

BAV19WS ~ BAV21WS

PRV : 100 Volts

Io : 250 mA

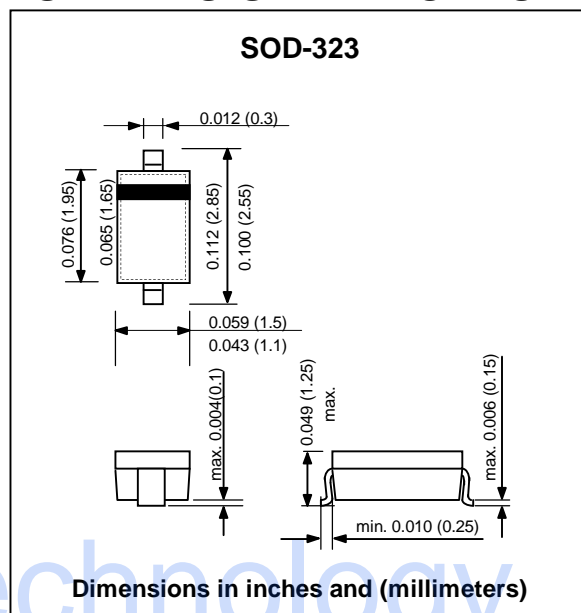
FEATURES :

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

MECHANICAL DATA :

- * Case : SOD-323 plastic Case

SMALL SIGNAL DIODES



Datasheet.Technology

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 ¹⁾			mW
Junction Temperature	T_j	150			$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to + 175			$^\circ\text{C}$

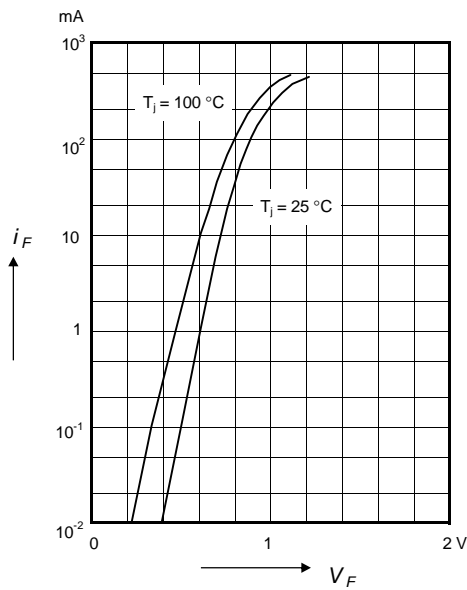
ELECTRICAL CHARACTERISTICS (Rating at $T_j = 25\text{ }^\circ\text{C}$ unless otherwise specified)

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

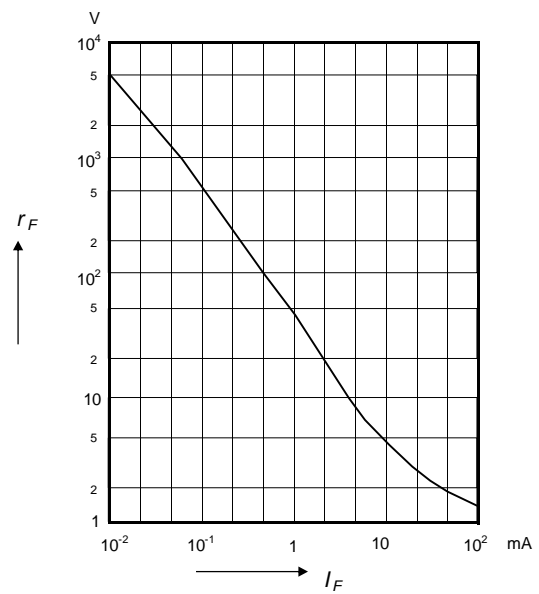
Note : 1) Valid provided that electrodes are kept at ambient temperature

RATINGS AND CHARACTERISTIC CURVES (BAV19WS ~ BAV21WS)

Forward characteristics

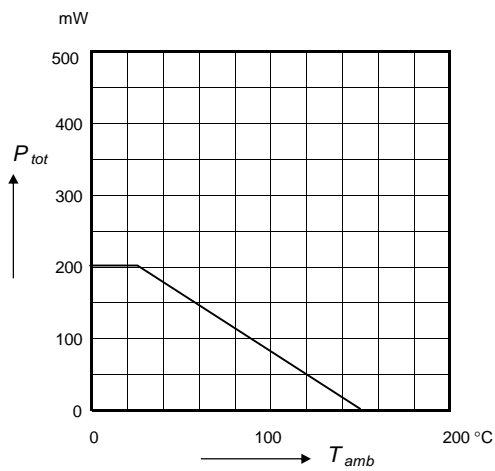


Dynamic forward resistance versus forward current



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

