

SK310B SCHOTTKY RECTIFIER

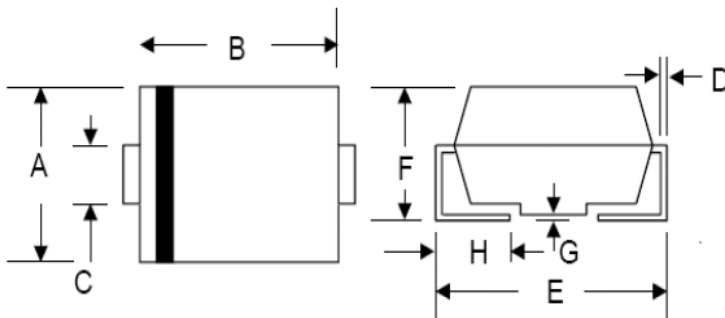
Applications:

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

Features:

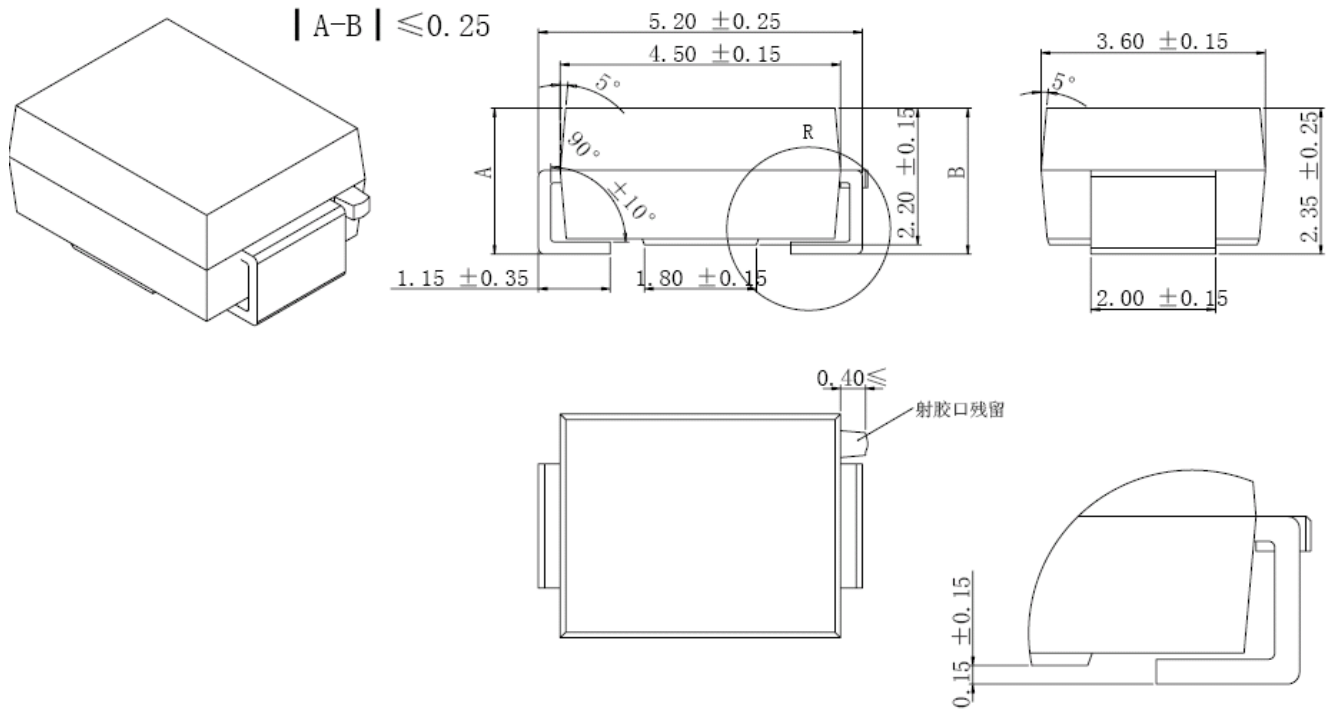
- Small foot print, surface mountable
- Very low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- Green products in compliance the ROHS directive
- This is a Pb – Free device
- All SMC parts are traceable to the wafer lot
- Additional testing 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	

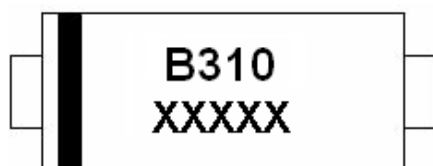
OPTION 1



OPTION 2(JK)

SMB

Marking Diagram:



Where XXXXX is YYWWL

B = Package type
3 = Forward Current (3A)
10 = Reverse Voltage (100V)
YY = Year
WW = Week
L = Lot Number

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

Ordering Information:

Device	Package	Shipping
SK310B	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}	-	100	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_L=115^{\circ}\text{C}$ rectangular wave form($L=0.375''$)	3.0	A
Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	110	A

