

Technical Data Data Sheet N0878, Rev. - Green Products

SB2200

## **SB2200 SCHOTTKY RECTIFIER**

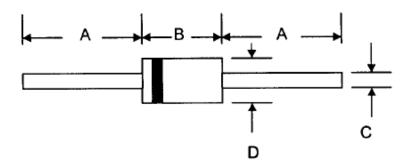
### Applications:

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

#### Features:

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 50A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability
- Classification Rating 94V-O
- Green Products in Compliance with the RoHS Directive
- 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 mm** 



	DO-15	
Dim	Min	Max
Α	25.4	_
В	5.50	7.62
С	0.71	0.864
D	2.60	3.60
All Dimensions in mm		



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#### Marking Diagram:



Where XXXXX is YYWWL

SB	= Device Type
2	= Forward Current (2A)
200	= Reverse Voltage (200V)
SSG	= SSG
ΥY	= Year
WW	= Week
L	= Lot Number

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

## **Ordering Information:**

Device	Package	Shipping
SB2200	DO-15	2000pag / tapa
	(Pb-Free)	3000pcs / 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 <sub>RWM</sub>	-	200	V
Max. Average Forward	I <sub>F(AV)</sub>	50% duty cycle @TC =105℃ rectangular wave form	2.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	50	А



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## **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V <sub>F1</sub>	@ 2A, Pulse, T <sub>J</sub> = 25℃	0.90	V
Max. Reverse Current	I <sub>R1</sub>	$@V_R = rated VR$ T <sub>J</sub> = 25°C	1.0	mA
	I <sub>R2</sub>	$@V_R = rated VR$ T <sub>J</sub> = 100°C	20	mA
Typical Junction Capacitance	Cj	@V <sub>R</sub> = 5.0 V, Tc=25℃ f <sub>SIG</sub> = 1MHz	170	pF

Pulse Width < 300µs, Duty Cycle <2%

\*

#### **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	TJ	-	-55 to +150	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	R <sub>θJC</sub>	DC operation	8	°C/W
Approximate Weight	wt	-	0.093	g
Case Style	DO-15			



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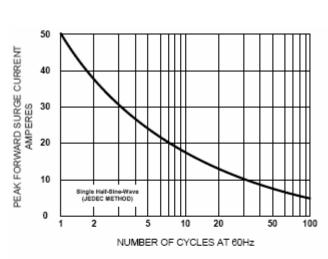


Figure 1. Maximum Non-repetitive Surge Current

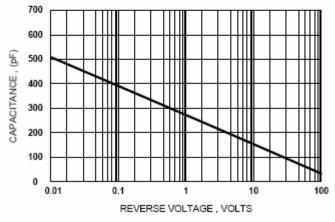


Figure 2. Typical Junction Capacitance

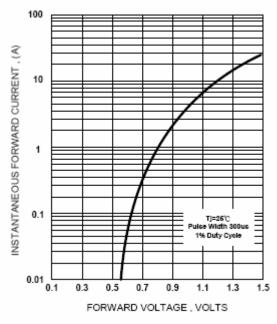


Figure 3. Typical Forward Characteristics

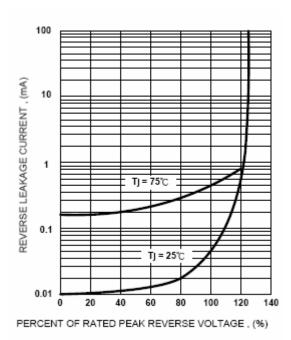


Figure 4. Typical Reverse Characteristics



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