Technical Data
Data Sheet N0109 Rev. -

Green Products

SL54A SCHOTTKY RECTIFIER

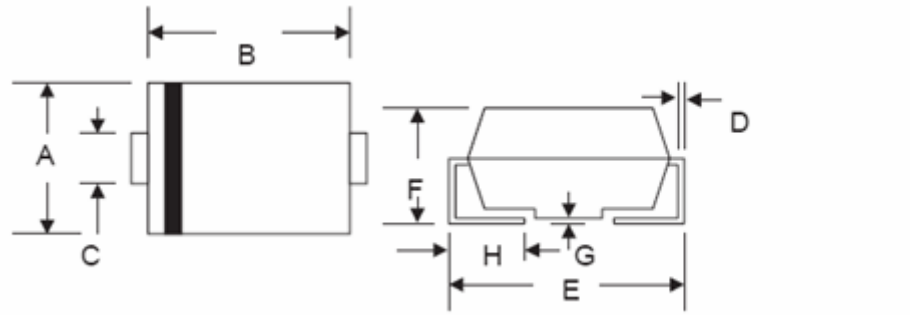
Applications:

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

Features:

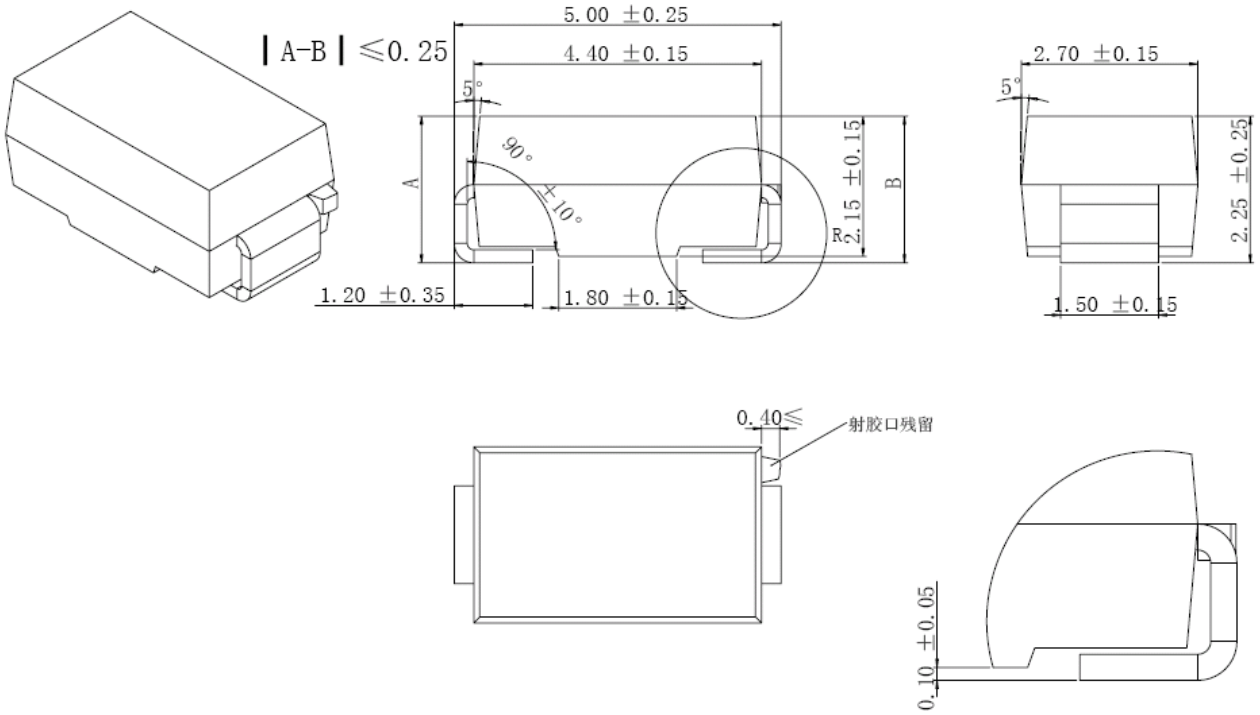
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions (In mm / Inches)



SMA/DO-214AC				
Dim	Min	Max	Min	Max
A	2.50	2.90	0.098	0.114
B	4.00	4.60	0.157	0.181
C	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
H	0.76	1.52	0.030	0.060
	In mm		In inch	

OPTION 1



OPTION 2(JK)

SMA

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Marking Diagram:

Where XXXXX is YYWWL

SL	= Device Type
5	= Forward Current (5A)
4	= Reverse Voltage (40V)
A	= Package type
YY	= Year
WW	= Week
L	= Lot Number

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

Ordering Information:

