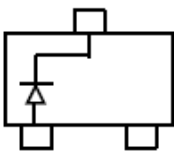
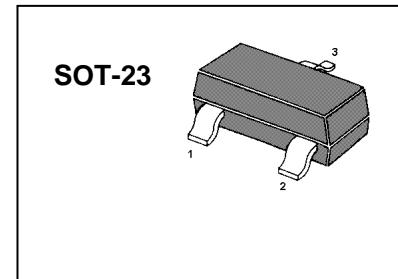


## SWITCHING DIODE

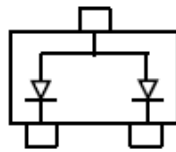
### FEATURES

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



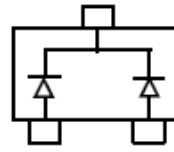
**BAS21**

Marking: JS



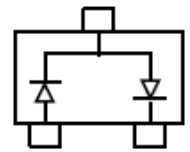
**BAS21A**

Marking: JS2



**BAS21C**

Marking: JS3



**BAS21S**

Marking: JS4

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

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	$V_{RRM}$	250	V
Working Peak reverse voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	400	mA
Average Rectified Output Current	$I_O$	200	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu\text{s}$	$I_{FSM}$	2.5	A
@ $t = 1.0\text{s}$		0.5	
Repetitive Peak Forward Surge Current	$I_{FRM}$	625	mA
Power Dissipation	$P_D$	225	mW
Thermal Resistance. Junction to Ambient Air	$R_{\theta JA}$	556	$^\circ\text{C}/\text{W}$
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	$V_{(BR)}$	$I_R=100\mu\text{A}$	250		V
Reverse voltage leakage current	$I_R$	$V_R=200\text{V}$		1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=100\text{mA}$ $I_F=200\text{mA}$		1000 1250	mV
Diode capacitance	$C_D$	$V_R=0\text{V}$ , $f=1\text{MHz}$		5	pF
Reveres recovery time	$t_{rr}$	$I_F=I_R=30\text{mA}$ , $I_{rr}=0.1 \times I_R$ , $R_L=100\Omega$		50	nS

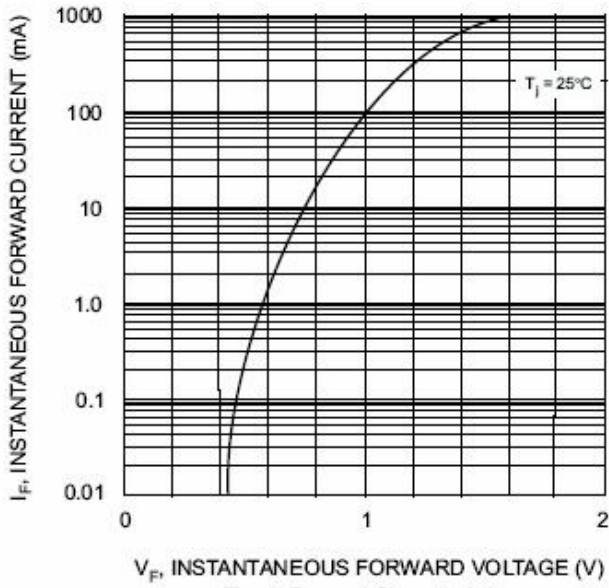


Fig. 1 Forward Characteristics

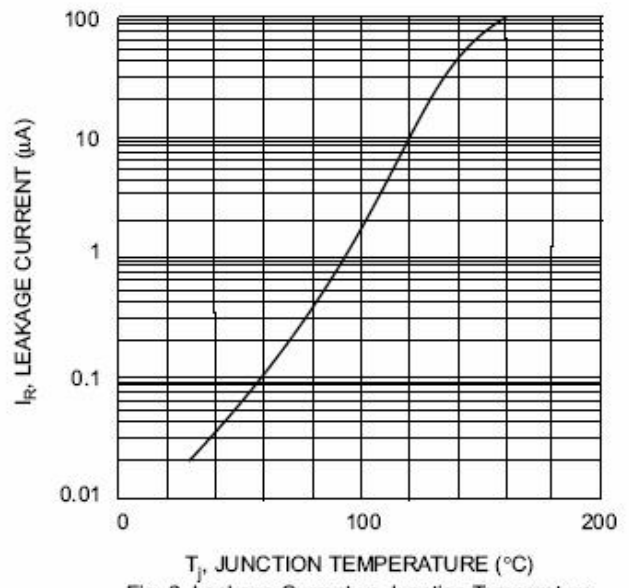


Fig. 2 Leakage Current vs Junction Temperature