

# SCHOTTKY BARRIER RECTIFIERS

## PRODUCT SUMMARY

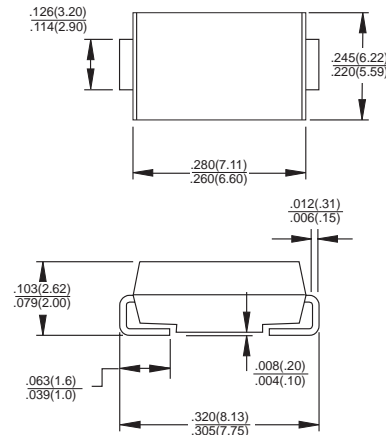
3.0 AMPS Surface Mount

## FEATURES

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 Underwriters  
 Laboratory Classification 94V-0  
 Epitaxial construction  
 High temperature soldering:  
 260 °C / 10 seconds at terminals



**SMC/DO-214AB**



## MECHANICAL DATA

Case: JEDEC DO-214AB Molded plastic  
 Terminals: Pure tin plated, lead free.  
 Polarity: Indicated by cathode band  
 Packaging: 16mm tape per EIA STD RS-481  
 Weight: 0.21gram

Dimensions in inches and (millimeters)



**Pb-free; RoHS-compliant**

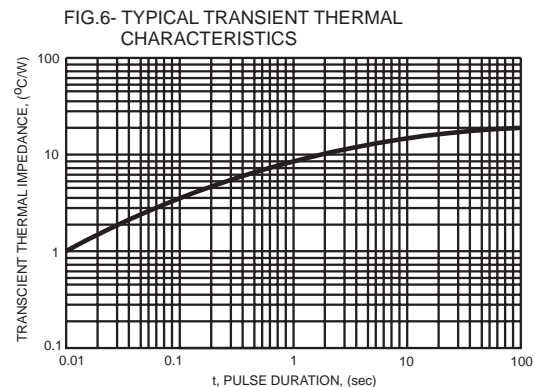
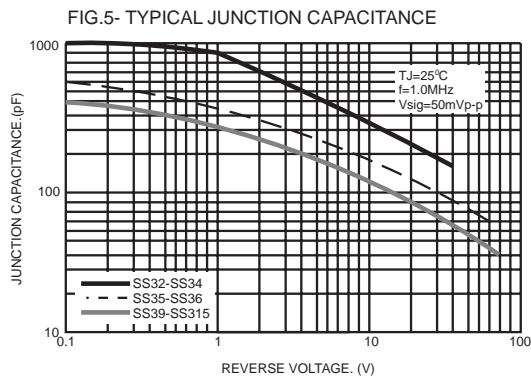
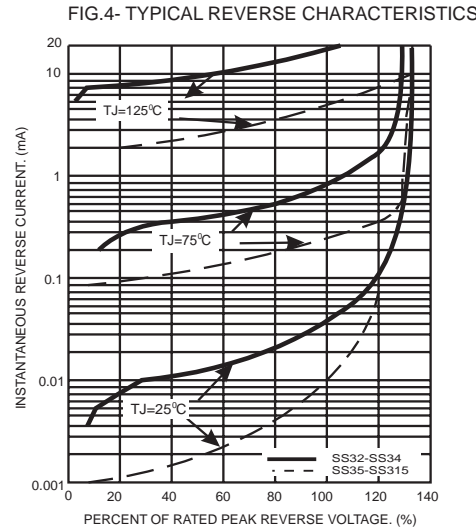
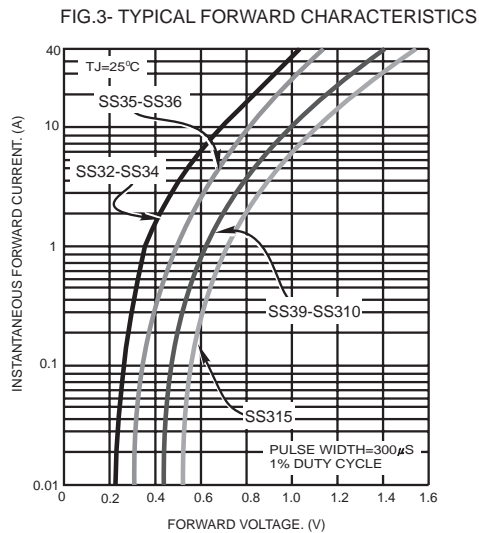
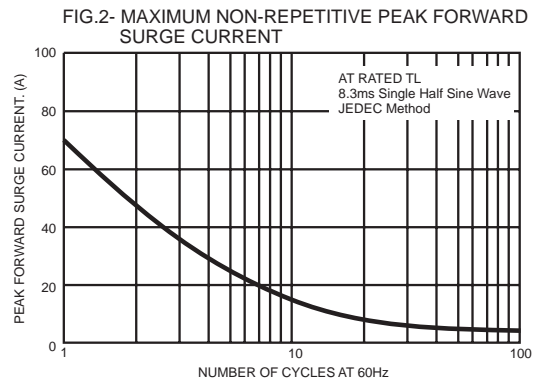
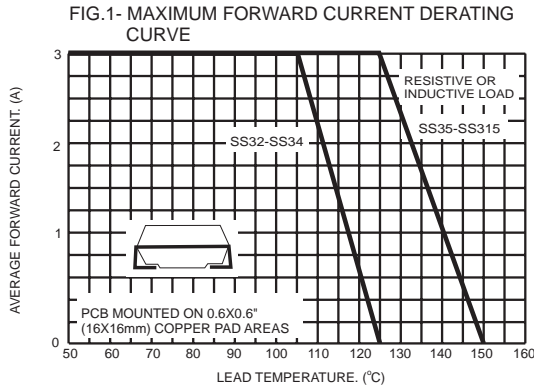
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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	SS 32	SS 33	SS 34	SS 35	SS 36	SS 39	SS 310	SS 315	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current at T <sub>L</sub> (See Fig. 1)	I <sub>(AV)</sub>	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	100			70					A
Maximum Instantaneous Forward Voltage (Note 1) IF= 3.0A @ 25°C @ 100°C	V <sub>F</sub>	0.5 0.4		0.75 0.65		0.85 0.70		0.95 0.80		V
Maximum DC Reverse Current @ T <sub>A</sub> =25 °C at Rated DC Blocking Voltage @ T <sub>A</sub> =125 °C	I <sub>R</sub>	0.5				0.1				mA
		10		5		0.5		mA		
Typical Thermal Resistance ( Note 2 )	R <sub>θJL</sub> R <sub>θJA</sub>	17 55								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125			-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

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

## RATINGS AND CHARACTERISTIC CURVES (SS32 THRU SS315)



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