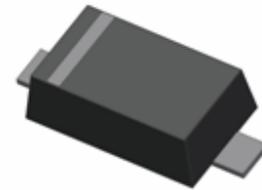


200mW SOD-323 SURFACE MOUNT

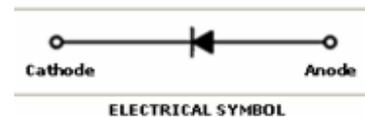
Small Outline Flat Lead Plastic Package

High Voltage Switching Diode

Green Product



SOD-323 Flat Lead



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

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
V_{RRM}	Maximum Repetitive Reverse Voltage	250	V
T_{STG}	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Current	1.0	A
	Pulse Width = 1.0 Second	4.0	A
	Pulse Width = 1.0 μsecond		

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

Specification Features:

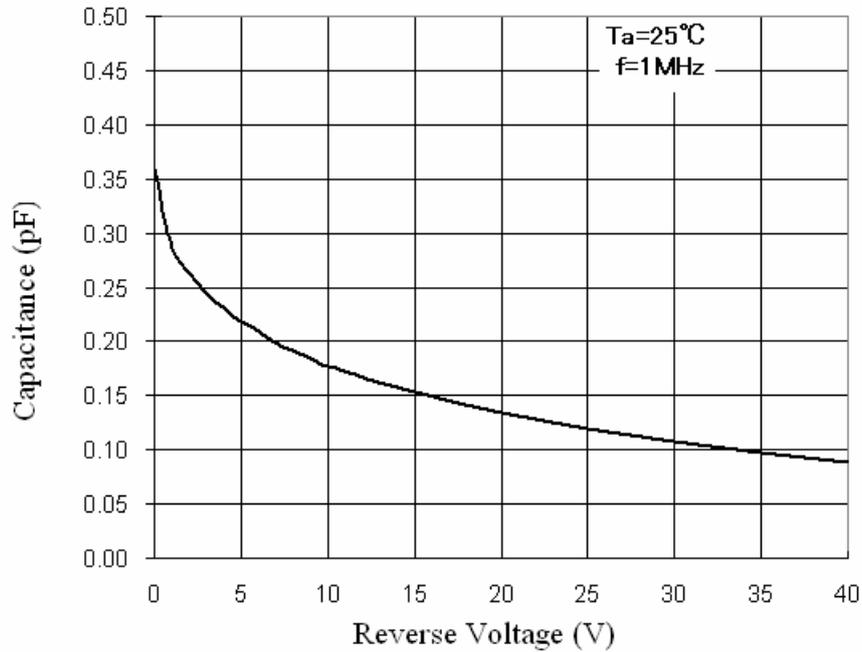
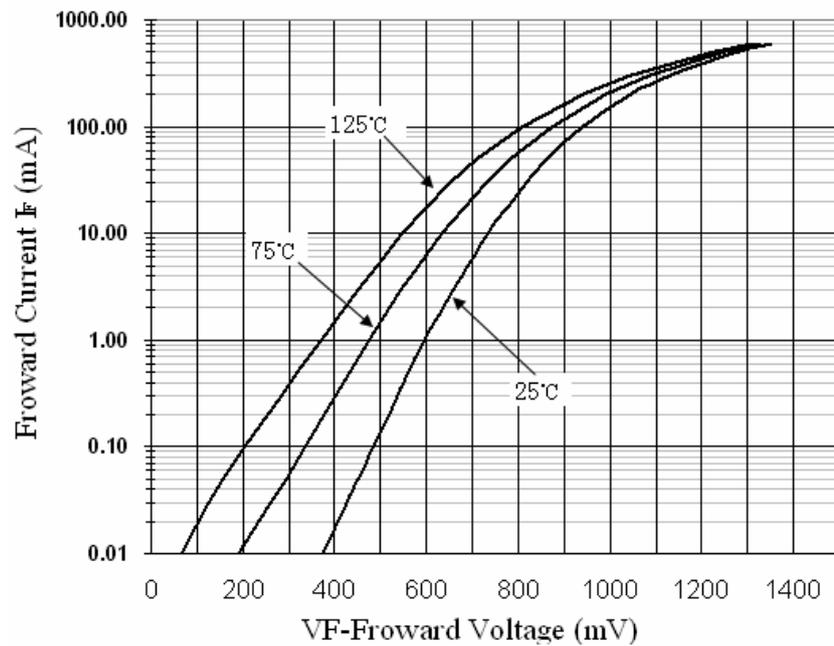
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- Moisture Sensitivity Level 1
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

DEVICE MARKING CODE:

