



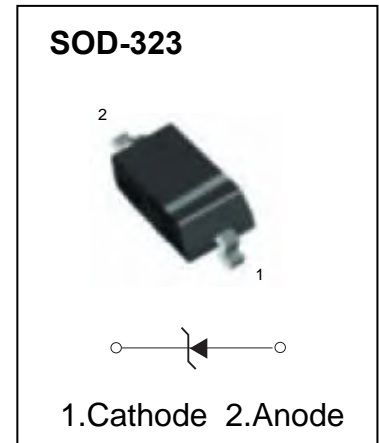
## BAV19WS-BAV21WS

### FEATURES

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

### APPLICATIONS

- Surface mount fast switching diode



### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV19WS	A8	SOD-323
BAV20WS	T2	SOD-323
BAV21WS	T3	SOD-323

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	120	200	250	V
Working Peak Reverse Voltage	$V_{RWM}$	100	150	200	V
DC Reverse Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward Continuous Current	$I_{FM}$	400			mA
Average Rectified Output Current	$I_o$	200			mA
Non-Repetitive Peak Forward Surge Current					
@t=1.0 $\mu$ s	$I_{FSM}$	2.5			
@t=1.0 s		0.5			
Repetitive Peak Forward Surge Current	$I_{FRM}$	625			mA
Power Dissipation	$P_d$	200			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625			°C/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to+150			°C



@ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	$V_{FM}$	-	1.0 1.25	V	$I_F=100mA$ $I_F=200mA$
Reverse Current	$I_R$	-	0.1	$\mu A$	$V_R=100V$ $V_R=150V$ $V_R=200V$
Capacitance between terminals	$C_T$	-	5	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	50	ns	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

