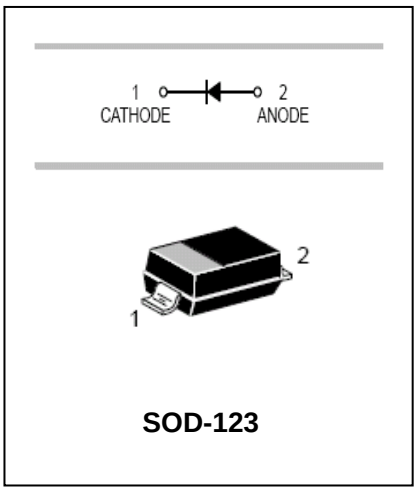
Surface mount low leakage diode

BAV3004W

FEATURES

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

Lead-free



SOD-123

APPLICATIONS

- Surface mount fast switching diode.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAV3004W	4P	SOD-123

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Value**	**Unit**
Peak Repetitive Reverse Voltage	V_{RRM}	350	V
Working Peak Reverse Voltage DC Reverse Voltage	V_{RWM} V_R	300	V
RMS Reverse Voltage	$V_{R(RMS)}$	212	V
Forward Continuous Current	I_{FM}	225	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current @t=1.0us @t=1.0s	I_{FSM}	4.0 1.0	A
Power Dissipation	P_d	400	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	312	℃/W
Operating and Storage Temperature Rage	T_j,T_{STG}	-65 to +150	℃

Surface mount low leakage diode **BAV3004W**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	350		-	V	I_R=150μA
Forward Voltage	V_F	-	0.78 0.93 1.03	0.87 1.0 1.25	V	I_F=20mA I_F=100mA I_F=200mA
Reverse Current	I_R	-	30 35	100 100	nA uA	V_R=240V,T_j=25℃ V_R=240V,T_j=150℃
Total Capacitance	C_T	-	1.0	5.0	pF	V_R=0V,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

