

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

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	P_d	200			mW
Thermal Resistance. Junction to Ambient Air	$R_{\theta JA}$	625			$^{\circ}\text{C}/\text{W}$
Junction temperature	T_J	150			$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55to+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	BAS19W BAS20W BAS21W	$V_{(BR)R}$ $I_R=100\mu\text{A}$	100 150 200		V
Reverse voltage leakage current	BAS19W BAS20W BAS21W	I_R $V_R=100\text{V}$ $V_R=150\text{V}$ $V_R=200\text{V}$		0.1	μA
Forward voltage	V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$		1 1.25	V
Diode capacitance	C_D	$V_R=0\text{V}$, $f=1\text{MHz}$		5	pF
Reveres recovery time	t_{rr}	$I_F=I_R=30\text{mA}$, $I_{rr}=0.1 \times I_R$		50	nS

Typical Characteristics

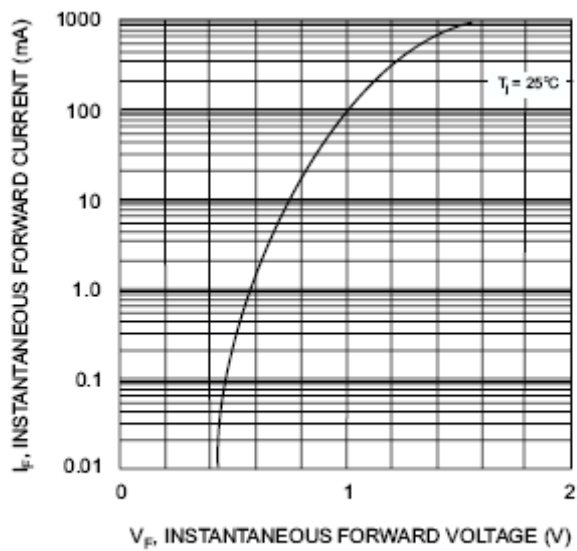


Fig. 1 Forward Characteristics

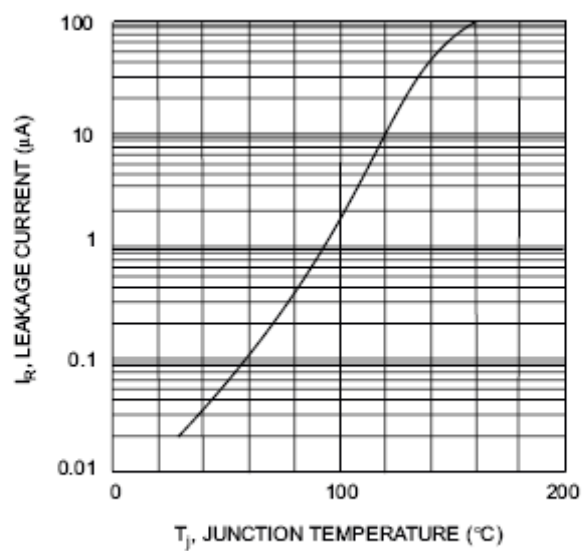


Fig. 2 Leakage Current vs Junction Temperature