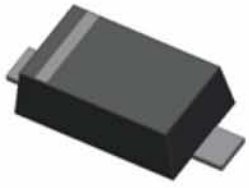
GAIA TECH

BAV19W/BAV20W/BAV21W

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

Green Product



SOD-123 Flat Lead

ELECTRICAL SYMBOL

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

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

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

Specification Features:

- Fast Switching Diode
- General Purpose Diodes High Voltage Application Diodes
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

DEVICE MARKING CODE:

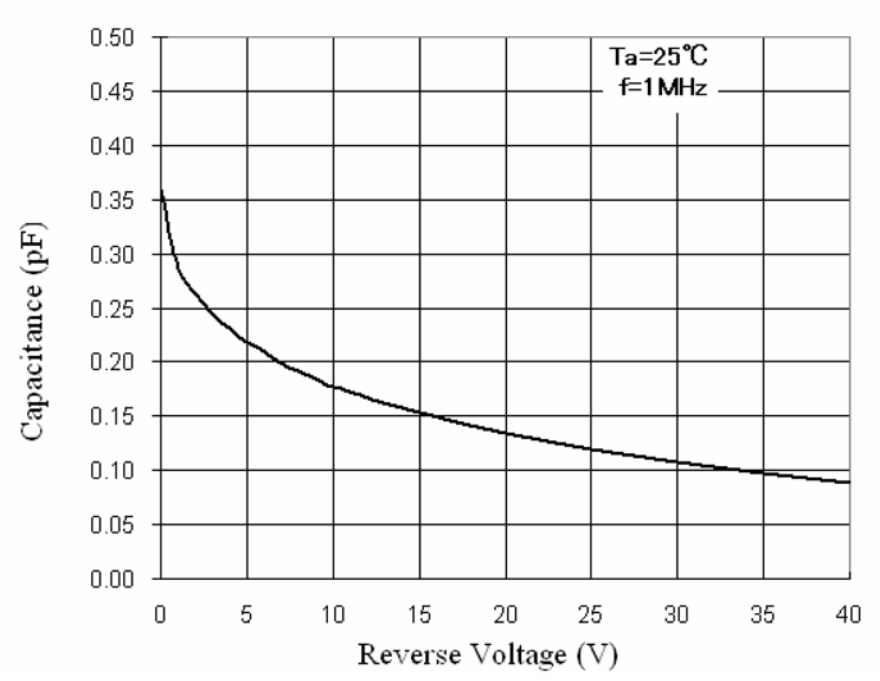
Device Type	Device Marking
BAV19W	H1
BAV20W	H2
BAV21W	H3

Electrical Characteristics T_A = 25°C unless otherwise noted

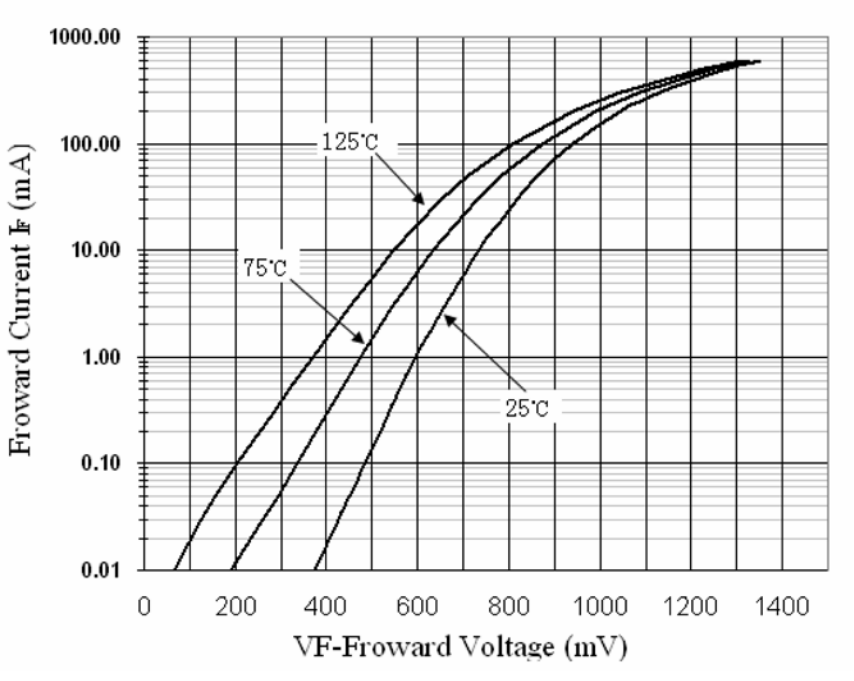
Symbol	Parameter		Test Condition	Limits		Unit
				Min	Max	
B_V	Breakdown Voltage	BAV19W	I_R=100μA	120	---	Volts
		BAV20W		200	---	Volts
		BAV21W		250	---	Volts
I_R	Reverse Leakage Current	BAV19W	V_R=100V	---	100	nA
		BAV20W	V_R=150V	---	100	nA
		BAV21W	V_R=200V	---	100	nA
V_F	Forward Voltage		I_F=100mA	---	1.0	Volts
			I_F=200mA	---	1.25	Volts
T_{RR}	Reverse Recovery Time		I_F=I_R=30mA R_L=100Ω I_{RR}=3mA	---	50	nS
C	Capacitance		V_R=0V, f=1M_{HZ}	---	5.0	pF

Typical Performance Characteristics

Total Capacitance



Forward Voltage vs Ambient Temperature



Reverse Current vs Reverse VoltageReverse