



SOT-323 Plastic-Encapsulate DIODE

BAS19W/20W/21W SWITCHING DIODE

FEATURES

Power dissipation

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

Collector current

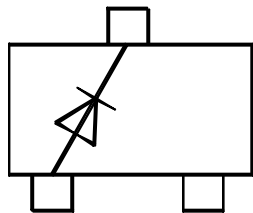
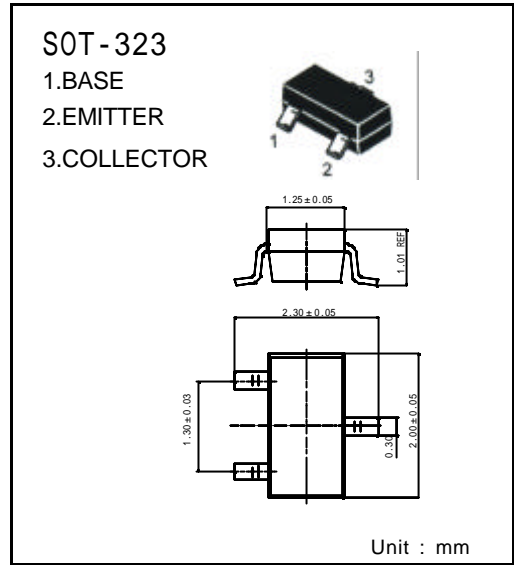
$I_F : 200 \text{ mA}$

Collector-base voltage

$V_R : 19W:120 \text{ V; } 20W:150\text{V ; } 21W:200\text{V}$

Operating and storage junction temperature range

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



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 $V_R=150\text{V}$ 200V	0.1	μA
Forward voltage		V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$	1000 1250	mV
Diode capacitance		C_D	$V_R=0\text{V}$ $f=1\text{MHz}$	5	pF
Reveres recovery time		t_{rr}	$I_F=I_R=30\text{mA}$ $I_{rr}=0.1 \times I_R$	50	nS

Typical Characteristics

BAS19W-BAS21W

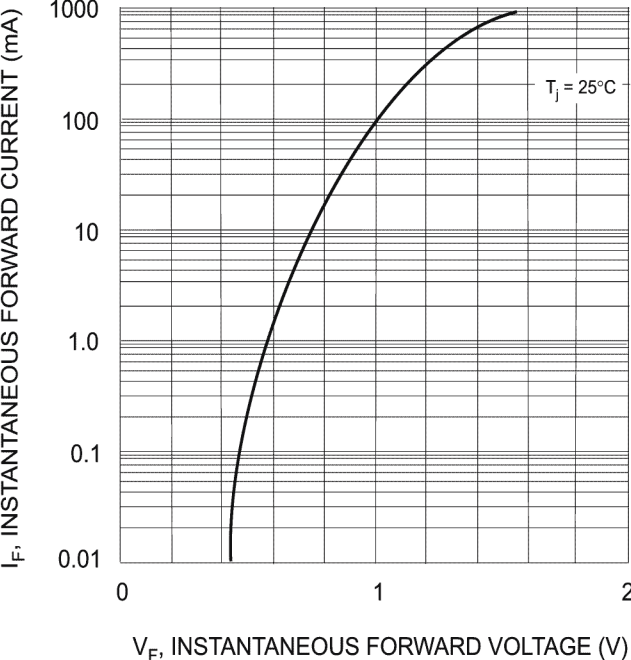


Fig. 1 Forward Characteristics

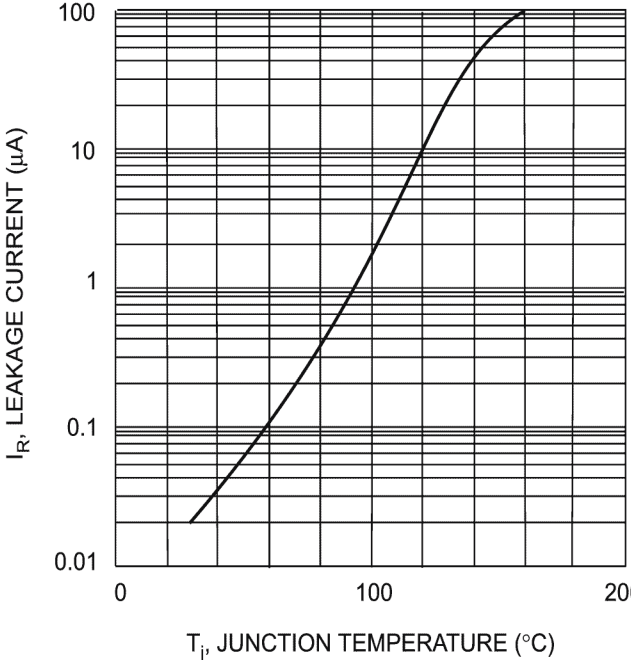
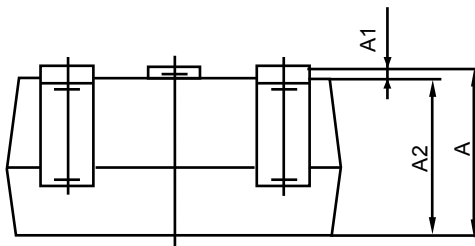
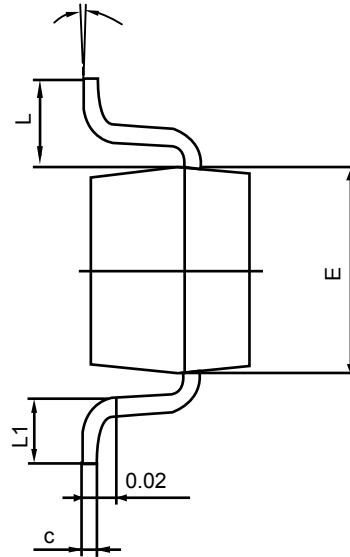
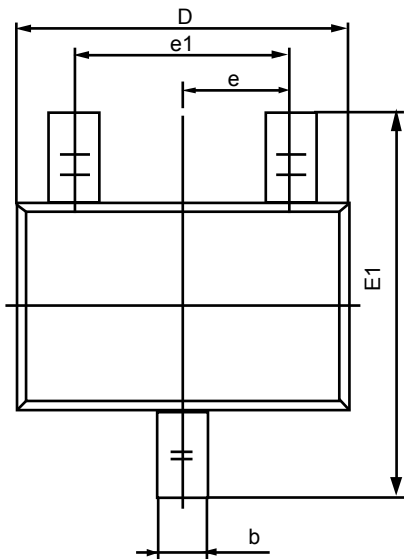


Fig. 2 Leakage Current vs Junction Temperature

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°