Certificate Number: Q10561

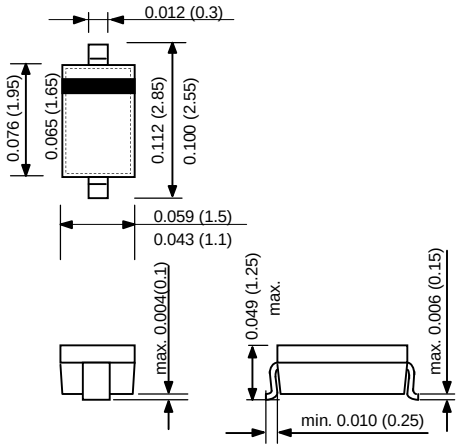
Certificate Number: E17276

BAV19WS ~ BAV21WS

SMALL SIGNAL DIODES

PRV : 100 Volts
Io : 250 mA

SOD-323



Dimensions in inches and (millimeters)

FEATURES :

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

MECHANICAL DATA :

* Case : SOD-323 plastic Case

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 °C and f ≥ 50 Hz	$I_{F(AV)}$	250			mA
Surge Forward Current at t < 1 s and Tj = 25 °C	I_{FSM}	1.0			A
Power Dissipation at T_{amb} = 25 °C	P_{tot}	200 [1)]			mW
Junction Temperature	Tj	150			°C
Storage Temperature Range	T_S	-65 to + 175			°C

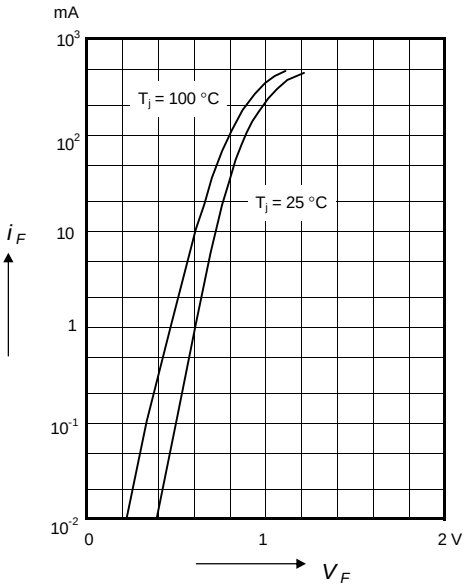
ELECTRICAL CHARACTERISTICS (Rating at Tj = 25 °C unless otherwise specified)

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

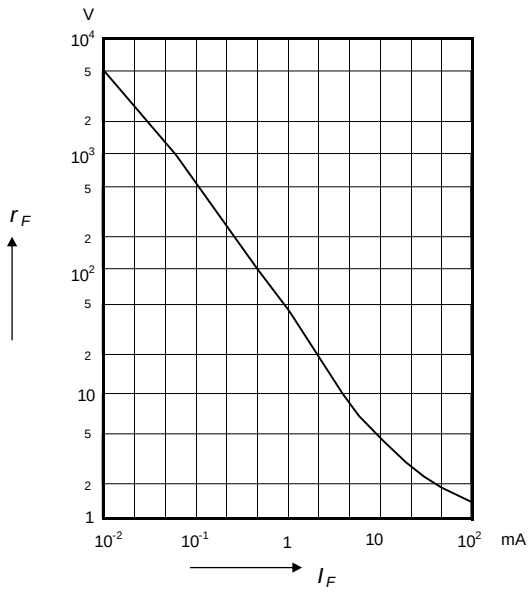
Note : 1) Valid provided that electrodes are kept at ambient temperature

RATINGS AND CHARACTERISTIC CURVES (BAV19WS ~ BAV21WS)

Forward charecteristics

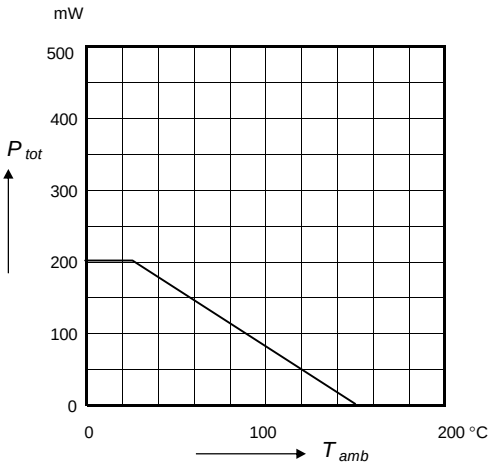


Dynamic forward resistance versus forward current



Admissible power dissipation versus ambient temperture

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



Admissible forward current versus ambient temperture

Valid provided that electrodes are kept at ambient temperratue