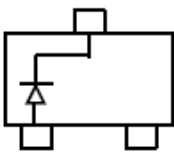
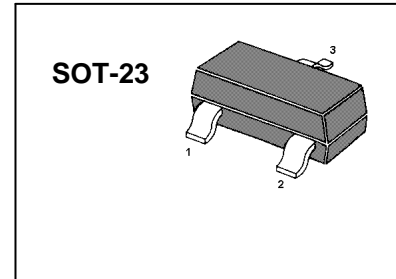




## SWITCHING DIODE

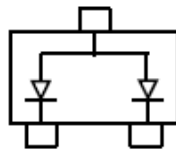
### FEATURES

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



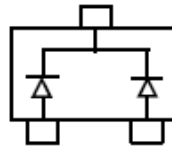
**BAS21**

Marking: JS



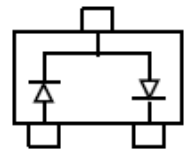
**BAS21A**

Marking: JS2



**BAS21C**

Marking: JS3



**BAS21S**

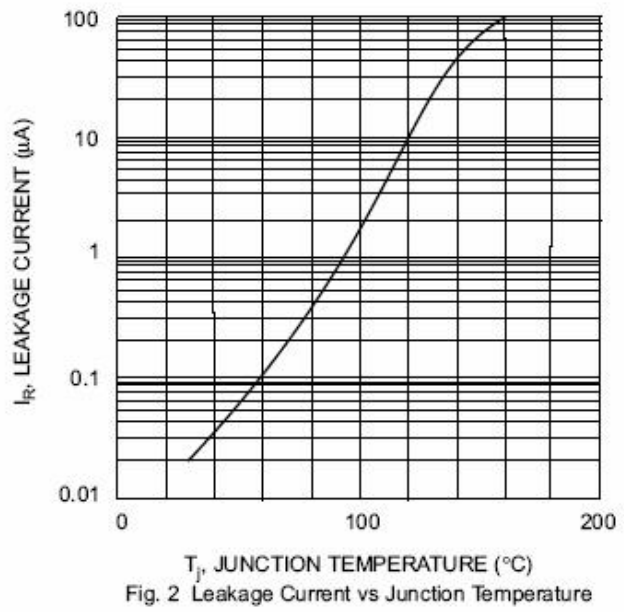
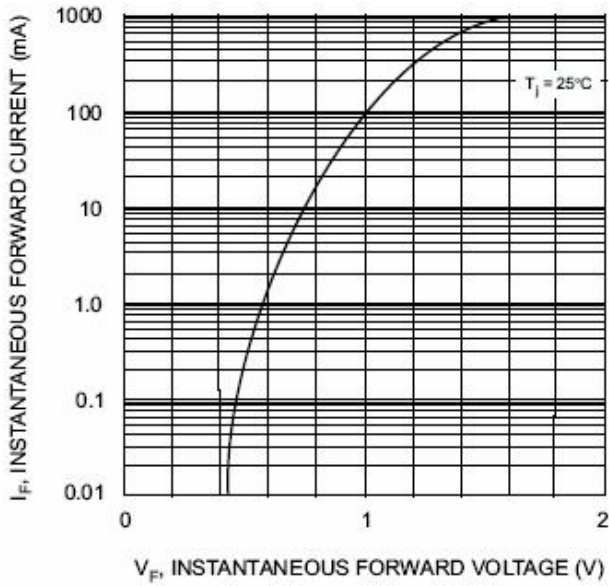
Marking: JS4

### Maximum Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	250	V
Working Peak reverse voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
Forward Continuous Current	I <sub>FM</sub>	400	mA
Average Rectified Output Current	I <sub>O</sub>	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs	I <sub>FSM</sub>	2.5	A
@ t = 1.0s		0.5	
Repetitive Peak Forward Surge Current	I <sub>FRM</sub>	625	mA
Power Dissipation	P <sub>D</sub>	225	mW
Thermal Resistance. Junction to Ambient Air	R <sub>θJA</sub>	556	°C/W
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>STG</sub>	-65-150	°C

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V <sub>(BR)</sub>	I <sub>R</sub> = 100μA	250		V
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> =200V		1	μA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =100mA I <sub>F</sub> =200mA		1000 1250	mV
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> , R <sub>L</sub> =100Ω		50	nS

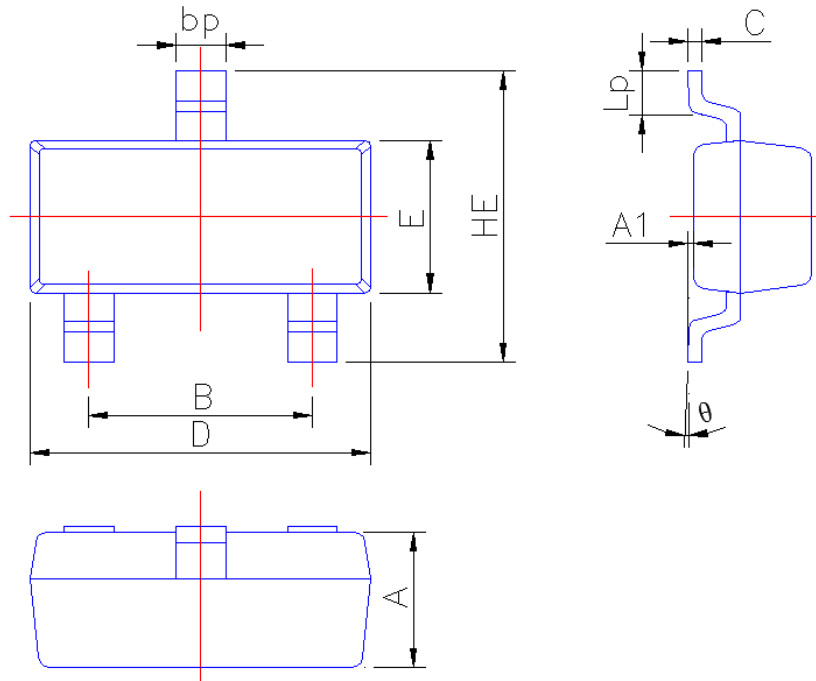




## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
$\theta$	0°	5°