Technical Data
Data Sheet N0874, Rev. -

Green Products

SB1200 SCHOTTKY RECTIFIER

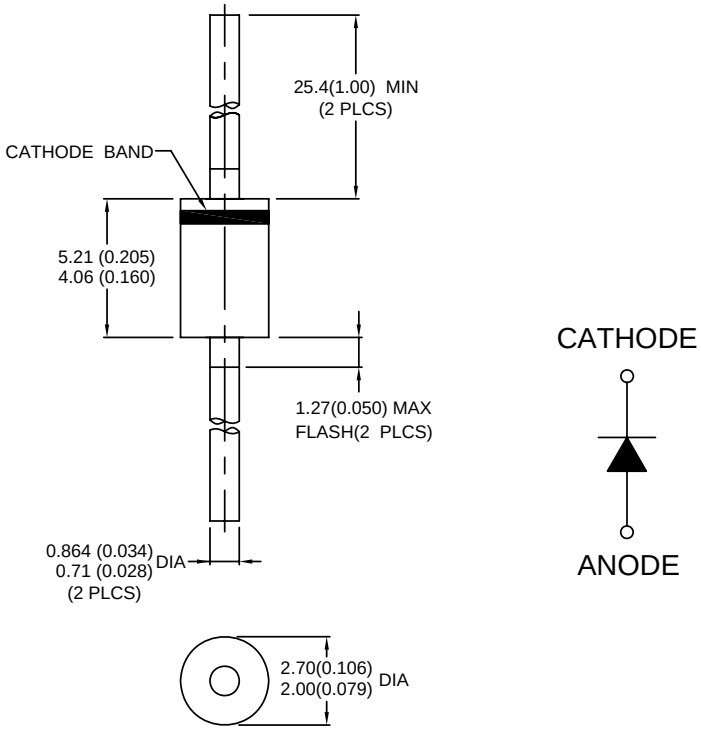
Applications:

- **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



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Marking Diagram:

Where XXXXX is YYWWL

SB = Device Type
1 = Forward Current (1A)
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
SB1200	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}	-	200	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @TC =105℃ rectangular wave form	1.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	20	A

Electrical Characteristics:

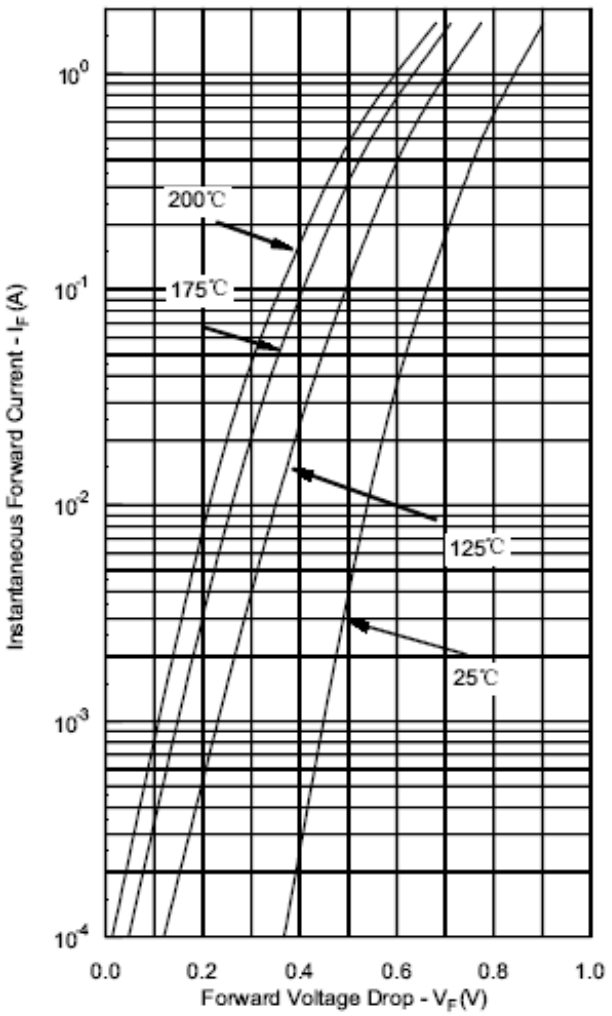
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 1A, Pulse, T_J = 25℃	0.92	V
	V_{F2}	@ 1A, Pulse, T_J = 125℃	0.76	V
Max. Reverse Current	I_{R1}	@V_R = rated VR T_J = 25℃	0.5	mA
	I_{R2}	@V_R = rated VR T_J = 100℃	1.0	mA
Typical Junction Capacitance	Cj	@V_R = 5.0 V, Tc=25℃ f_{SIG} = 1MHz	20	pF
Max. Voltage Rate of Change	dv/dt	-	10,000	v/us

* Pulse Width < 300μs, Duty Cycle <2%

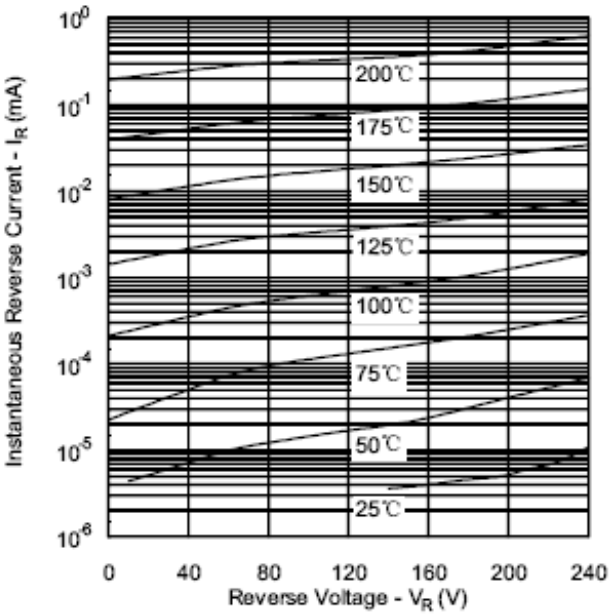
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	°C
Max. Storage Temperature	T_{stg}	-	-55 to +150	°C
Maximum Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	DC operation	140	°C/W
Approximate Weight	wt	-	0.35	g
Case Style	DO-41			

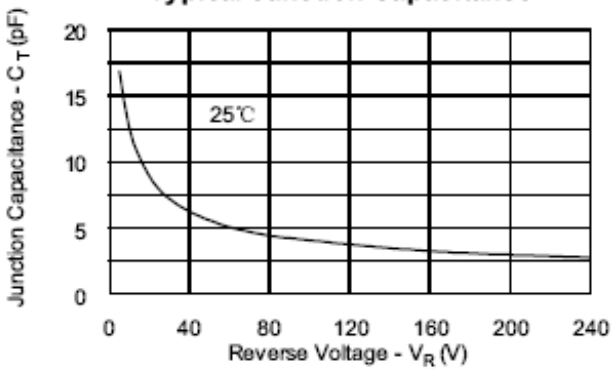
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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