

Technical Data Data Sheet N0935, Rev. B Green Products

# **SK34B SCHOTTKY RECTIFIER**

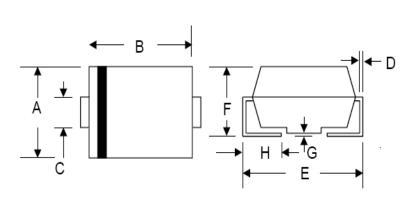
### Applications:

- 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	Мах		
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			

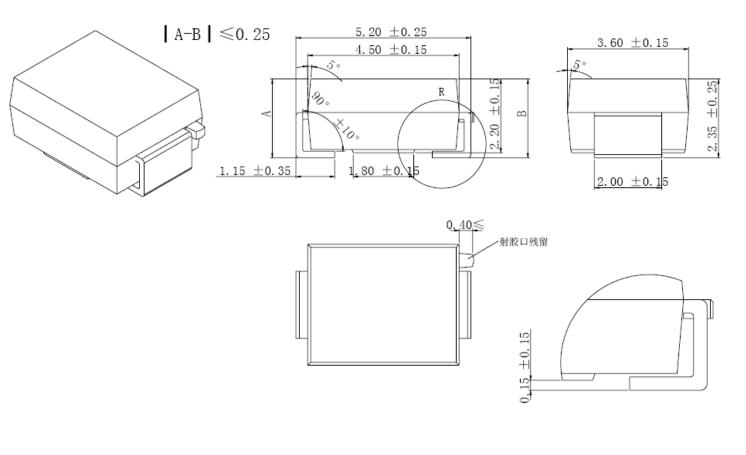
### **OPTION 1**



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**OPTION 2(JK)** 

SMB



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### Marking Diagram:

	SK34B	L	Where XXXXX is YYWWL		
4	XXXXX		SK 3 4 B YY WW L	<ul> <li>Device Type</li> <li>Forward Current (3A)</li> <li>Reverse Voltage (40V)</li> <li>Package type</li> <li>Year</li> <li>Week</li> <li>Lot Number</li> </ul>	
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 Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	-	40	V
Average Forward Current	I <sub>F(AV)</sub>	@T <sub>L</sub> =105℃(Note1)	3.0	A
Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	75	А

Note1: Rectangular wave form, 50% duty cycle,  $T_L$  (Lead Temperature) =  $T_T$  (Terminal Temperature)



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### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	V <sub>F1</sub>	@ 3A, Pulse, T <sub>J</sub> = 25℃	0.63	V
	$V_{F2}$	<b>@</b> 3A, Pulse, T <sub>J</sub> = 125℃	0.57	V
Reverse Current*	I <sub>R1</sub>	@V <sub>R</sub> = rated VR T <sub>J</sub> = 25℃	1.0	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated VR T <sub>J</sub> = 125℃	20	mA
Typical Junction Capacitance	Cj	@V <sub>R</sub> = 5.0 V, Tc=25℃ f <sub>SIG</sub> = 1MHz	60	pF

\* Pulse Width < 300 $\mu$ s, Duty Cycle <2%

### **Thermal-Mechanical Specifications:**

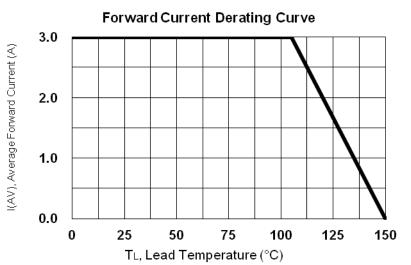
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Typical Thermal Resistance Junction to Lead	$R_{ ext{ heta}JL}$	DC operation	25	°C/W
Approximate Weight	wt	-	0.68	g
Case Style		SMB		



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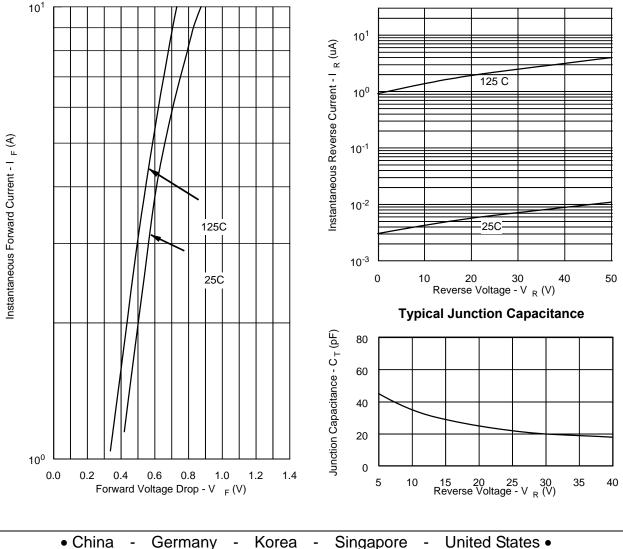
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Typical Forward Characteristics

**Typical Reverse Characteristics** 



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