

SB20100 SCHOTTKY RECTIFIER

Applications:

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

Features:

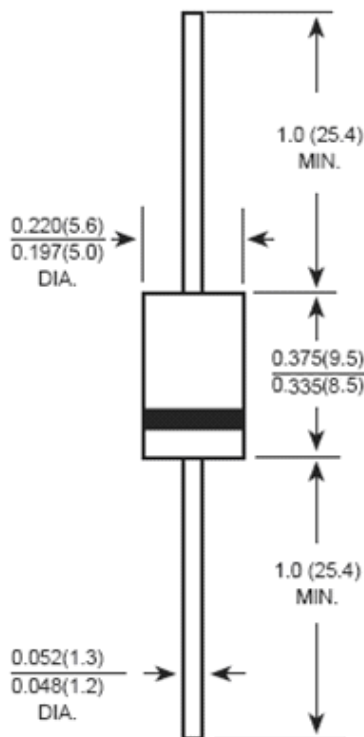
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection

Applications

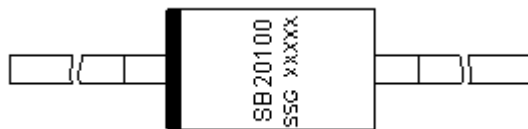
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



Mechanical Dimensions: In mm/Inches



DO-201AD

Marking Diagram:


Where XXXXX is YYWWL

SB = Device Type
 20 = Forward Current (20A)
 100 = Reverse Voltage (100V)
 SSG = SSG
 YY = Year
 WW = Week
 L = Lot Number

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

Ordering Information:

Device	Package	Shipping
SB20100	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 Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	-	100	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C=105^\circ\text{C}$, rectangular wave form	20	A
Peak One Cycle Non-Repetitive Surge Current (per leg)	I_{FSM}	8.3 ms, half Sine pulse	280	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop(per leg)*	V _{F1}	@ 20A, Pulse, T _J = 25 °C	0.93	V
	V _{F2}	@ 20A, Pulse, T _J = 125 °C	0.80	V
Reverse Current(per leg)*	I _{R1}	@V _R = rated VR T _J = 25 °C	1	mA
	I _{R2}	@V _R = rated VR T _J = 125 °C	10	mA
Junction Capacitance	C _T	@V _R = 5V, T _C = 25 °C f _{SIG} = 1MHz	500	pF

* Pulse Width < 300µs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T _J	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	R _{θJC}	DC operation	4.5	°C/W
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

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