

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

MARKING

4P

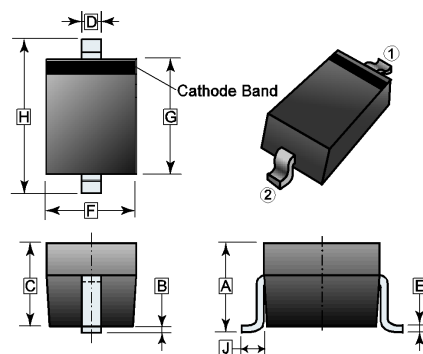
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

ORDER INFORMATION

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

SOD-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05	REF.	F	1.15	1.45
B	0.20	REF.	G	1.60	1.90
C	0.80	1.00	H	2.25	2.75
D	0.25	0.40	J	0.475 REF.	
E	0.05	0.20			



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

Parameter	Symbol	Ratings	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	350	V
Working Peak Reverse Voltage	V _{RWM}	300	
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{RMS}	212	V
Forward Continuous Current	I _F	200	mA
Repetitive Peak Forward Current	I _{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current	t=1μs	4	A
	t=1s	1	
Power Dissipation	P _D	200	mW
Thermal Resistance Junction-Ambient	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65~150	°C

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

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	V_F	-	0.78	0.87	V	$I_F=20\text{mA}$
		-	0.93	1		$I_F=100\text{mA}$
		-	1.03	1.25		$I_F=200\text{mA}$
Reverse Voltage Leakage Current	I_R	-	30	100	nA	$V_R=240\text{V}, T_J=25^\circ\text{C}$
		-	35	100	μA	$V_R=240\text{V}, T_J=125^\circ\text{C}$
Total Capacitance	C_T	-	1	-	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	T_{RR}	-	-	50	nS	$I_F=I_R=30\text{mA}, I_{RR}=3\text{mA}, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Power Derating Curve

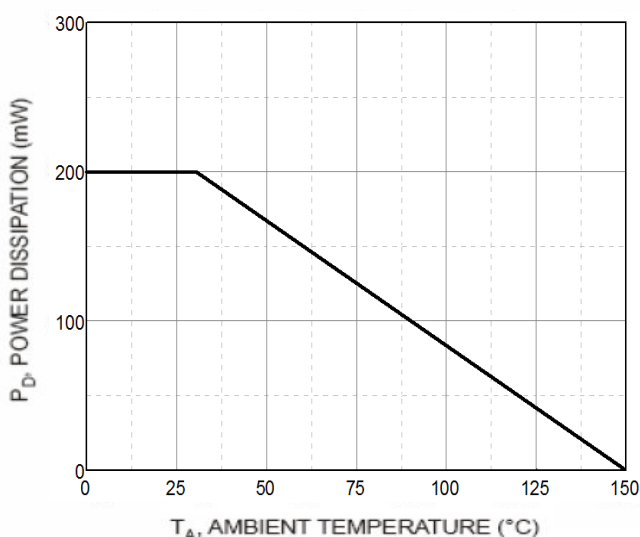


Fig. 3 Typical Reverse Characteristics

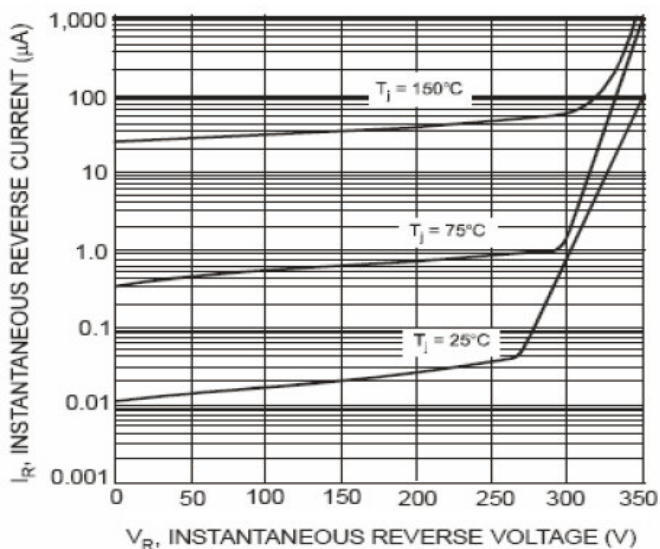


Fig. 2 Typical Forward Characteristics

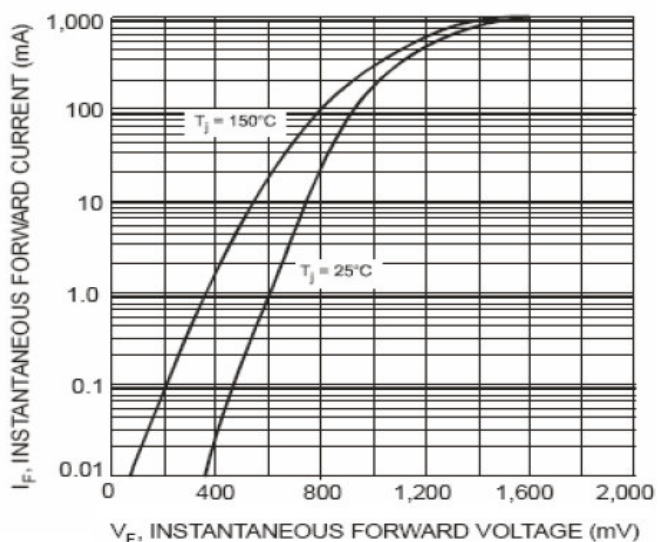


Fig. 4 Total Capacitance vs. Reverse Voltage

