

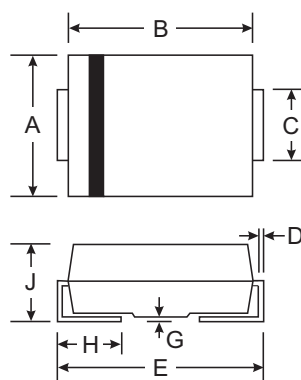
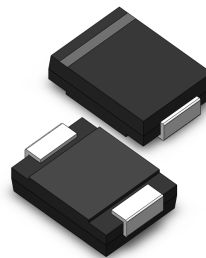
**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 3.0 A**

### Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material - UL Flammability
- Classification 94V-0
- High Reliability
- High Current Capability and Low  $V_F$
- Submersible Temperature of 265°C for 10 Seconds in Solder Bath

### Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



| SMC/DO-214AB         |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 5.59 | 6.22 |
| B                    | 6.60 | 7.11 |
| C                    | 2.75 | 3.18 |
| D                    | 0.15 | 0.31 |
| E                    | 7.75 | 8.13 |
| G                    | 0.10 | 0.20 |
| H                    | 0.76 | 1.52 |
| J                    | 2.00 | 2.62 |
| All Dimensions in mm |      |      |

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic                                                                                                | Symbol            | SS32C       | SS33C | SS34C | SS35C       | SS36C | SS38C | SS310C | Unit |
|---------------------------------------------------------------------------------------------------------------|-------------------|-------------|-------|-------|-------------|-------|-------|--------|------|
| Maximum repetitive peak reverse voltage                                                                       | V <sub>RRM</sub>  | 20          | 30    | 40    | 50          | 60    | 80    | 100    | V    |
| Maximum RMS voltage                                                                                           | V <sub>RMS</sub>  | 14          | 21    | 28    | 35          | 42    | 56    | 70     | V    |
| Maximum DC blocking voltage                                                                                   | V <sub>DC</sub>   | 20          | 30    | 40    | 50          | 60    | 80    | 100    | V    |
| Maximum average forward rectified current at T <sub>L</sub> (see fig.1)                                       | I <sub>(AV)</sub> | 3.0         |       |       |             |       |       |        | A    |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method)           | I <sub>FSM</sub>  | 100.0       |       |       |             |       |       |        | A    |
| Maximum instantaneous forward voltage at 3.0A                                                                 | V <sub>F</sub>    | 0.55        |       |       | 0.70        |       | 0.85  |        | V    |
| Maximum DC reverse current     T <sub>A</sub> =25°C<br>at rated DC blocking voltage     T <sub>A</sub> =100°C | I <sub>R</sub>    | 0.5         |       |       |             |       |       |        | mA   |
|                                                                                                               |                   | 20          |       |       | 10          |       |       |        |      |
| Typical junction capacitance (NOTE 1)                                                                         | C <sub>J</sub>    | 500         |       |       | 300         |       |       |        | pF   |
| Typical thermal resistance (NOTE 2)                                                                           | R <sub>θJA</sub>  | 55.0        |       |       |             |       |       |        | °C/W |
| Operating junction temperature range                                                                          | T <sub>J,</sub>   | -65 to +125 |       |       | -65 to +150 |       |       |        | °C   |
| Storage temperature range                                                                                     | T <sub>STG</sub>  | -65 to +150 |       |       |             |       |       |        | °C   |

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES SS32C THRU SS310C

