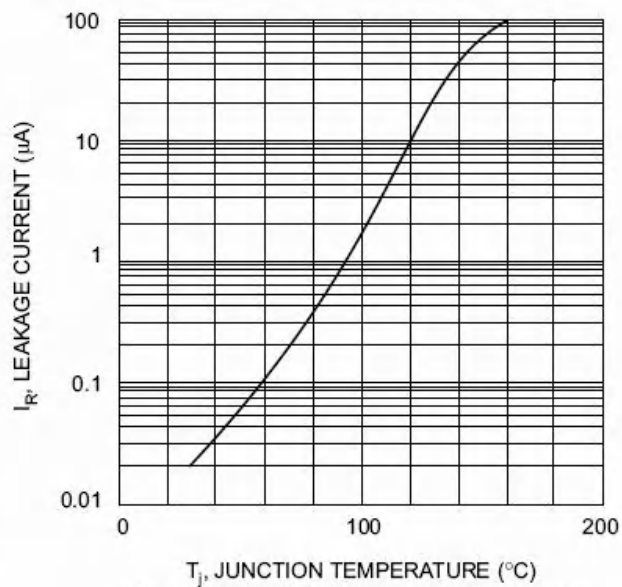


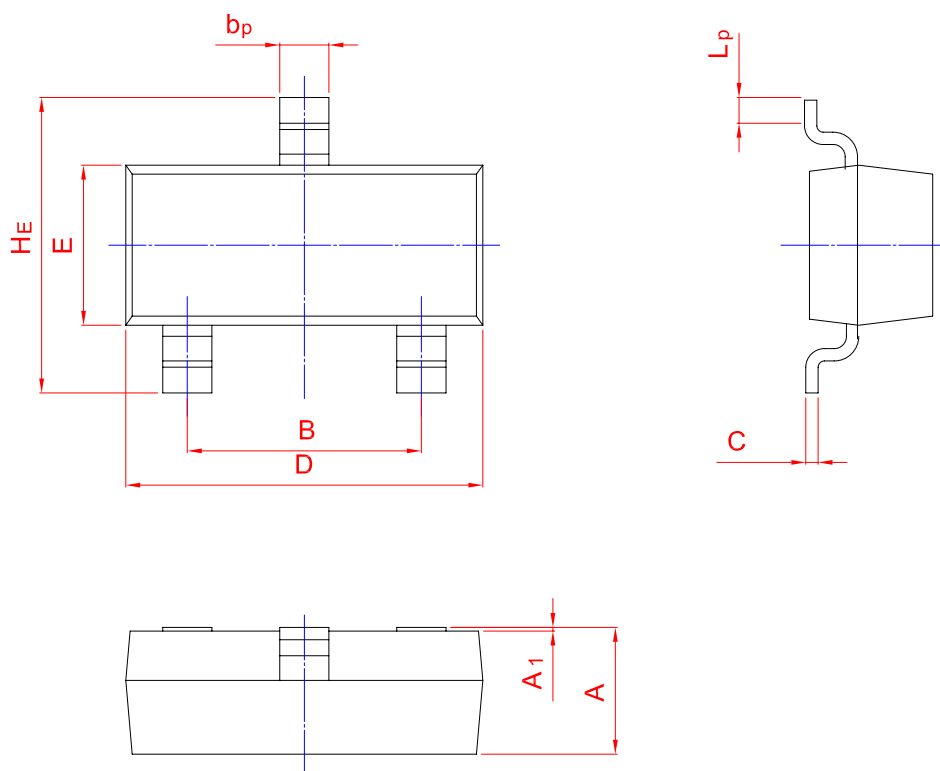
Fig. 2 Leakage Current vs Junction Temperature



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20