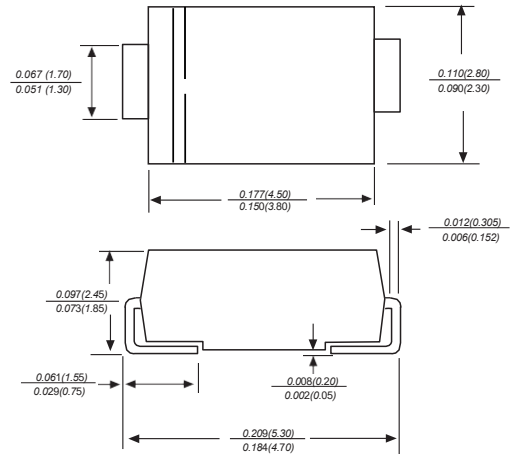


## SURFACE MOUNT GENERAL PURPOSE SILICONRECTIFIER

### Features

- ◆ For surface mounted applications
- ◆ Low profile packag
- ◆ Glass Passivated Chip Juntion
- ◆ Easy to pick and place
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

### DO-214AC/SMA



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

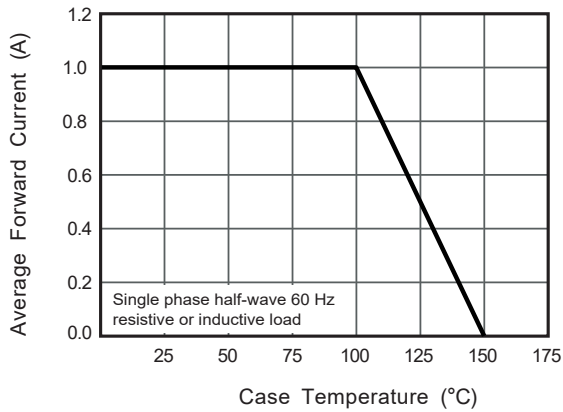
| Parameter                                                                                                 | SYMBOLS         | M20A        | UNITS              |
|-----------------------------------------------------------------------------------------------------------|-----------------|-------------|--------------------|
| Marking Code                                                                                              |                 |             |                    |
| Maximum repetitive peak reverse voltage                                                                   | $V_{RMM}$       | 2000        | V                  |
| Maximum RMS voltage                                                                                       | $V_{RMS}$       | 1400        | V                  |
| Maximum DC blocking voltage                                                                               | $V_{DC}$        | 2000        | V                  |
| Maximum average forward rectified current at $T_c=100^\circ\text{C}$                                      | $I_{(AV)}$      | 1.0         | A                  |
| Peak forward surge current<br>8.3ms single half sine-wave<br>superimposed on rated load (JEDEC Method)    | $I_{FSM}$       | 30          | A                  |
| Maximum instantaneous forward voltage at 1A                                                               | $V_F$           | 1.1         | V                  |
| Maximum DC reverse current $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage $T_A=125^\circ\text{C}$ | $I_R$           | 5<br>50     | $\mu\text{A}$      |
| Typical junction capacitance (NOTE 1)                                                                     | $C_J$           | 20          | pF                 |
| Typical thermal resistance (NOTE 2)                                                                       | $R_{\theta JA}$ | 95          | $^\circ\text{C/W}$ |
| Operating junction and storage temperature range                                                          | $T_J, T_{STG}$  | -55 to +150 | $^\circ\text{C}$   |

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

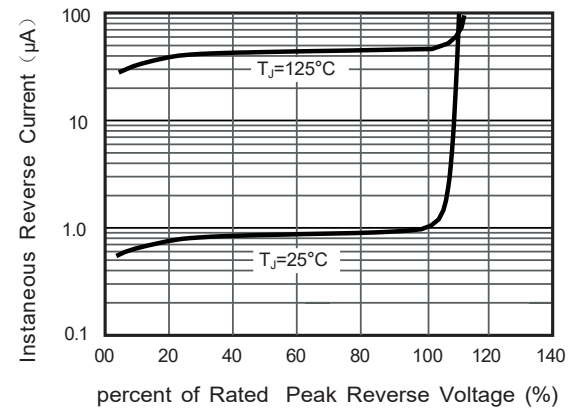
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## Typical Characteristics

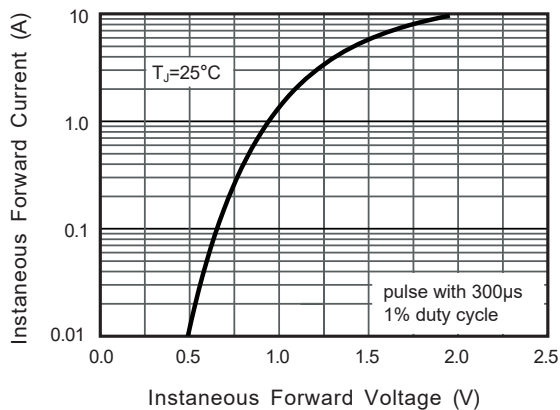
**Fig.1 Forward Current Derating Curve**



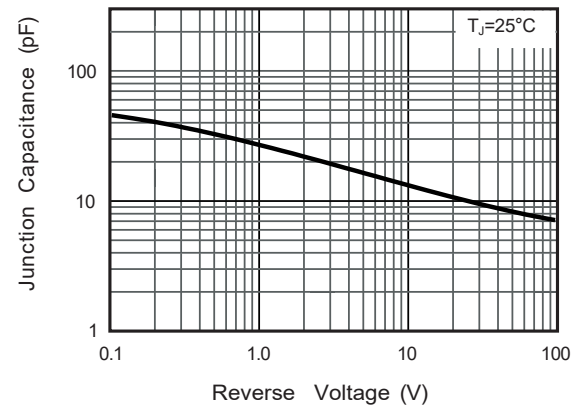
**Fig.2 Typical Reverse Characteristics**



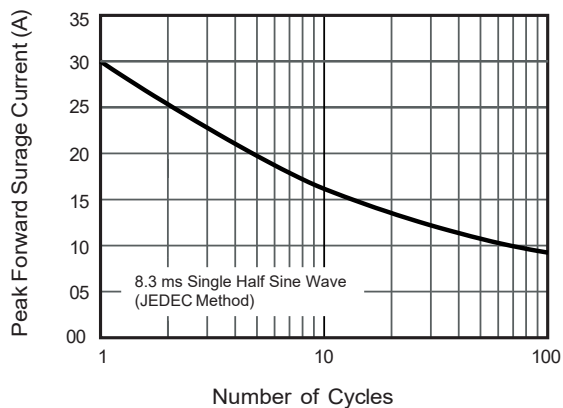
**Fig.3 Typical Instaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



The curve above is for reference only.