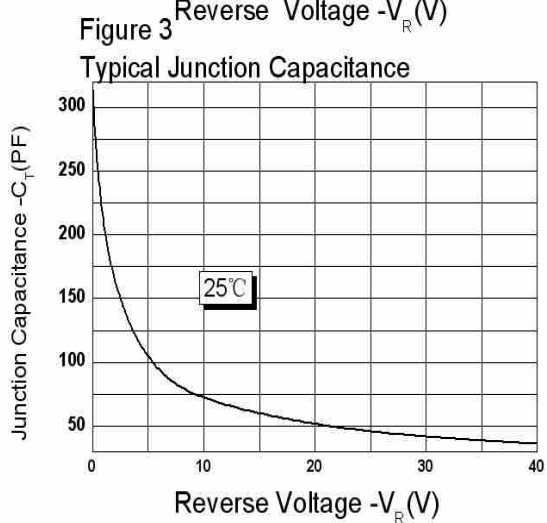
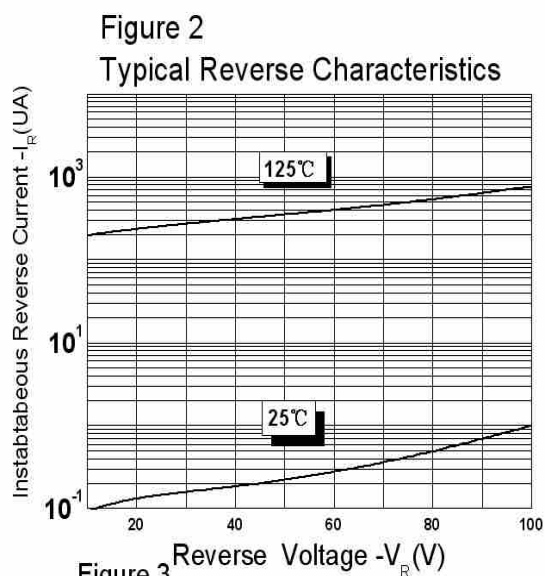
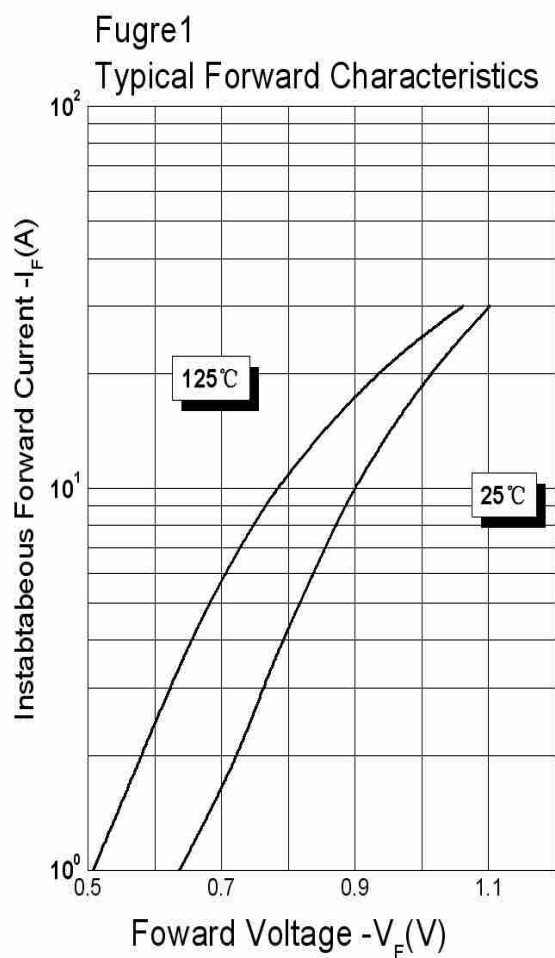
Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V_{F1}	@ 3A, Pulse, $T_J = 25^{\circ}\text{C}$	0.85	V
	V_{F1}	@ 3A, Pulse, $T_J = 125^{\circ}\text{C}$	0.80	V
Reverse Current	I_{R1}	@ $V_R = \text{rated VR}$ $T_J = 25^{\circ}\text{C}$	0.6	mA
	I_{R2}	@ $V_R = \text{rated VR}$ $T_J = 125^{\circ}\text{C}$	20	mA
Typical Junction Capacitance	Cj	@ $V_R = 4.0\text{ V}$, $T_c = 25^{\circ}\text{C}$ $f_{\text{SIG}} = 1\text{MHz}$	250	pF

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

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-	-55 to +150	$^{\circ}\text{C}$
Repetitive peak reverse current	I_{RRM}	$T_p = 2\mu\text{s}$ $F = 1\text{KHz}$ square	1	A
Maximum Thermal Resistance Junction to Lead	$R_{\theta\text{JL}}$	DC operation	17	$^{\circ}\text{C/W}$
Maximum Thermal Resistance, Case to Heat Sink	$R_{\theta\text{JA}}$	DC operation	75	$^{\circ}\text{C/W}$
Approximate Weight	wt	-	0.68	g
Case Style	SMB			



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