BAV19W--21W

Surface mount switching diode
FEATURES

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



SOD-123

APPLICATIONS

- Surface mount fast switching diode

ORDERING INFORMATION

Type No.	Marking	Package Code
BAV19W	A8	SOD-123
BAV20W	T2	SOD-123
BAV21W	T3	SOD-123

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	BAV19W	BAV20W	BAV21W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC 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=1.0 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	250			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500			℃/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
Maximum Forward Voltage	V_{F1} V_{F2}	-	1.0 1.25	V	I_F=100mA I_F=200mA
Reverse Current BAV19W BAV20W BAV21W	I_R	-	0.1	μA	V_R=100V V_R=150V V_R=200V
Junction Capacitance	C_j	-	5.0	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

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

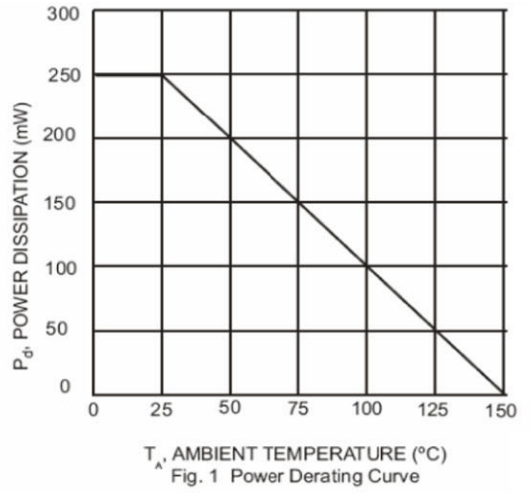


Fig. 1 Power Derating Curve

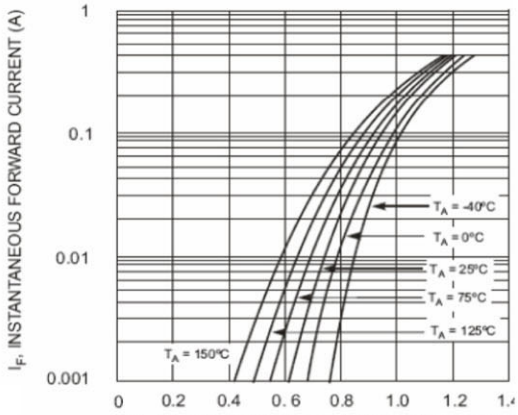


Fig. 2 Typical Forward Characteristics

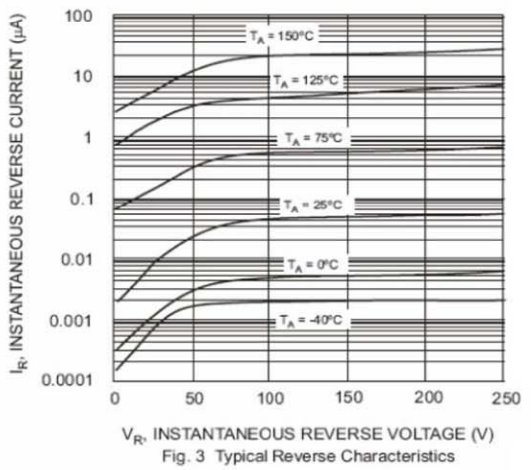


Fig. 3 Typical Reverse Characteristics

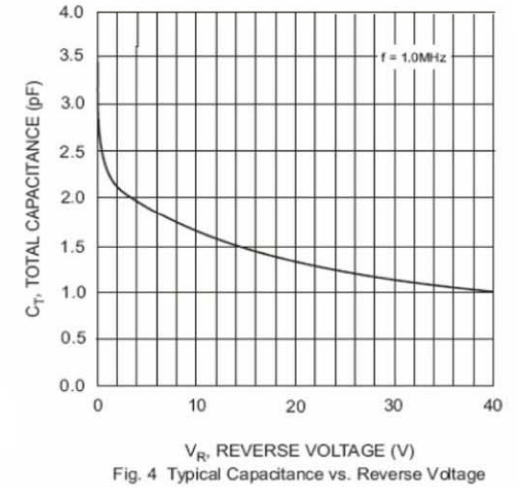
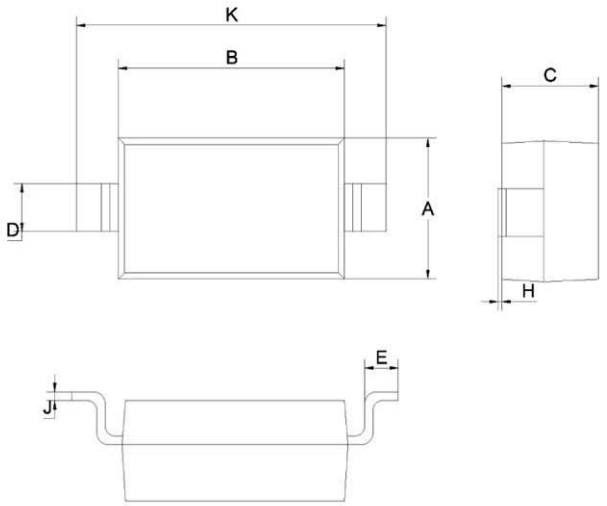


Fig. 4 Typical Capacitance vs. Reverse Voltage

Surface mount switching diode

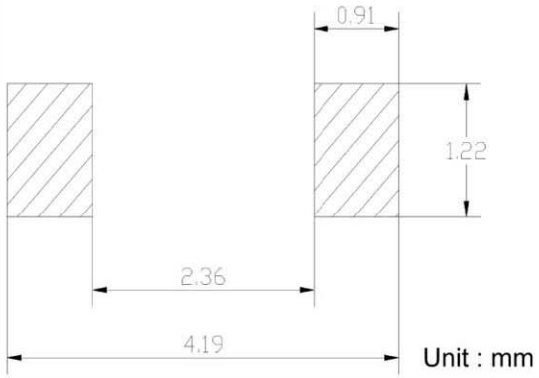
PACKAGE OUTLINE

Plastic surface mounted package



SOD-123		
Dim	Min	Max
A	1.4	1.8
B	2.55	2.85
C	1.15 Typical	
D	0.5	0.6
E	0.3	0.4
H	0.02	0.10
J	0.1 Typical	
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAV19W/20W/21W	SOD-123	3000/Tape&Reel