

## SS32 THRU SS310

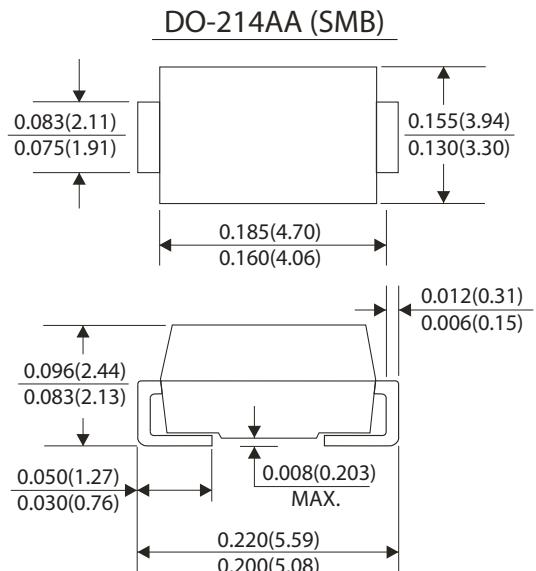
CURRENT 3.0Amperes  
VOLTAGE 20 to 100 Volts

### Features

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed : 250 °C/10 seconds at terminals

### Mechanical Data

- Case : JEDEC SMB(DO-214AA) molded plastic body
- Terminals : Solder Plate, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	Units							
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	90	100	Volts							
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	63	70	Volts							
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	90	100	Volts							
Maximum average forward rectified current 0.375"(9.5mm) lead length(see Fig. 1)	I(AV)	3.0								Amps							
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	70.0								Amps							
Maximum instantaneous forward voltage at 3.0A (Note 1)	V <sub>F</sub>	0.55		0.75		0.85											
Maximum instantaneous reverse current at rated DC blocking voltage (Note1)	T <sub>A</sub> =25 °C T <sub>A</sub> =100 °C	I <sub>R</sub>	2.0														
Typical thermal resistance (Note 2)			20														
Operating junction temperature range	T <sub>J</sub>	-50 to +125								°C							
Storage temperature range	T <sub>STG</sub>	-65 to +150								°C							

#### Notes:

- (1) Pulse test: 300  $\mu$  S pulse width, 1% duty cycle
- (2) Thermal resistance junction to ambient

# DEC

## RATINGS AND CHARACTERISTIC CURVES SS32 THRU SS310

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

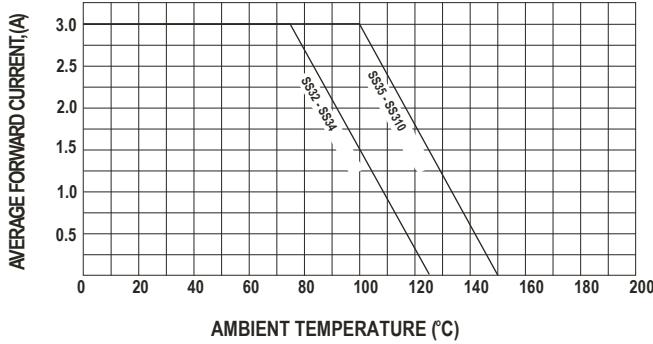


FIG.3-MAXIMUM NON-REPETITIVE FORWARDSURGE CURRENT

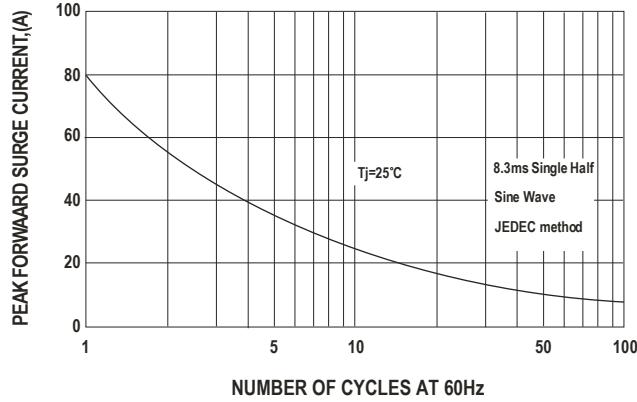


FIG.4-TYPICAL JUNCTION CAPACITANCE

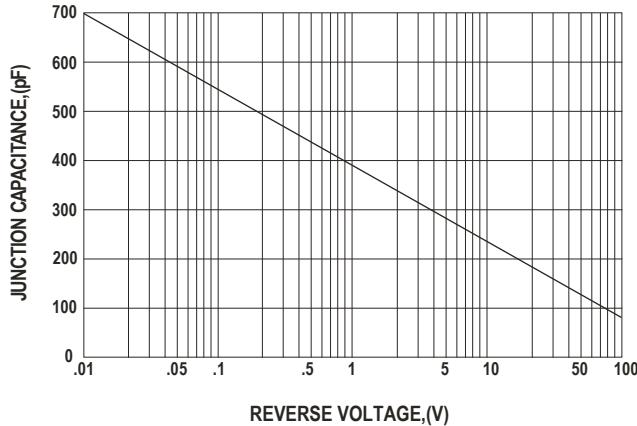


FIG.2-TYPICAL FORWARDCHARACTERISTICS

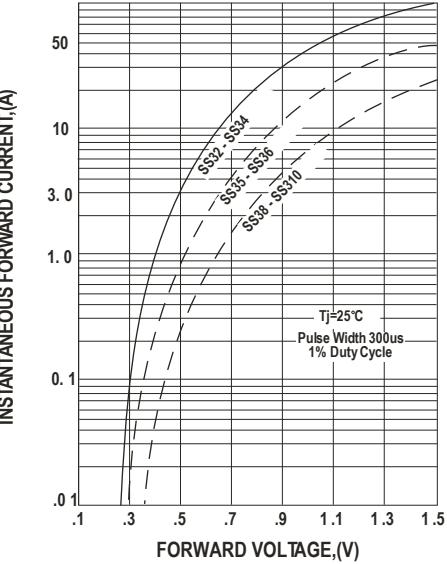


FIG.5 - TYPICAL REVERSECHARACTERISTICS

