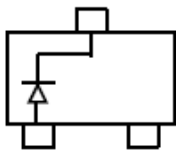
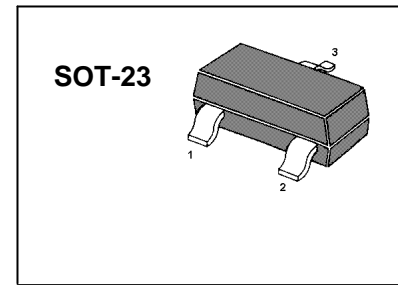


BAS21 ... SWITCHING DIODE

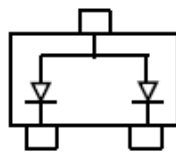
FEATURES

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



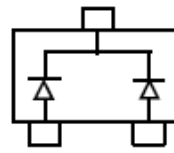
BAS21

Marking: JS



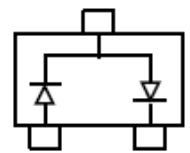
BAS21A

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	I_{FSM}	@ $t = 1.0\mu\text{s}$	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	μA
Forward voltage	V_F	$I_F = 100\text{mA}$		1000	mV
		$I_F = 200\text{mA}$		1250	
Diode capacitance	C_D	$V_R = 0\text{V}, f = 1\text{MHz}$		5	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		50	nS

Typical Characteristics

BAS21/A/C/S

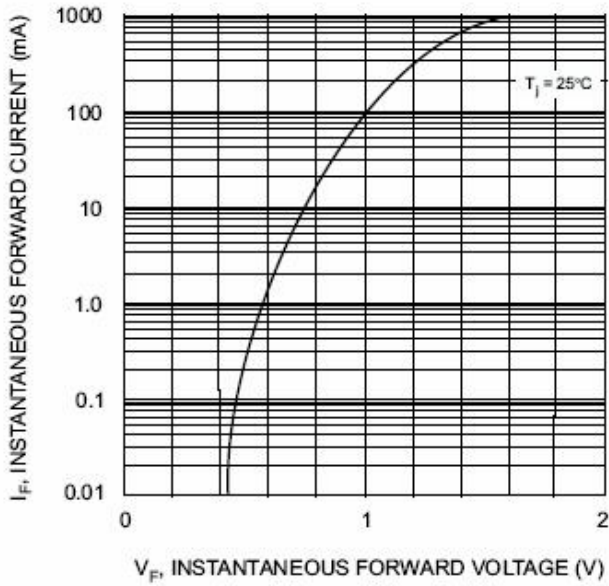


Fig. 1 Forward Characteristics

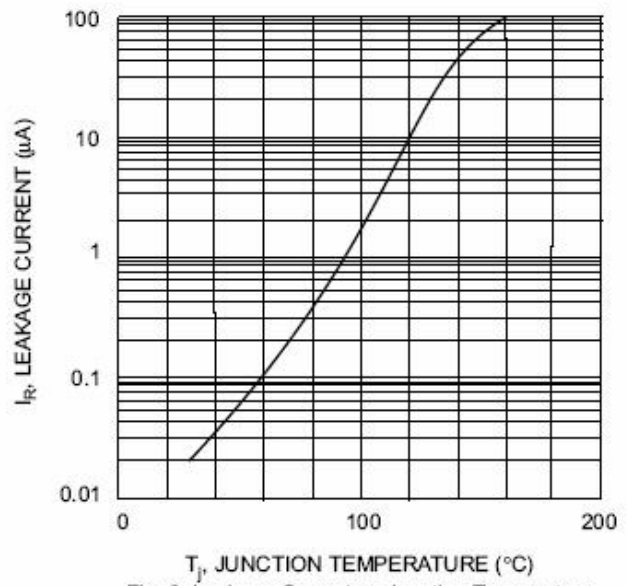
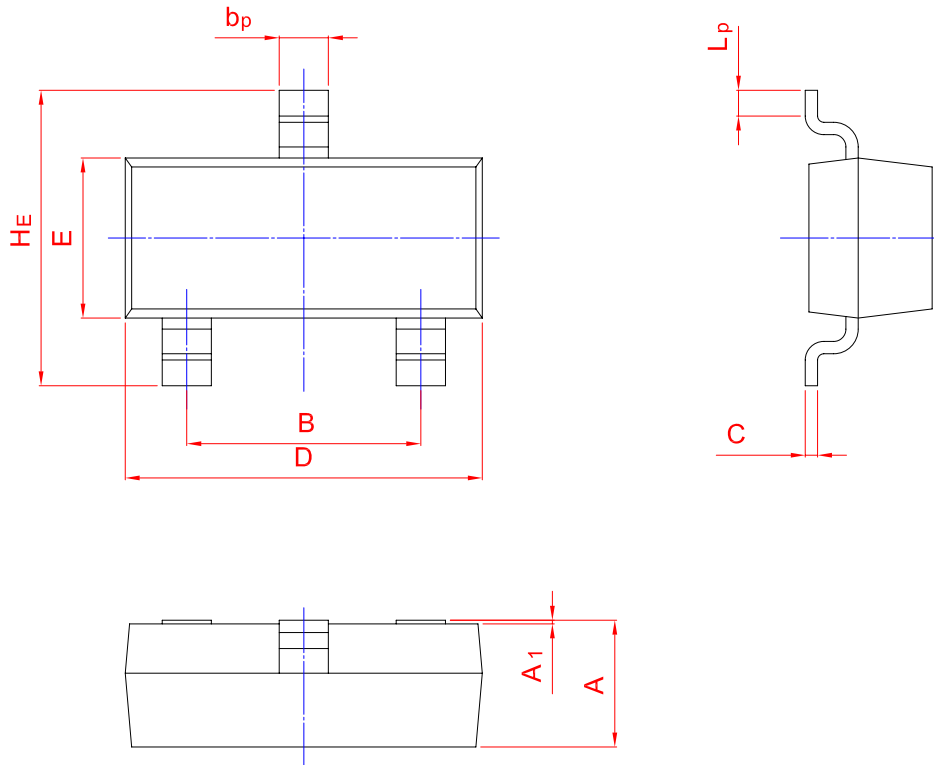
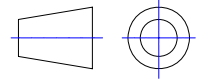


Fig. 2 Leakage Current vs Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	Hε	A1	Lp
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20