迈拓电子
MAITUO ELECTRONIC

BAS21x SWITCHING DIODE

FEATURES

Fast Switching Speed

Surface Mount Package Ideally Suited for Automatic Insertion

For General Purpose Switching Applications

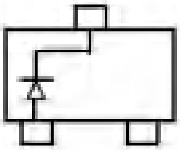
High Conductance

Marking: BAS21 JS

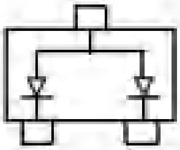
Marking: BAS21A JS2

Marking: BAS21C JS3

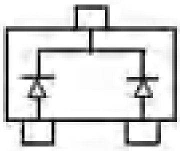
Marking: BAS21S JS4



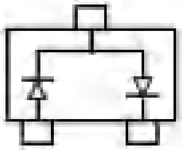
BAS21



BAS21A



BAS21C



BAS21S

SOT-23

Maximum Ratings @T_A=25℃

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage **Working Peak reverse voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	250	V
Forward Continuous Current	I_{FM}	400	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs **@ t = 1.0s**	I_{FSM}	2.5 0.5	A
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	℃/W
Junction temperature	T_J	150	℃
Storage temperature range	T_{STG}	-65-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	I_R= 100μA	250		V
Reverse voltage leakage current	I_R	V_R=200V		1	μA
Forward voltage	V_F	I_F=100mA I_F=200mA		1000 1250	mV
Diode capacitance	C_D	V_R=0V, f=1MHz		5	pF
Reveres recovery time	t_{rr}	I_F=I_R=30mA,I_{rr}=0.1×I_R,R_L=100Ω		50	nS