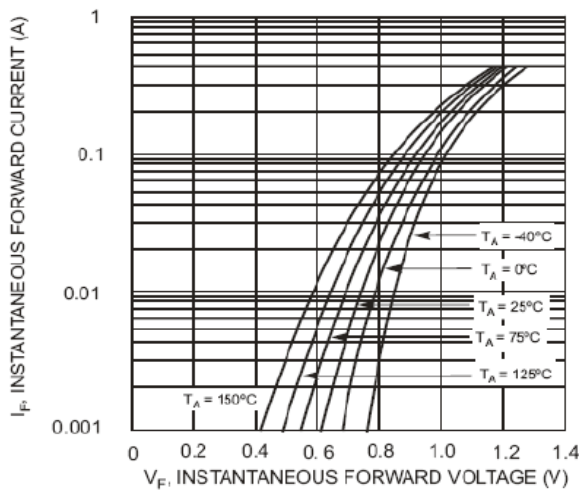


Fig. 1 Typical Forward Characteristics

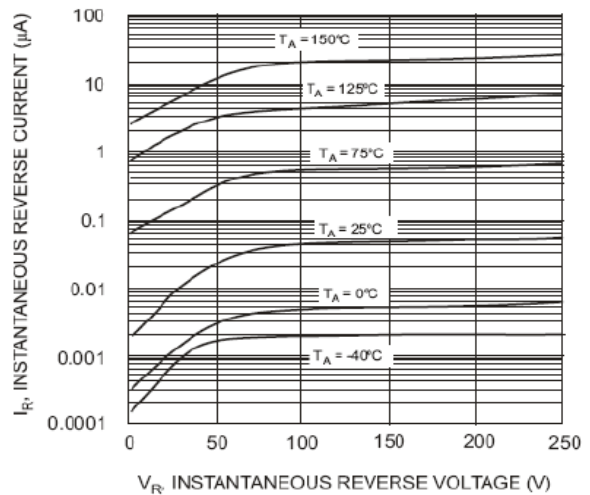


Fig. 2 Typical Reverse Characteristics

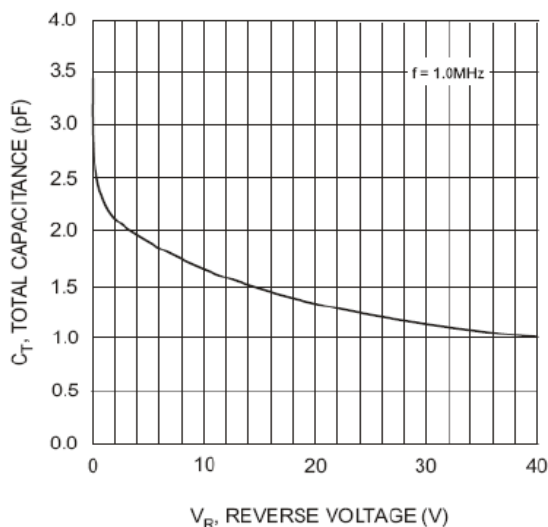


Fig. 3 Typical Capacitance vs. Reverse Voltage

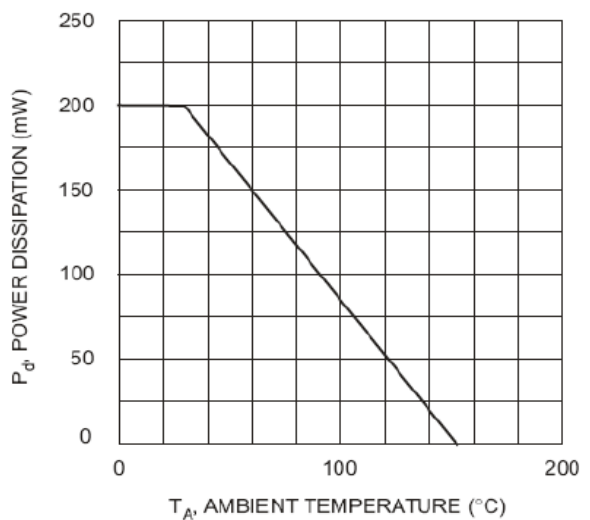


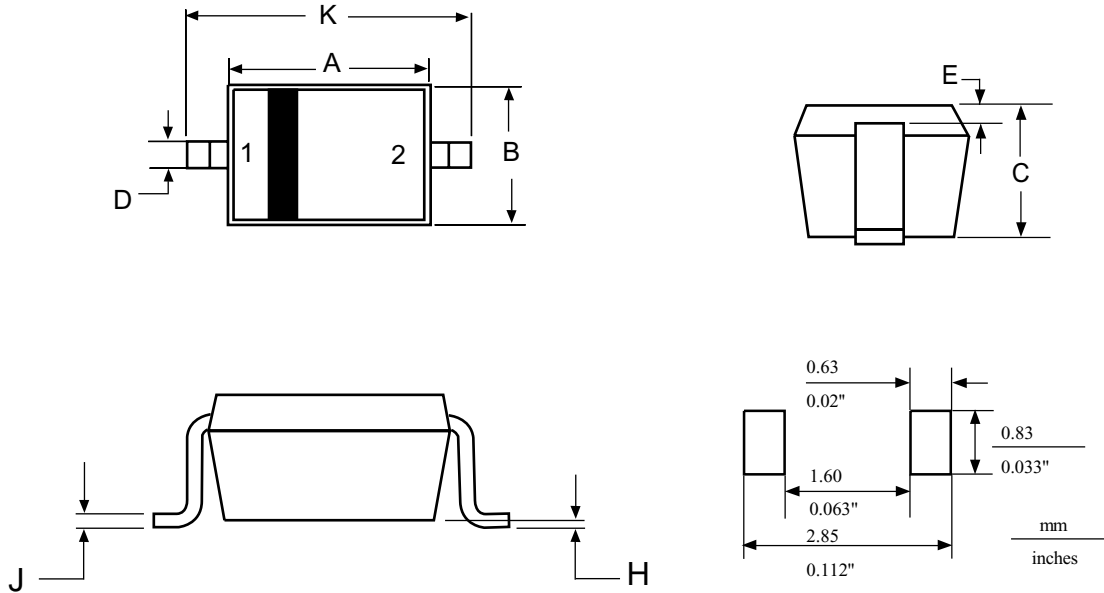
Fig. 4 Power Derating Curve, Total Package





PACKAGE OUTLINE  
SOD-323

unit:mm



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.35	0.045	0.053
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

PIN: 1. CATHODE  
2. ANODE

