

SB1100 SCHOTTKY RECTIFIER

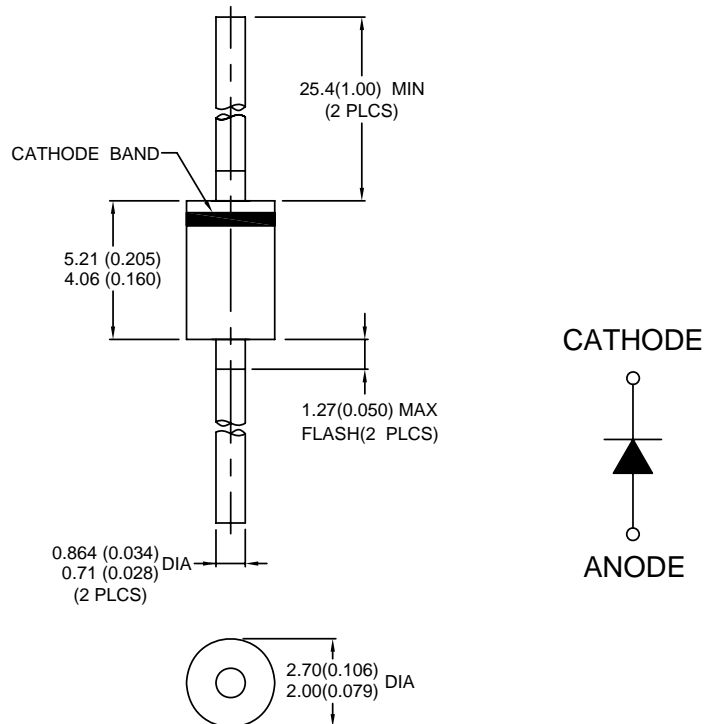
Applications:

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

Features:

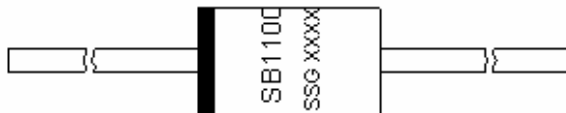
- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 50A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability
- Classification Rating 94V-0
- Green Products in Compliance 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-41

Marking Diagram:



Where XXXXX is YYWWL

- SB = Device Type
- 1 = Forward Current (1A)
- 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
SB1100	DO-41 (Pb-Free)	5000pcs / reel

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}	-	100	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @TC =105°C rectangular wave form(L=0.375")	1.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	26	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 1.0A, Pulse, $T_J = 25^\circ\text{C}$	0.85	V
	V_{F2}	@ 1.0A, Pulse, $T_J = 125^\circ\text{C}$	0.75	
Max. Reverse Current	I_{R1}	@ $V_R = \text{rated VR}$ $T_J = 25^\circ\text{C}$	1.0	mA
Typical Junction Capacitance	C_j	@ $V_R = 5.0\text{ V}$, $T_c = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$	80	pF

* Pulse Width < 300 μs , Duty Cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	15	$^\circ\text{C/W}$
Maximum Thermal Resistance, Case to Heat Sink	$R_{\theta JA}$	DC operation	65	$^\circ\text{C/W}$
Approximate Weight	wt	-	0.35	g
Case Style	DO-41			

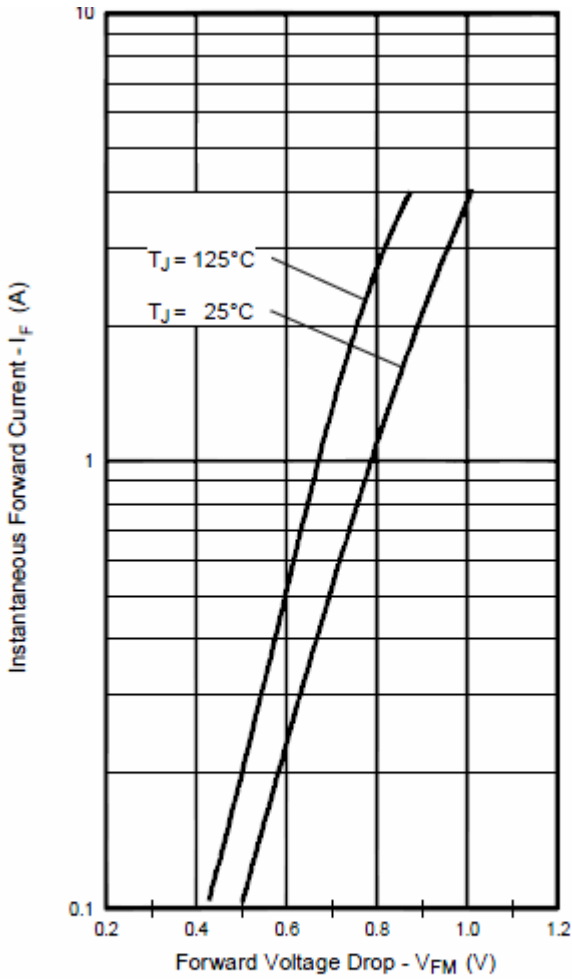


Fig. 1 Max. Forward Voltage Drop Characteristics (Per Leg)

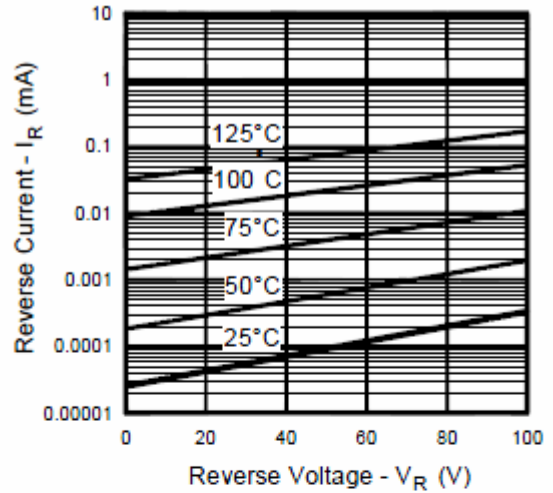


Fig. 2 Typical Values of Reverse Current Vs. Reverse Voltage (Per Leg)

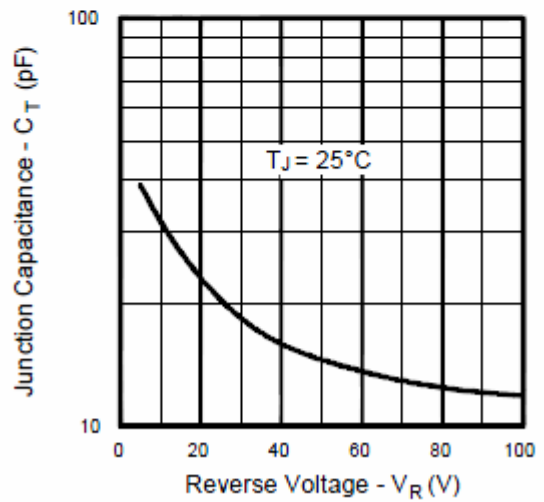


Fig. 3 Typical Junction Capacitance Vs. Reverse Voltage (Per Leg)



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