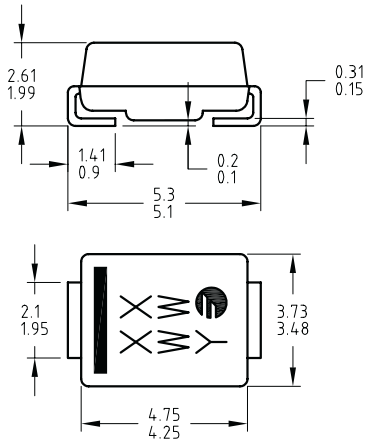
3 Amp. Surface Mount Schottky Barrier Rectifiers

RoHS COMPLIANCE

CASE: SMB/DO-214AA



XX = Marking code
WW = Week code
Y = Year code

Dimensions in mm.

Voltage	Current
20 V to 150 V	3.0 A

- For surface mounted application
- Easy pick and place
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability. low VF
- High surge current capability
- Plastic material used carriers Underwraiters Laboratory Classification 94V-0
- Epitaxial construction
- High temperature soldering: 260 °C / 10 seconds at terminals

MECHANICAL DATA

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

Maximum Ratings and Electrical Characteristics at 25 °C

		SK 32B	SK 34B	SK 36B	SK 310B	SK 315B
	Marking code	IF	IG	IH	IJ	IK
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	20	40	60	100	150
V_{RMS}	Maximum RMS Voltage (V)	14	28	42	70	105
V_{DC}	Maximum DC Blocking Voltage (V)	20	40	60	100	150
$I_{F(AV)}$	Forward Current at T_L (See graphic)	3.0 A				
I_{FSM}	8.3 ms.Peak Forward Surge Current (Jedec Method)	70 A				
T_j	Operating Temperature Range	-55°C to +125°C		-55°C to +150°C		
T_{stg}	Storage Temperature Range	-55°C to +150°C				

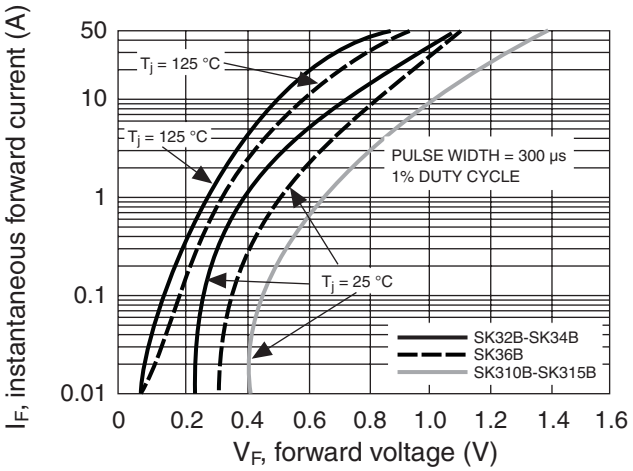
Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage @ 3.0 A	0.5 V	0.75 V	0.85 V	0.95 V
I_R	Maximum DC Reverse Current (Note 1) T_A = 25 °C	0.5 mA		0.1 mA	
	at Rated DC Blocking Voltage T_A =125°C	10 mA	5.0 mA	2.0 mA	
R_{thj-l} R_{thj-a}	Typical Thermal Resistance (Note 2)	17 °C/W 75 °C/W			

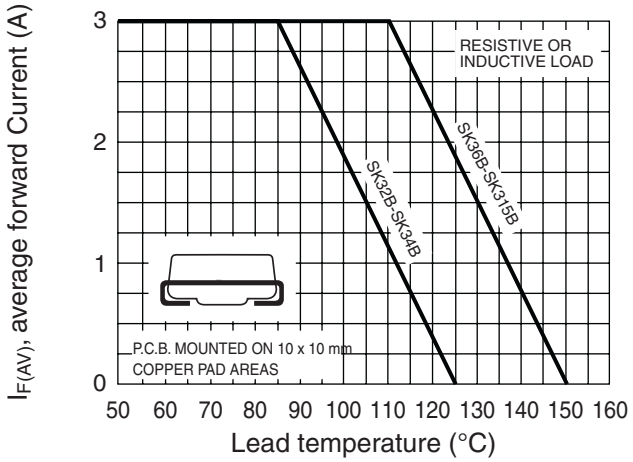
NOTES: 1. Pulse Test With PW = 300 µsec, 1% Duty Cycle
2. Measured on P.C. Board with 10mm x 10mm Copper Pad Areas.

Rating And Characteristic Curves

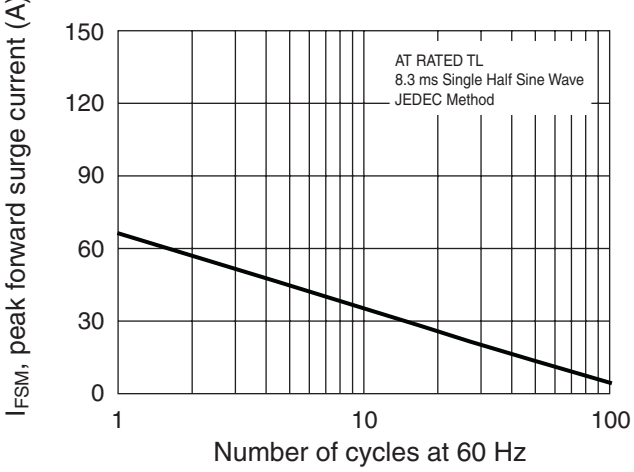
TYPICAL FORWARD CHARACTERISTIC



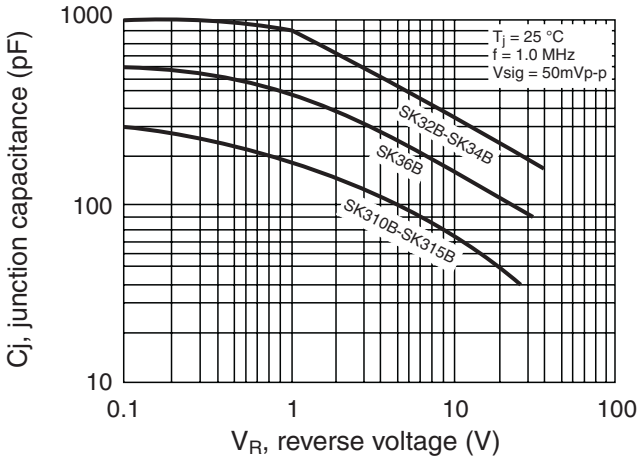
MAXIMUM FORWARD CURRENT DERATING CURVE



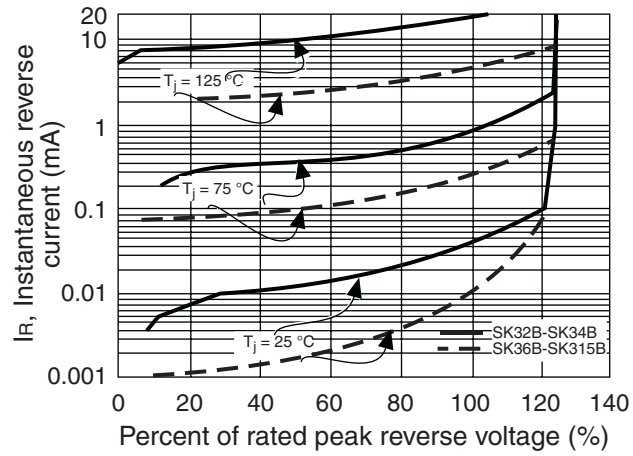
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTIC



TYPICAL TRANSIENT THERMAL CHARACTERISTIC