

400mW SOD-123 SURFACE MOUNT
Small Outline Gull Wing Lead Plastic Package
High Voltage & High Conductance
Fast Switching Diode

Green Product

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	400	mW
T_{STG}	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
V_{RRM}	Repetitive Peak Reverse Voltage	250	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA

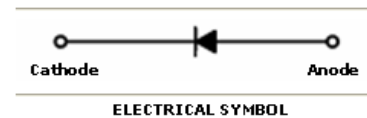
These ratings are limiting values above which the serviceability of the diode may be impaired.



SOD-123 Gull Wing Lead

Specification Features:

- Fast Switching Diode
- General Purpose Diodes High Voltage Application Diodes
- Gull Wing Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.01g

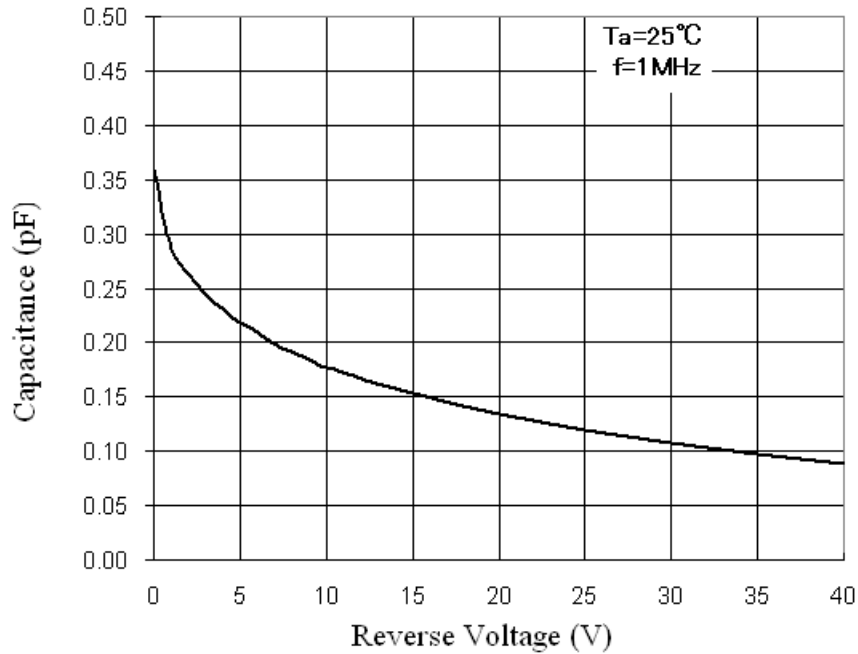
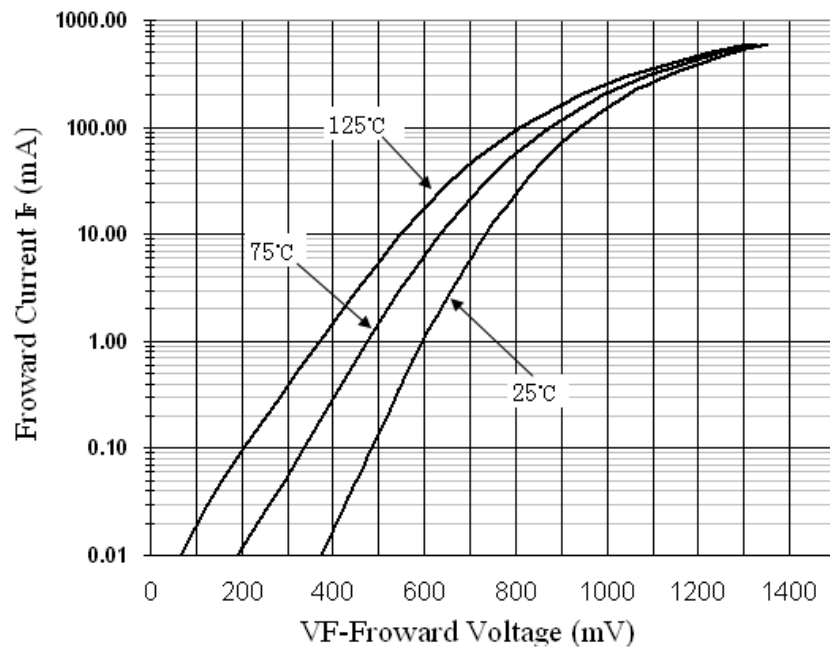


DEVICE MARKING CODE:

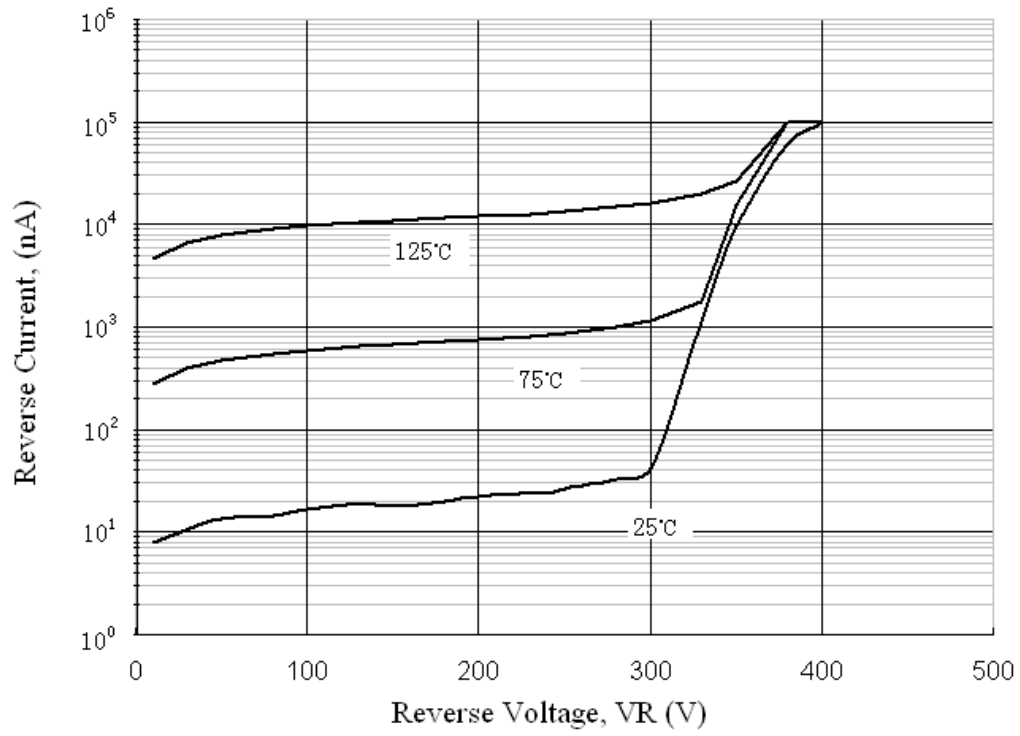
Device Type	Device Marking
BAV19WG	A8
BAV20WG	T2
BAV21WG	T3

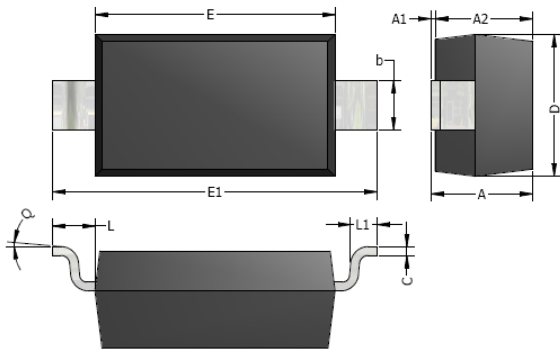
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit	
			Min	Max		
B_V	Breakdown Voltage	BAV19WG	$I_R=100\mu\text{A}$	120	---	Volts
		BAV20WG		200	---	Volts
		BAV21WG		250	---	Volts
I_R	Reverse Leakage Current	BAV19WG	$V_R=100\text{V}$	---	100	nA
		BAV20WG	$V_R=150\text{V}$	---	100	nA
		BAV21WG	$V_R=200\text{V}$	---	100	nA
V_F	Forward Voltage		$I_F=100\text{mA}$	---	1.0	Volts
			$I_F=200\text{mA}$	---	1.25	Volts
T_{RR}	Reverse Recovery Time		$I_F=I_R=30\text{mA}$ $R_L=100\Omega$ $I_{RR}=3\text{mA}$	---	50	nS
C	Capacitance		$V_R=0\text{V}, f=1\text{MHz}$	---	5.0	pF

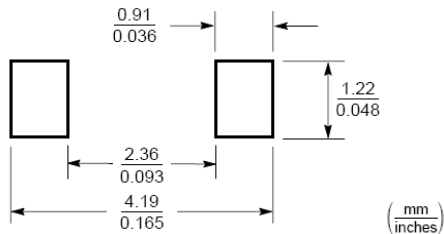
Typical Performance Characteristics
Total Capacitance

Forward Voltage vs Ambient Temperature


Reverse Current vs Reverse Voltage



SOD123 Gull Wing Lead Package Outline


DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.05	1.25	0.041	0.049
A1	0.00	0.10	0.000	0.004
A2	1.05	1.15	0.041	0.045
b	0.50	0.70	0.020	0.028
c	0.08	0.15	0.003	0.006
D	1.50	1.70	0.059	0.067
E	2.60	2.80	0.102	0.110
E1	3.55	3.85	0.140	0.152
L	0.50 REF.		0.020 REF.	
L1	0.25	0.45	0.010	0.018
θ	0°	8°	0°	8°

Typical Soldering Pattern:


Note:
Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

NOTICE

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