

SB2150 SCHOTTKY RECTIFIER

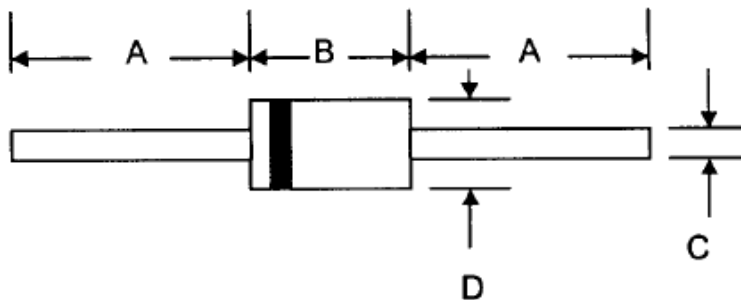
Applications:

- 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

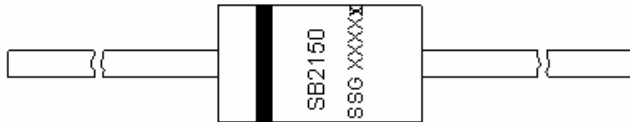


DO-15		
Dim	Min	Max
A	25.4	—
B	5.50	7.62
C	0.71	0.864
D	2.60	3.60
All Dimensions in mm		

DO-15



Marking Diagram:



Where XXXXX is YYWWL

- SB = Device Type
- 2 = Forward Current (2A)
- 150 = Reverse Voltage (150V)
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

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

Ordering Information:

Device	Package	Shipping
SB2150	DO-15 (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_{RWM}	-	150	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @TC =150°C rectangular wave form(L=0.375")	2.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	50	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 2A, Pulse, $T_J = 25^\circ\text{C}$	0.88	V
Max. Reverse Current	I_{R1}	@ $V_R = \text{rated VR}$ $T_J = 25^\circ\text{C}$	1.0	mA
	I_{R2}	@ $V_R = \text{rated VR}$ $T_J = 125^\circ\text{C}$	5.0	mA
Typical Junction Capacitance	C_j	@ $V_R = 5.0\text{ V}$, $T_c = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$	140	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	8	$^\circ\text{C/W}$
Approximate Weight	wt	-	0.093	g
Case Style		DO-15		

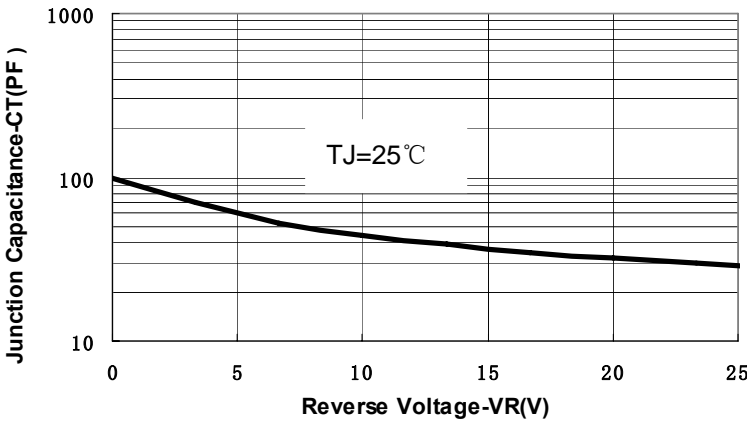


Fig.1-Typical Junction Capacitance Vs.Reverse Voltage

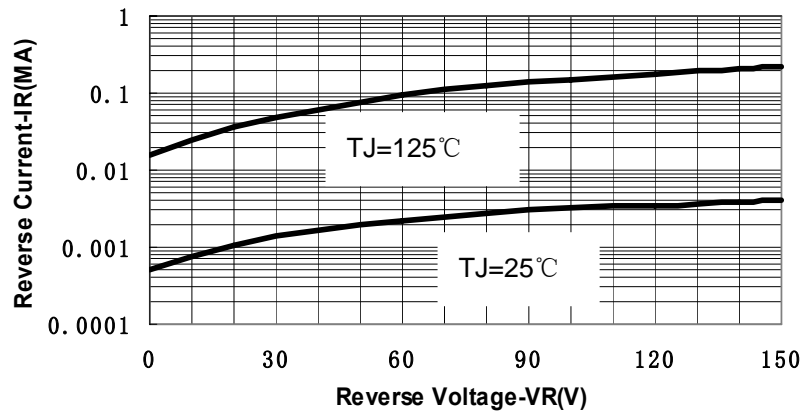


Fig.2-Typical Values Of Reverse Current Vs.Reverse Voltage

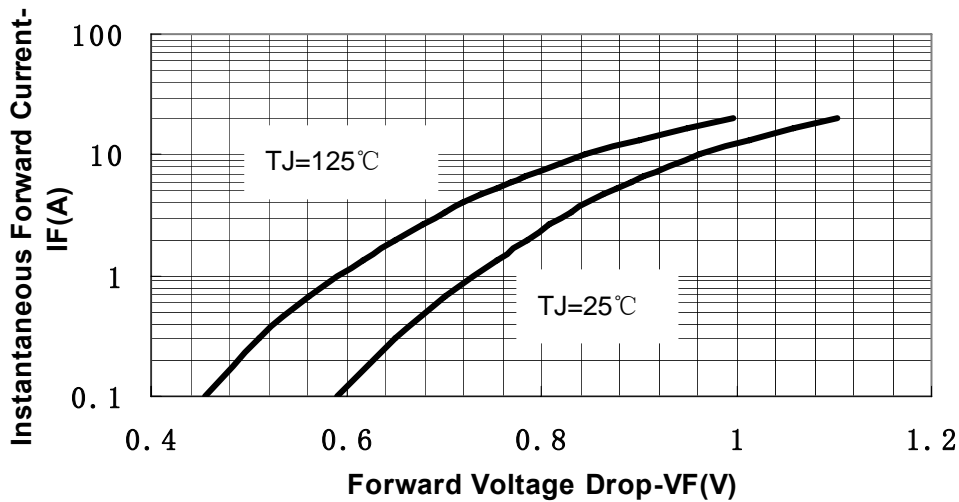


Fig.3-Typical Forward Voltage Drop Characteristics



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