Technical Data *Green Products*
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SB6200 SCHOTTKY RECTIFIER

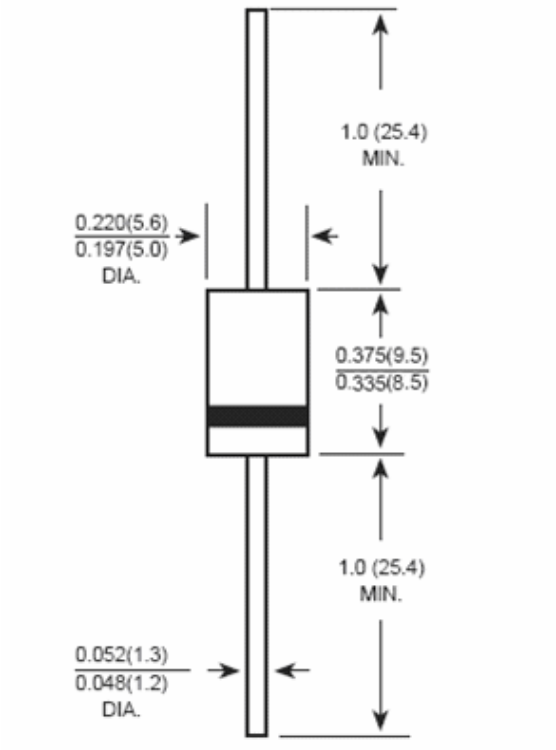
Applications:

- **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



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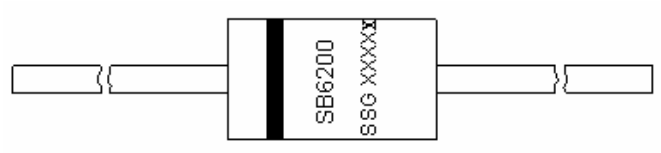
Marking Diagram:



Where XXXXX is YYWWL

SB = Device Type
6 = Forward Current (6A)
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
SB6200	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:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	200	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @T_C =105°C, rectangular wave form	6.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	128	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 6 A, Pulse, T_J = 25 °C	0.90	V
Max. Reverse Current	I_{R1}	@V_R = rated VR T_J = 25 °C	1.0	mA
	I_{R2}	@V_R = rated VR T_J = 125 °C	7.0	mA
Max. Junction Capacitance (per leg)	C_T	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz	150	pF
Max. Voltage Rate of Change	dv/dt	-	10,000	V/us

* Pulse Width < 300μs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature Range	T_J	-	-55 to +150	°C
Storage Temperature Range	T_{stg}	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	3.5	°C/W
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

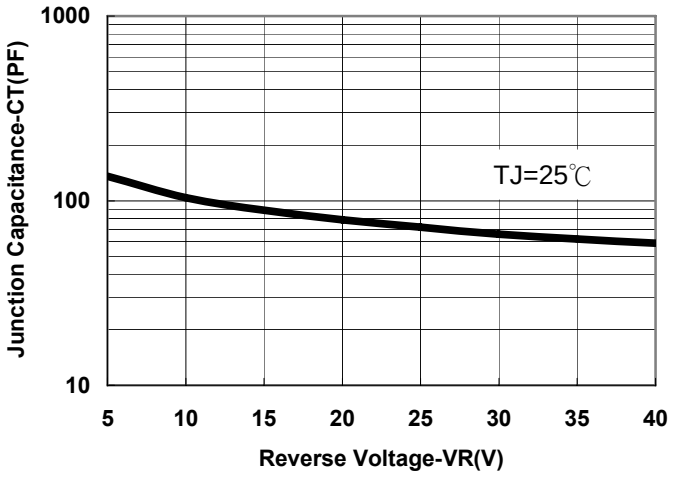


Fig.1-Typical Junction Capacitance Vs.Reverse Voltage

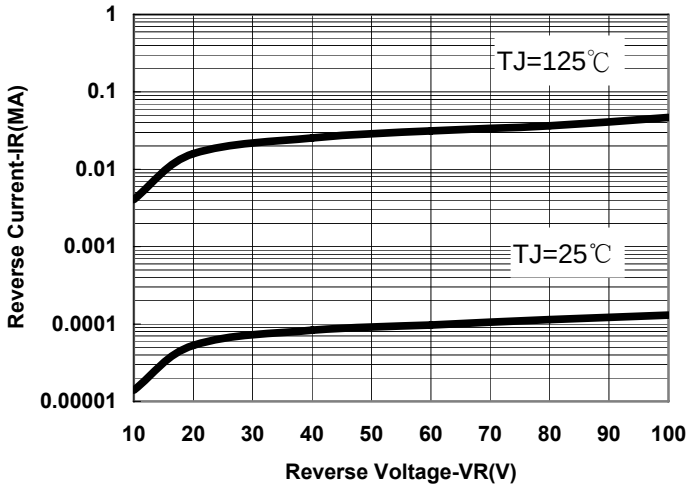


Fig.2-Typical Values Of Reverse Current Vs.Reverse Voltage

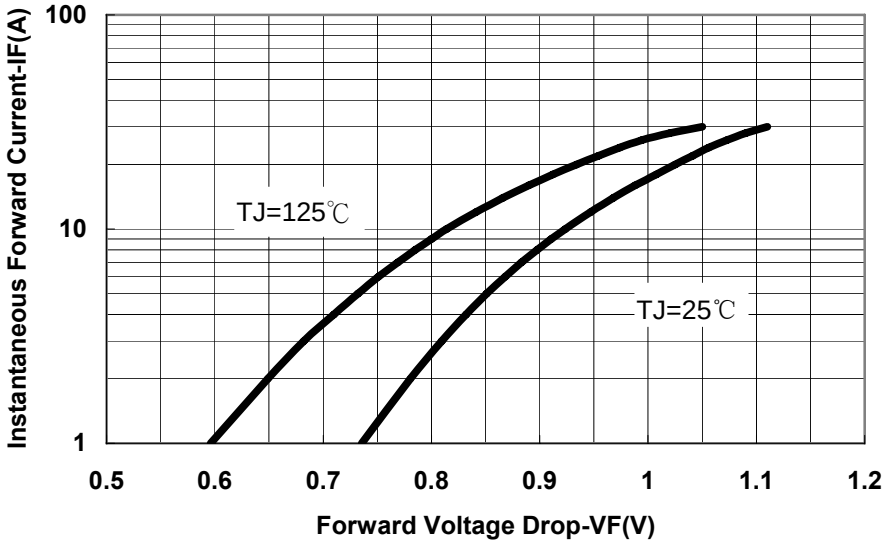


Fig.3-Typical Forward Voltage Drop Characteristics

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