

## BAV19WS ~ BAV21WS

**PRV : 100 Volts**  
**Io : 250 mA**

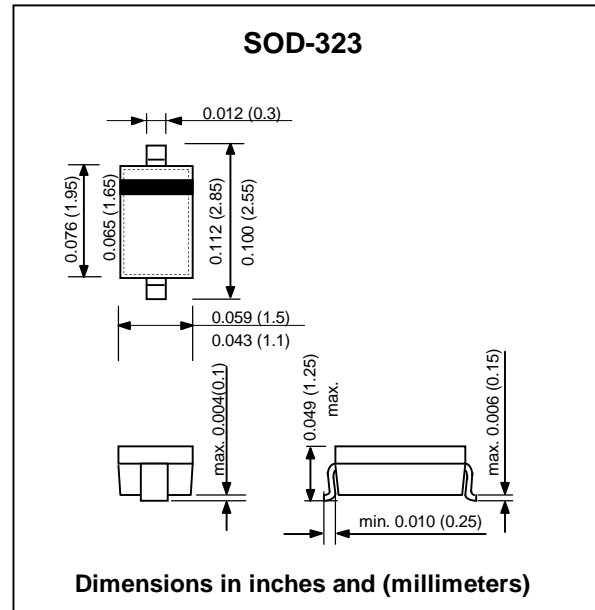
### FEATURES :

- \* Silicon Epitaxial Planar Diode
- \* For General Purpose
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : SOD-323 plastic Case

## SMALL SIGNAL DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Reverse Voltage	$V_R$	100	150	200	V
Peak Reverse Voltage	$V_{RM}$	120	200	250	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb} = 25\text{ }^\circ\text{C}$ and $f \geq 50\text{ Hz}$	$I_{F(AV)}$	250			mA
Surge Forward Current at $t < 1\text{ s}$ and $T_j = 25\text{ }^\circ\text{C}$	$I_{FSM}$	1.0			A
Power Dissipation at $T_{amb} = 25\text{ }^\circ\text{C}$	$P_{tot}$	200 <sup>1)</sup>			mW
Junction Temperature	$T_j$	150			$^\circ\text{C}$
Storage Temperature Range	$T_s$	-65 to + 175			$^\circ\text{C}$

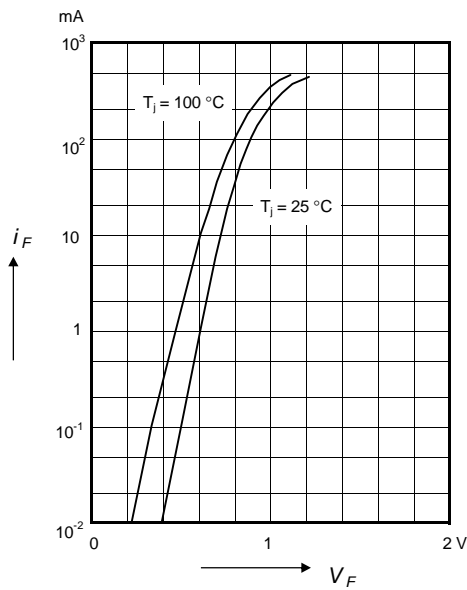
### ELECTRICAL CHARACTERISTICS (Rating at $T_j = 25\text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 100\text{ mA}$	-	-	1	V
		$I_F = 200\text{ mA}$	-	-	1.25	V
Leakage Current	$I_R$	BAV19WS $V_R = 100\text{ V}$	-	-	100	nA
		BAV20WS $V_R = 150\text{ V}$	-	-	100	nA
		BAV21WS $V_R = 200\text{ V}$	-	-	100	nA
Capacitance	$C_{tot}$	$V_F = V_R = 0\text{ V}$	-	-	1.5	pF
Reverse Recovery Time	$T_{rr}$	$I_F = 30\text{ mA}$ , $I_R = 30\text{ mA}$ $I_{rr} = 3\text{ mA}$ , $R_L = 100\Omega$	-	-	50	ns

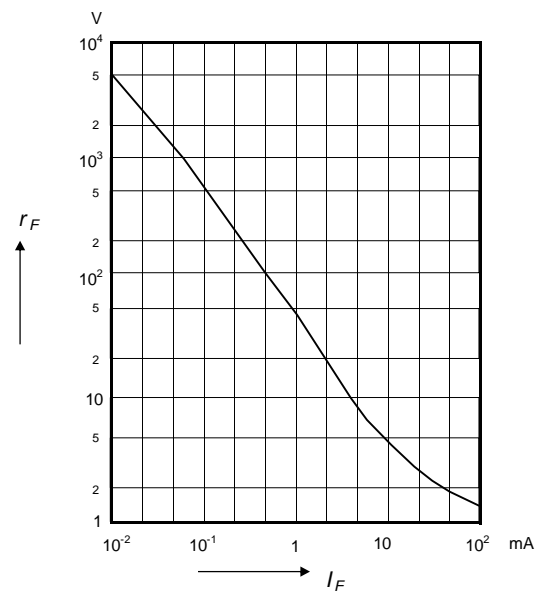
Note : 1) Valid provided that electrodes are kept at ambient temperature

## RATINGS AND CHARACTERISTIC CURVES ( BAV19WS ~ BAV21WS)

### Forward characteristics

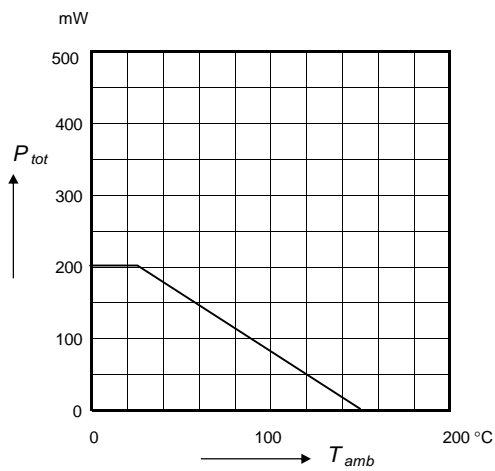


### Dynamic forward resistance versus forward current



### Admissible power dissipation versus ambient temperature

For conditions, see footnote in table  
"Absolute Maximum Ratings"



### Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

