

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **SK210A SCHOTTKY RECTIFIER**



#### **Features**

- Small foot print, surface mountable
- Very low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term
- reliability
- Green products in compliance 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

## **Circuit Diagram**



#### **Applications**

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

### **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 Rectified Forward Current	I <sub>F (AV)</sub>	50% duty cycle @T <sub>L</sub> =100°C, rectangular wave form	2	Α
Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3ms, Half Sine pulse, T <sub>c</sub> = 25 °C	50	А

#### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop*	V <sub>F1</sub>	@ 2A, Pulse, T <sub>J</sub> = 25 °C	0.73	0.85	V
	V <sub>F1</sub>	@ 2A, Pulse, T <sub>J</sub> = 125 °C	0.60	0.70	V
Reverse Current*	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , T <sub>J</sub> = 25 °C	0.001	0.5	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , T <sub>J</sub> = 100 °C	-	2.0	mA
Junction Capacitance	Ст	$@V_R = 5V, T_C = 25 \text{ °C}, f_{SIG} = 1MHz$	130	240	pF
Series Inductance	Ls	Measured lead to lead 5 mm from package body	8.0	-	nH
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

<sup>\*</sup> Pulse width < 300 µs, duty cycle < 2%



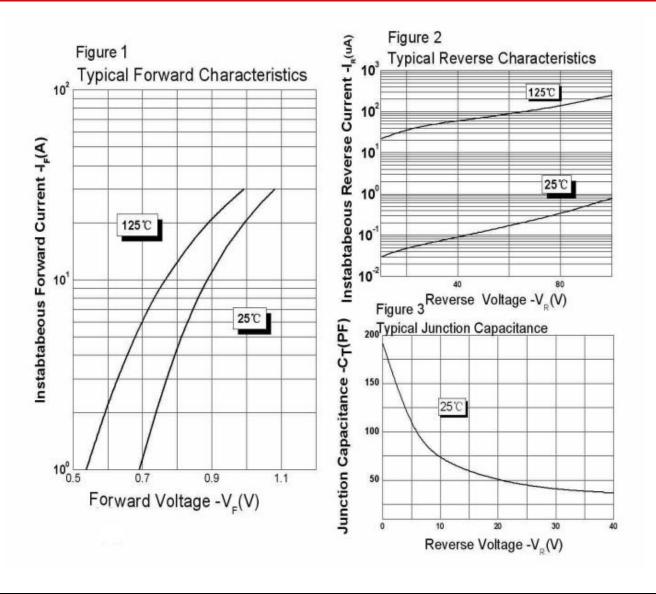




# **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	$T_J$	-	-55 to +150	°C
Storage Temperature	$T_{stg}$	-	-55 to +150	°C
Typical Thermal Resistance Junction to Lead	$R_{ heta JL}$	DC operation	23	°C/W
Typical Thermal ResistanceJunction to Ambient	$R_{ heta JA}$	DC operation	77	°C/W
Approximate Weight	wt	-	0.06	g

### **Ratings and Characteristics Curves**



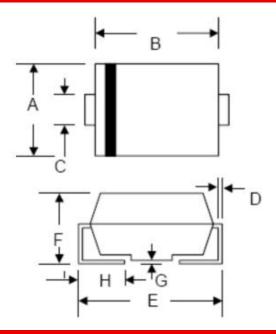
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#### **Mechanical Dimensions SMA**



SYMBOL	Millimeters		Inches		
	Min.	Max.	Min.	Max.	
Α	2.40	2.84	0.094	0.112	
В	3.99	4.75	0.157	0.187	
С	1.05	1.70	0.041	0.067	
D	0.15	0.51	0.006	0.020	
Е	4.80	5.66	0.189	0.223	
F	1.90	2.95	0.075	0.116	
G	0.05	0.203	0.002	0.008	
Н	0.76	1.52	0.030	0.600	

## **Ordering Information**

Device	Package	Shipping
SK210A	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.

## **Marking Diagram**

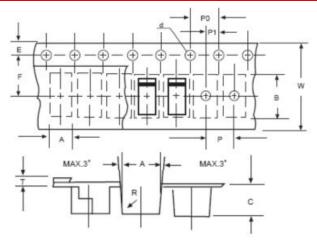
Where XXXXX is YYWWL



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

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

# **Carrier Tape & Reel Specification SMA**



SYMBOL	Millimeters		
	Min.	Max.	
Α	2.97	3.17	
В	5.70	5.90	
С	2.32	2.52	
d	1.40	1.60	
E	1.40	1.60	
F	5.60	5.70	
Р	3.90	4.10	
P0	3.90	4.10	
P1	1.90	2.10	
Т	0.25	0.35	
W	11.80	12.20	

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