DESCRIPTION

The BAV19W~ BAV21W is available in SOD-123 packages

FEATURES

- Fast Switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications.
- RoHS Compliant
- Available in SOD-123 packages

ORDERING INFORMATION

Package Type	Part Number
SOD-123	BAV19W
	BAV20W
	BAV21W
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

APPLICATIONS

- Surface mount fast switching diode

ABSOLUTE MAXIMUM RATINGS

@T_A= 25°C, unless otherwise specified

Parameter	Symbol	BAV19W	BAV20W	BAV21W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage OC Reverse Voltage	V_{RRM} V_{RWM} V_R	100	150	200	V
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=1.0μs @t=1.0s	I_{FSM}	2.5 0.5			A
Repetitive Peak Forward Surge Current	I_{FRM}	625			mA
Power Dissipation	P_D	250			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500			°C/W
Operating and Storage Temperature Rage	T_J ,T_{STG}	-65 ~ +150			°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

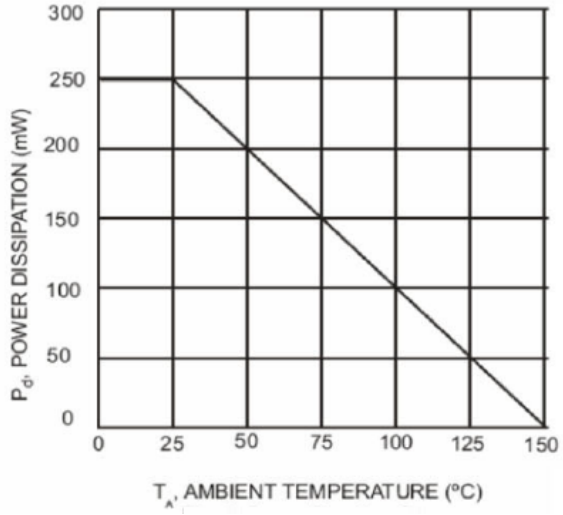
ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions		Min.	Max.	Unit
Maximum Forward Voltage	V_{F1} V_{F2}	I_F=100mA I_F=200mA			1.0 1.25	V
Reverse Current	I_R	V_R=100V V_R=150V V_R=200V	BAV19W BAV20W BAV21W		0.1	μA
Junction Capacitance	Cj	V_R=0 , f=1.0MHz			5.0	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=30mA , I_{rr}=0.1x I_R , R_L=1000			50	ns

