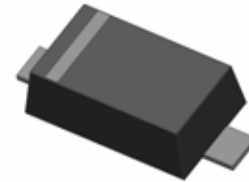
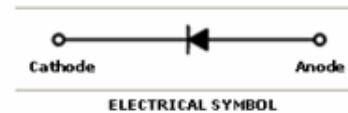


**400mW SOD-123 SURFACE MOUNT**  
**Small Outline Flat Lead Plastic Package**  
**High Voltage & High Conductance**  
**Fast Switching Diode**

Green Product



SOD-123 Flat Lead



**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
$I_{F(AV)}$	Repetitive Peak Forward Current	200	mA

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

**Specification Features:**

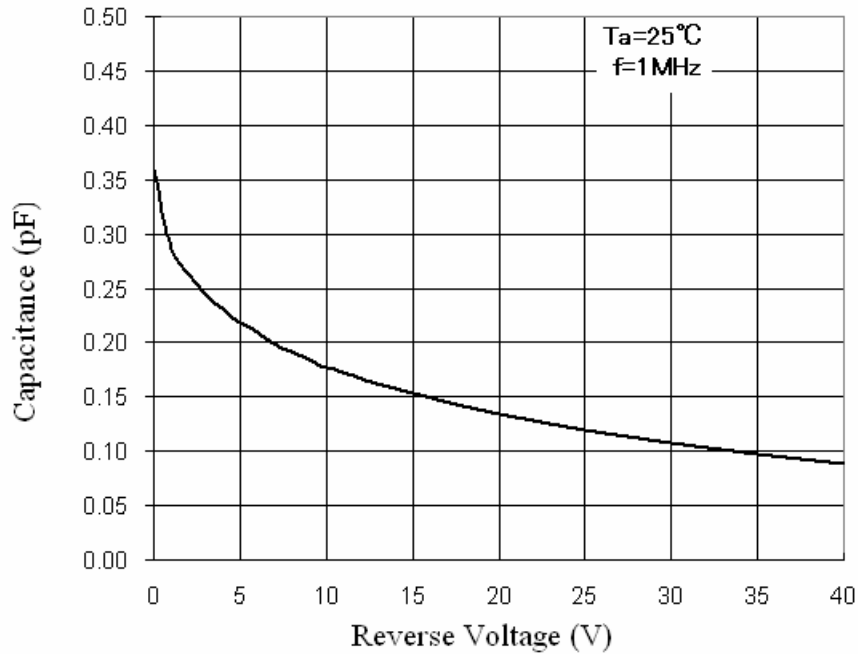
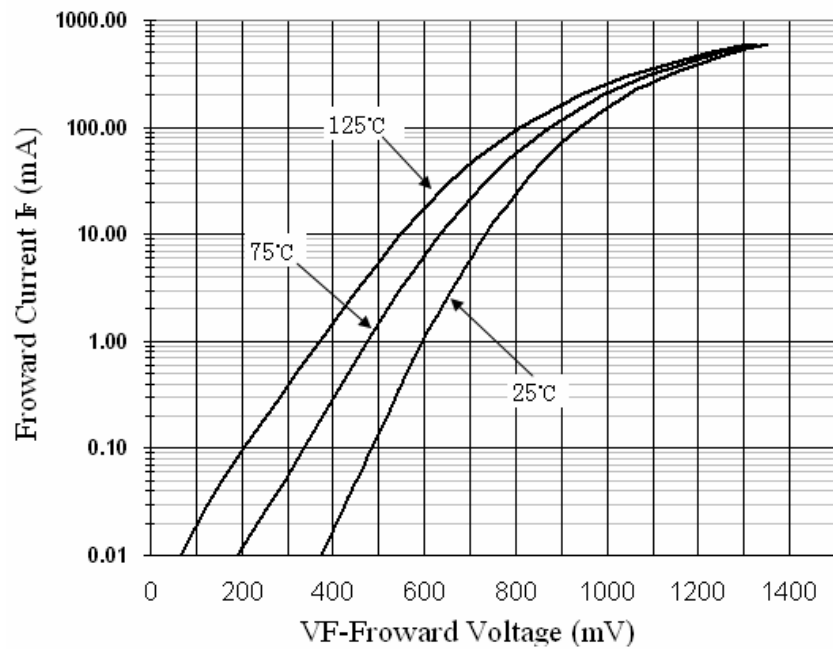
- Fast Switching Diode
- General Purpose Diodes High Voltage Application Diodes
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

