

## SOD123 SWITCHING DIODE

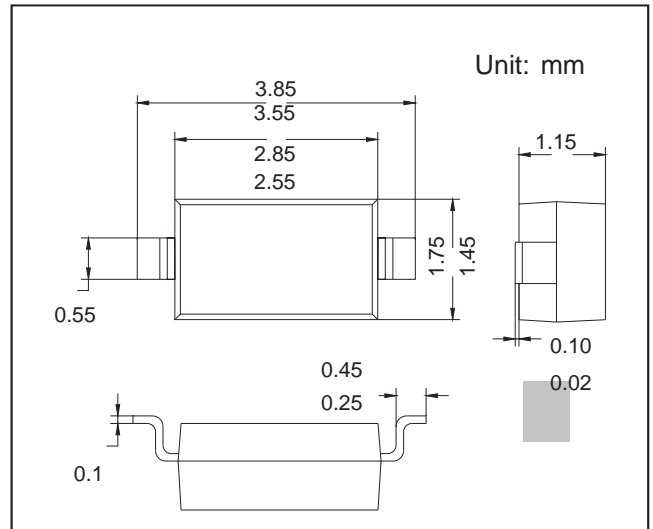
### FEATURES

Low Reverse Current  
Surface Mount Package Ideally Suited for Automatic Insertion

Fast Switching Speed  
For General Purpose Switching Applications

### MECHANICAL DATA

Case: SOD-123 Small Outline Plastic Package  
Polarity: Color band denotes cathode end  
Mounting Position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value			Unit
		BAV19W	BAV20W	BAV21W	
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	120	200	250	V
$V_{RRM}$	Peak Repetitive Reverse Voltage	100	150	200	V
$V_{RWM}$	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	71	106	141	V
$I_O$	Average Rectified Output Current	200			mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ t=8.3ms	2.0			A
$P_D$	Power Dissipation	500			mW
$R_{JA}$	Thermal Resistance from Junction to Ambient	250			/W
$T_j$	Junction Temperature	150			/
$T_{stg}$	Storage Temperature	-55~+150			/

### Electrical Specification (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Un
Reverse current	$I_R$	$V_R=100V$	BAV19W		0.1	uA
		$V_R=150V$	BAV20W		0.1	
		$V_R=200V$	BAV21W		0.1	
Forward voltage	$V_F$	$I_F=100mA$			1	V
		$I_F=200mA$			1.25	
Total capacitance	$C_{tot}$	$V_R=0V, f=1MHz$			5	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=30mA, I_{rr}=0.1 \cdot I_R, R_L=100$			50	ns

RATINGS AND CHARACTERISTIC CURVES

