

SK36A

RoHS

Technical Data Data Sheet N0104 Rev. A



# SK36A 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
- Terminals finish: 100% Pure Tin
- "-A" is an AEC-Q101 qualified device
- 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	V <sub>RRM</sub> Vrwm	-	60	V
DC Blocking Voltage	VR			
Average Rectified Forward Current	IF (AV)	50% duty cycle $@T_c=100^{\circ}C$ , rectangular wave form	3	А
Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3ms, Half Sine pulse, T_c = 25 $^\circ\text{C}$	100	A

## **Electrical Characteristics:**

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop*	V <sub>F1</sub>	@ 3A, Pulse, T <sub>J</sub> = 25 °C	0.58	0.75	V
Reverse Current*	I <sub>R1</sub>	$@V_R = rated V_{R,} T_J = 25 \ ^{\circ}C$	0.01	1.0	mA
	I <sub>R2</sub>	$@V_R = rated V_{R,} T_J = 100 \ ^{\circ}C$	-	20	mA
Junction Capacitance	Ст	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C, f <sub>SIG</sub> = 1MHz	100	250	pF

\* Pulse width < 300  $\mu$ s, duty cycle < 2%

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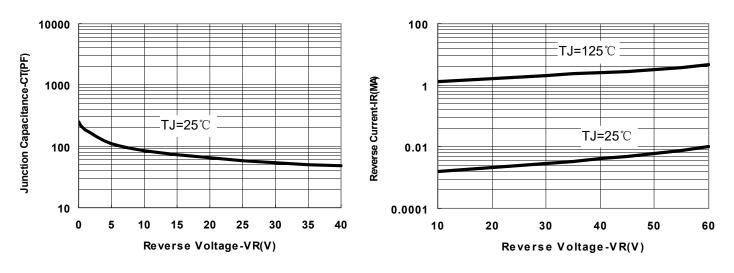


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# **Thermal-Mechanical Specifications:**

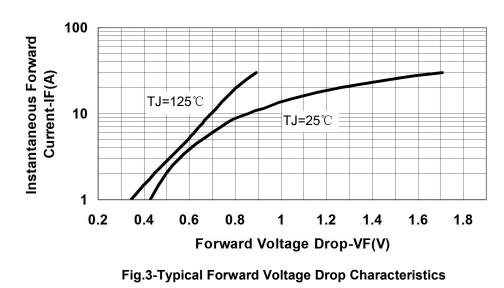
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	$R_{ ext{ heta}JC}$	DC operation	8	°C/W
Approximate Weight	wt	-	0.06	g











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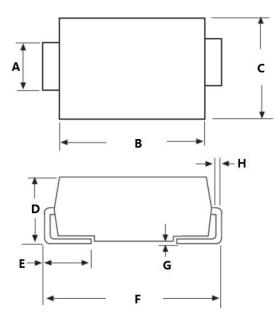


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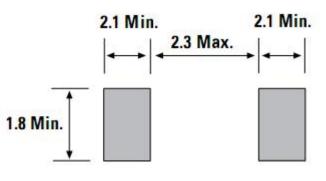
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#### **Mechanical Dimensions SMA**



SYMBOL	Millimeters		Inches	
STMIDUL	Min.	Max.	Min.	Max.
А	1.25	1.65	0.049	0.065
В	3.95	4.60	0.156	0.181
С	2.25	2.95	0.089	0.116
D	1.95	2.90	0.077	0.114
E	0.75	1.60	0.030	0.063
F	4.80	5.60	0.189	0.220
G	0.05	0.20	0.002	0.008
н	0.15	0.41	0.006	0.016

### Soldering Pad Layout (Millimeters)

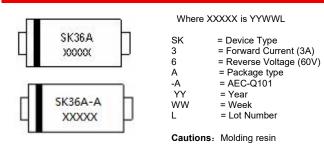


### **Ordering Information**

Device	Package	Shipping
SK36A	SMA	5000pcs / reel
SK36ATR	SMA	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



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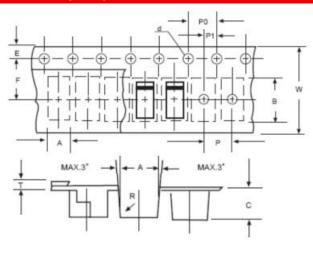
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#### **Carrier Tape Specification SMA**



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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