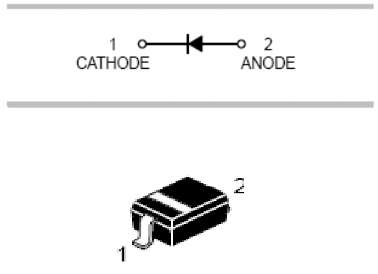
Silicon Epitaxial Planar Diode **BAV19WS/BAV20WS/BAV21WS**

FEATURES

Lead-free

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



SOD-323

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℃ unless otherwise specified

Characteristic	**Symbol**	**BAV19WS**	**BAV20WS**	**BAV21WS**	**Unit**
Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	V
Working Peak Reverse Voltage DC Reverse Voltage	V_{RWM} V_R	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Average Rectified Output Current	I_o	200			mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	I_{FSM}	2.5 0.5			A
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			℃/W
Operating and Storage Temperature Rage	T_j, T_{STG}	-65 to +150			℃

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Min**	**Max**	**Unit**	**Test Condition**
Reverse Breakdown Voltage BAV19WS BAV20WS BAV21WS	$V_{(BR)R}$	 120 200 250		V	I_R=100uA
Forward Voltage	V_{FM}	-	1.0 1.25	V	I_F=100mA I_F=200mA
Reverse Current BAV19WS BAV20WS BAV21WS	I_R	-	0.1 0.1 0.1	μA	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×I_R,R_L=100Ω

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TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

