WEITRON

BAS19H/BAS20H
BAS21H

Surface Mount Switching Diode

Lead(Pb)-Free

SWITCHING DIODE
200mAMPERS
120-250VOLTS

Features:

*Fast Switching Speed
*Surface Mount Package Ideally Suited for Automatic Insertion
*High Conductance
*For General Purpose Switching Applications

Mechanical Data:

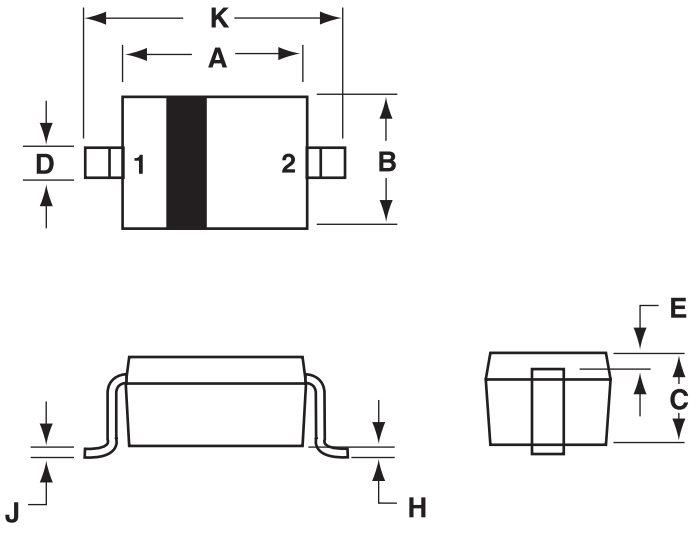
*Case: SOD-323 Molded Plastic
*Terminals: Solderable Per MIL-STD-202, Method 208
*Polarity: See Eqivalent Circuit Diagram
*Weight: 0.004grams(approx)



SOD-323

SOD-323 Outline Demensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15 REF	
H	0.00	0.10
J	0.089	0.377
K	2.30	2.70

PIN 1.CATHODE
2.ANODE

Maximum Ratings (T$_A$=25°C Unless otherwise noted)

Characteristic	Symbol	BAS19H	BAS20H	BAS21H	Unit
Non-Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	Volts
Working Peak Reverse Voltage DC Blocking Voltage	V_{RWM} V_R	100	150	200	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	140	V
Forward Continuous Current (1)	I_{FM}	400			mA
Average Rectified Output Current (1)	I_o	200			mA
Non-Repetitive Peak Forward Surge Current @t=1.0us @t=1.0s	I_{FSM}	2.5 0.5			A
Power Dissipation	Pd	200			mW
Thermal Resistance Junction to Ambient Air (1)	$R_{\theta JA}$	625			°C/W
Operating and Storage Temperature Range	T_j ,T_{STG}	-65 to +150			°C

Electrical Characteristics (T$_A$=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Forward Voltage I_F =100mA I_F =200mA	VF	-	1.0 1.25	Volts
Reverse Leakage @Rated DC Blocking Voltage	IR	-	100	nAdc
Total Capacitance (V_R=1.0V, f=1.0MHz)	C_j	-	5.0	P_F
Reverse Recovery Time I_F=I_R =30mA I_{rr} =0.1*I_R ,RL=100 W	trr		50	nS

NOTE:

1. Valid provided that terminals are kept at ambient temperature.

Device Marking

Item	Marking	Eqivalent Circuit diagram
BAS19	JP , A8	
BAS20	JR , T2	
BAS21	JS , T3	

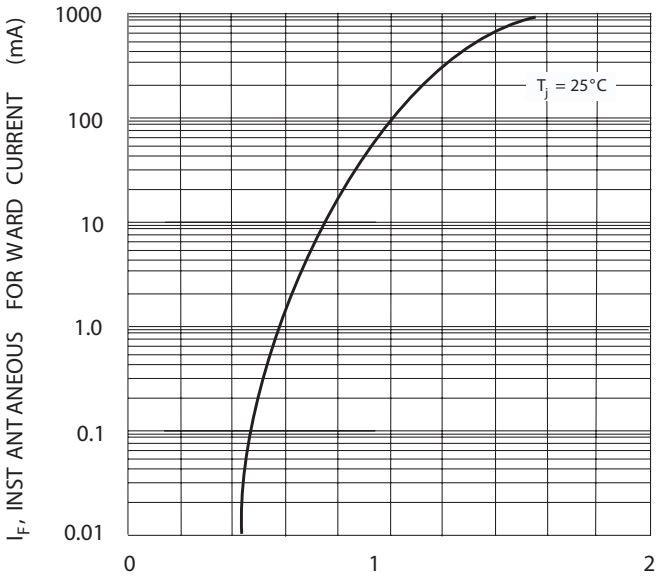


Fig. 1 Forward Characteristics

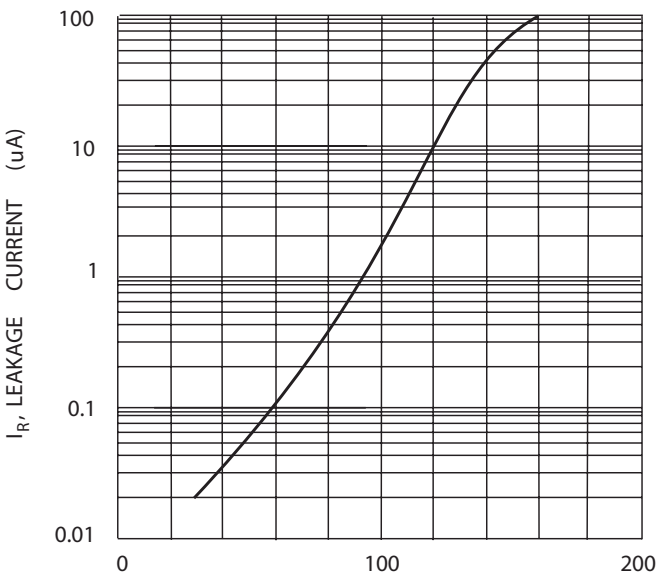


Fig. 2 Leakage Current vs Junction Temperature