



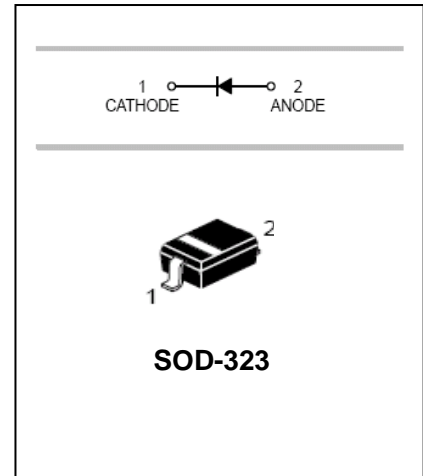
Silicon Epitaxial Planar Diode **BAV19WS/BAV20WS/BAV21WS**

FEATURES

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



Lead-free



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
Average Rectified Output Current	I_o	200			mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.5			
@t=1.0 μ s					
@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



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage BAV19WS BAV20WS BAV21WS	$V_{(BR)R}$	120 200 250		V	$I_R=100\mu A$
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	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

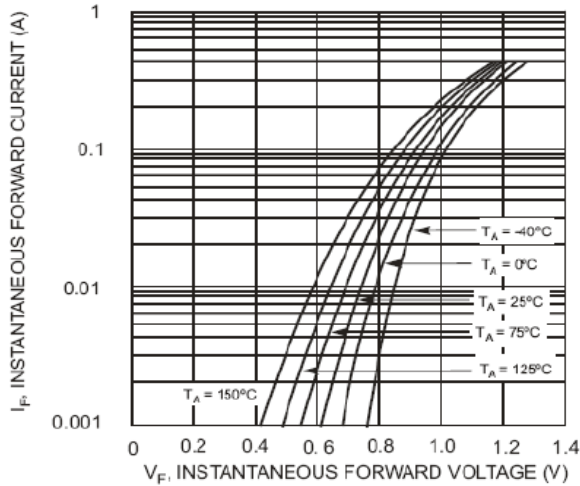


Fig. 1 Typical Forward Characteristics

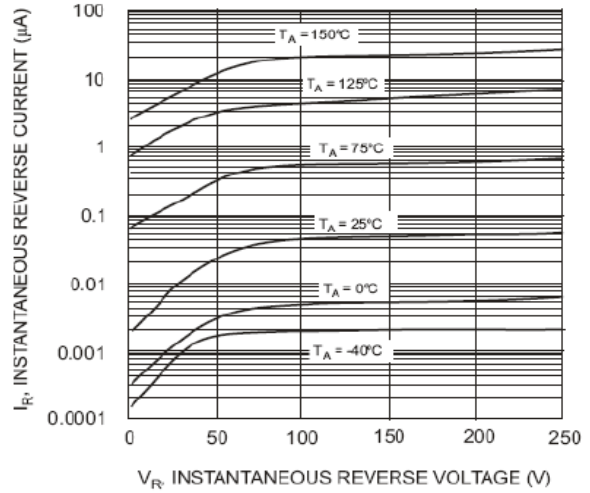


Fig. 2 Typical Reverse Characteristics

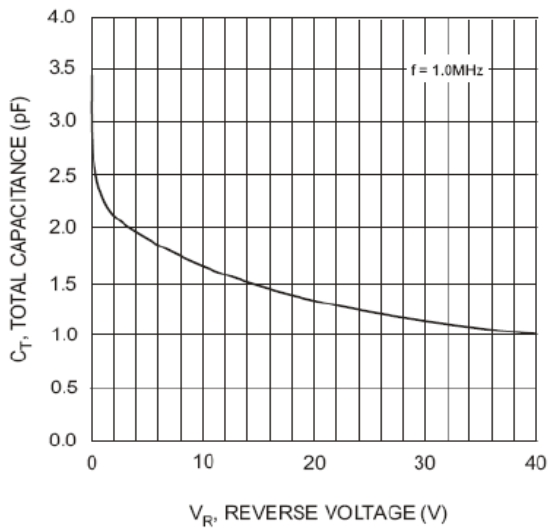


Fig. 3 Typical Capacitance vs. Reverse Voltage

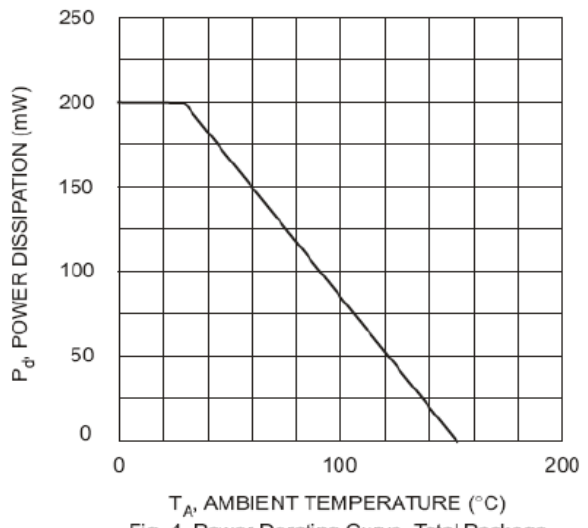


Fig. 4 Power Derating Curve, Total Package

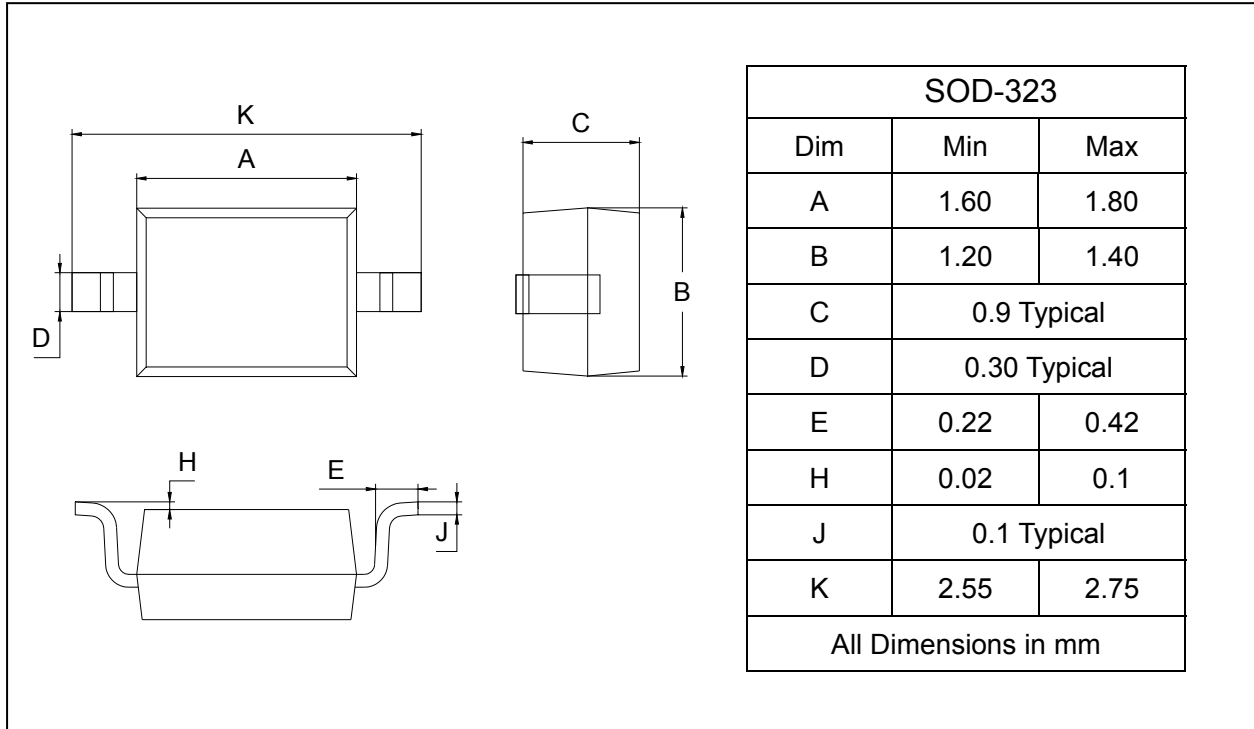


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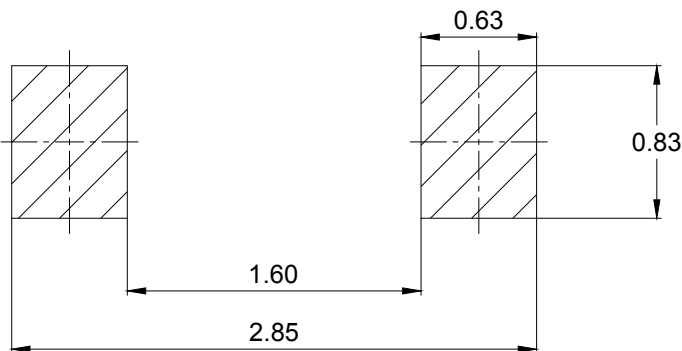
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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