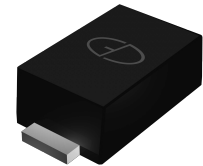


# BAV19W thru BAV21W Switching Diodes

## Features

- Small signal switching diode
- For general purpose
- RoHS compliant



SOD-123

## Absolute Maximum Ratings

( $T_A=25^\circ\text{C}$  unless otherwise noted)

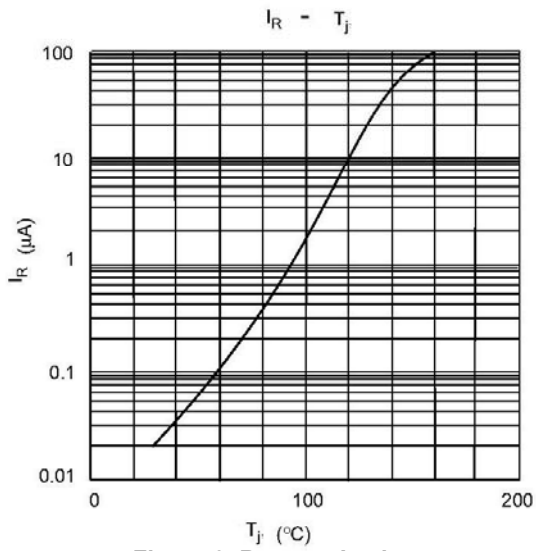
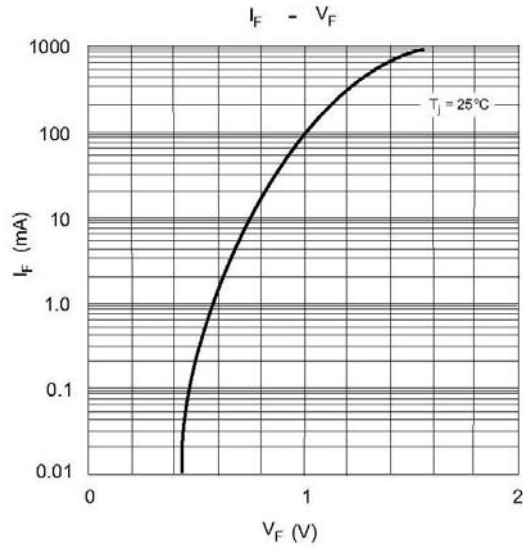
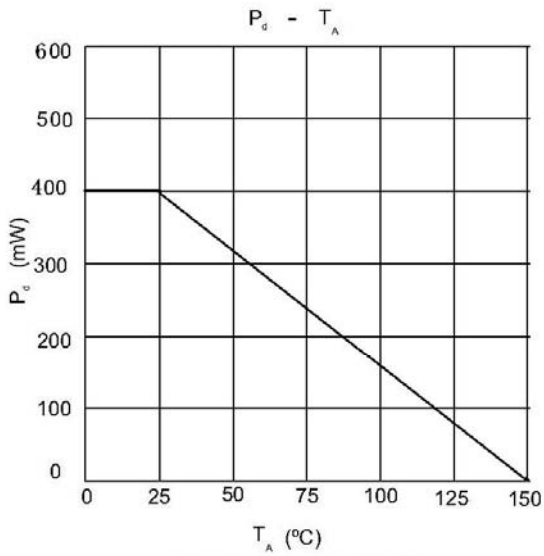
Parameter	Symbol	BAV19W	BAV20W	BAV21W	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	120	200	250	V
Working Peak Reverse Voltage DC Blocking Voltage	$V_{RWM}$ $V_R$	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward Continuous Current	$I_{FM}$	400			mA
Average Rectified Output Current	$I_O$	200			mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	2.5 @ $t=1.0\text{ms}$			A
		0.5 @ $t=1.0\text{s}$			A
Power Dissipation	$P_D$	400			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500			$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150			$^\circ\text{C}$

## Electrical Characteristics

( $T_A=25^\circ\text{C}$  unless otherwise noted)

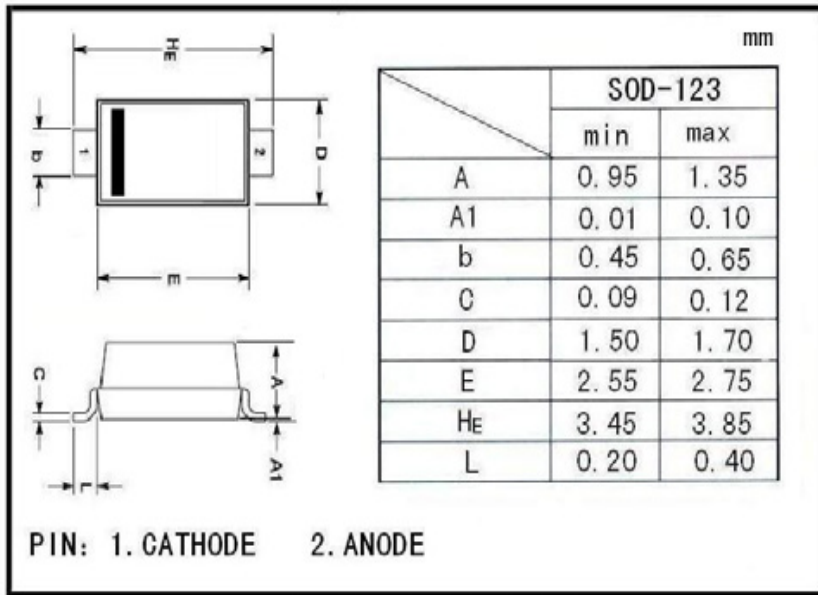
Parameter	Symbol	Test Condition	Rating		Unit	
			Min	Max		
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	BAV19W	120	-	V
			BAV20W	200	-	
			BAV21W	250	-	
Forward Voltage	$V_{FM}$	$I_F=100\text{mA}$	-	1.0	V	
		$I_F=200\text{mA}$	-	1.25	V	
Peak Reverse Current @ Rated DC Blocking Voltage	$I_{RM}$	$T_J=25^\circ\text{C}$ $V_R=V_{RWM}$	-	100	nA	
		$T_J=100^\circ\text{C}$ $V_R=V_{RWM}$	-	15	$\mu\text{A}$	
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=30\text{mA}$ , $I_{rr}=0.1 \times I_R$ , $R_i=100\Omega$	-	50	ns	
Total Capacitance	$C_T$	$V_R=0$ , $f=1.0\text{MHz}$	-	5.0	pF	

**Typical Electrical Characteristic Curves**



**Package Outline Dimensions**

**SOD-123**



**Marking Information**

Type	BAV19W	BAV20W	BAV21W
Marking	A8	T2	T3