



# SKL32B THRU SKL34B

3.0 AMPS. Surface Mount Low  $V_F$  Schottky Barrier Rectifiers



Voltage Range  
20 to 40 Volts  
Current  
3.0 Amperes

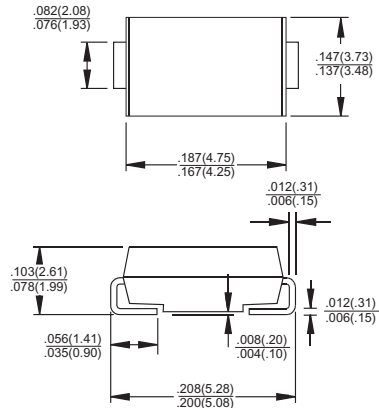
## Features

- ✧ For surface mounted application
- ✧ Metal silicon junction, majority carrier conduction
- ✧ Low forward voltage drop
- ✧ Easy pick and place
- ✧ High surge current capability
- ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering:  
260°C / 10 seconds at terminals

## Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Terminals: Solder plated
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 16mm tape per EIA STD RS-481
- ✧ Weight: 0.21gram

### SMB/DO-214AA



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SKL32B	SKL33B	SKL34B	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	3.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100			A
Maximum Instantaneous Forward Voltage (Note 1) @3.0A	$V_F$	0.385		0.40	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	5.0			mA
		250			mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17			$^\circ\text{C/W}$
		55			
Marking Code		SL32B	SL33B	SL34B	
Operating Temperature Range	$T_J$	-55 to +125			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150			$^\circ\text{C}$

Notes:1. Pulse Test with PW=300 usec, 1% Duty Cycle.

2. Measured on P.C. Board with 0.6 x 0.6"(16.0 x 16.0mm) Copper Pad Areas.

## RATINGS AND CHARACTERISTIC CURVES (SKL32B THRU SKL34B)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

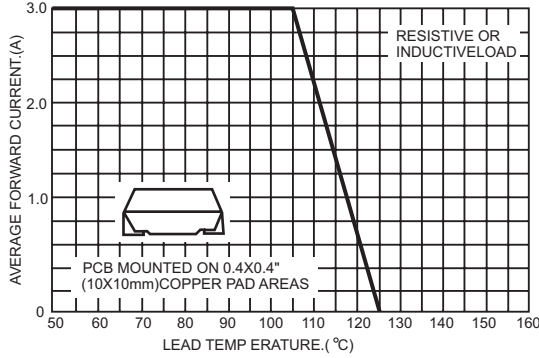


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

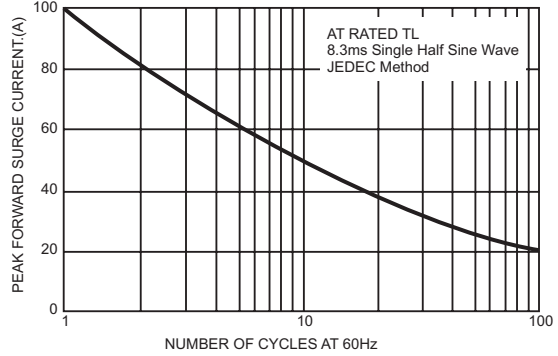


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

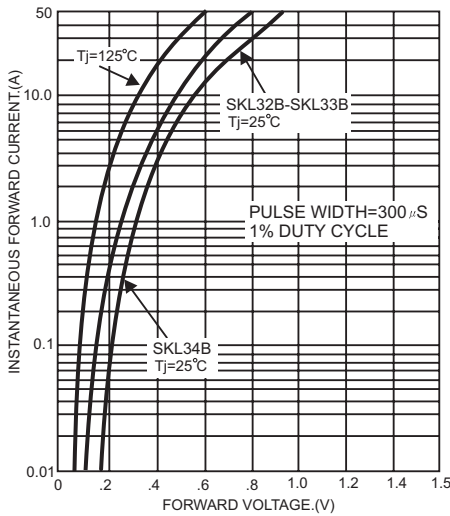


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

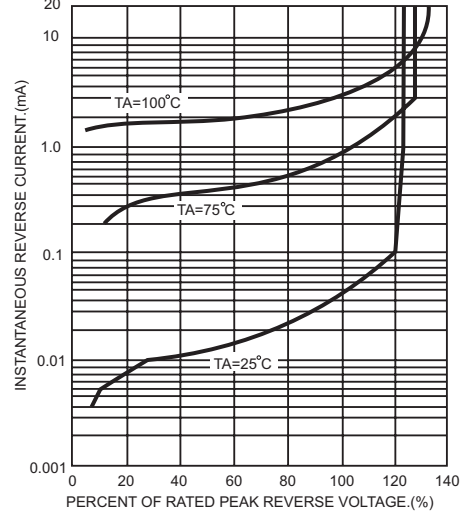


FIG. 5- TYPICAL JUNCTION CAPACITANCE

