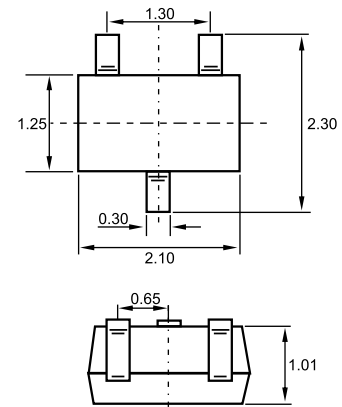


### SOT-323



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<sub>A</sub>=25°C

Parameter	Symbol	BAS19W	BAS20W	BAS21W	Unit
Peak Repetitive reverse voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>R</sub>	100	150	200	V
Average Rectified Output Current	I <sub>O</sub>	200			mA
Power Dissipation	P <sub>d</sub>	200			mW
Thermal Resistance. Junction to Ambient Air	R <sub>θJA</sub>	625			°C/W
Junction temperature	T <sub>J</sub>	150			°C
Storage temperature range	T <sub>STG</sub>	-55to+150			°C

## ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	BAS19W BAS20W BAS21W	V <sub>(BR)R</sub> I <sub>R</sub> = 100μA	100 150 200		V
Reverse voltage leakage current	BAS19W BAS20W BAS21W	V <sub>R</sub> =100V V <sub>R</sub> =150V V <sub>R</sub> =200V		0.1	μA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =100mA I <sub>F</sub> =200mA		1 1.25	V
Diode capacitance	C <sub>D</sub>	V <sub>R</sub> =0V, f=1MHz		5	pF
Reveres recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =30mA, I <sub>rr</sub> =0.1×I <sub>R</sub>		50	nS



## Typical Characteristics

