

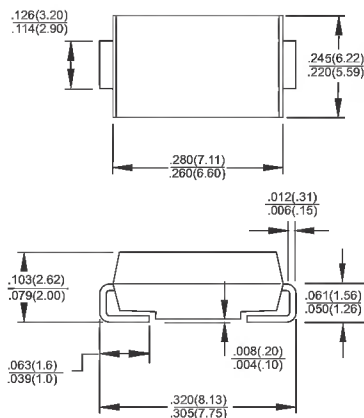
# SS32 - SS315

## 3.0 AMPS. Surface Mount Schottky Barrier Rectifiers SMC/DO-214AB



### 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
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.



### 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: 0.21 gram

Dimensions in inches and (millimeters)

#### Marking Diagram



- SS3X = 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	SS 32	SS 33	SS 34	SS 35	SS 36	SS 39	SS 310	SS 315	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current at T <sub>L</sub> (See Fig. 1)	I(AV)	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	100				70				A
Maximum Instantaneous Forward Voltage (Note 1) IF= 3.0A @ 25°C @ 100°C	VF	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	IR	0.5				0.1				mA mA
		10		5		0.5				
Typical Thermal Resistance ( Note 2 )	RθJL RθJA	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)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

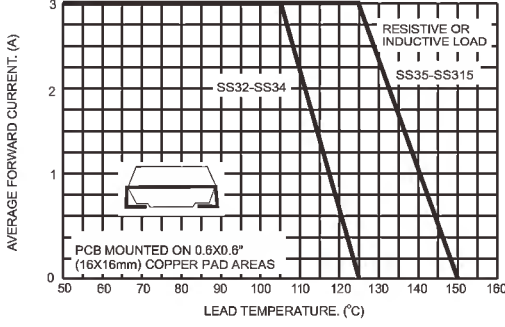


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

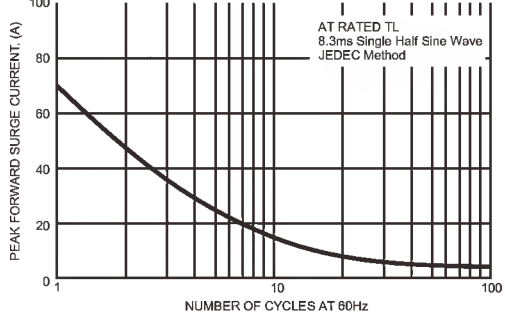


FIG.3- TYPICAL FORWARD CHARACTERISTICS

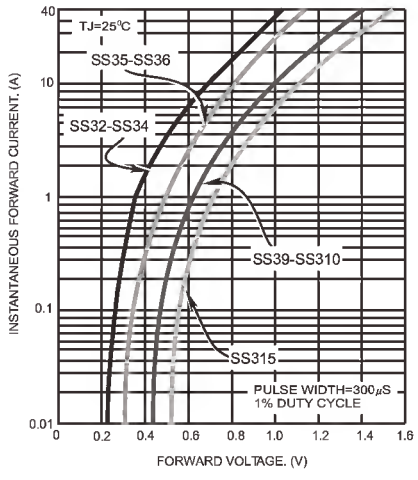


FIG.4- TYPICAL REVERSE CHARACTERISTICS

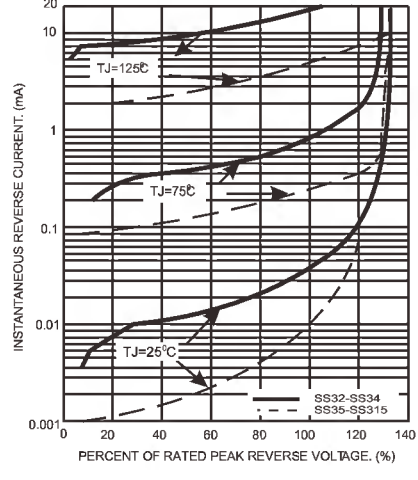


FIG.5- TYPICAL JUNCTION CAPACITANCE

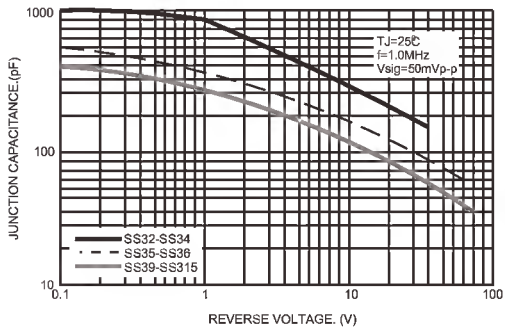


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

