

## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.21 grams



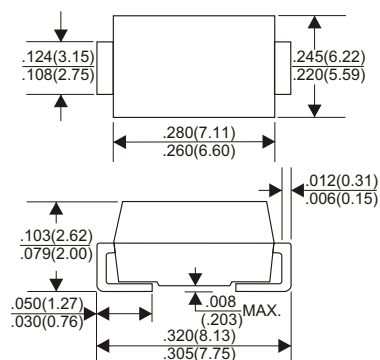
## VOLTAGE RANGE

100 Volts

## CURRENT

5.0 Amperes

### DO-214AB(SMC)



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                                                                                        | SS510L     | UNITS |
|----------------------------------------------------------------------------------------------------|------------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 100        | V     |
| Maximum RMS Voltage                                                                                | 70         | V     |
| Maximum DC Blocking Voltage                                                                        | 100        | V     |
| Maximum Average Forward Rectified Current                                                          |            |       |
| See Fig. 1                                                                                         | 5.0        | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 120        | A     |
| Maximum Instantaneous Forward Voltage at 5.0A                                                      | 0.67       | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 0.1        | mA    |
| at Rated DC Blocking Voltage Ta=125°C                                                              | 20         | mA    |
| Typical Junction Capacitance (Note1)                                                               | 370        | pF    |
| Typical Thermal Resistance R JA (Note 2)                                                           | 55         | °C/W  |
| Operating Temperature Range Tj                                                                     | -55 → +150 | °C    |
| Storage Temperature Range Tstg                                                                     | -55 → +150 | °C    |

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Unit mounted on PC board with 5.0mm× 5.0 mm (0.013 mm thick) copper pads as heat sink

## RATING AND VCHARACTERISTIC CURVES(SS510L)

FIG.1-FORWARD CURRENT DERATING CURVE

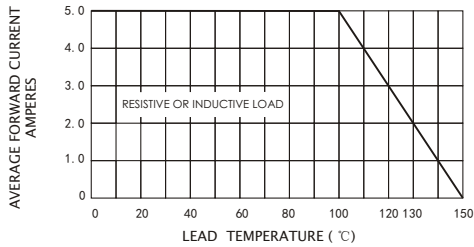


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

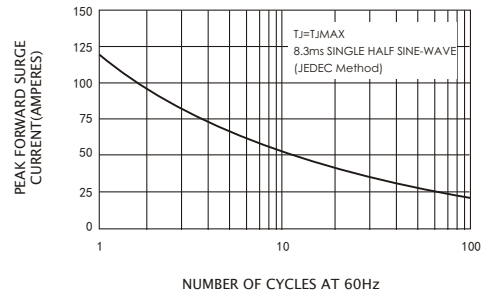


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

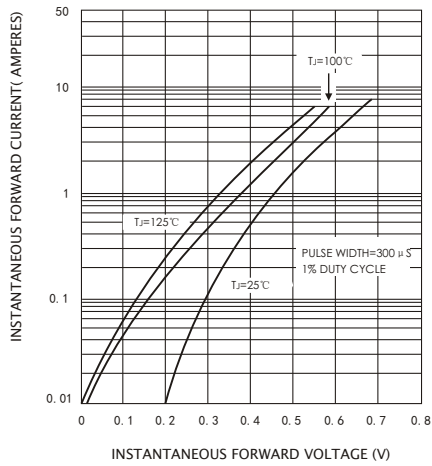


FIG.4-TYPICAL REVERSE CHARACTERISTICS

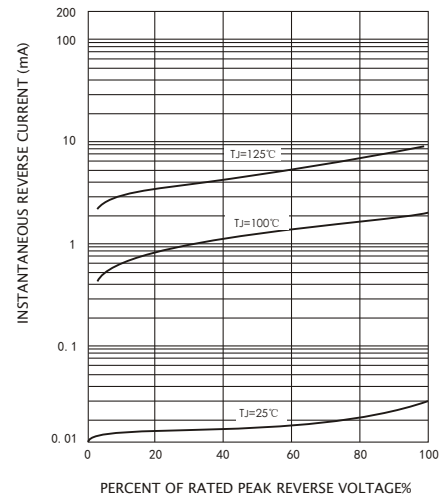


FIG.5-TYPICAL JUNCTION CAPACITANCE

