

SK34B SCHOTTKY RECTIFIER

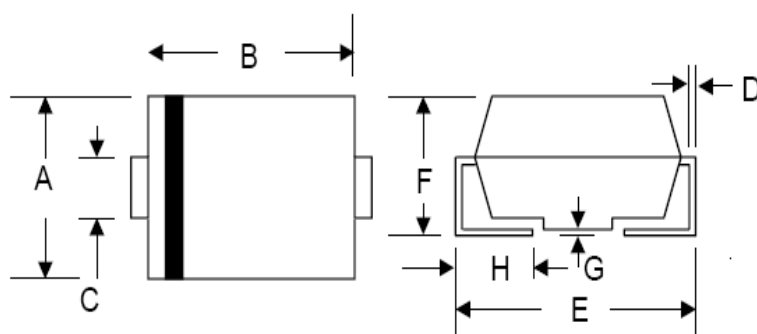
Applications:

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

Features:

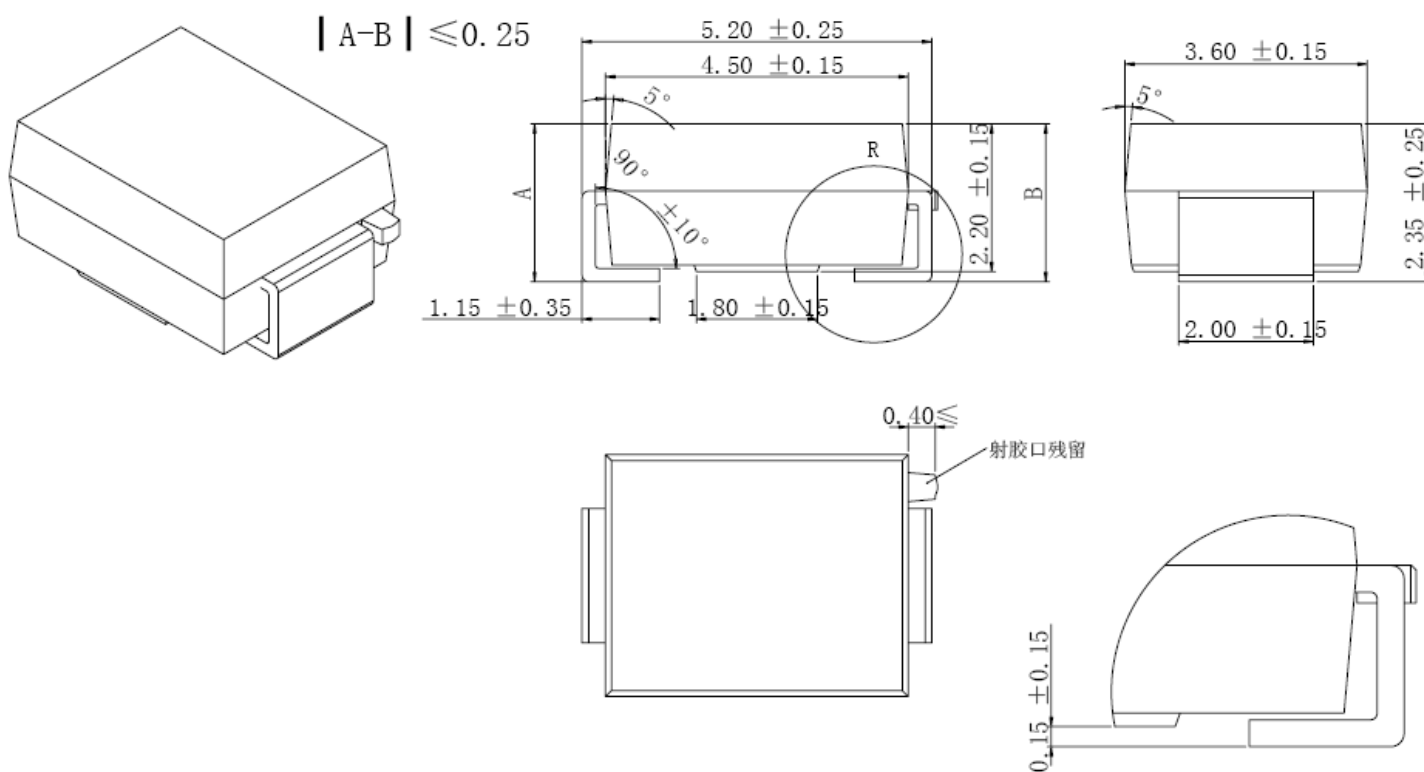
- Small foot print, surface mountable
- Very low forward Voltage Drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- Green Products in Compliance the ROHS Directive
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions: In mm



SMB/DO-214AA				
Dim	Min	Max	Min	Max
A	3.30	3.94	0.130	0.155
B	4.06	4.70	0.160	0.185
C	1.91	2.11	0.075	0.083
D	0.152	0.305	0.006	0.012
E	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
H	0.76	1.27	0.029	0.05
		in mm		In inch

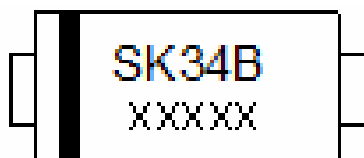
OPTION 1



OPTION 2(JK)

