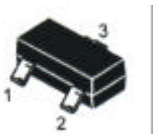
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

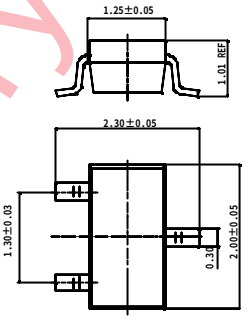
SOT-323 Plastic-Encapsulate DIODE

BAS19W/20W/21W SWITCHING DIODE

SOT-323

1.BASE
2.EMITTER
3.COLLECTOR





Unit : mm

FEATURES

Power dissipation

P_D : 200 mW (Tamb=25℃)

Collector current

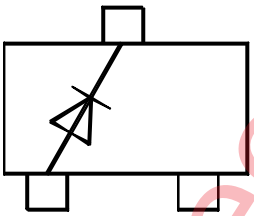
I_F : 200 mA

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℃



Marking :BAS19W KA8
BAS20W KT2
BAS21W KT3

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage BAS19W	$V_{(BR)R}$	I_R= 100μA	100		V
Reverse breakdown voltage BAS20W			150		
Reverse breakdown voltage BAS21W			200		
Reverse voltage leakage current BAS19W	I_R	100V		0.1	μA
Reverse voltage leakage current BAS20W		VR=150V			
Reverse voltage leakage current BAS21W		200V			
Forward voltage	V_F	I_F=100mA		1000	mV
		I_F=200mA		1250	
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		50	nS

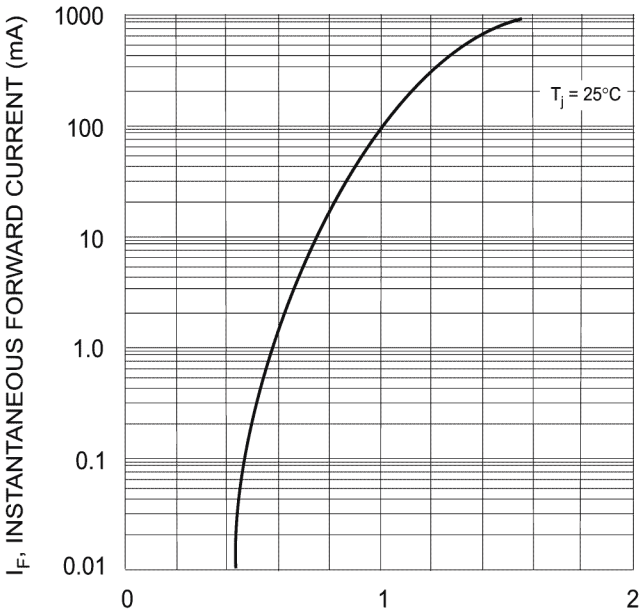


Fig. 1 Forward Characteristics

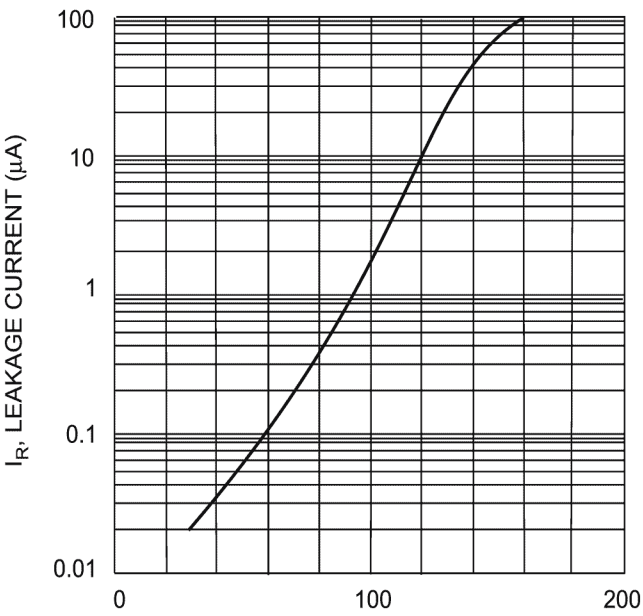
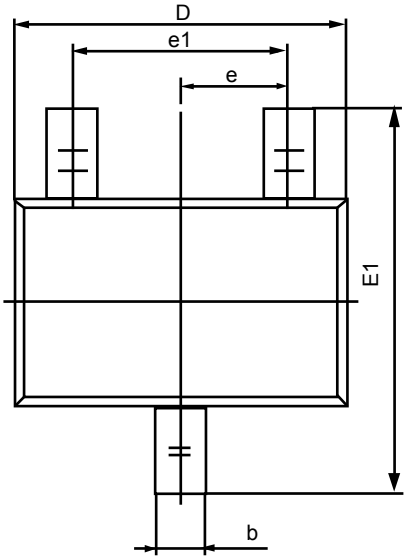
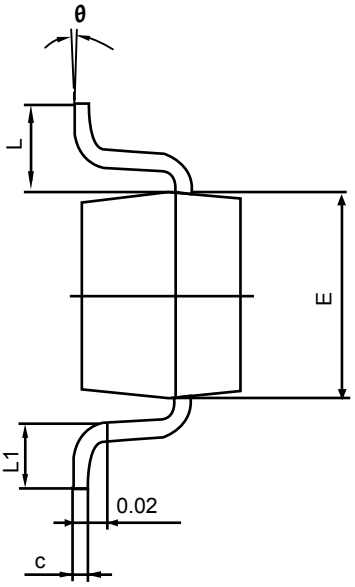
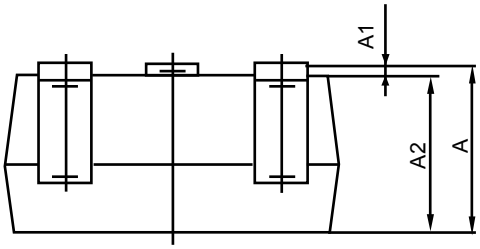


Fig. 2 Leakage Current vs Junction Temperature

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°