

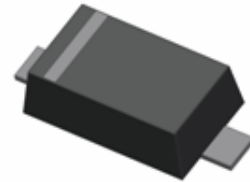
400mW SOD-123 SURFACE MOUNT

Small Outline Flat Lead Plastic Package

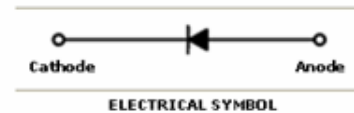
High Voltage & High Conductance

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:

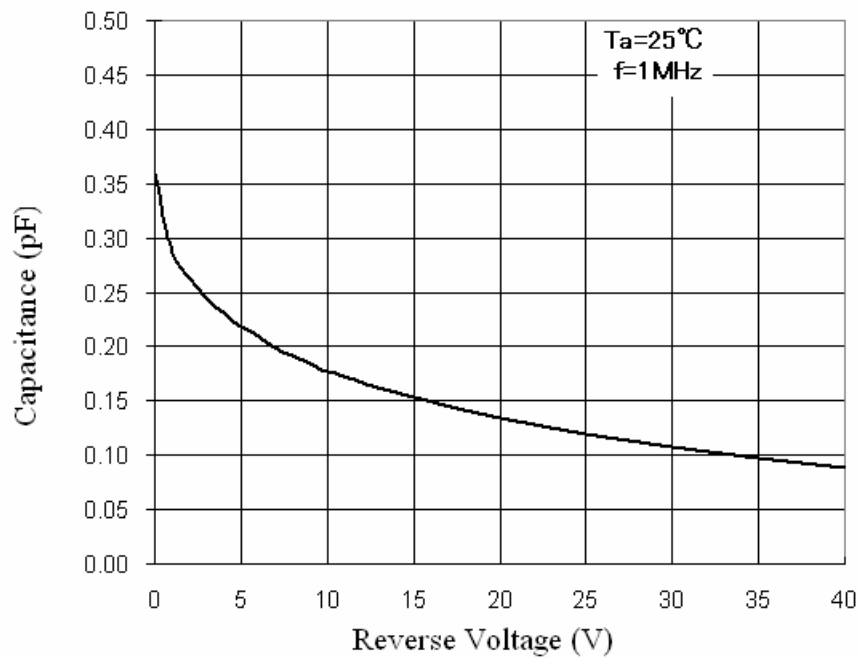
Device Type	Device Marking
BAV19W	H1
BAV20W	H2
BAV21W	H3

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

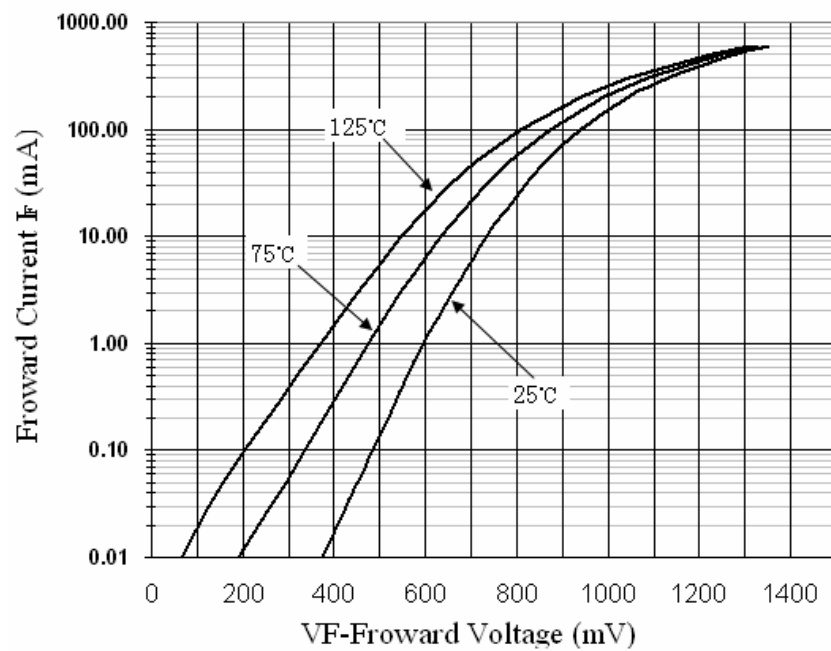
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R=100\mu\text{A}$	120	---	Volts
			200	---	Volts
			250	---	Volts
I_R	Reverse Leakage Current	$V_R=100\text{V}$	---	100	nA
		$V_R=150\text{V}$	---	100	nA
		$V_R=200\text{V}$	---	100	nA
V_F	Forward Voltage	$I_F=100\text{mA}$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