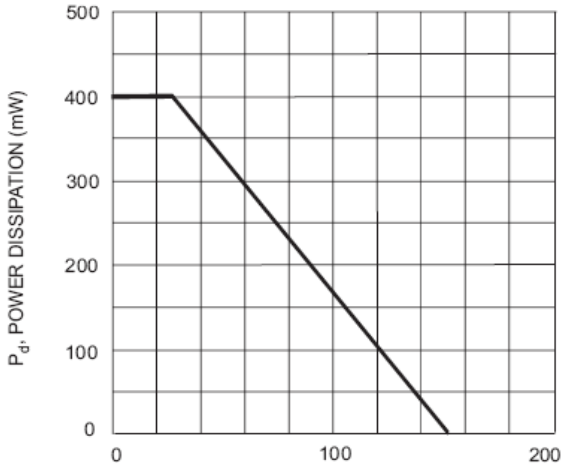


Fig. 1 Power Derating Curve

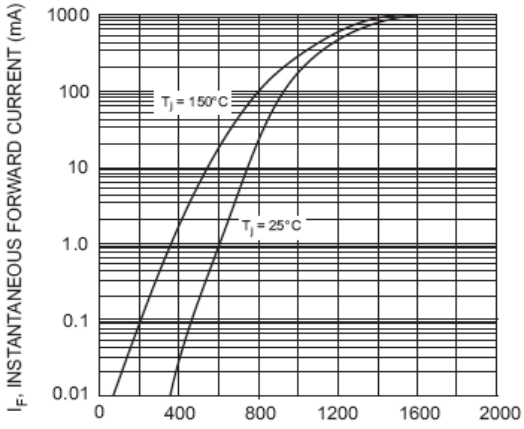


Fig. 2 Typical Forward Characteristics

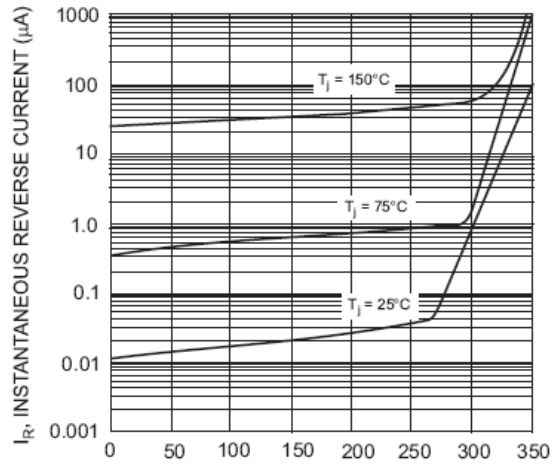


Fig. 3 Typical Reverse Characteristics

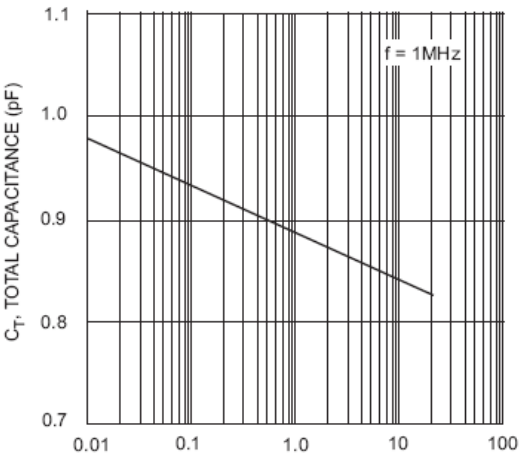
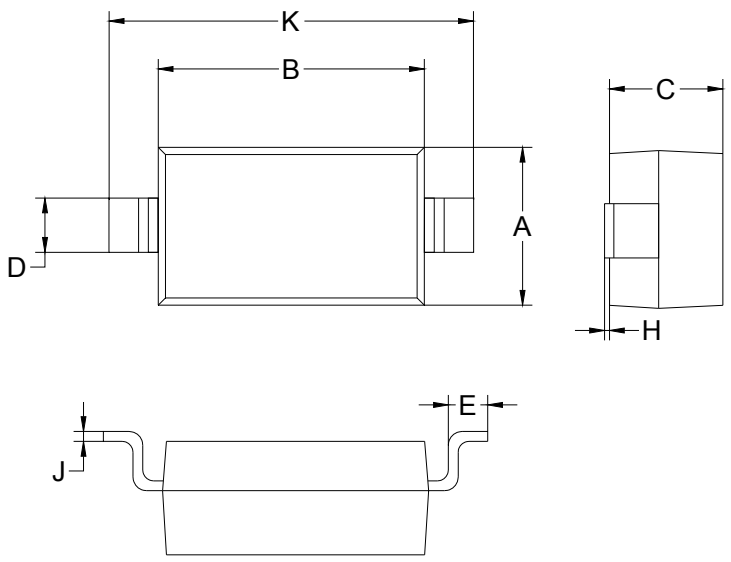


Fig. 4 Typical Total Capacitance vs. Reverse Voltage

Surface mount low leakage diode **BAV3004W**

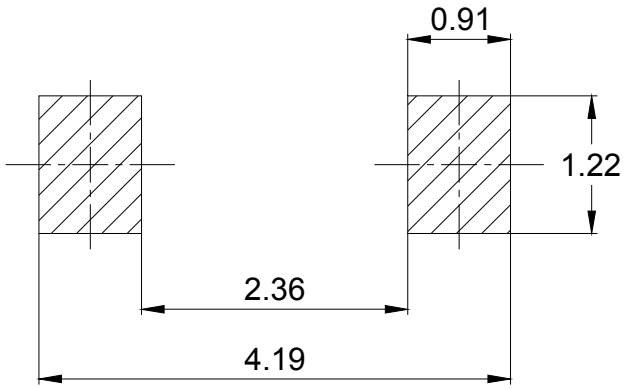
PACKAGE OUTLINE

Plastic surface mounted package SOD-123



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.15 Typical	
D	0.55 Typical	
E	0.25	0.45
H	0.02	0.10
J	0.1 Typical	
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm

PACKAGE INFORMATION

Device	Package	Shipping
BAV3004W	SOD-123	3000/Tape&Reel