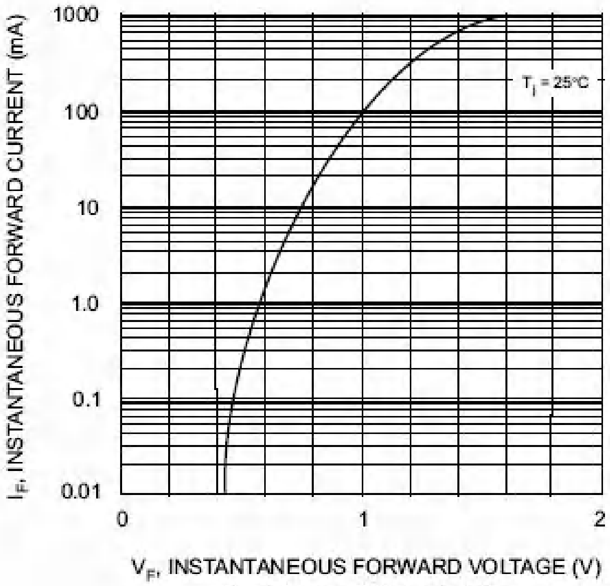


Fig. 1 Forward Characteristics

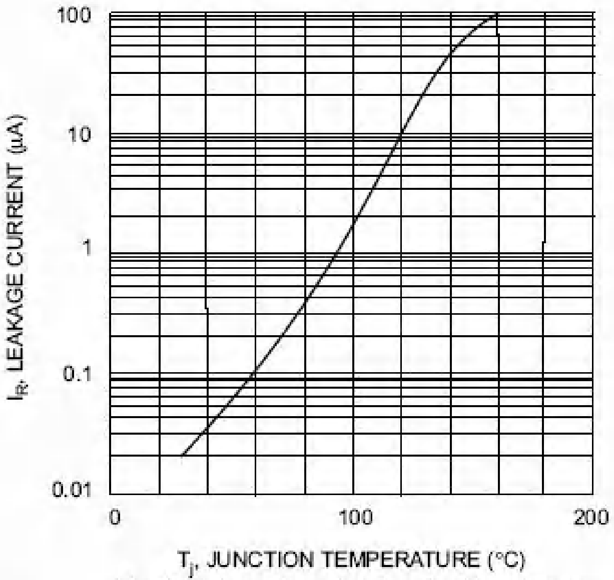
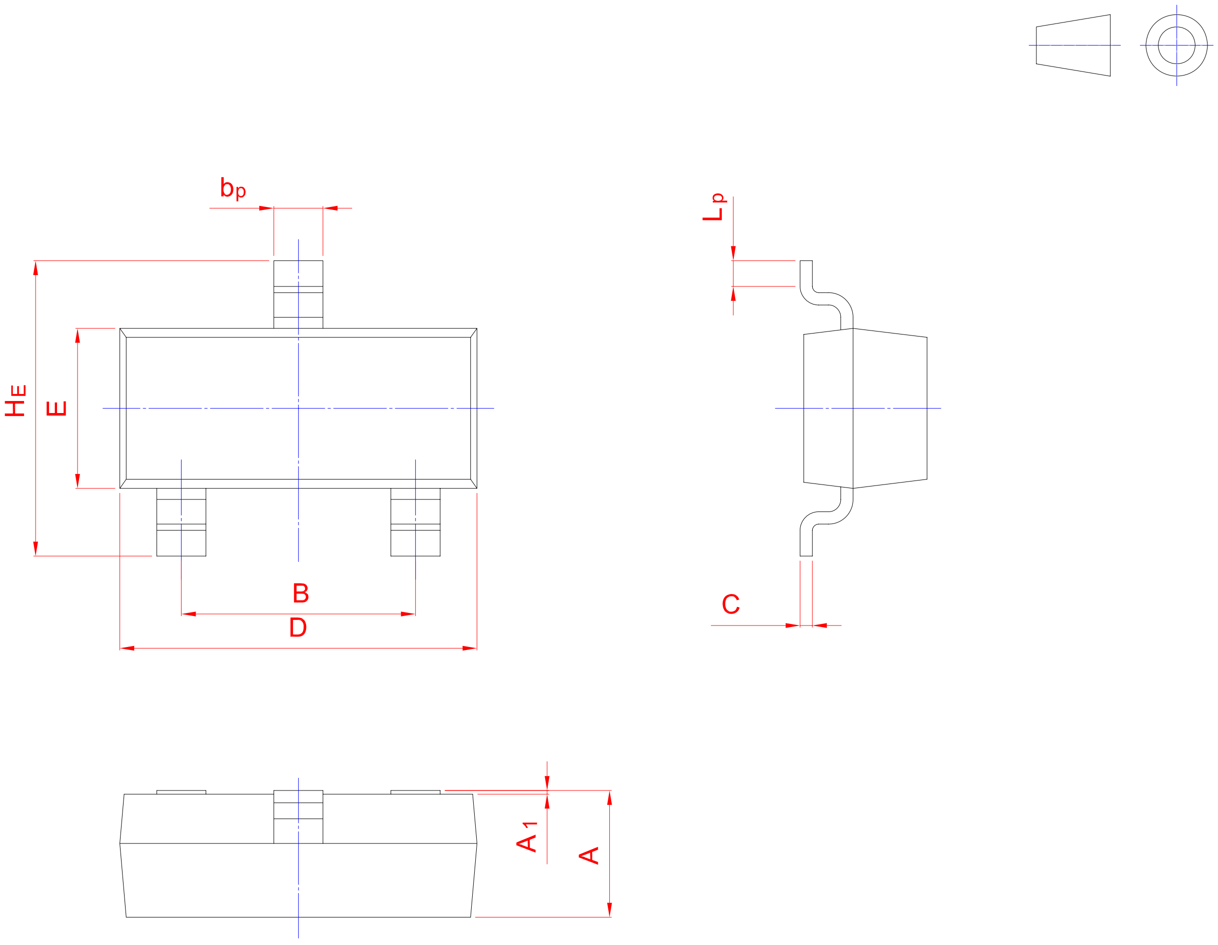


Fig. 2 Leakage Current vs Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



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