Device	Package	Shipping
SL54A	SMA (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}	-	40	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @TC =105℃ rectangular wave form(L=0.375")	5.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	190	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 5A, Pulse, T_J = 25℃	0.5	V
Max. Reverse Current	I_{R1}	@V_R = rated VR T_J = 25℃	1.0	mA
	I_{R2}	@V_R = rated VR T_J = 100℃	30	mA
Typical Junction Capacitance	Cj	@V_R = 5.0 V, Tc=25℃ f_{SIG} = 1MHz	200	pF

* Pulse Width < 300μs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +125	℃
Max. Storage Temperature	T_{stg}	-	-55 to +150	℃
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	8	℃/W
Approximate Weight	wt	-	0.11	g
Case Style	SMA			

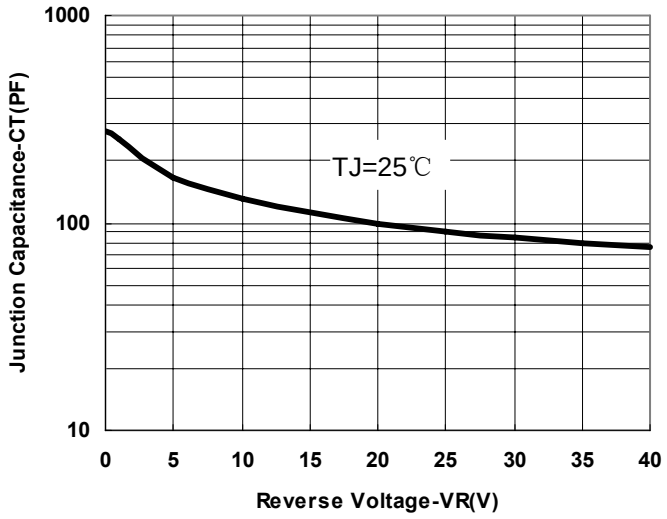

Fig.1-Typical Junction Capacitance

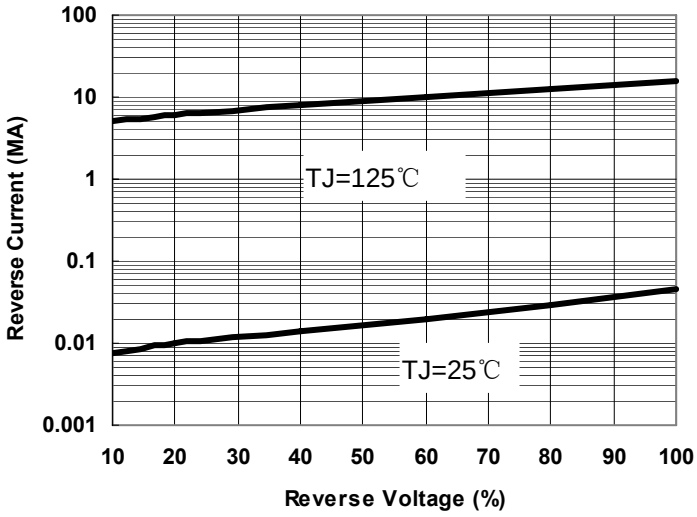

Fig.2-Typical Reverse Characteristics

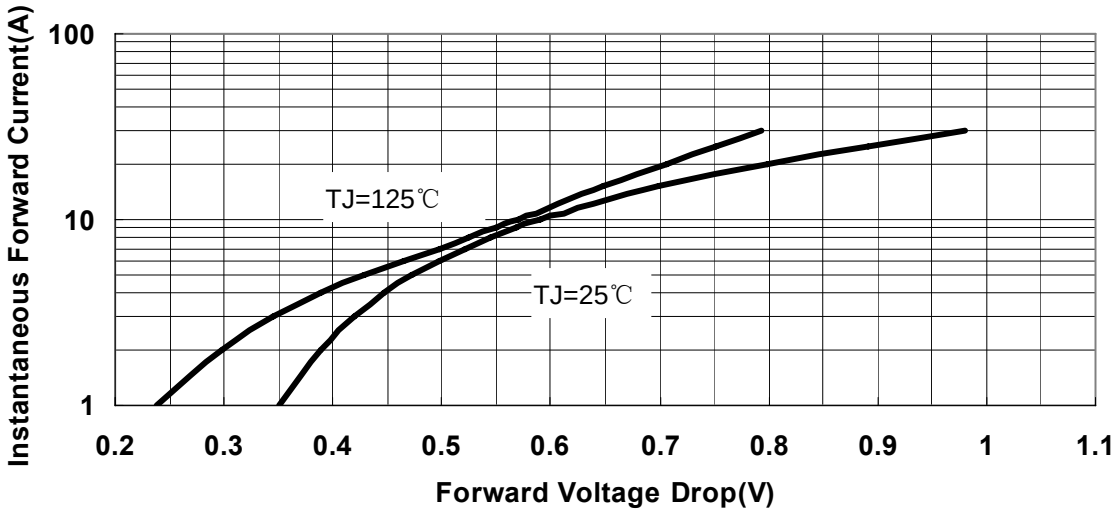

Fig.3-Typical Instantaneous Forward Voltage Characteristics

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