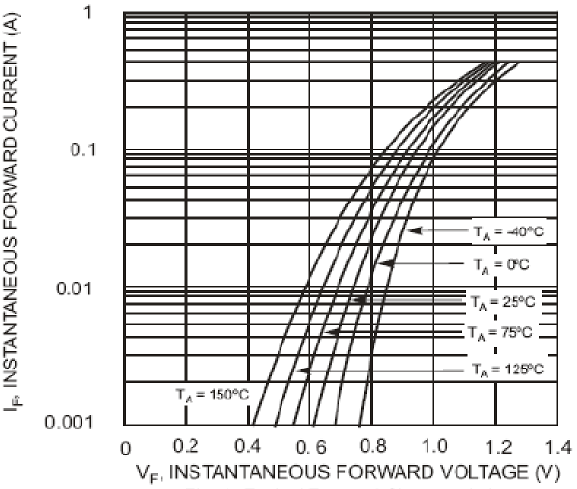

Fig. 1 Typical Forward Characteristics

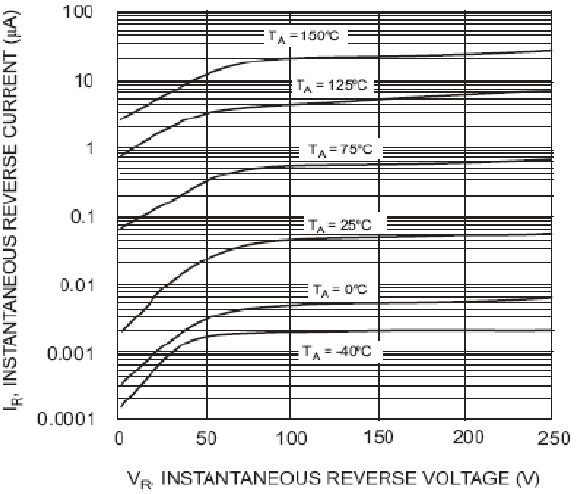

Fig. 2 Typical Reverse Characteristics

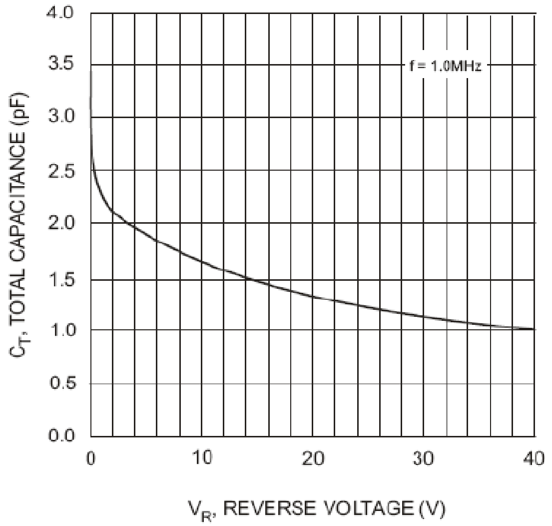

Fig. 3 Typical Capacitance vs. Reverse Voltage

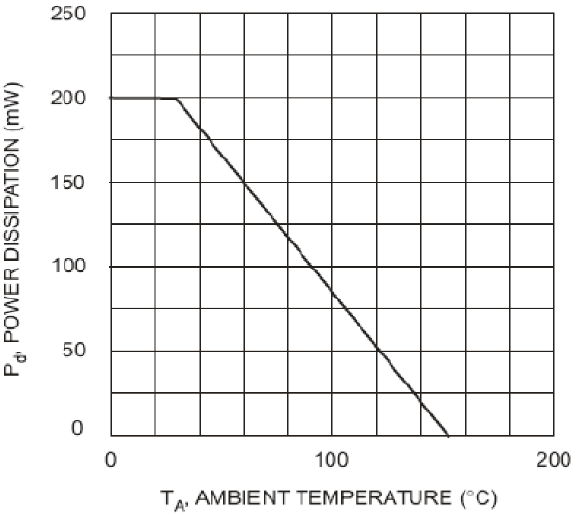

Fig. 4 Power Derating Curve, Total Package

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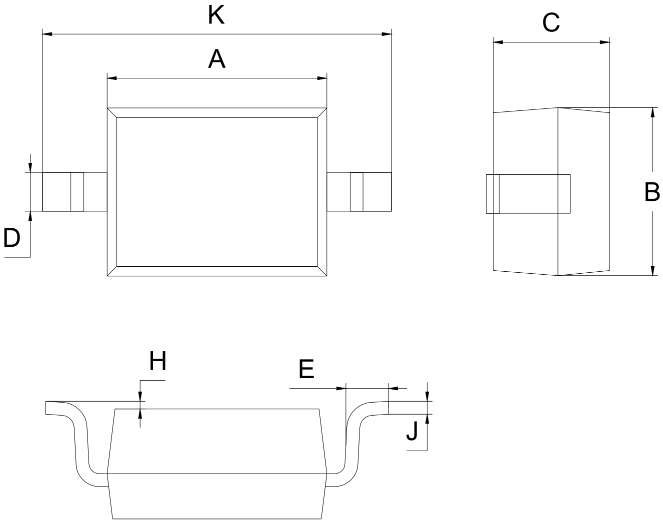
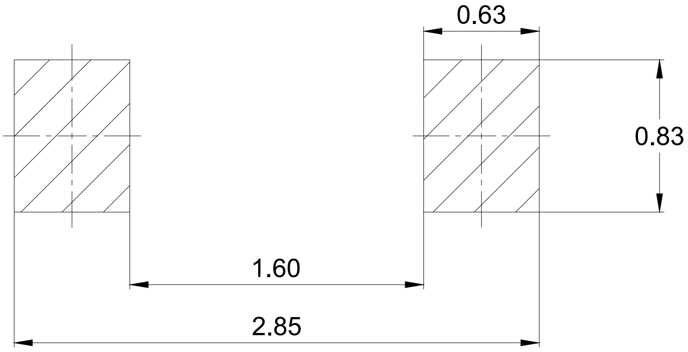
PACKAGE OUTLINE

Plastic surface mounted package SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.9 Max	
D	0.30 Typical	
E	0.22	0.42
H	0.02	0.1
J	0.1 Typical	
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit ： mm

PACKAGE　INFORMATION

Device	Package	Shipping
BAV19WS/20WS/21WS	SOD-323	3000/Tape&Reel