



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-323 Plastic-Encapsulate DIODE

BAS19W/20W/21W SWITCHING DIODE

FEATURES

Power dissipation

P_D : 200 mW ($T_{amb}=25$)

Collector current

I_F : 200 mA

Collector-base voltage

V_R : 19W:120 V; 20W:150V ; 21W:200V

Operating and storage junction temperature range

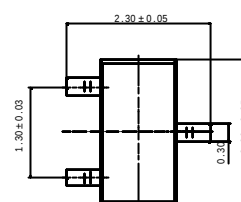
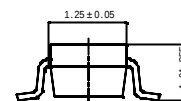
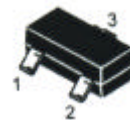
T_J , T_{stg} : -55 to +150

SOT-323

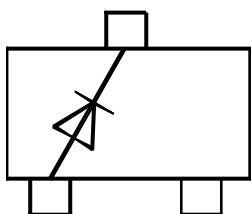
1.BASE

2.EMITTER

3.COLLECTOR



Unit : mm



Marking :BAS19W KA8

BAS20W KT2

BAS21W KT3

ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage BAS19W BAS20W BAS21W	$V_{(BR)R}$	$I_R = 100\mu A$	100 150 200		V
Reverse voltage leakage current BAS19W BAS20W BAS21W	I_R	100V $V_R = 150V$ 200V		0.1	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}	$I_F = I_R = 30mA$ $I_{rr} = 0.1 \times I_R$		50	nS

Typical Characteristics

BAS19W-BAS21W

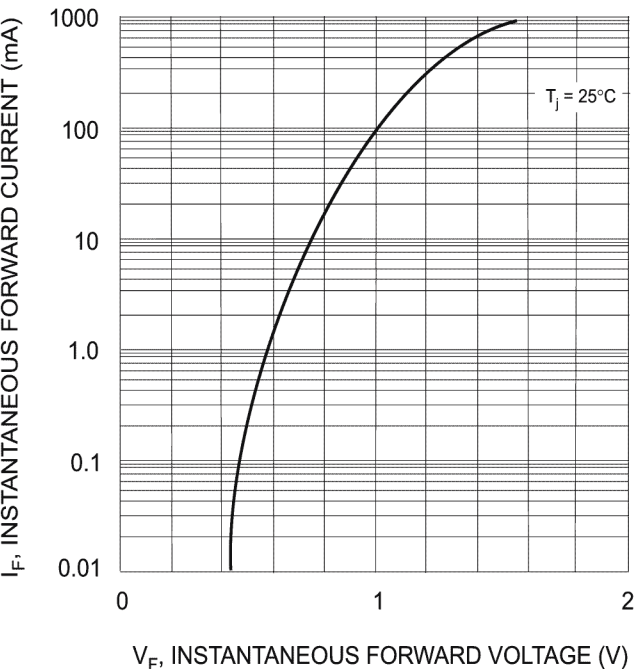


Fig. 1 Forward Characteristics

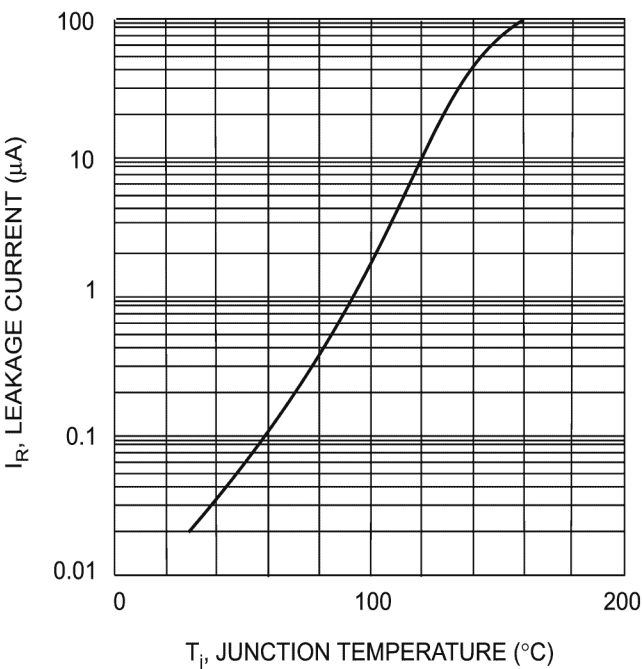
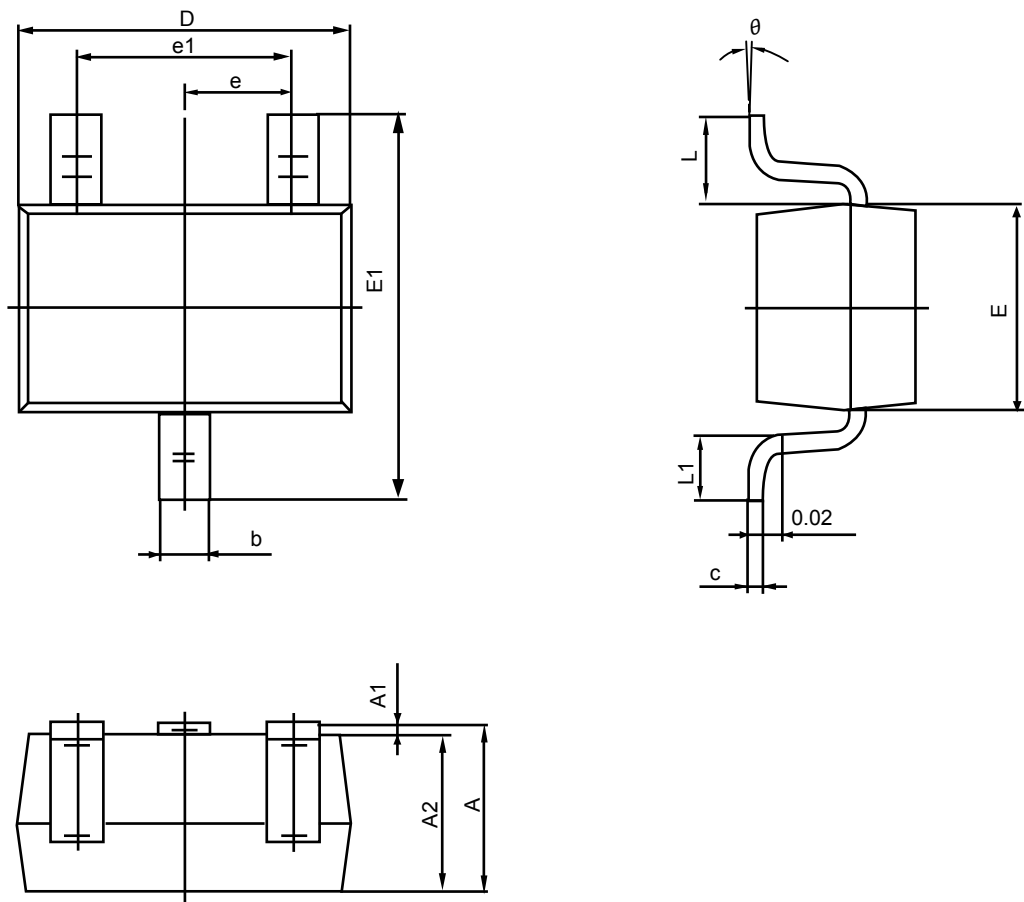


Fig. 2 Leakage Current vs Junction Temperature

SOT-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°