



# SS1045 THRU SS10200

## 10.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### 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

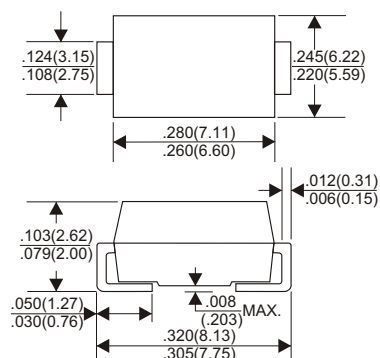
### VOLTAGE RANGE

45 to 200 Volts

### CURRENT

10.0Ampere

### 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                                                                                        | SS1045          | SS1060 | SS10100 | SS10150 | SS10200 | UNITS |
|----------------------------------------------------------------------------------------------------|-----------------|--------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 45              | 60     | 100     | 150     | 200     | V     |
| Maximum RMS Voltage                                                                                | 32              | 42     | 70      | 105     | 140     | V     |
| Maximum DC Blocking Voltage                                                                        | 45              | 60     | 100     | 150     | 200     | V     |
| Maximum Average Forward Rectified Current                                                          | 10.0            |        |         |         |         | A     |
| See Fig. 1                                                                                         |                 |        |         |         |         |       |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 175             |        |         |         |         | A     |
| Maximum Instantaneous Forward Voltage at 10.0A                                                     | 0.55            | 0.7    | 0.85    | 0.92    |         | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 0.1             |        | 0.02    |         |         | µA    |
| at Rated DC Blocking Voltage Ta=125°C                                                              |                 |        |         |         |         |       |
|                                                                                                    | 5               |        | 2       |         |         | mA    |
| Typical Junction Capacitance (Note1)                                                               | 440             |        |         |         |         | pF    |
| Typical Thermal Resistance R JA (Note 2)                                                           | 60              |        |         |         |         | °C/W  |
| Operating Temperature Range Tj                                                                     | — -55 to +175 — |        |         |         |         | °C    |
| Storage Temperature Range TSTG                                                                     | -55 to +175     |        |         |         |         | °C    |

#### NOTES:

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

## RATING AND CHARACTERISTIC CURVES (SS1045 THRU SS10200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

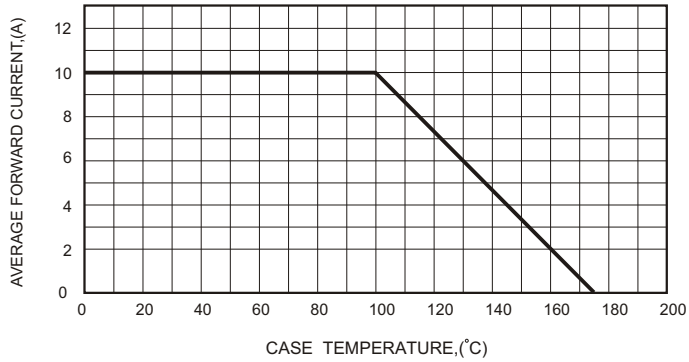


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

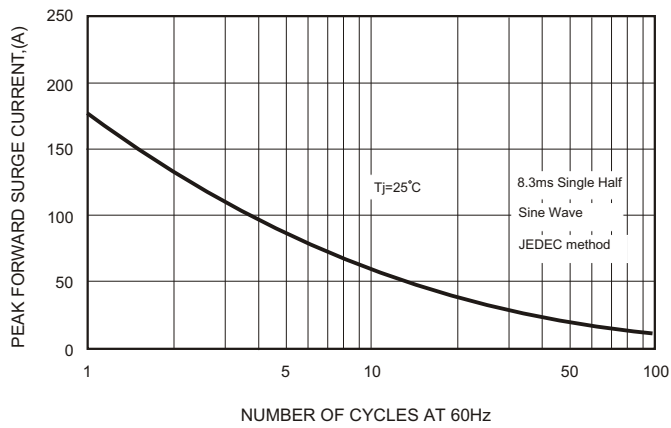


FIG.4-TYPICAL JUNCTION CAPACITANCE

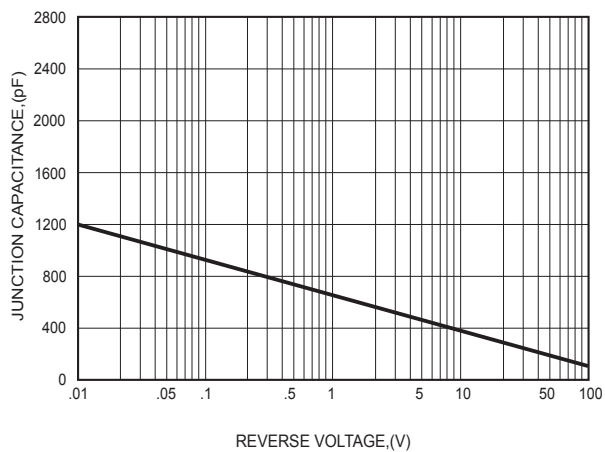


FIG.2-TYPICAL FORWARD CHARACTERISTICS

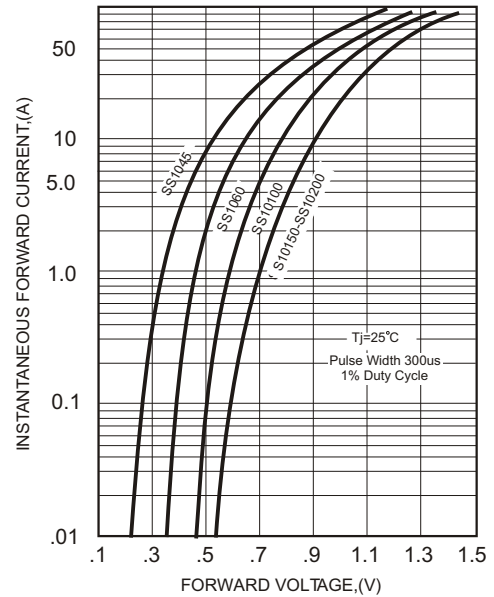


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

