

# SS4001 THRU SS4007



## 1.0 AMP SURFACE MOUNT SILICON RECTIFIERS

### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* High surge current capability

### MECHANICAL DATA

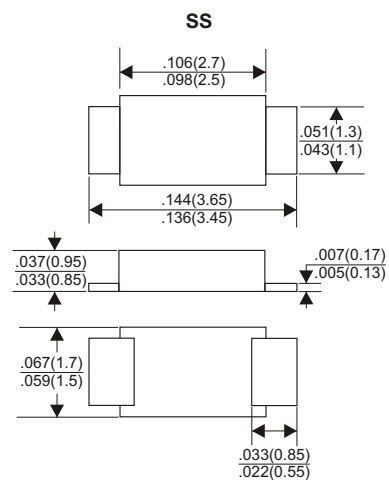
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

1.0 Ampere



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	SS4001	SS4002	SS4003	SS4004	SS4005	SS4006	SS4007	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_L=75^\circ\text{C}$	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.1							V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	5.0							$\mu\text{A}$
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	50							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance R <sub>JL</sub> (Note 2)	30							$^\circ\text{C/W}$
Operating and Storage Temperature Range $T_J, T_{STG}$	-65 — +150							$^\circ\text{C}$
Marking Code	R01	R02	R03	R04	R05	R06	R07	

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Lead.

## RATING AND CHARACTERISTIC CURVES (SS4001 THRU SS4007)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

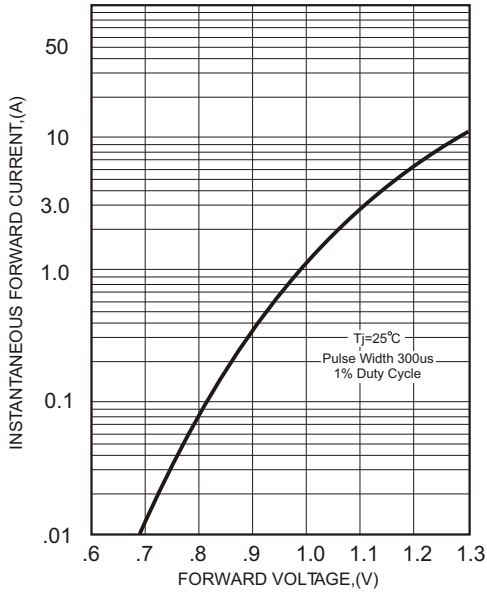


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

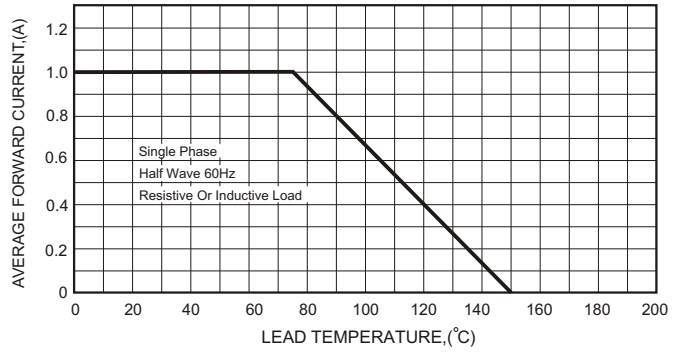


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

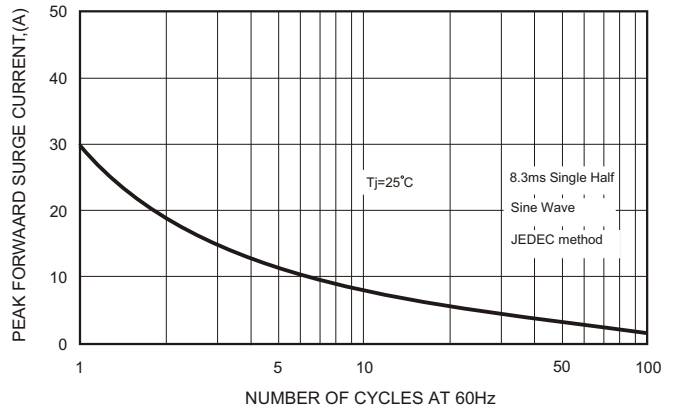


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

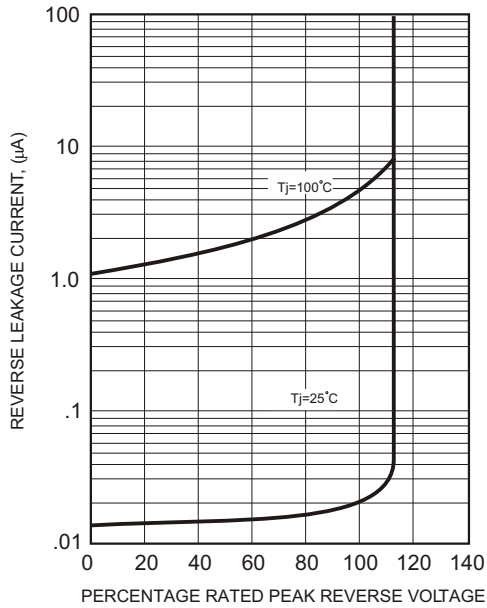


FIG.5-TYPICAL JUNCTION CAPACITANCE

