



## Features

- Average Forward Current:  $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode

## Package Marking and Ordering Information

| Product ID    | Pack              | Marking | Qty(PCS) |
|---------------|-------------------|---------|----------|
| 1N4001-1N4007 | SMA<br>(DO-214AC) | Mx      | 2000     |

x: From 1-7



SMA  
(DO-214AC)



## Maxmim Ratings ( $T_a=25^{\circ}C$ unless otherwise noted)

| Item                                             | Symbol         | Unit        | Test Conditions                                            | 1N400      |     |     |     |     |     |      |
|--------------------------------------------------|----------------|-------------|------------------------------------------------------------|------------|-----|-----|-----|-----|-----|------|
|                                                  |                |             |                                                            | 1          | 2   | 3   | 4   | 5   | 6   | 7    |
| Repetitive Peak Reverse Voltage                  | $V_{RRM}$      | V           |                                                            | 50         | 100 | 200 | 400 | 600 | 800 | 1000 |
| Maximum RMS Voltage                              | $V_{RMS}$      | V           |                                                            | 35         | 70  | 140 | 280 | 420 | 560 | 700  |
| Average Forward Current                          | $I_{F(AV)}$    | A           | 60Hz Half-sine wave,<br>Resistance load, $T_L=75^{\circ}C$ | 1.0        |     |     |     |     |     |      |
| Surge(Non-repetitive)Forward Current             | $I_{FSM}$      | A           | 60Hz Half-sine wave,<br>1 cycle, $T_a=25^{\circ}C$         | 30         |     |     |     |     |     |      |
| Operation Junction and Storage Temperature Range | $T_J, T_{STG}$ | $^{\circ}C$ |                                                            | -55 ~ +150 |     |     |     |     |     |      |

## Electrcal Charcteristics ( $T_a=25^{\circ}C$ unless otherwise specified)

| Item                        | Symbol           | Unit          | Test Condition                | 1N400              |   |   |   |   |   |   |
|-----------------------------|------------------|---------------|-------------------------------|--------------------|---|---|---|---|---|---|
|                             |                  |               |                               | 1                  | 2 | 3 | 4 | 5 | 6 | 7 |
| Peak Forward Voltage        | $V_F$            | V             | $I_F=1.0A$                    | 1.0                |   |   |   |   |   |   |
| Peak Reverse Current        | $I_{RRM1}$       | $\mu A$       | $V_{RM}=V_{RRM}$              | $T_a=25^{\circ}C$  |   |   |   |   |   |   |
|                             | $I_{RRM2}$       |               |                               | $T_a=125^{\circ}C$ |   |   |   |   |   |   |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | $^{\circ}C/W$ | Between junction and ambient  | 55                 |   |   |   |   |   |   |
|                             | $R_{\theta J-L}$ |               | Between junction and terminal | 25                 |   |   |   |   |   |   |

## Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

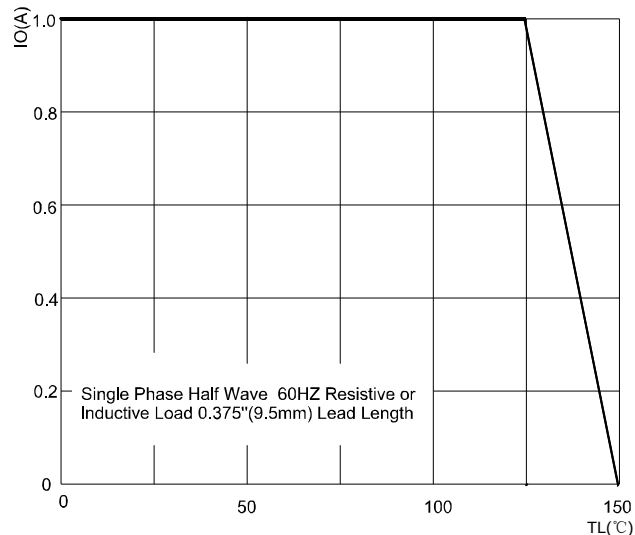


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

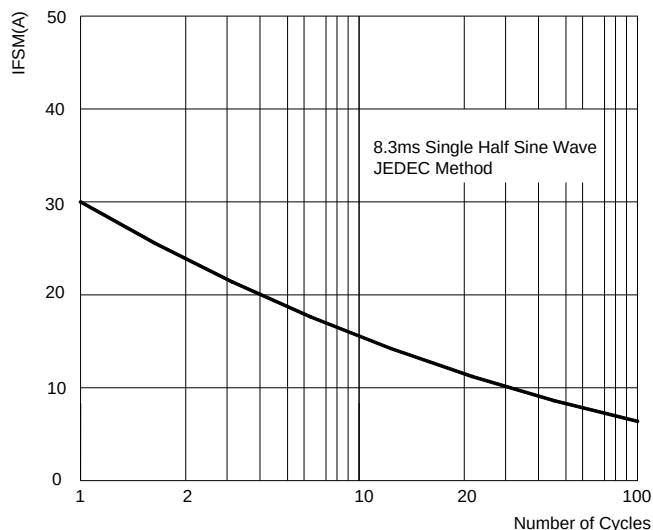


FIG.3: TYPICAL FORWARD CHARACTERISTICS

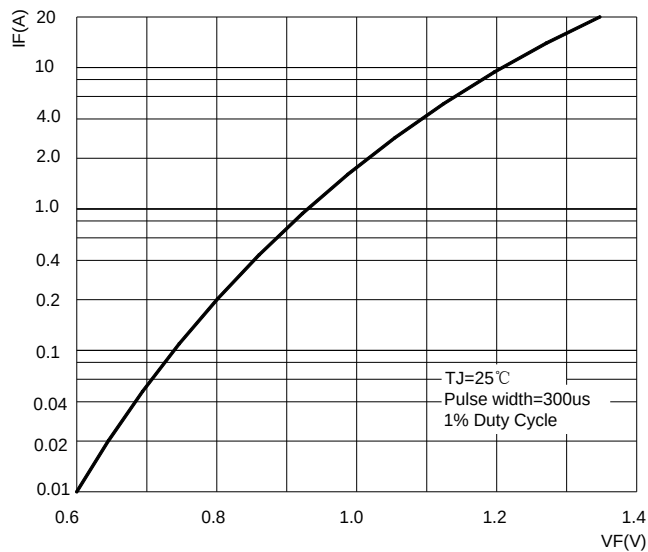
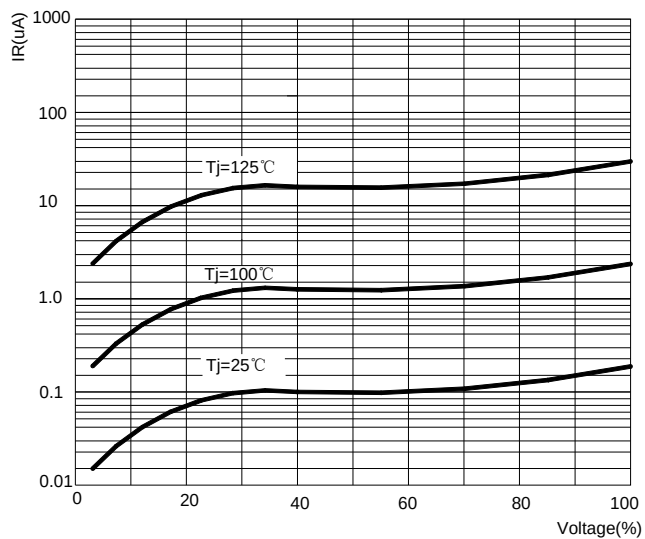
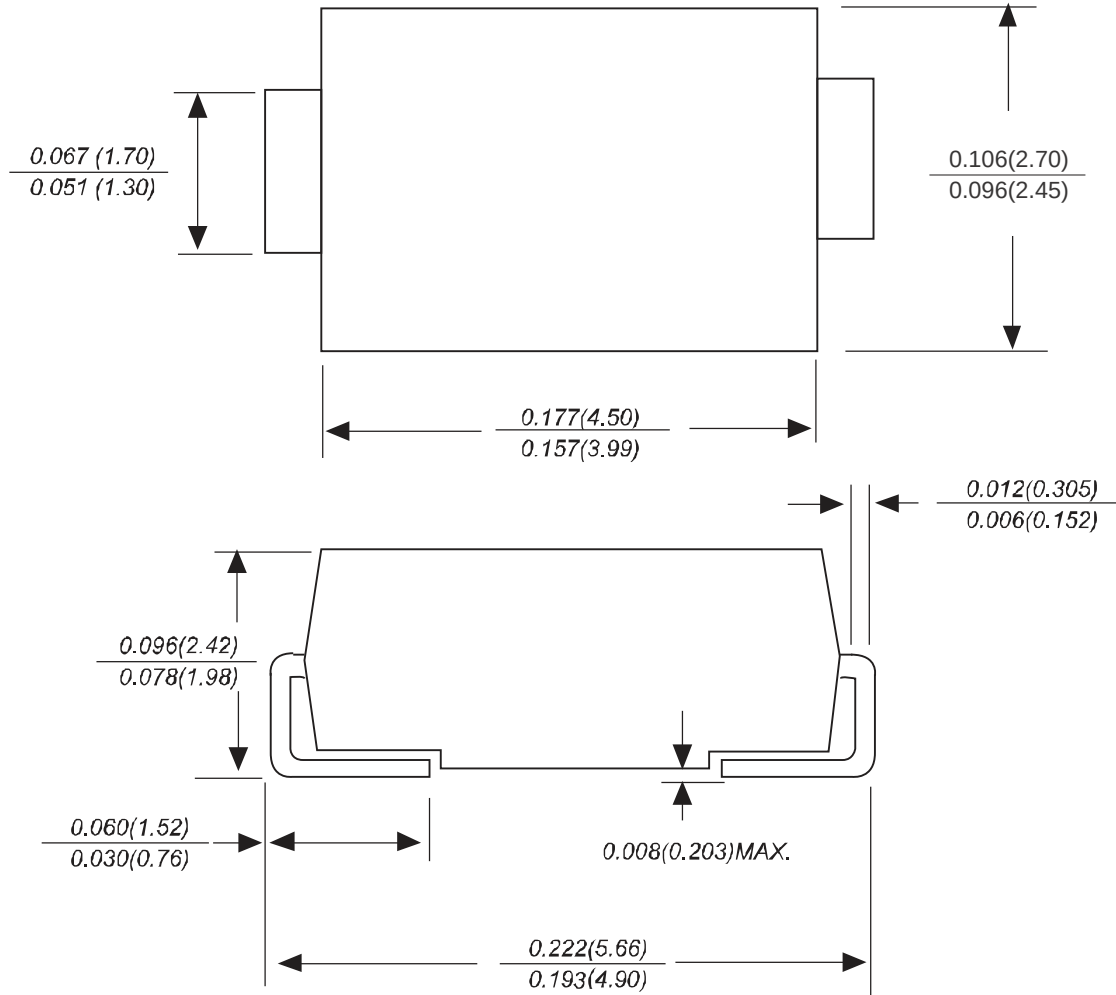


FIG.4: TYPICAL REVERSE CHARACTERISTICS





**Package Outline Dimensions**  
**SMA(DO-214AC)**



*Dimensions in inches and (millimeters)*



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