

Surface Mount Switching Diode

Pb Lead(Pb)-Free

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 Equivalent Circuit Diagram
- *Weight: 0.004grams(approx)

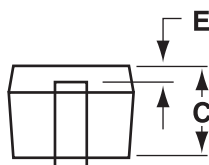
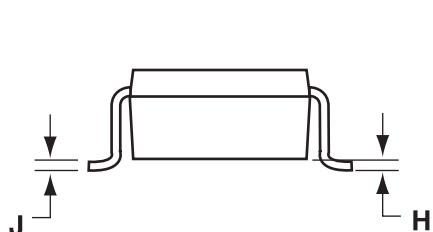
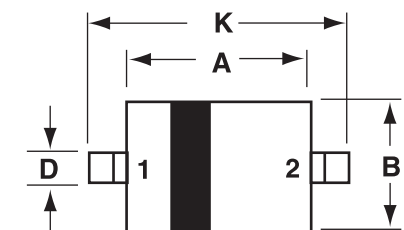
SWITCHING DIODE
200mAMPERS
120-250VOLTS



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 ($T_A=25^{\circ}\text{C}$ 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 @ $t=1.0\mu s$ @ $t=1.0s$	I_{FSM}	2.5 0.5			A
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient Air ⁽¹⁾	$R_{\theta JA}$	625			$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150			$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Forward Voltage $I_F=100\text{mA}$ $I_F=200\text{mA}$	V_F	-	1.0 1.25	Volts
Reverse Leakage @Rated DC Blocking Voltage	I_R	-	100	nA _{dc}
Total Capacitance ($V_R=1.0\text{V}$, $f=1.0\text{MHz}$)	C_j	-	5.0	P _F
Reverse Recovery Time $I_F=I_R=30\text{mA}$ $I_{rr}=0.1*I_R$, $R_L=100\ \Omega$	t_{rr}		50	nS

NOTE:

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

Device Marking

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

