

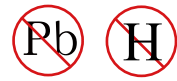


DATA SHEET

SEMICONDUCTOR

BAS19W/20W/21W

SOT-323 Plastic-Encapsulate DIODE



SWITCHING DIODE

FEATURES

Power dissipation

PD: 200 mW ($T_{amb}=25^{\circ}C$)

Collector current

I_F : 200 mA

Collector-base voltage

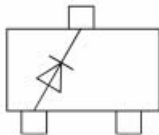
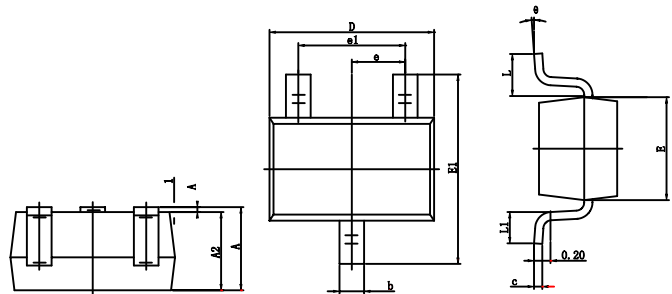
V_R : 19W: 120 V; 20W: 150V ; 21W: 200V

Operating and storage junction temperature range

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

SOT323

Unit:inch(mm)



Marking: BAS19W KA8
BAS20W KT2
BAS21W KT3

High temperature soldering : $260^{\circ}C$ / 10 seconds at terminals

Pb free product at available : 99% Sn above meet RoHS
environment substance directive request

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	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

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

DEVICE CHARACTERISTICS

BAS19W/20W/21W

