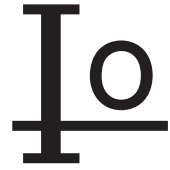


# SM5391A THRU SM5399A

1.5 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
- \* Weight: 0.063 gram

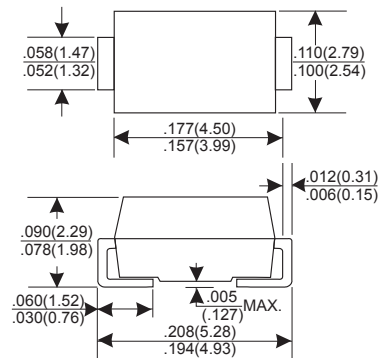
## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

1.5 Ampere

### DO-214AC(SMA)



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	SM5391A	SM5392A	SM5393A	SM5395A	SM5397A	SM5398A	SM5399A	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									
See Fig. 2								1.5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								50	A
Maximum Instantaneous Forward Voltage at 1.5A								1.15	V
Maximum DC Reverse Current								10.0	μA
at Rated DC Blocking Voltage								100	μA
Typical Junction Capacitance (Note 1)								30	pF
Typical Thermal Resistance RθJA (Note 2)								53	°C/W
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>								-65 — +175	°C

### NOTES:

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

# RATING AND CHARACTERISTIC CURVES (SM5391A THRU SM5399A)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

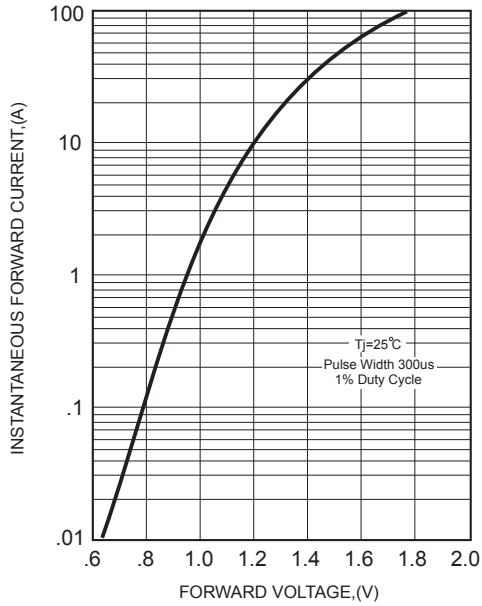


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

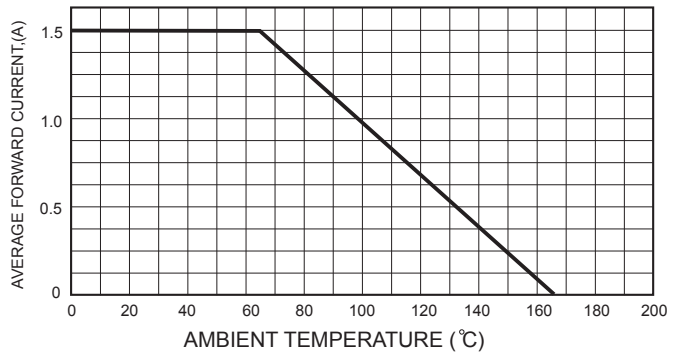


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

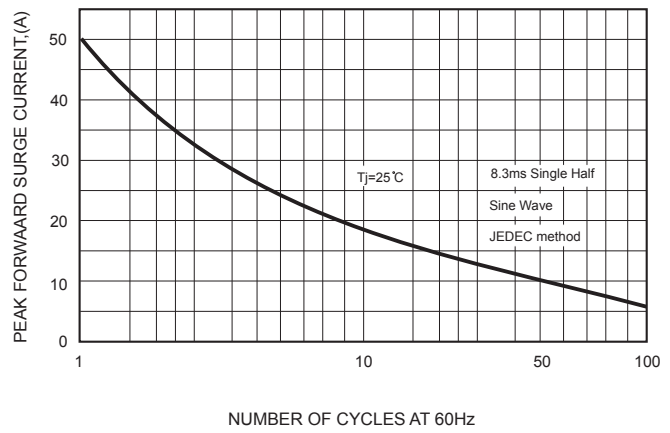


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

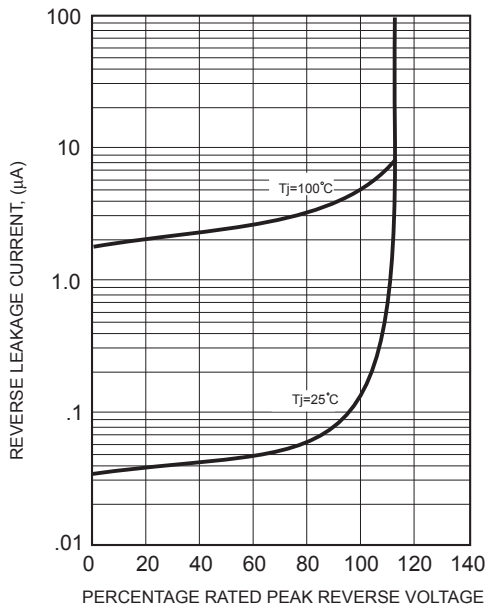


FIG.5-TYPICAL JUNCTION CAPACITANCE

