

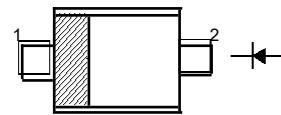
# BSR106WS

## Features

- Guard Ring Protection
- Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters
- High Surge Current Capability

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View  
Marking Code: "SM"  
Simplified outline SOD-323 and symbol

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Average forward current	$I_{F(AV)}$	1	A
Peak Forward Surge Current	$I_{FSM}$	10	A
Junction Temperature	$T_J$	-65~+125	$^\circ\text{C}$
Storage Temperature Range	stg	-65~+150	$^\circ\text{C}$

## Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Average Forward Current $T_c = 90$	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms, half sine	$I_{FSM}$	10	A
Maximum Instantaneous Forward Voltage $I_{FM} = 1\text{A};$ $T_J = 25$ (Note 1)	$V_F$	0.70	V
Maximum DC Reverse Current At Rated DC Blocking Voltage $T_A=25$	$I_R$	0.1	mA
Typical junction capacitance Measured at 1.0MHz , $V_R=4.0\text{V}$	$C_J$	120	pF

Notes:1. Pulse Test: Pulse Width 300usec, Duty Cycle 2%

## Typical Characteristics

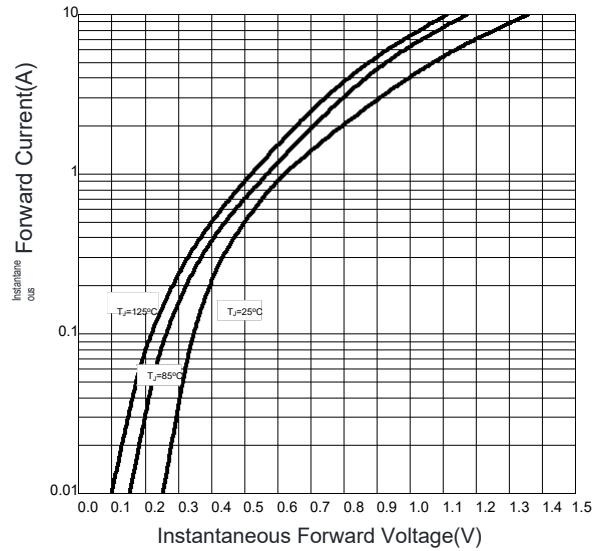


Fig.1 Typical Forward Voltage Characteristics

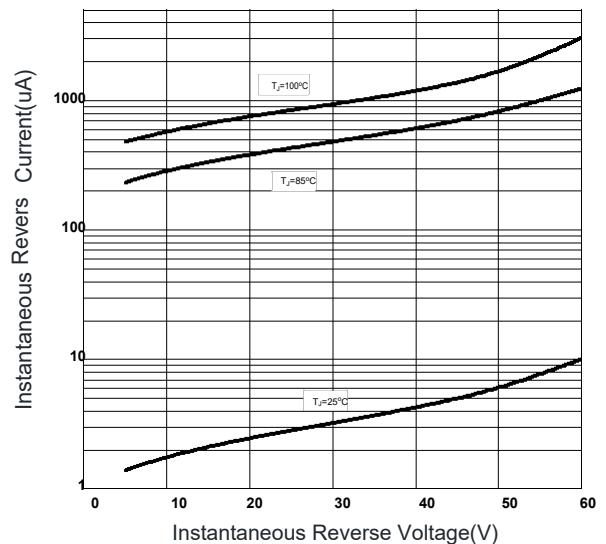


Fig.2 Typical Reverse Characteristics

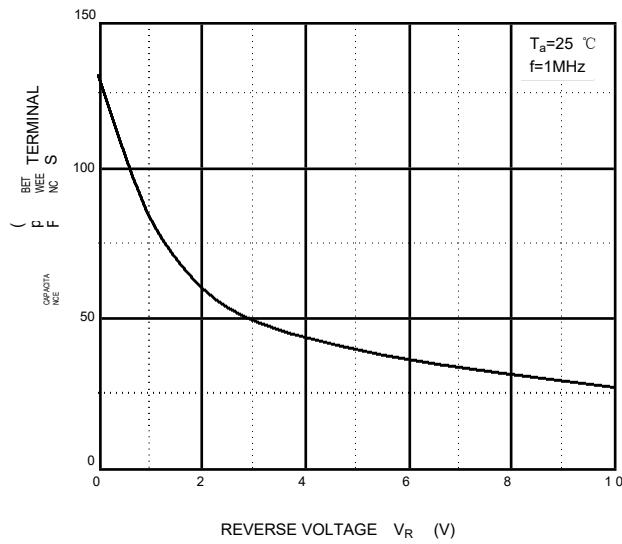


Fig.3 Capacitance Characteristics

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

