

**Green Products** 

## **SK34B SCHOTTKY RECTIFIER**

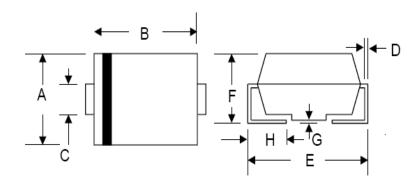
#### **Applications:**

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Disk drives
- Battery charging

#### 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

#### **Mechanical Dimensions: In mm**



SMB/DO-214AA				
Dim	Min	Max	Min	Max
Α	3.30	3.94	0.130	0.155
В	4.06	4.70	0.160	0.185
С	1.91	2.11	0.075	0.083
D	0.152	0.305	0.006	0.012
Е	5.08	5.59	0.2	0.220
F	2.13	2.44	0.084	0.096
G	0.051	0.203	0.002	0.008
Н	0.76	1.27	0.029	0.05
	in mm		In inch	

#### **OPTION 1**

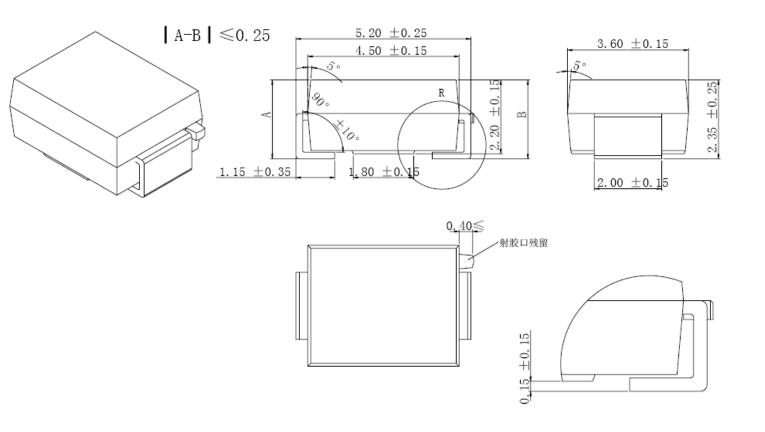
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**OPTION 2(JK)** 

**SMB** 

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## **Marking Diagram:**



Where XXXXX is YYWWL

SK = Device Type

3 = Forward Current (3A) 4 = Reverse Voltage (40V)

B = Package type

YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

## **Ordering Information:**

Device	Package	Shipping
SK34B	SMB (Pb-Free)	3000pcs / 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 <sub>F(AV)</sub>	50% duty cycle @TC =80 ℃ rectangular wave form(L=0.375")	3.0	А
Max. Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	75	А

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#### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 3A, Pulse, T <sub>J</sub> = 25℃	0.63	V
	$V_{F1}$	@ 3A, Pulse, T <sub>J</sub> = 125°C	0.57	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = rated VR	1.0	mA
		T <sub>J</sub> = 25°C		
	ı	@V <sub>R</sub> = rated VR	20	mA
	I <sub>R2</sub>	T <sub>J</sub> = 100°C		
Typical Junction Capacitance	Cj	@V <sub>R</sub> = 4.0 V, Tc=25°C	60	pF
		f <sub>SIG</sub> = 1MHz		

<sup>\*</sup> Pulse Width < 300µs, Duty Cycle <2%

# **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +150	$^{\circ}$ C
Max. Storage Temperature	$T_{stg}$	-	-55 to +150	$^{\circ}$ C
Maximum Thermal	D	DC operation	8	°C/W
Resistance Junction to Case	$R_{ heta Jc}$	DC operation	0	C/VV
Approximate Weight	wt	-	0.68	g
Case Style		SMB		1

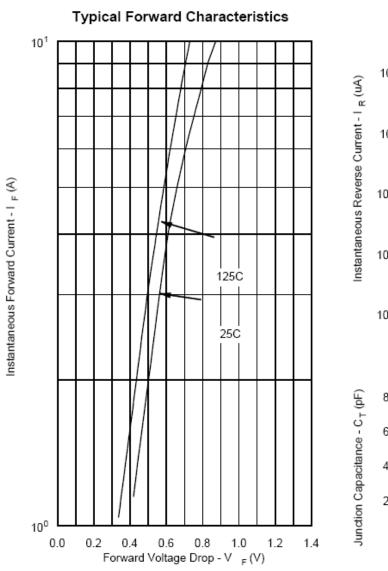
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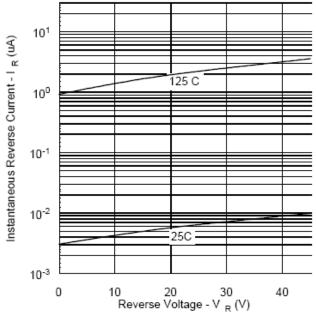




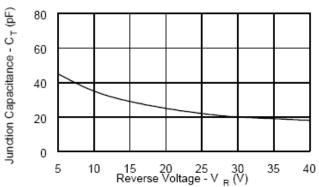
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# Typical Reverse Characteristics



#### Typical Junction Capacitance



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