



THE DATASHEET OF SB5200TA



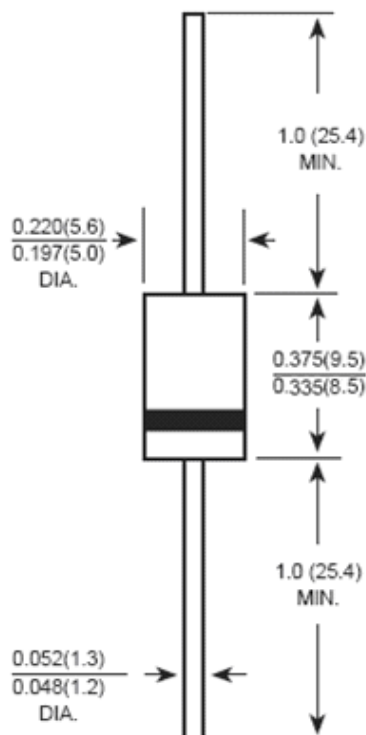
SB5200 SCHOTTKY RECTIFIER

Applications:

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

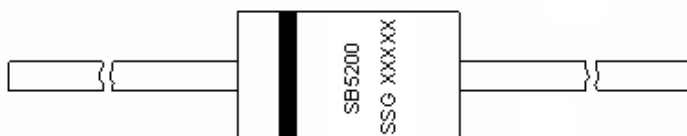
Features:

- 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
- 5 = Forward Current (5A)
- 200 = Reverse Voltage (200V)
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

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

Ordering Information:

Device	Package	Shipping
SB5200	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	SB5200	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	V
Average Rectified Output Current (Note 1) @ $T_A = 105^{\circ}\text{C}$	I_O	5.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120	A
Forward Voltage @ $I_F = 5.0\text{A}, T_A = 25^{\circ}\text{C}$ @ $I_F = 5.0\text{A}, T_A = 125^{\circ}\text{C}$	V_{FM}	1.10 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 7	mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	10	$^{\circ}\text{C}/\text{W}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$
Junction Temperature	T_J	-55 to +150	$^{\circ}\text{C}$
Case Style	DO-201AD		

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

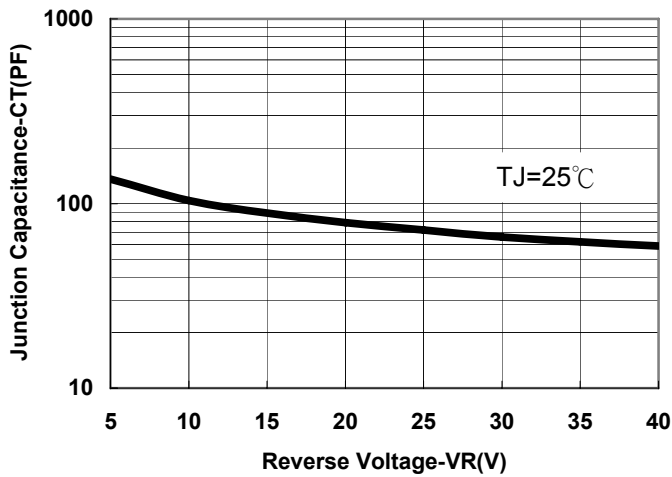


Fig.1-Typical Junction Capacitance

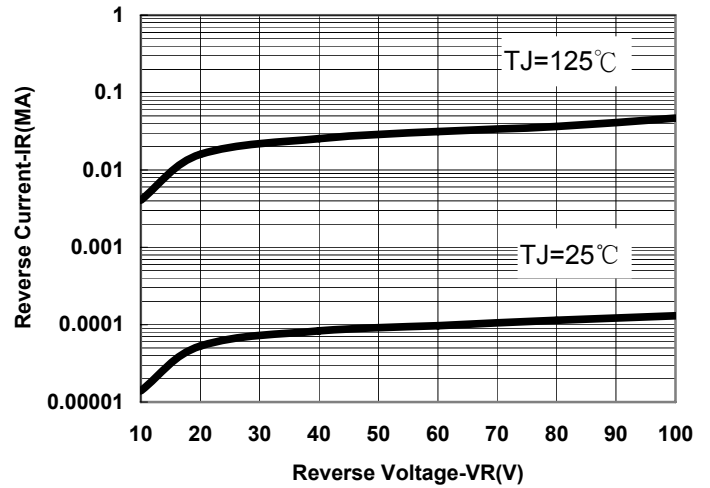


Fig.2-Typical Values Of Reverse Current

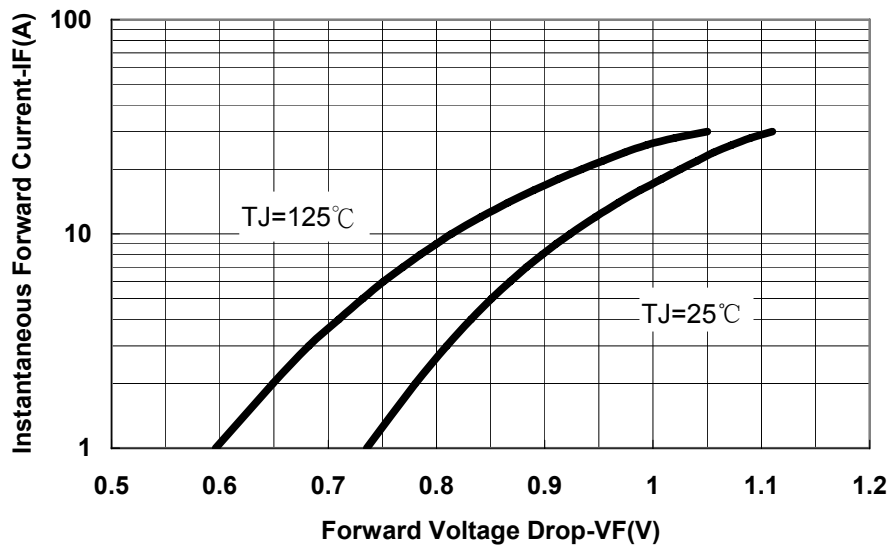




Fig.3-Typical Forward Voltage Drop Characteristics

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