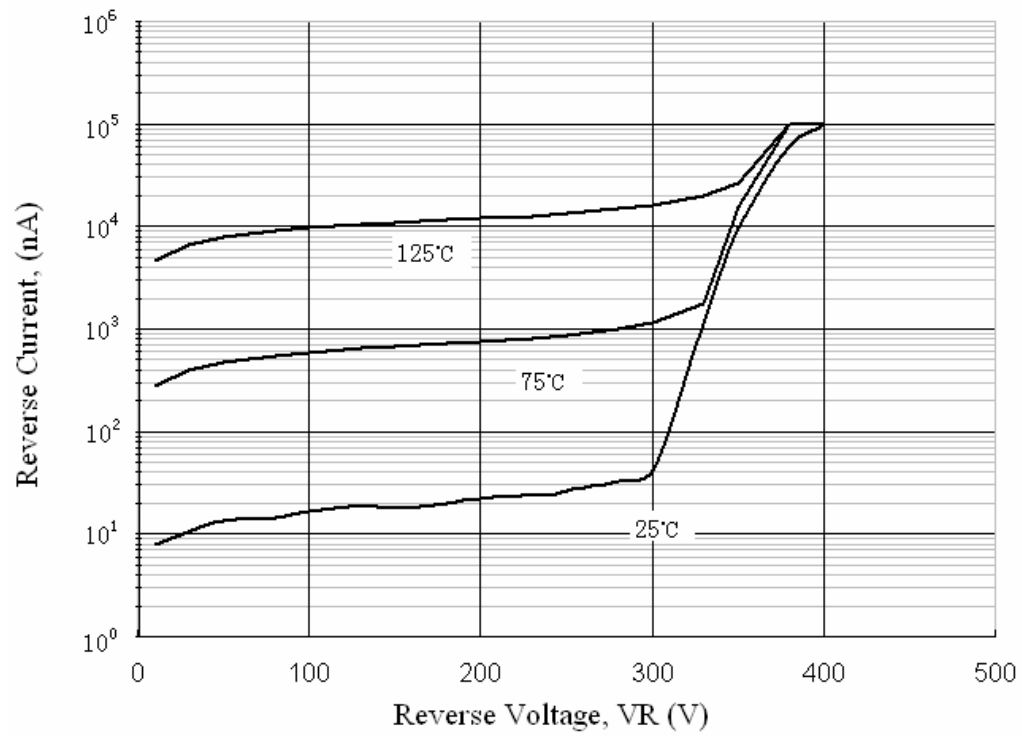
Total Capacitance



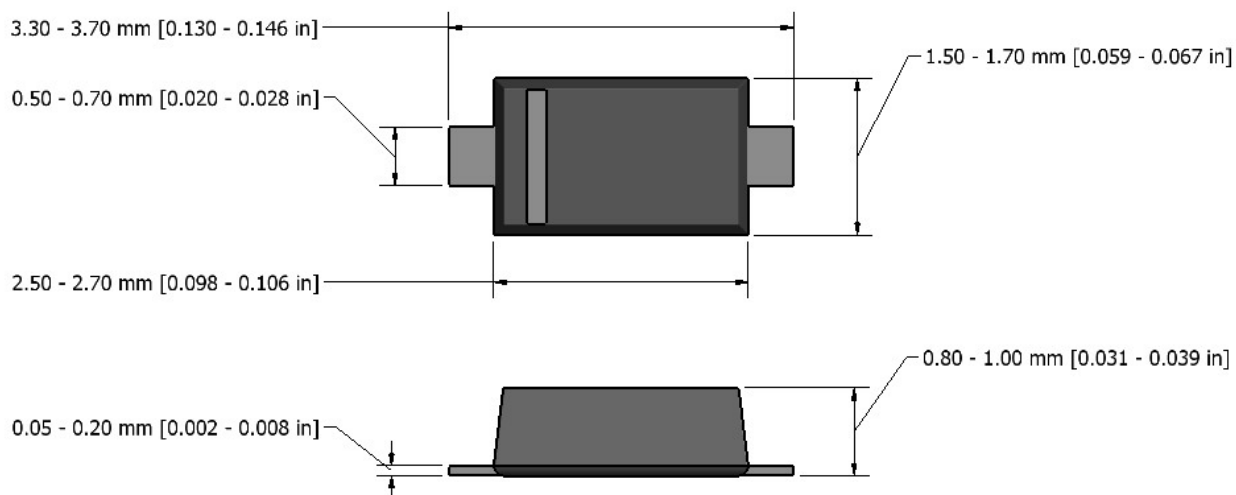
Forward Voltage vs Ambient Temperature



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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