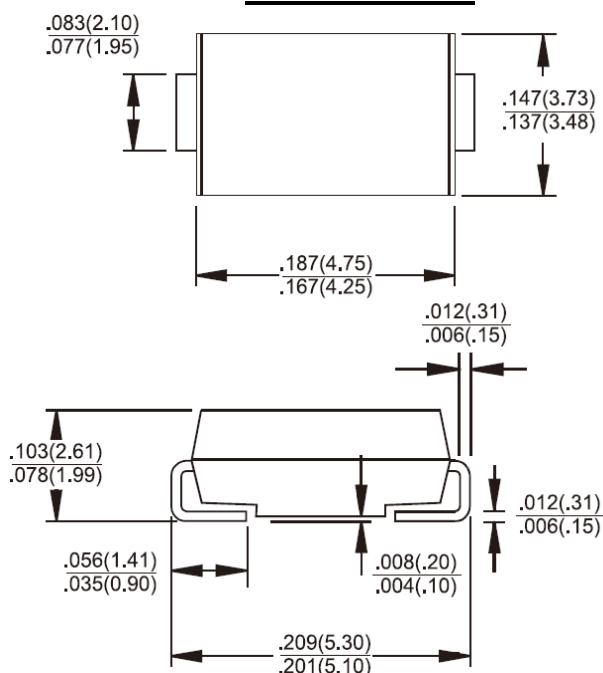


**3.0AMPS Surface Mount Schottky Barrier Rectifiers
SMB/DO-214AA**



Features

- ✧ For surface mounted application
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low forward voltage drop
- ✧ Easy pick and place
- ✧ High surge current capability
- ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering: 260°C/10 seconds at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminals: Pure tin plated, lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 16mm tape per EIA STD RS-481
- ✧ Weight: 0.1 gram

Dimensions in inches and (millimeters)

Marking Diagram



- SK3XB = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

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	SK 32B	SK 33B	SK 34B	SK 35B	SK 36B	SK 39B	SK 310B	SK 315B	SK 320B	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	200	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3									A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	70									A	
Maximum Instantaneous Forward Voltage (Note 1) @ 3 A	V_F	0.5			0.75		0.85		0.95		V	
Maximum Reverse Current @ Rated VR $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	0.5					0.1					mA
		10			5		-					
		-					2					
Typical Thermal Resistance	$R_{\theta JL}$	17									$^\circ\text{C/W}$	
	$R_{\theta JA}$	75										
Operating Temperature Range	T_J	- 55 to + 125				- 55 to + 150						$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150										$^\circ\text{C}$

Note 1: Pluse Test with PW=300 usec, 1% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (SK32B THRU SK320B)

FIG. 1 FORWARD CURRENT DERATING CURVE

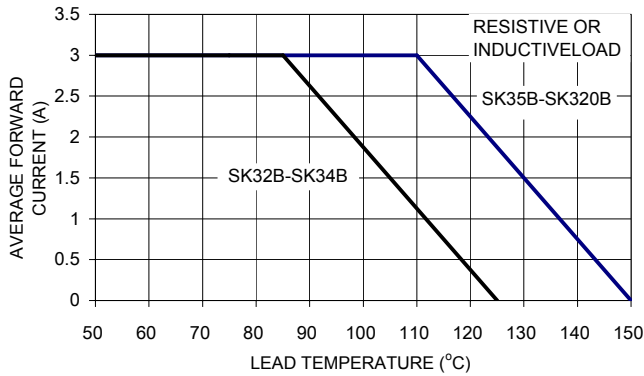


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

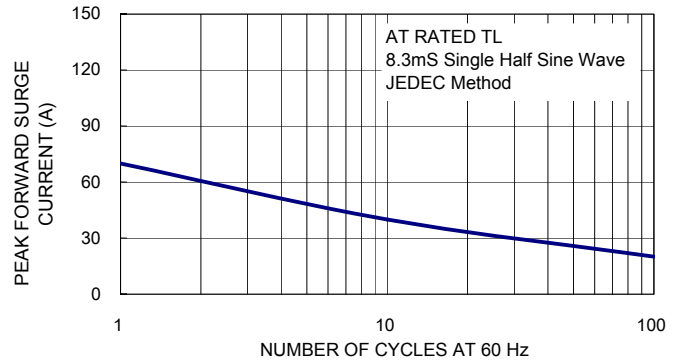


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

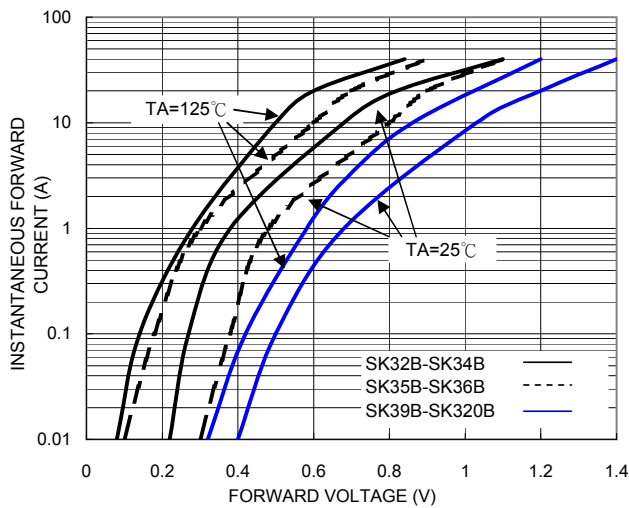


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

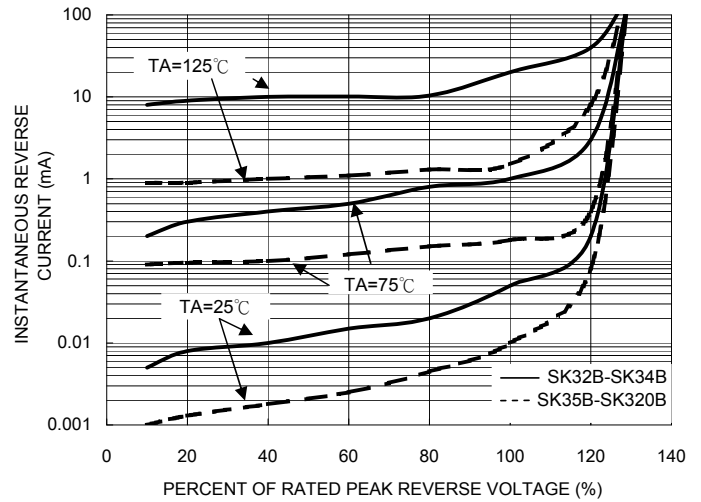


FIG. 5 TYPICAL JUNCTION CAPACITANCE

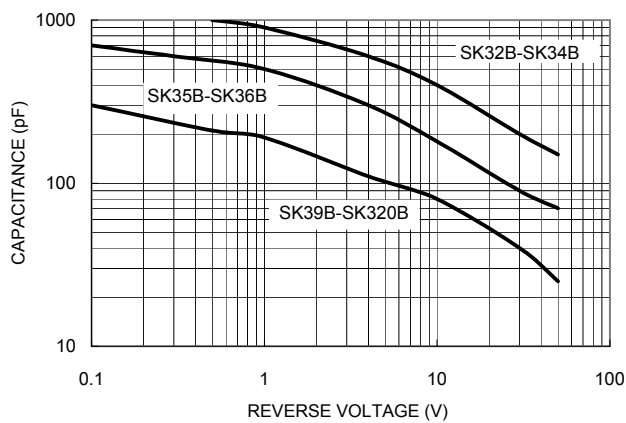


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

