

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

- Fast Switching Speed
- Low Leakage Current
- High Reverse Breakdown Voltage
- Surface Mount Package Ideally Suited for Automatic Insertion

SOD-323



MARKING

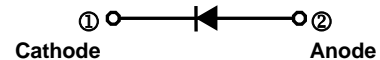
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PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

ORDER INFORMATION

Part Number	Type
BAV3004WS-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit	
Non-Repetitive Peak Reverse Voltage	V _{RM}	350	V	
Repetitive Peak Reverse Voltage	V _{RRM}	350		
Reverse Breakdown Voltage	V _R	300		
RMS Reverse Voltage	V _{RMS}	212		
Forward Continuous Current	I _F	200	mA	
Repetitive Peak Forward Current	I _{FRM}	625		
Non-Repetitive Peak Forward Surge Current	t=1μs	I _{FSM}	4	A
	t=1s		1	
Power Dissipation	P _D	200	mW	
Thermal Resistance Junction-Ambient	R _{θJA}	625	°C/W	
Operating Junction & Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C	

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	V_F	-	-	0.87	V	$I_F=20\text{mA}$
		-	-	1		$I_F=100\text{mA}$
		-	-	1.25		$I_F=200\text{mA}$
Reverse Voltage Leakage Current	I_R	-	-	100	nA	$V_R=240\text{V}, 25^\circ\text{C}$
		-	-	100	μA	$V_R=240\text{V}, 125^\circ\text{C}$
Total Capacitance	C_T	-	5	-	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}	-	50	-	nS	$I_F=I_R=30\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Typical Instantaneous Forward Characteristics

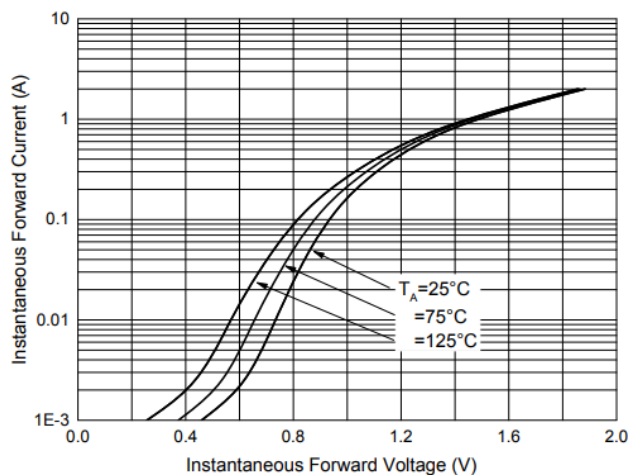


Fig. 2 - Typical Reverse Leakage Characteristics

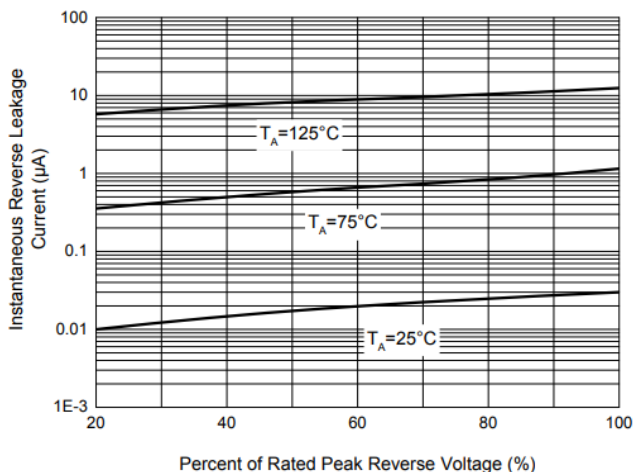
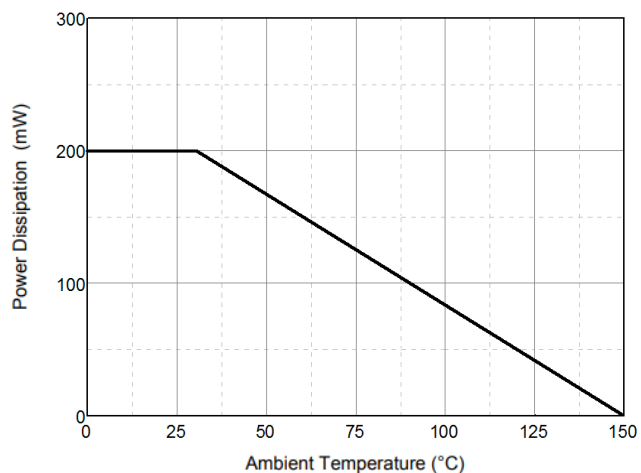
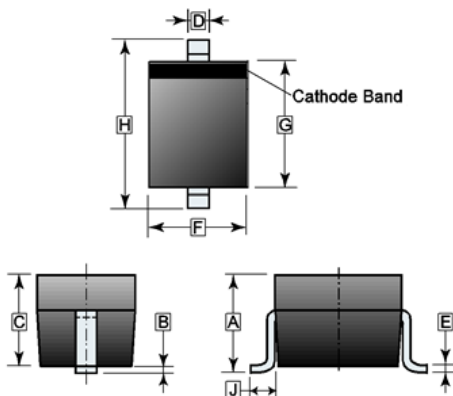


Fig. 3 - Power Derating Curve



PACKAGE OUTLINE DIMENSIONS

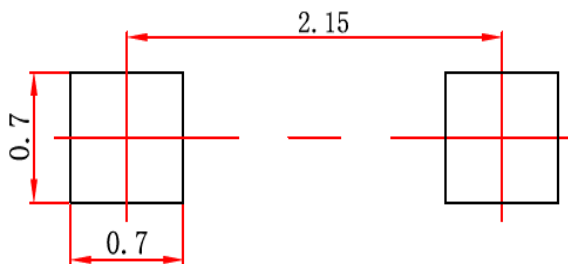
SOD-323



REF.	Millimeter	
	Min.	Max.
A	1.05 REF.	
B	0.07 REF.	
C	0.80	1.10
D	0.25	0.40
E	0.05	0.25
F	1.10	1.50
G	1.50	1.95
H	2.30	2.80
J	0.475 REF.	

MOUNTING PAD LAYOUT

SOD-323



*Dimensions in millimeters