



SKL13B

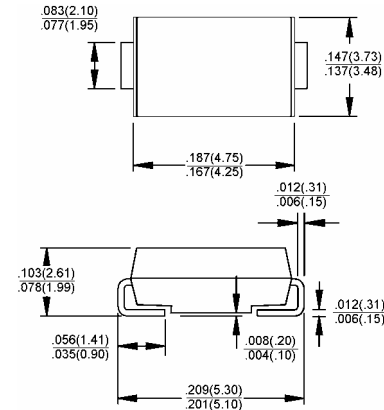
1.0 AMP. Surface Mount Low V_F Schottky Barrier Rectifiers **SMB/DO-214AA**

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: Matte tin plating
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 16mm tape per EIA STD RS-481
- ✧ Weight: 0.093 gram



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	SKL13B	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	V
Maximum RMS Voltage	V_{RMS}	21	V
Maximum DC Blocking Voltage	V_{DC}	30	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	1.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50	A
Maximum Instantaneous Forward Voltage (Note 1) @ 1.0A	V_F	0.39	V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_R	0.2	mA
		50	mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$	30	$^\circ\text{C/W}$
	$R_{\theta JA}$	85	
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 0.4" x 0.4" (10 x 10mm) Copper Pad Areas.

Version: C10



RATINGS AND CHARACTERISTIC CURVES (SKL13B)

