

# BAS16WS

**PRV : 100 Volts**

**Io : 250 mA**

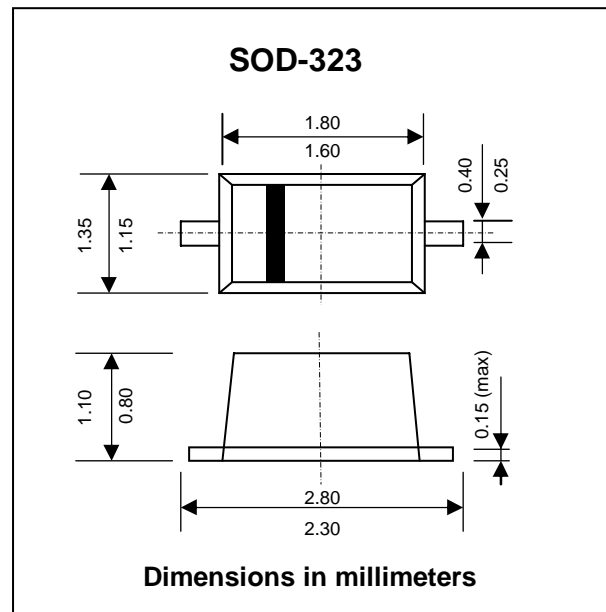
## FEATURES :

- \* Silicon Epitaxial Planar Diode
- \* Fast switching diodes.
- \* Pb / RoHS Free

## MECHANICAL DATA :

- \* Case : SOD-323 plastic Case
- \* Weight : approx. 0.004 g

## SMALL SIGNAL DIODE



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	75	V
Peak Reverse Voltage	$V_{RM}$	100	V
Rectified Current (Continuous)	$I_{F(AV)}$	250	mA
Surge Forward Current at $t = 1$ s and $T_j = 25$ °C	$I_{FSM}$	500	mA
Power Dissipation at $T_{amb} = 25$ °C	$P_{tot}$	200 <sup>1)</sup>	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_s$	-65 to + 150	°C

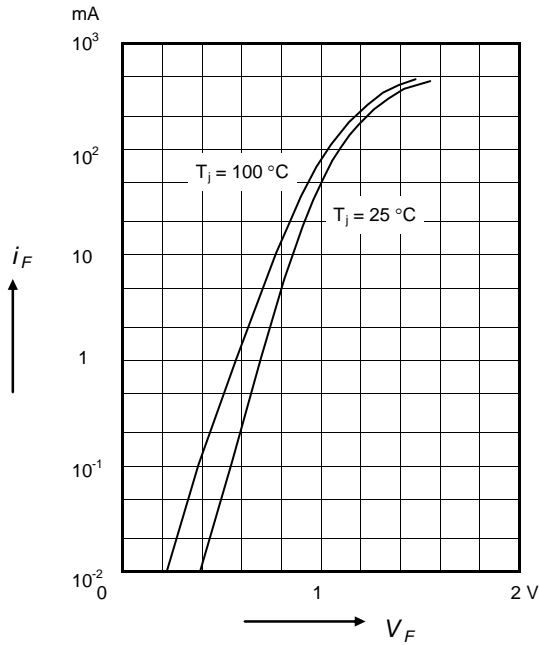
## ELECTRICAL CHARACTERISTICS (Rating at $T_j = 25$ °C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 50$ mA	$V_F$	-	-	1	V
Leakage Current	at $V_R=25$ V, $T_j=150$ °C	$I_R$	-	30	nA
	at $V_R = 75$ V	$I_R$	-	1	μA
	at $V_R=75$ V, $T_j=150$ °C	$I_R$	-	50	μA
Capacitance at $V_F = V_R = 0$ V	$C_{tot}$	-	-	4	pF
Reverse Recovery Time from $I_F = 10$ mA to $I_R = 10$ mA, $I_R = 6$ V, $R_L = 100$ Ω	$T_{rr}$	-	-	6	ns
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	-	-	650 <sup>1)</sup>	°C/W

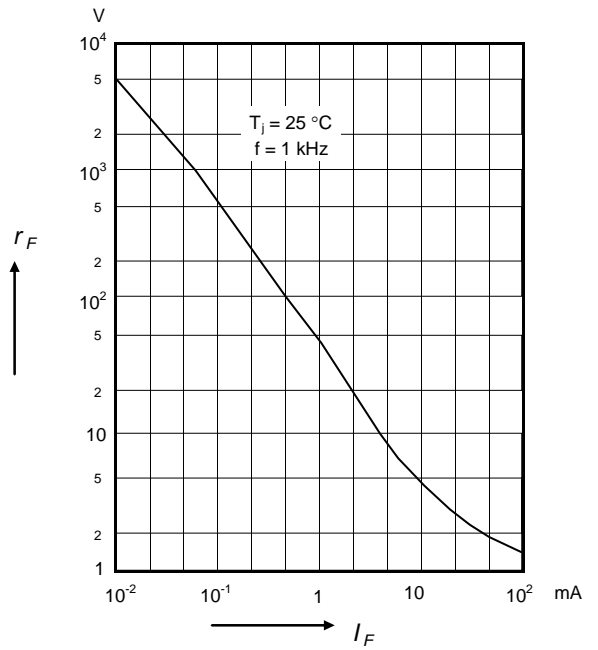
Note : 1) Valid provided that electrodes are kept at ambient temperature

## RATINGS AND CHARACTERISTIC CURVES ( BAS16WS )

**Forward characteristics**

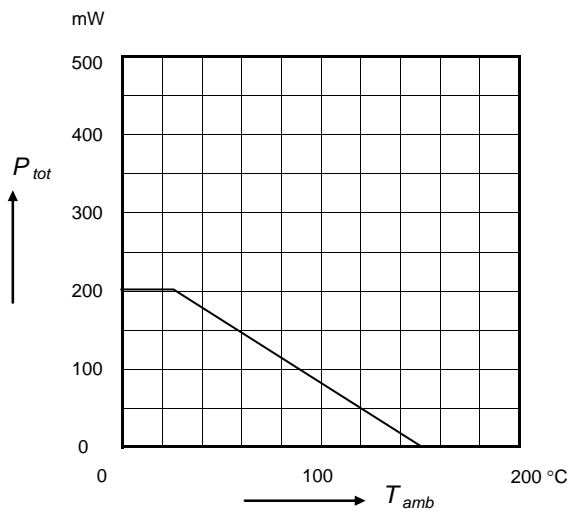


**Dynamic forward resistance versus forward current**



**Admissible power dissipation versus ambient temperature**

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



**Relative capacitance versus reverse voltage**