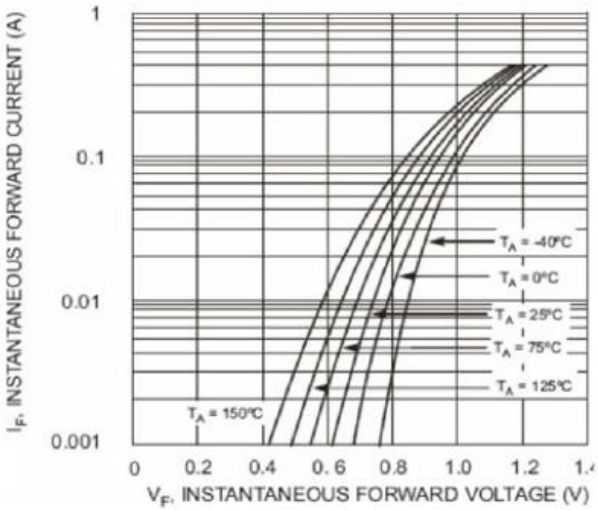
TYPICAL PERFORMANCE CHARACTERISTICS

@T_A= 25°C, unless otherwise specified

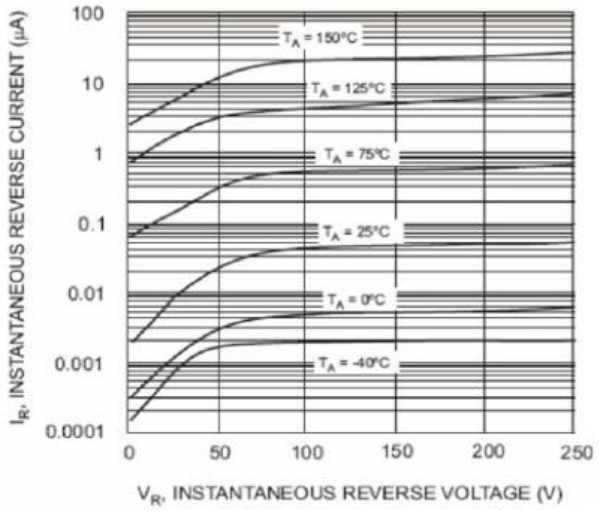
1. Power Derating Curve



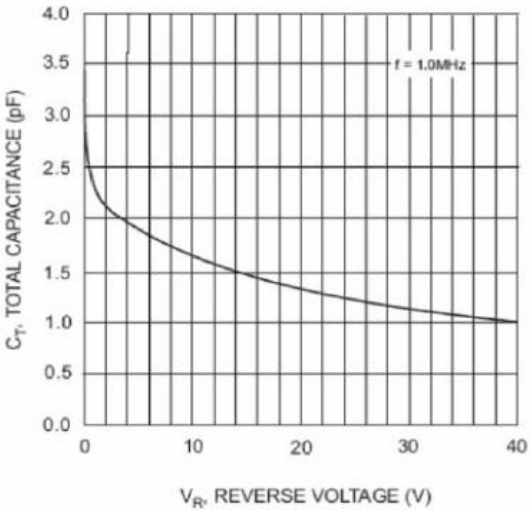
2. Typical Forward Characteristics



3. Typical Reverse Characteristics

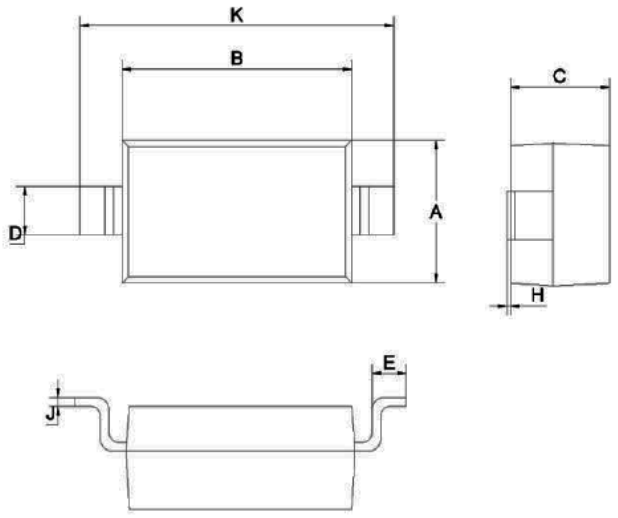


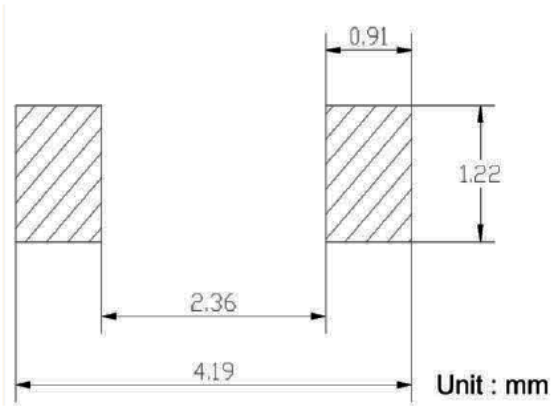
4. Typical Capacitance vs. Reverse Voltage



PACKAGE INFORMATION

Dimension in SOD-123 (Unit: mm)





Soldering Footprint

DIM	MIN	MAX
A	1.400	1.800
B	2.550	2.850
C	1.150 TYP.	
D	0.500	0.600
E	0.300	0.400
H	0.020	0.100
J	0.100 TYP.	
K	3.550	3.850

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