

### Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed: 260°C/10seconds
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking

### Mechanical Data

- Case:DO214AC Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

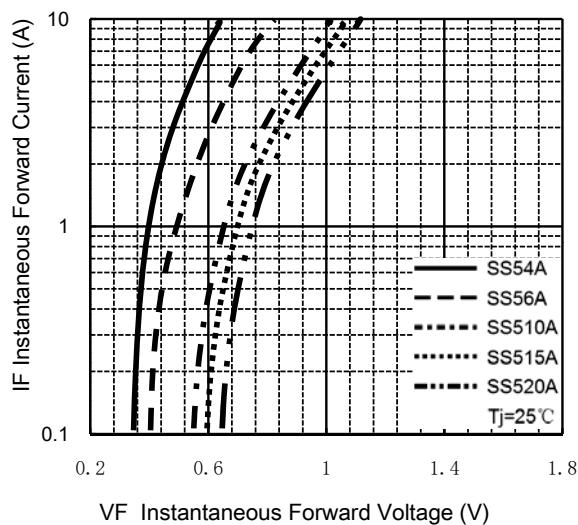
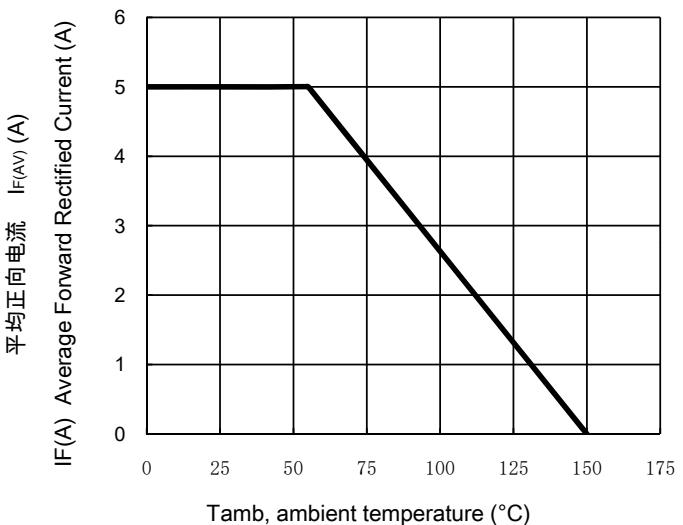
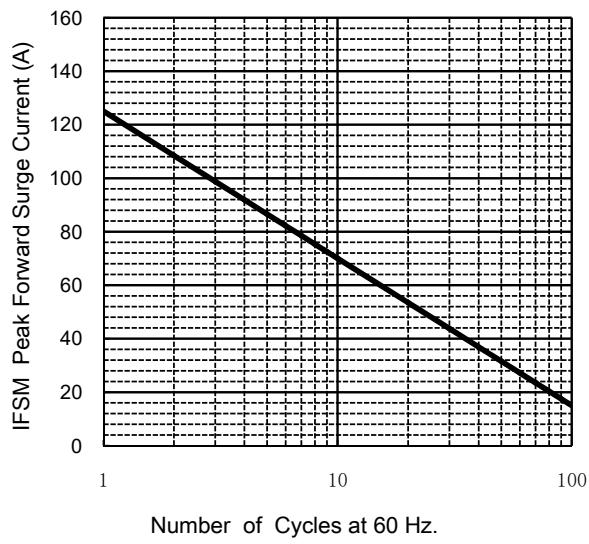
### Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter  | Symbols            | SS54A          | SS56A        | SS510A | SS515A | SS520A | Unit |    |  |
|--|--------------------|----------------|--------------|--------|--------|--------|------|----|--|
| Maximum repetitive peak reverse voltage                                  | V <sub>RRM</sub>   | 40             | 60           | 100    | 150    | 200    | V    |    |  |
| Maximum RMS voltage  | V <sub>RMS</sub>   | 28             | 42           | 70     | 105    | 140    | V    |    |  |
| Maximum DC blocking voltage  | V <sub>DC</sub>    | 40             | 60           | 100    | 150    | 200    | V    |    |  |
| Maximum average forward rectified current                                | I <sub>F(AV)</sub> |                |              | 5.0    |        |        | A    |    |  |
| Non-repetitive peak forward surge current<br>8.3 ms singlehalf sine-wave | I <sub>FSM</sub>   |                |              | 125    |        |        | A    |    |  |
| Maximum forward voltage @IF=5.0A   | V <sub>F</sub>     | 0.55           | 0.70         | 0.85   | 0.92   | 0.95   | V    |    |  |
| Maximum reverse current @V <sub>D</sub>                                  | TA= 25°C           | I <sub>R</sub> | 500          | 100    | 50     |        |      | µA |  |
|  | TA= 100°C          |                | 20           |        | 10     |        |      | mA |  |
| Typical thermal resistance (Note 1)                                      | R <sub>θJA</sub>   | 60             |              |        |        |        | °C/W |    |  |
|  | R <sub>θJL</sub>   | 20             |              |        |        |        |      |    |  |
| VR=4.0V,f=1MHz<br>Type junction capacitance                              | C <sub>j</sub>     | 350            |              | 380    | 400    |        | pF   |    |  |
| Operating junction   | T <sub>j</sub>     | -55 --- +125   | -55 --- +150 |        |        |        | °C   |    |  |
| Storage temperature rang   | T <sub>TSG</sub>   | -55 --- +150   |              |        |        |        | °C   |    |  |

Note:

1) Thermal resistance from junction to ambient , PCB mounted.

**Characteristic Curves**
**TYPICAL FORWARD CHARACTERISTIC**

**FORWARD CURRENT DERATING CURVE**

**MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT**

**Typical Reverse Characteristics**
