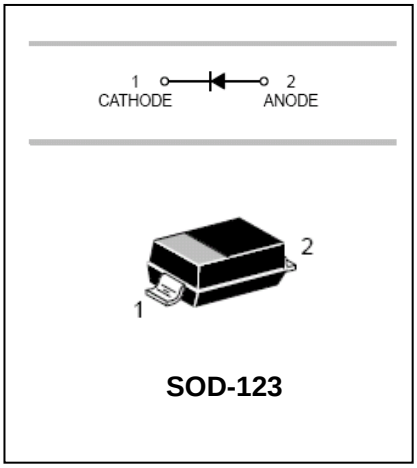
Surface mount switching diode **BAS116W**

FEATURES

- Low leakage current applications.
- Medium speed switching times.
- Surface mount package ideally suited for automatic Insertion.

Lead-free



SOD-123

APPLICATIONS

- High speed switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS116W	JV	SOD-123

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Limits**	**Unit**
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	85	V
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Forward Continuous Current	I_{FM}	215	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs @t=1.0ms @t=1.0s	I_{FSM}	 4.0 1.0 0.5	A
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	℃/W
Operating Junction Temperature Range	T_j	150	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	85	-	-	V	I_R= 100μA
Forward Voltage	V_{FM}	-	-	0.9 1.0 1.1 1.25	V	I_F=1mA I_F=10mA I_F=50mA I_F=150mA
Reverse Leakage Current	I_R	-	-	5.0 80	nA	V_R=75V V_R=75V,T_j=150℃
Junction Capacitance	C_j	-	2	-	pF	V_R=0V,f=1.0MHz
Reverse Recovery Time	t_{rr}	-	-	3	ns	I_F=I_R=10mAI_{rr}=0.1*I_R