SMB

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	$I_{F(AV)}$	50% duty cycle @TC =80 °C rectangular wave form(L=0.375")	3.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	75	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 3A, Pulse, $T_J = 25^{\circ}\text{C}$	0.63	V
	V_{F1}	@ 3A, Pulse, $T_J = 125^{\circ}\text{C}$	0.57	V
Max. Reverse Current	I_{R1}	@ $V_R = \text{rated VR}$ $T_J = 25^{\circ}\text{C}$	1.0	mA
	I_{R2}	@ $V_R = \text{rated VR}$ $T_J = 100^{\circ}\text{C}$	20	mA
Typical Junction Capacitance	C_j	@ $V_R = 4.0\text{ V}$, $T_c = 25^{\circ}\text{C}$ $f_{\text{SIG}} = 1\text{MHz}$	60	pF

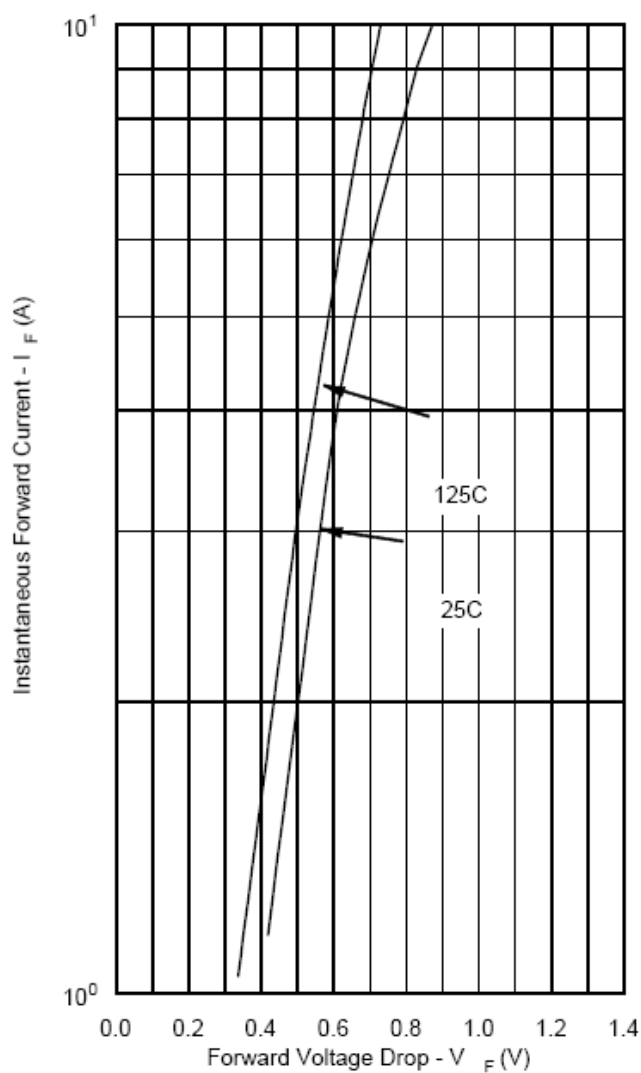
* Pulse Width < 300 μs , Duty Cycle < 2%

Thermal-Mechanical Specifications:

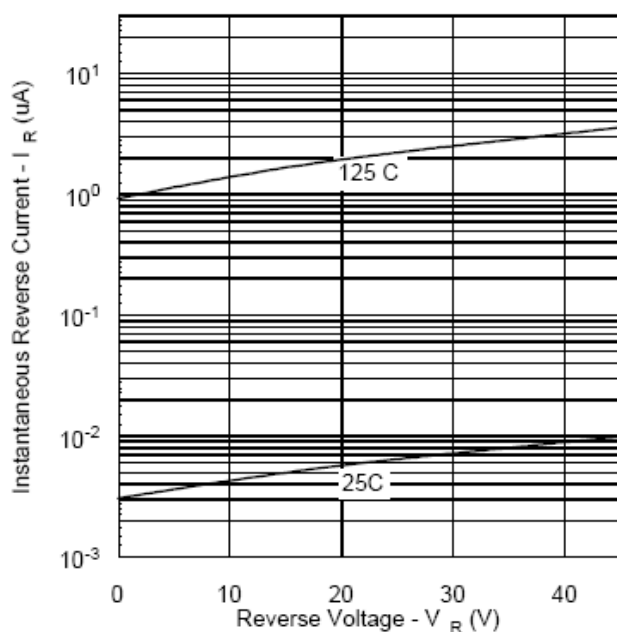
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^{\circ}\text{C}$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^{\circ}\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta\text{Jc}}$	DC operation	8	$^{\circ}\text{C/W}$
Approximate Weight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



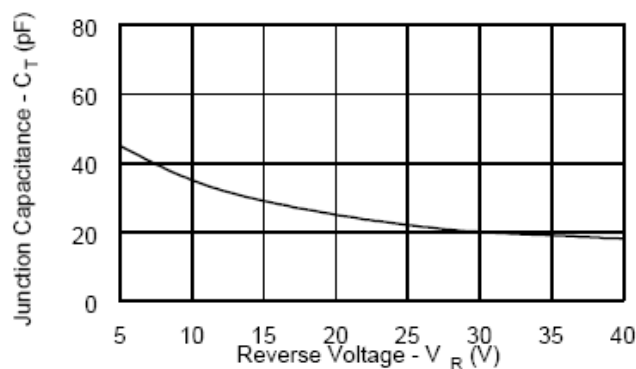
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance





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