

# SS32 THRU SS310

## 3.0 AMPS. SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

**Voltage Range**  
**20 to 100 Volts**  
**Current**  
**3.0 Amperes**

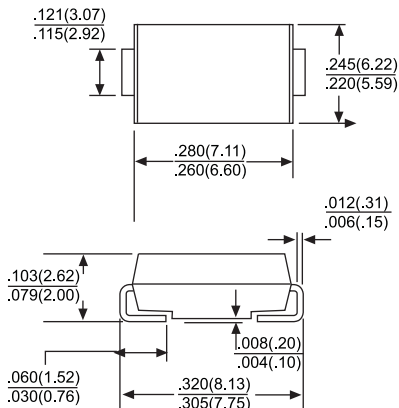
### Features

- 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-O
- Epitaxial construction
- High temperature soldering:  
250°C/ 10 seconds at terminals

### Mechanical Data

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

### SMC/DO-214AB



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number		SS32	SS33	SS34	SS35	SS36	SS38	SS310	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at T <sub>L</sub> (See Fig.1)	I <sub>F(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							A
Maximum Instantaneous Forward Voltage (Note 1) @ 2.0A	V <sub>F</sub>	0.45	0.55	0.6	0.7		0.85		V
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>R</sub>	20			10.0				mA mA
Typical Thermal Resistance (Note 2)	R <sub>θJL</sub> R <sub>θJA</sub>				17 75		°C/W °C/W		
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Pulse Test with PW=300 usec, 1% Duty Cycle  
2. Measured on P.C. Board with 0.55 x 0.55" (14 x 14mm) Copper Pad Areas.

# RATING AND CHARACTERISTIC CURVES SS32 THRU SS310

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

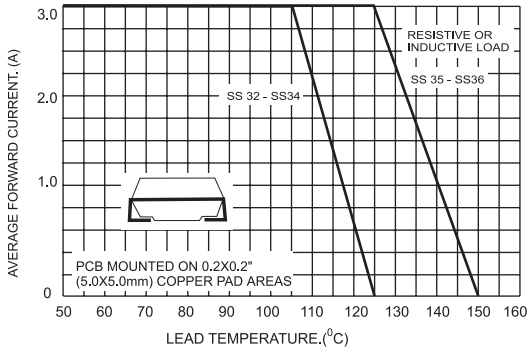


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

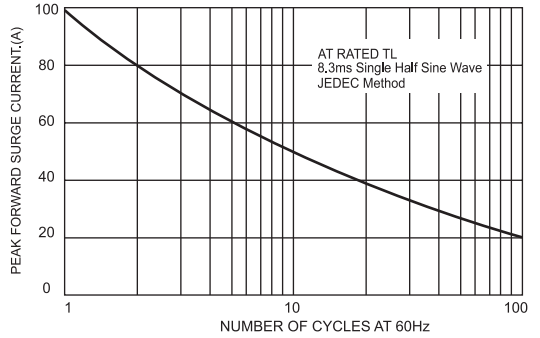


FIG.3-TYPICAL FORWARD CHARACTERISTICS

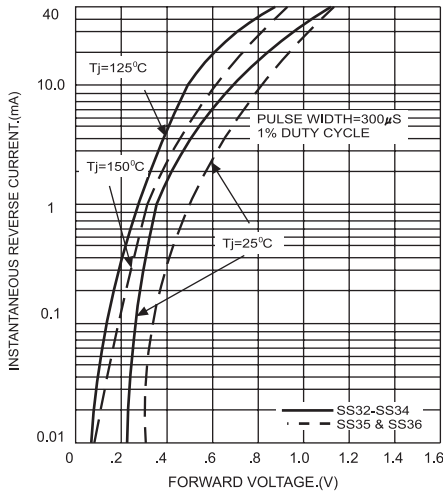


FIG.4-TYPICAL REVERSE CHARACTERISTICS

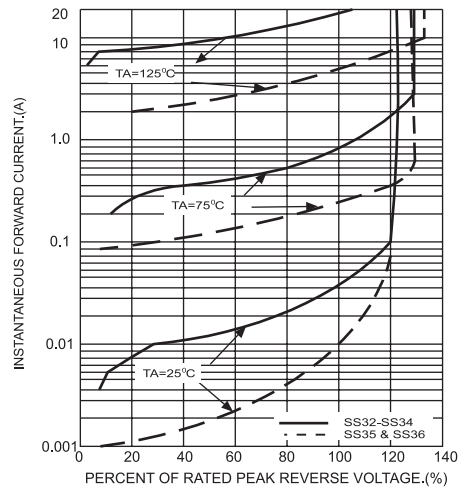


FIG.5-TYPICAL JUNCTION CAPACITANCE

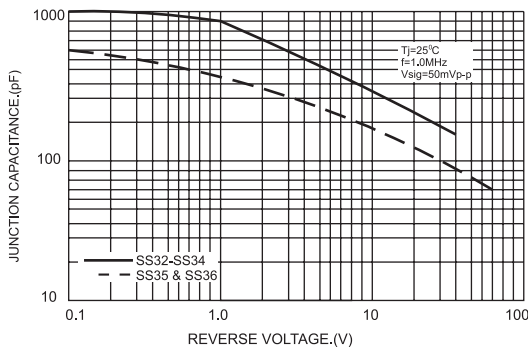


FIG.6-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