**DEVICE MARKING CODE:**

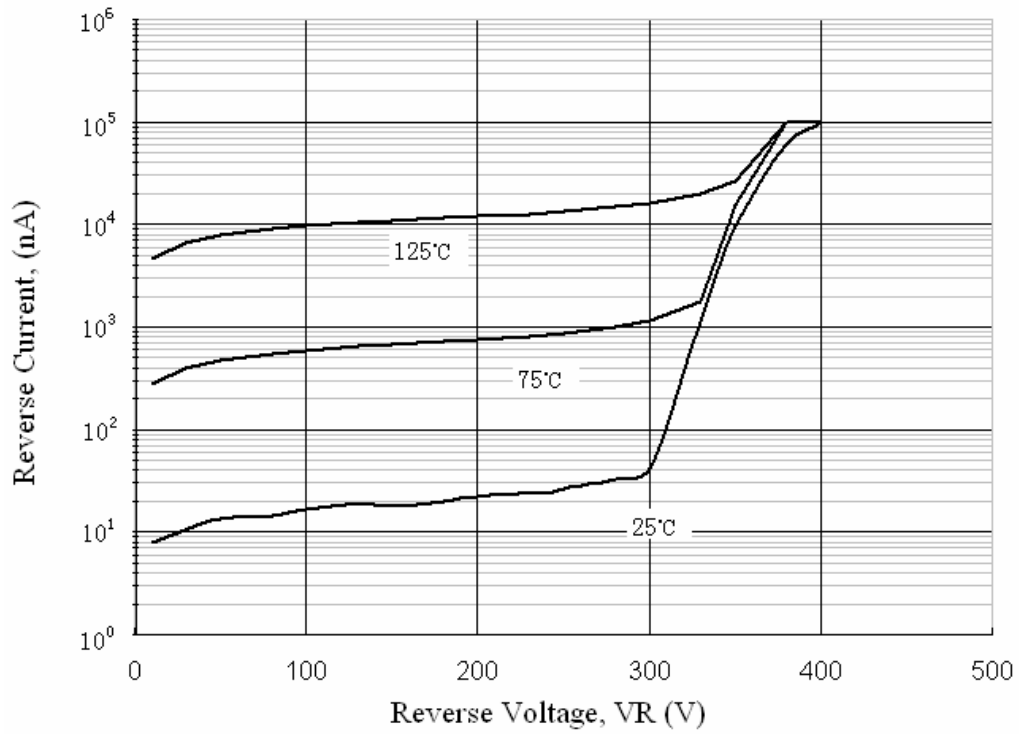
Device Type	Device Marking
BAV19W	H1
BAV20W	H2
BAV21W	H3

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

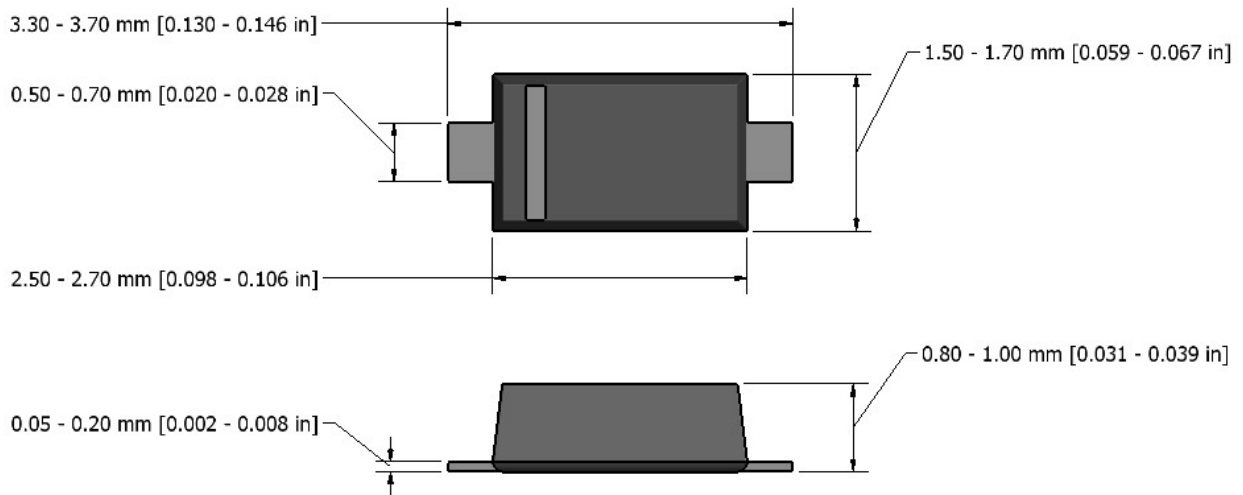
Symbol	Parameter	Test Condition	Limits		Unit	
			Min	Max		
$B_V$	Breakdown Voltage	BAV19W	$I_R=100\mu\text{A}$	120	---	Volts
		BAV20W		200	---	Volts
		BAV21W		250	---	Volts
$I_R$	Reverse Leakage Current	BAV19W	$V_R=100\text{V}$	---	100	nA
		BAV20W	$V_R=150\text{V}$	---	100	nA
		BAV21W	$V_R=200\text{V}$	---	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**



**Flat Lead SOD-123 Package Outline**



This datasheet presents technical data of Tak Cheong's Switching Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed by Tak Cheong. Please consult your nearest Tak Cheong's sales office for further assistance.

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