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

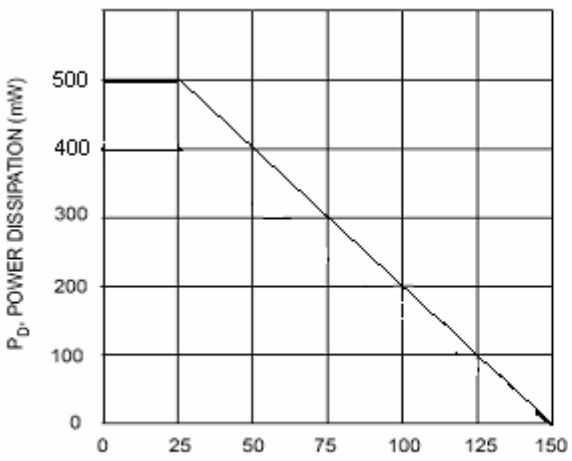

Fig. 1 Power Derating Curve

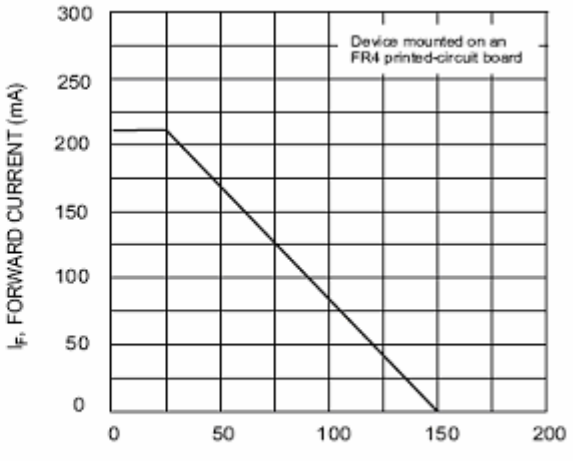

Fig. 2 Current Derating Curve

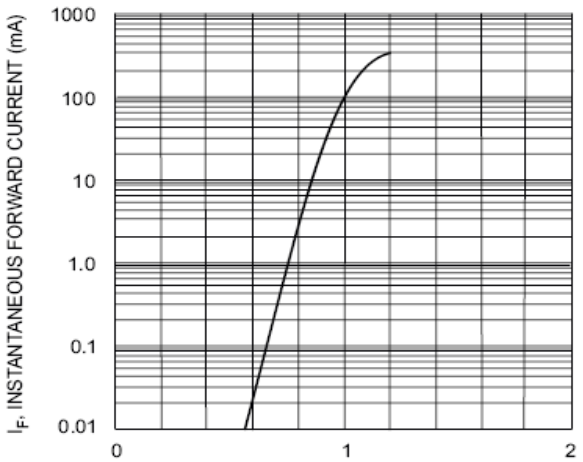

Fig. 3 Typical Forward Characteristics

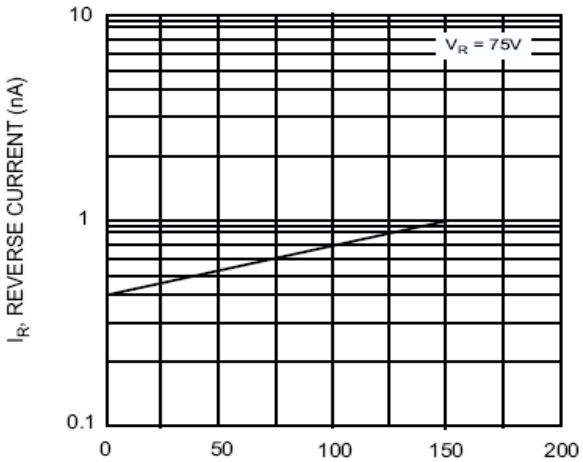

Fig. 4 Typical Reverse Characteristics

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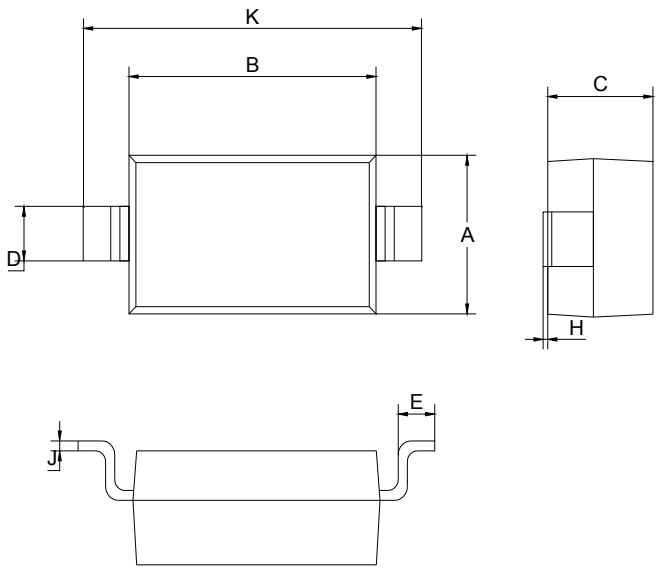
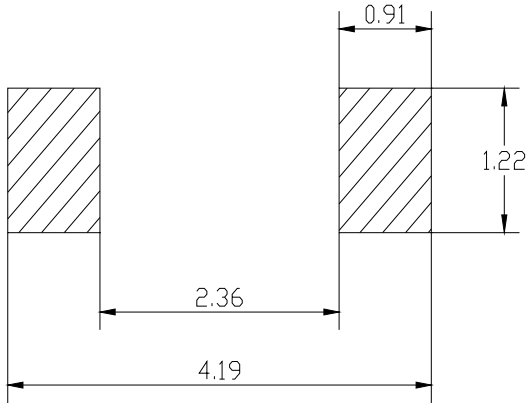
PACKAGE OUTLINE

Plastic surface mounted package SOD-123



SOD-123		
Dim	Min	Max
A	1.4	1.8
B	2.55	2.85
C	1.15 Typical	
D	0.55 Typical	
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



Unit：mm

PACKAGE INFORMATION

Device	Package	Shipping
BAS116W	SOD-123	3000/Tape&Reel