

# BAS16WS

**PRV : 100 Volts**  
**I<sub>o</sub> : 250 mA**

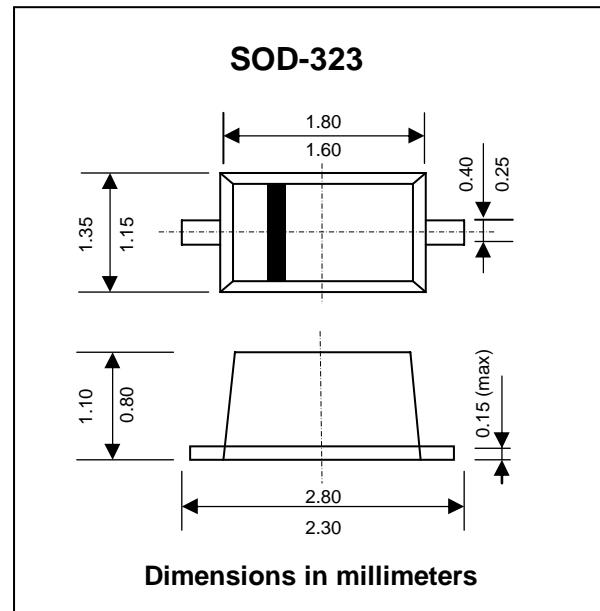
## FEATURES :

- \* 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 <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
Rectified Current (Continuous)	I <sub>F(AV)</sub>	250	mA
Surge Forward Current at t = 1 s and T <sub>j</sub> = 25 °C	I <sub>FSM</sub>	500	mA
Power Dissipation at T <sub>amb</sub> = 25 °C	P <sub>tot</sub>	200 <sup>1)</sup>	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>s</sub>	-65 to + 150	°C

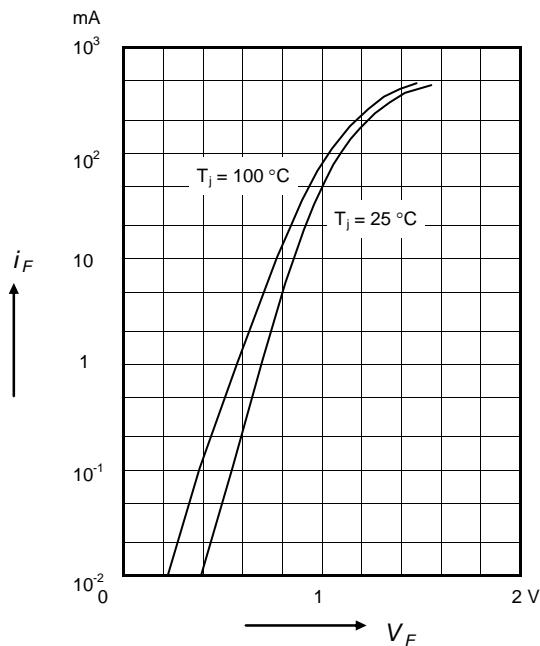
## ELECTRICAL CHARACTERISTICS (Rating at T<sub>j</sub> = 25 °C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I <sub>F</sub> = 50 mA	V <sub>F</sub>	-	-	1	V
Leakage Current at V <sub>R</sub> =25 V, T <sub>j</sub> =150°C at V <sub>R</sub> = 75 V at V <sub>R</sub> =75 V, T <sub>j</sub> =150°C	I <sub>R</sub>	-	-	30	nA
	I <sub>R</sub>	-	-	1	µA
	I <sub>R</sub>	-	-	50	µA
Capacitance at V <sub>F</sub> = V <sub>R</sub> = 0 V	C <sub>tot</sub>	-	-	4	pF
Reverse Recovery Time from I <sub>F</sub> = 10 mA to I <sub>R</sub> = 10 mA, I <sub>R</sub> = 6 V, R <sub>L</sub> = 100 Ω	T <sub>rr</sub>	-	-	6	ns
Thermal Resistance Junction to Ambient Air	R <sub>thJA</sub>	-	-	650 <sup>1)</sup>	°C/W

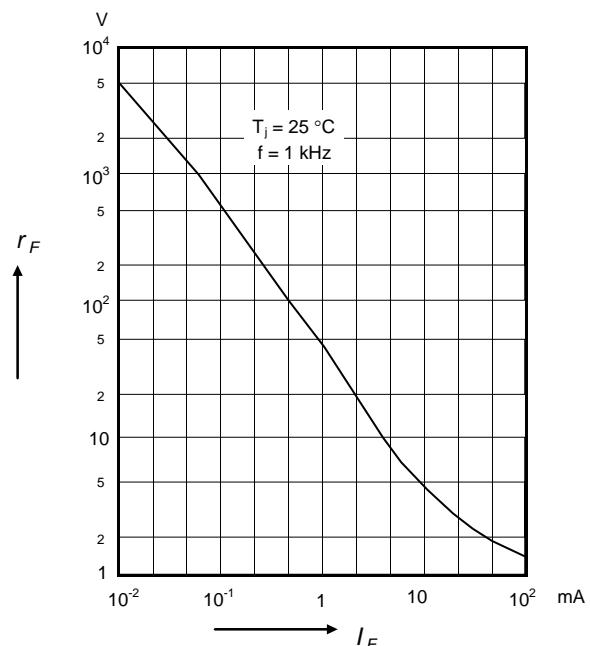
Note : 1) Valid provided that electrodes are kept at ambient temperature

## RATINGS AND CHARACTERISTIC CURVES ( BAS16WS )

**Forward characteristics**

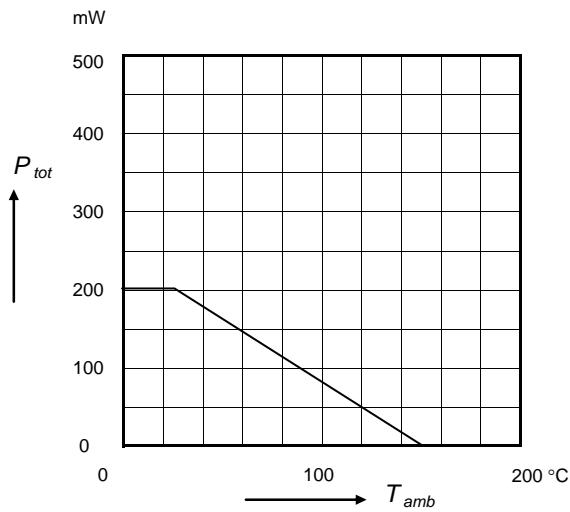


**Dynamic forward resistance versus forward current**



**Admissible power dissipation versus ambient temperature**

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



**Relative capacitance versus reverse voltage**