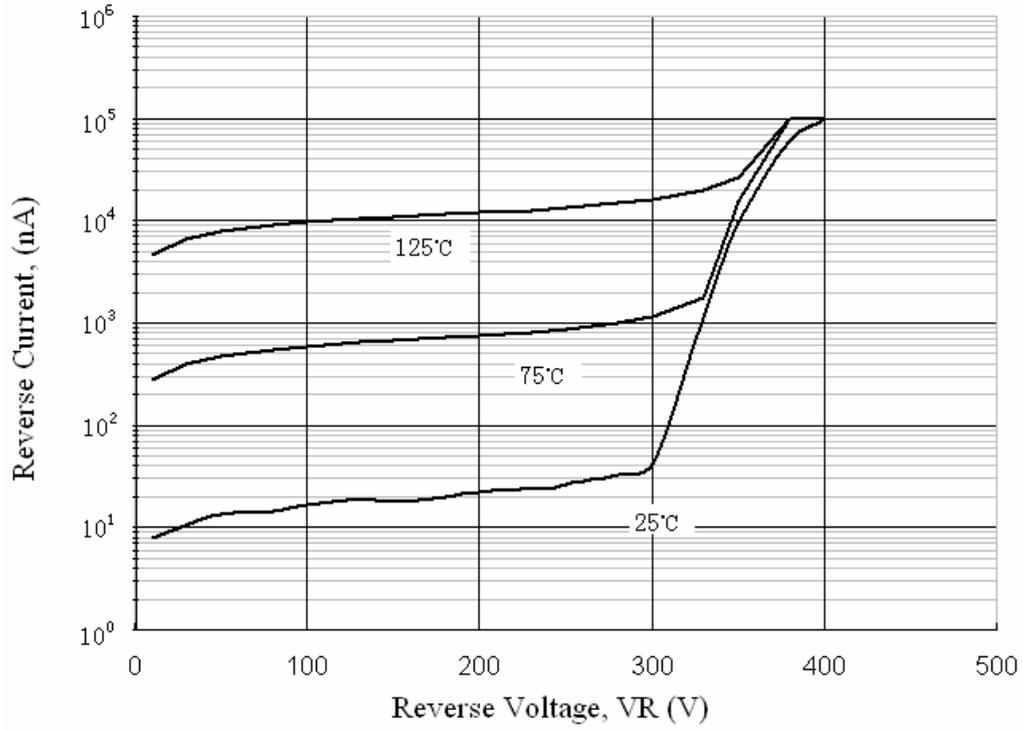
Device Type	Device Marking
BAV19WS	S5
BAV20WS	S6
BAV21WS	S7

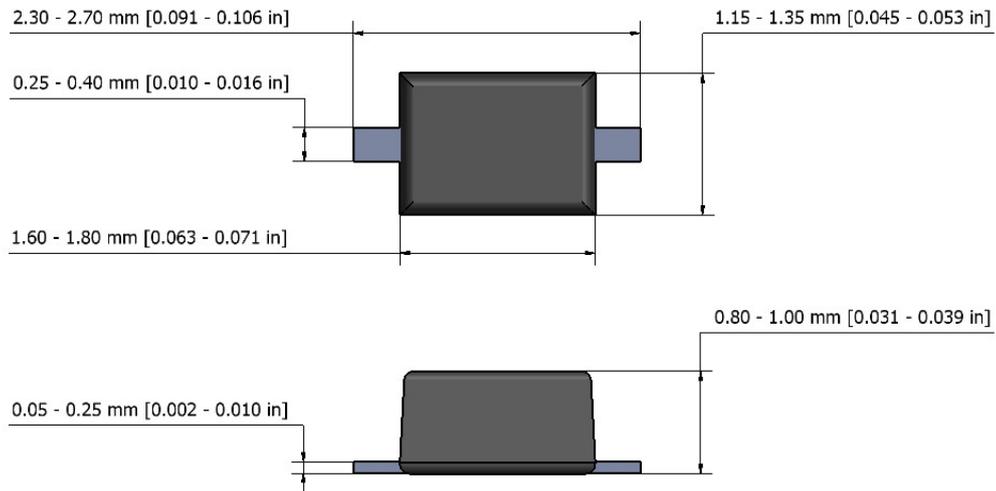
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit	
			Min	Max		
B_V	Breakdown Voltage	BAV19WS	$I_R=100\mu\text{A}$	120	---	Volts
		BAV20WS		200	---	Volts
		BAV21WS		250	---	Volts
I_R	Reverse Leakage Current	BAV19WS	$V_R=100\text{V}$	---	100	nA
		BAV20WS	$V_R=150\text{V}$	---	100	nA
		BAV21WS	$V_R=200\text{V}$	---	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



SOD-323 Package Outline

NOTE: The above package outline is similar to JEITA SC-90.

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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