

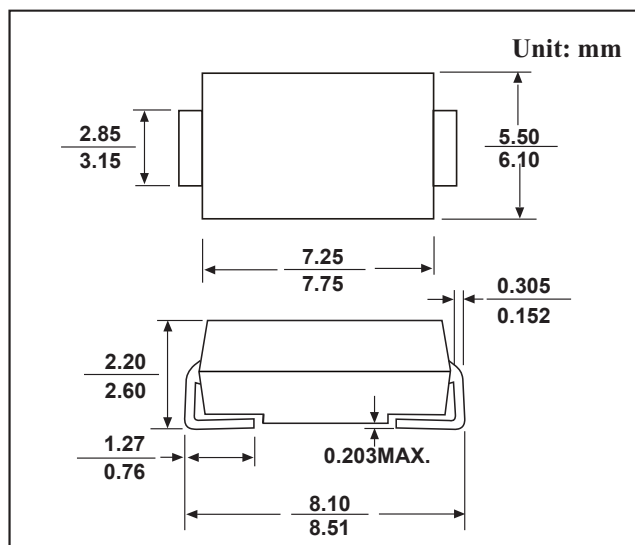
## SMC FAST RECOVERY RECTIFIERS

### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

### MECHANICAL DATA

- Case style: SMC molded plastic
- Mounting position: Any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter                                                                                                      | Symbols                           | RS3A        | RS3B | RS3D | RS3G | RS3J | RS3K | RS3M | UNITS |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|------|------|------|------|------|------|-------|
| Maximum repetitive peak reverse voltage                                                                        | V <sub>RRM</sub>                  | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | VOLTS |
| Maximum RMS voltage                                                                                            | V <sub>RMS</sub>                  | 35          | 70   | 140  | 280  | 420  | 560  | 700  | VOLTS |
| Maximum DC blocking voltage                                                                                    | V <sub>DC</sub>                   | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | VOLTS |
| Maximum average forward rectified current at T <sub>L</sub> =65°C                                              | I <sub>(AV)</sub>                 | 3.0         |      |      |      |      |      |      | Amps  |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method)         | I <sub>FSM</sub>                  | 100.0       |      |      |      |      |      |      | Amps  |
| Maximum instantaneous forward voltage at 3.0A                                                                  | V <sub>F</sub>                    | 1.3         |      |      |      |      |      |      | Volt  |
| Maximum DC Reverse Current    T <sub>a</sub> = 25 °C<br>at Rated DC Blocking Voltage    T <sub>a</sub> =125 °C | I <sub>R</sub>                    | 5.0<br>50.0 |      |      |      |      |      |      | uA    |
| Maximum reverse recovery time                                                                                  | t <sub>rr</sub>                   | 150         |      |      |      | 250  | 500  |      | ns    |
| Typical junction capacitance                                                                                   | C <sub>J</sub>                    | 150.0       |      |      |      |      |      |      | pF    |
| Typical thermal resistance                                                                                     | R <sub>qJA</sub>                  | 20.0        |      |      |      |      |      |      | °C/W  |
| Operating junction and storage temperature range                                                               | T <sub>j</sub> , T <sub>stg</sub> | -55 to +150 |      |      |      |      |      |      | °C    |

## RATINGS AND CHARACTERISTIC CURVES

