



# DATA SHEET

SEMICONDUCTOR

SS32~SS320

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

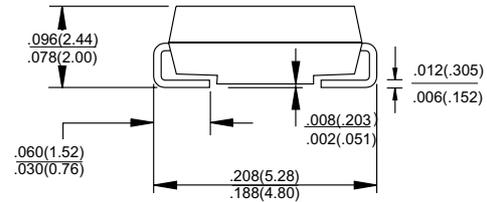
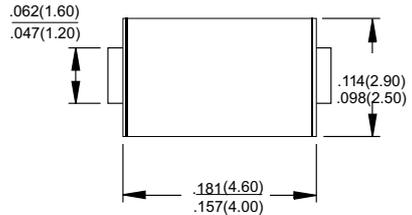


**VOLTAGE- 20 to 200 Volts CURRENT- 3.0 Amperes**

SMA/DO-214AC Unit:inch(mm)

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request



## MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

	SYMBOLS	SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	SS315	SS320	UNITS		
Marking Code		SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	SS315	SS320			
Maximum Recurrent Peak Reverse Voltage	VRRM	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	150.0	200.0	V		
Maximum RMS Voltage	VRMS	14.0	21.0	28.0	35.0	42.0	56.0	63.0	70.0	105.0	140.0	V		
Maximum DC Blocking Voltage	VDC	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	150.0	200.0	V		
Maximum Average Forward Rectified Current at TL (See figure 1)	I(AV)	3.0										A		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80.0										A		
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	VF	0.50		0.70		0.85		0.90		0.92		V		
Maximum DC Reverse Current (Note 1) Ta= 25°C at Rated DC Blocking Voltage Ta=100°C	I R	0.5					20.0							mA mA
Maximum Thermal Resistance(Note 2)	RθJL	17.0										°C/W		
	RθJA	55.0												
	RθJC	20.0												
Typical Junction capacitance	CJ	300										pF		
Operating Temperature Range	TJ	-55 to +150										°C		
Storage Temperature Range	TSTG	-55 to +150										°C		

NOTES:

- A.Pulse Test with PW =300µsec, 2% Duty Cycle.
- B.Mounted on P.C. Board with 14mm2 (.013mm thick) copper pad areas.

# DEVICE CHARACTERISTICS

## SS32~SS320

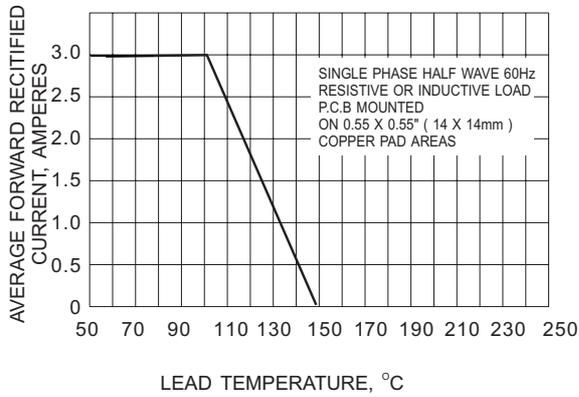


Fig.1- FORWARD CURRENT DERATING CURVE

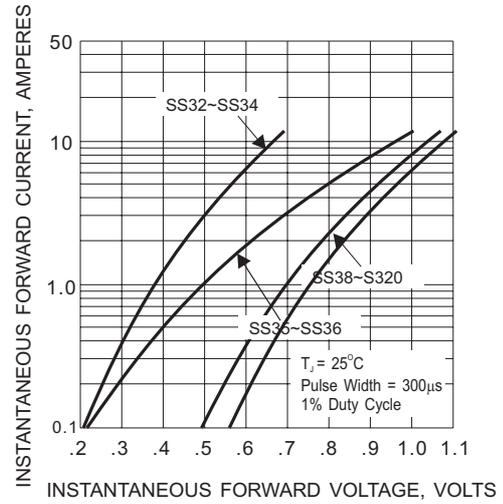


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

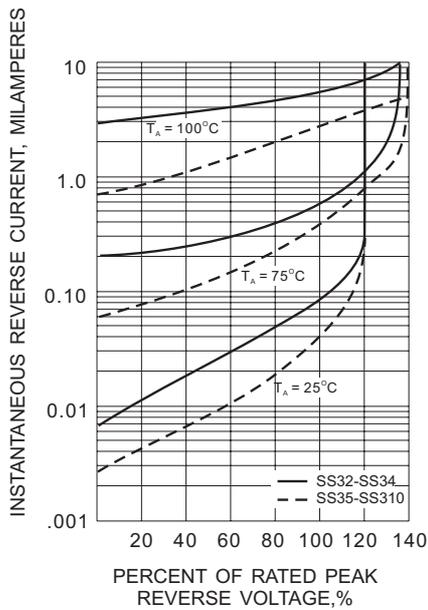


Fig.3- TYPICAL REVERSE CHARACTERISTIC

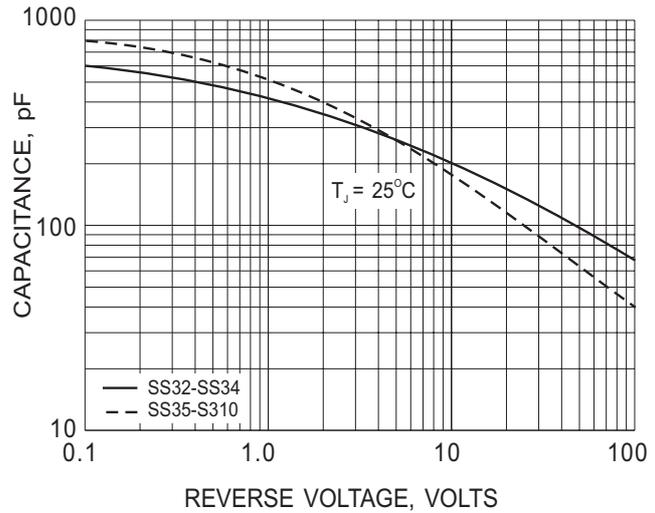


Fig.4- TYPICAL JUNCTION CAPACITANCE

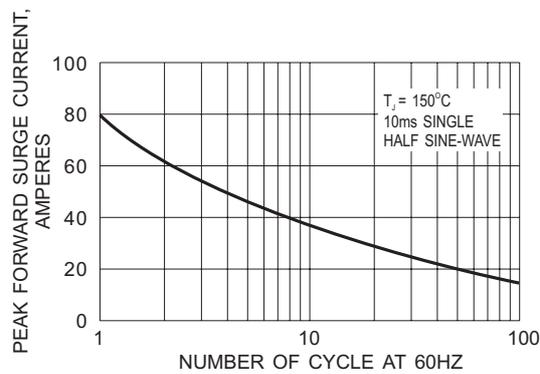


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



**SMA PACKAGE OUTLINE DIMENSIONS** Unit: inch ( mm )

