

Technical Data Data Sheet N1347, Rev. - **Green Products** 

# **SL210A SCHOTTKY RECTIFIER**

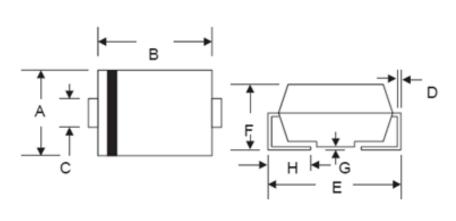
### Applications:

- 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 Inches / mm



SMA/DO-214AC				
Dim	Min	Мах	Min	Мах
Α	2.50	2.90	0.098	0.114
В	4.00	4.60	0.157	0.181
С	1.40	1.60	0.055	0.063
D	0.152	0.305	0.006	0.012
E	4.80	5.28	0.189	0.208
F	2.00	2.44	0.079	0.096
G	0.051	0.203	0.002	0.008
н	0.76	1.52	0.030	0.060
	In mm		In inch	

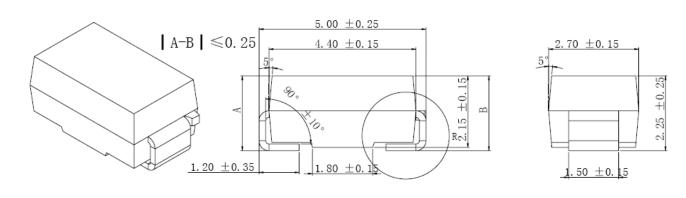
### **OPTION 1**

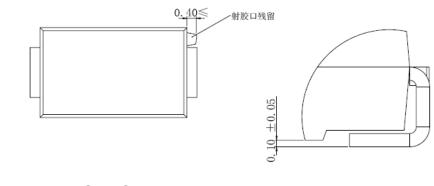


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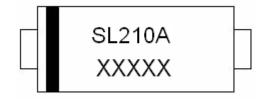
**OPTION 2(JK)** 

SMA



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## Marking Diagram:



Where XXXXX is YYWWL

SL	= Device Type
2	= Forward Current (2A)
10	= Reverse Voltage (100V)
А	= Package type
YY	= Year
WW	= Week
L	= Lot Number

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

### **Ordering Information:**

Device	Package	Shipping
SL210A	SMA	
SLZTUA	(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 Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	-	100	V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @T <sub>C</sub> =115°C, rectangular wave form	2	А
peak one cycle Non- repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	70	А

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## **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop *	V <sub>F1</sub>	@ 2A, Pulse, T <sub>J</sub> = 25 °C	0.78	V
	V <sub>F2</sub>	@ 2A, Pulse, T <sub>J</sub> = 125 °C	0.68	V
Reverse Current *	I <sub>R1</sub>	$@V_R = rated V_R$	0.1	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	$@V_R = rated V_R$	2.0	mA
		T <sub>J</sub> = 100 °C		
Junction Capacitance	CT	$@V_{R} = 5V, T_{C} = 25 \ ^{\circ}C$	200	pF
		f <sub>SIG</sub> = 1MHz		

Pulse Width < 300µs, Duty Cycle <2%

## **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Lead	$R_{ ext{ hetaJL}}$	-	17	°C/W
Maximum Thermal Resistance, Junction to Ambient	$R_{ ext{ heta}JA}$	-	75	°C/W
Approximate Weight	wt	-	0.11	g
Case Style		SMA		



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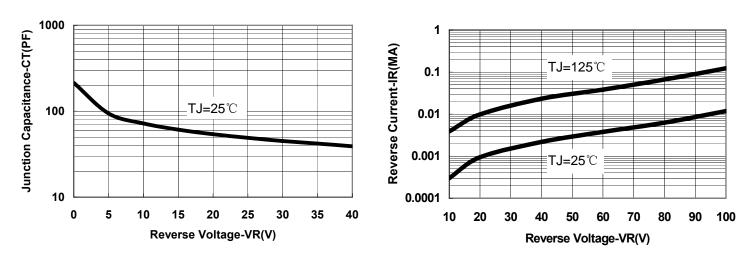


Fig.1-Typical Junction Capacitance Vs. Reverse Voltage

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

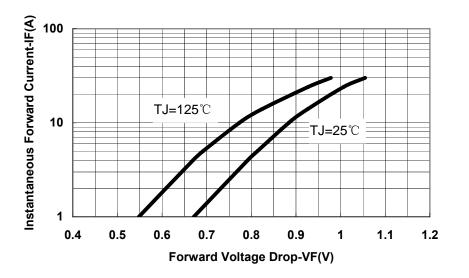


Fig.3-Typical Forward Voltage Drop Characteristics



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