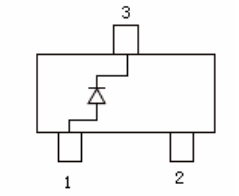
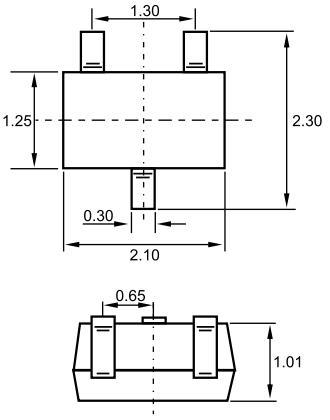
BAS19W/20W/21W

Switching Diode



SOT-323



Dimensions in inches and (millimeters)

Features

- ✧ Fast Switching Speed
- ✧ Surface Mount Package Ideally Suited for Automatic Insertion
- ✧ For General Purpose Switching Applications
- ✧ High Conductance

Marking: BAS19W KA8
BAS20W KT2
BAS21W KT3

Maximum Ratings @T_A=25℃

Parameter	Symbol	BAS19W	BAS20W	BAS21W	Unit
Peak Repetitive reverse voltage DC Blocking Voltage	V_{RRM} V_R	100	150	200	V
Average Rectified Output Current	I_O	200			mA
Power Dissipation	Pd	200			mW
Thermal Resistance. Junction to Ambient Air	$R_{\theta}JA$	625			℃/W
Junction temperature	T_J	150			℃
Storage temperature range	T_{STG}	-55to+150			℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	BAS19W BAS20W BAS21W	$V_{(BR)R}$	I_R= 100μA	100 150 200		V
Reverse voltage leakage current	BAS19W BAS20W BAS21W	I_R	V_R=100V V_R=150V V_R=200V		0.1	μA
Forward voltage		V_F	I_F=100mA I_F=200mA		1 1.25	V
Diode capacitance		C_D	V_R=0V, f=1MHz		5	pF
Reveres recovery time		t_{rr}	I_F=I_R=30mA,I_{rr}=0.1×I_R		50	nS

Typical Characteristics

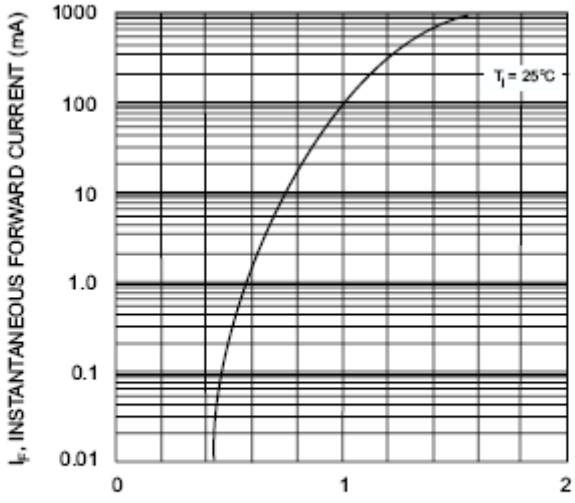


Fig. 1 Forward Characteristics

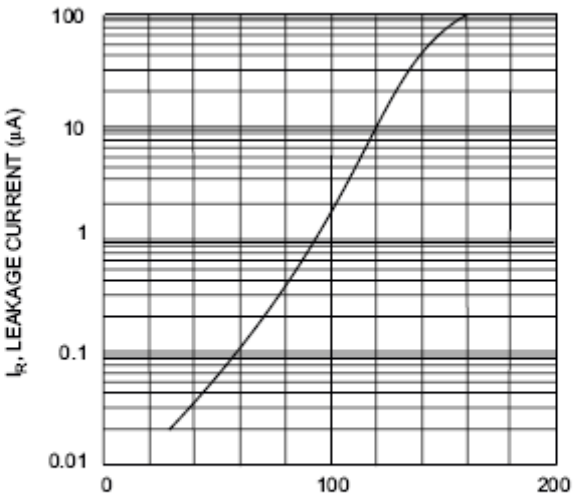


Fig. 2 Leakage Current vs Junction Temperature