

## SB3220 SCHOTTKY RECTIFIER

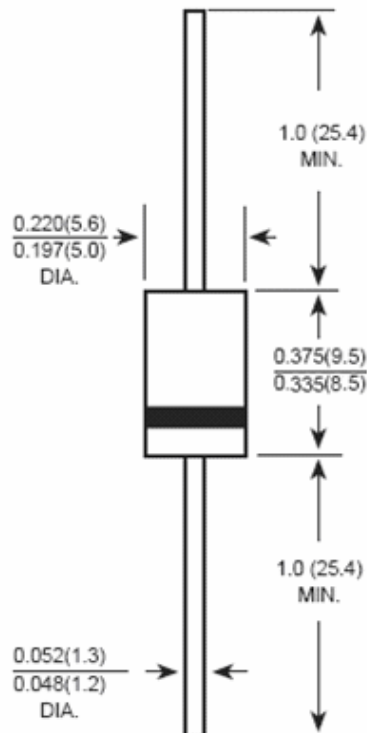
### Applications:

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Disk drives
- Battery charging

### Features:

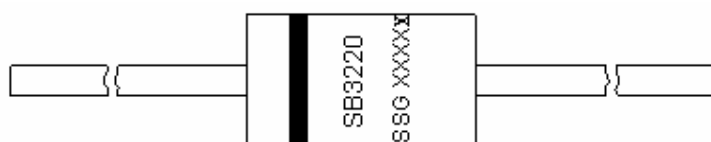
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Mechanical Dimensions: In Inches / mm



**DO-201AD**

**Marking Diagram:**



Where XXXXX is YYWWL

- SB = Device Type
- 3 = Forward Current (3A)
- 220 = Reverse Voltage (220V)
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

**Cautions :** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information:**

Device	Package	Shipping
SB3220	DO-201AD (Pb-Free)	1250 pcs / Tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

**Maximum Ratings and Electrical Characteristics** @ $T_A=25^{\circ}\text{C}$  unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Characteristic	Symbol	SB3220	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	220	V
Average Rectified Output Current (Note 1) @ $T_A = 50^{\circ}\text{C}$	$I_o$	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	110	A
Forward Voltage @ $I_F = 3.0\text{A}$	$V_{FM}$	0.90	V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^{\circ}\text{C}$ @ $T_A = 125^{\circ}\text{C}$	$I_{RM}$	1.0 6	mA
Typical Junction Capacitance (Note 2)	$C_j$	100	pF
Max. Voltage Rate of Change	$dv/dt$	10,000	V/ $\mu\text{s}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$
Max. Junction Temperature	$T_J$	-55 to +150	$^{\circ}\text{C}$
Approximate Weight	wt	1.02	g
Case Style	DO-201AD		

Note:1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

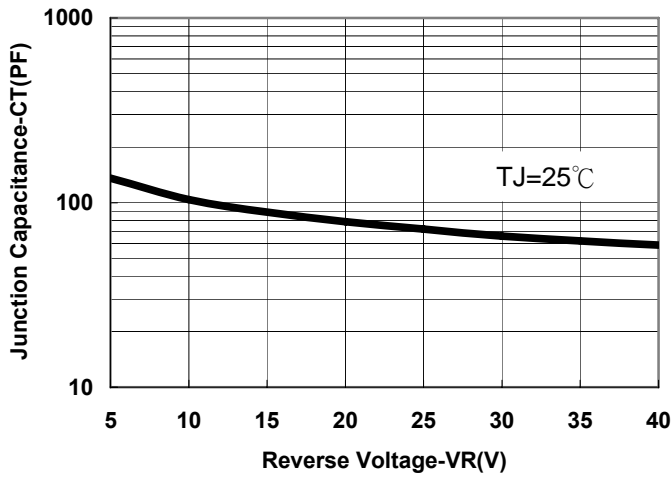


Fig.1-Typical Junction Capacitance Vs.Reverse Voltage

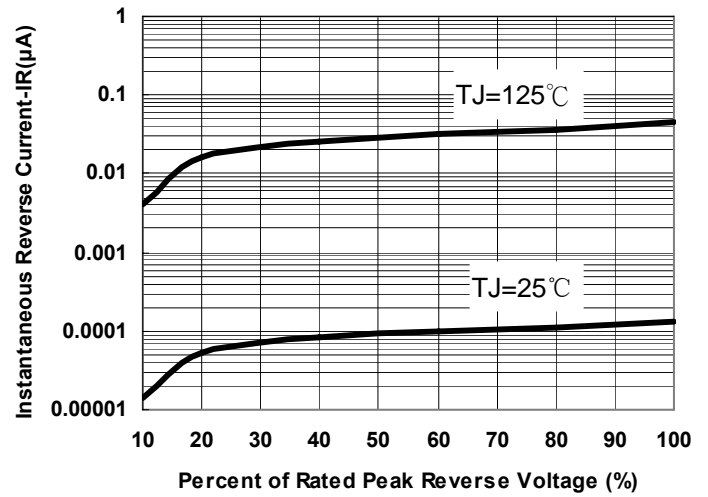


Fig.2-Typical Values Of Reverse Current Vs.Reverse Voltage

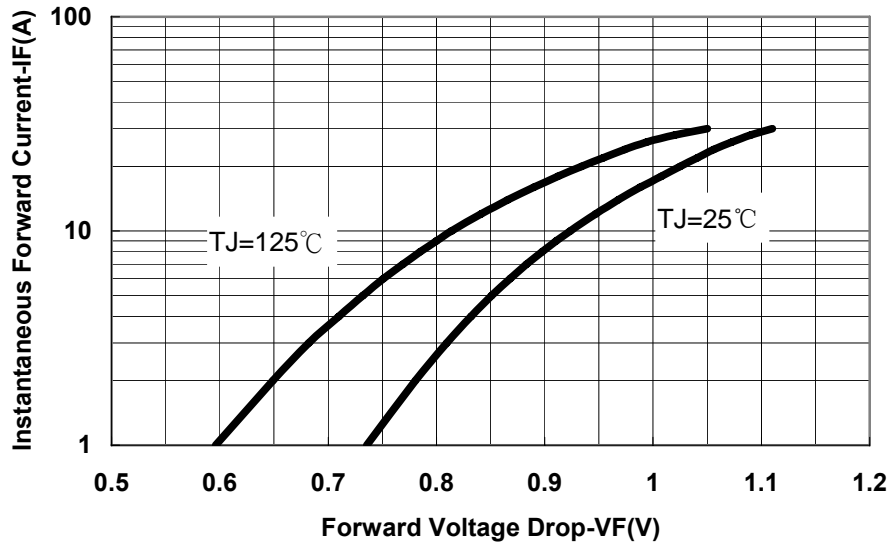


Fig.3-Typical Forward Voltage Drop Characteristics



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