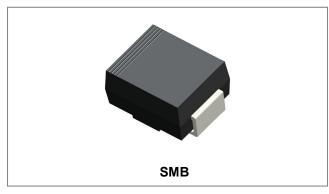


SK34B

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SK34B SCHOTTKY RECTIFIER



Circuit Diagram



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

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 DC Blocking Voltage	V _{RRM} V _{RWM} V _R	-	40	V
Average Rectified Forward Current	lf (AV)	50% duty cycle @T _L =105°C(Note1), rectangular wave form	3	А
Peak One Cycle Non-Repetitive Surge Current	I _{FSM}	8.3ms, Half Sine pulse, T_c = 25 °C	75	А

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

Electrical Characteristics:

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop*	V _{F1}	@ 3A, Pulse, T _J = 25 °C	0.58	0.63	V
	V _{F2}	@ 3A, Pulse, T _J = 125 °C	0.50	0.57	V
Reverse Current*	I _{R1}	$@V_R = rated V_{R_J}T_J = 25 \ ^{\circ}C$	0.0001	1.0	mA
	I _{R2}	$@V_R = rated V_{R_j} T_J = 125 \ ^{\circ}C$	0.004	20	mA
Junction Capacitance	Ст	$@V_{R} = 5V, T_{C} = 25 \circ C, f_{SIG} = 1MHz$	45	60	pF
Series Inductance	Ls	Measured lead to lead 5 mm from package body		-	nH
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

* Pulse width < 300 µs, duty cycle < 2%

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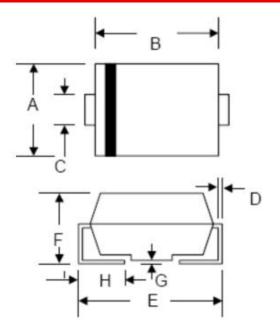


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Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Lead	$R_{ heta JL}$	DC operation	25	°C/W
Approximate Weight	wt	-	0.09	g

Mechanical Dimensions SMB



SYMBOL	Millimeters		Inches	
STWIDOL	Min.	Max.	Min.	Max.
А	3.30	3.94	0.130	0.155
В	4.06	4.70	0.160	0.185
С	1.80	2.20	0.071	0.087
D	0.152	0.305	0.006	0.012
E	4.80	5.59	0.189	0.220
F	2.10	2.60	0.083	0.102
G	0.051	0.203	0.002	0.008
н	0.76	1.52	0.030	0.060

Ordering Information

Device	Package	Shipping
SK34B	SMB	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.





Where XXXXX is YYWWL

- = Device Type
- = Forward Current (3A) = Reverse Voltage (40V)
- = Package type
- = Year
- = Week
- = Lot Number

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

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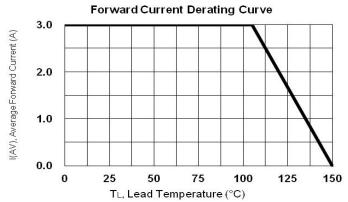


SK34B

RoHS

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Ratings and Characteristics Curves



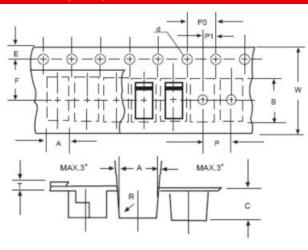
Typical Forward Characteristics Typical Reverse Characteristics 10¹ 10¹ (BA) 125 C 10⁰ 10⁻¹ Þ 10⁻² 25C 125C Instantaneous Reverse Cupent - I 10⁻³ 20 30 Reverse Voltage - V _R (V) 40 50 0 10 25C **Typical Junction Capacitance** Instantaneous Forward Current - I 80 60 40 20 10⁰ 0 0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 Junction Ca 10 $\begin{array}{cccccccc} 15 & 20 & 25 & 30 \\ \text{Reverse Voltage - V} & _{\text{R}} (\text{V}) \end{array}$ 40 5 35 Forward Voltage Drop - V $_{F}$ (V)

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Carrier Tape Specification SMB



SYMBOL	Millimeters		
STWIDOL	Min.	Max.	
A	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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