



## Features

- Average Forward Current:  $I_{F(AV)}=3A$
- Polarity: Color band denotes cathode



SMA  
(DO-214AC)



## Package Marking and Ordering Information

| Product ID      | Pack              | Marking | Qty(PCS) |
|-----------------|-------------------|---------|----------|
| VSSA310S-E3/5AT | SMA<br>(DO-214AC) | V31PS   | 2000     |

## Maximum Ratings (Ta=25°C unless otherwise noted)

| Item                                 | Symbol      | Test Conditions                             | Limit      | Unit |
|--------------------------------------|-------------|---------------------------------------------|------------|------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$   |                                             | 100        | V    |
| Maximum RMS Voltage                  | $V_{RMS}$   |                                             | 70         | V    |
| Average Forward Current              | $I_{F(AV)}$ | 60Hz Half-sine wave, Resistance load, FIG.1 | 3.0        | A    |
| Surge(Non-repetitive)Forward Current | $I_{FSM}$   | 60Hz Half-sine wave, 1 cycle, Ta=25°C       | 70         | A    |
| Junction Temperature                 | $T_J$       |                                             | -55 ~ +150 | °C   |
| Storage Temperature                  | $T_{STG}$   |                                             | -55 ~ +150 | °C   |

## Electrical Characteristics(Ta=25°C unless otherwise specified)

| Item                        | Symbol           | Test Condition                |                    | Limit | Unit     |
|-----------------------------|------------------|-------------------------------|--------------------|-------|----------|
| Peak Forward Voltage        | $V_F$            | $I_F=3.0A$                    |                    | 0.85  | V        |
| Peak Reverse Current        | $I_{RRM1}$       | $V_{RM}=V_{RRM}$              | $T_a=25^{\circ}C$  | 0.1   | mA       |
|                             | $I_{RRM2}$       |                               | $T_a=100^{\circ}C$ | 5.0   |          |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | Between junction and ambient  |                    | 75    | °C/<br>W |
|                             | $R_{\theta J-L}$ | Between junction and terminal |                    | 17    |          |

### 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

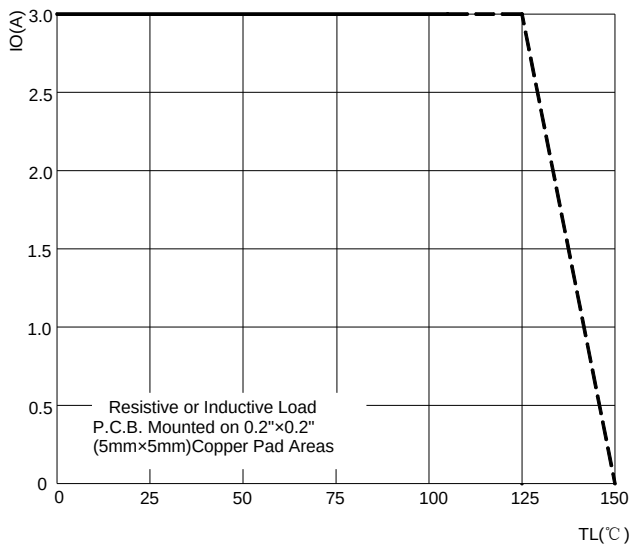


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

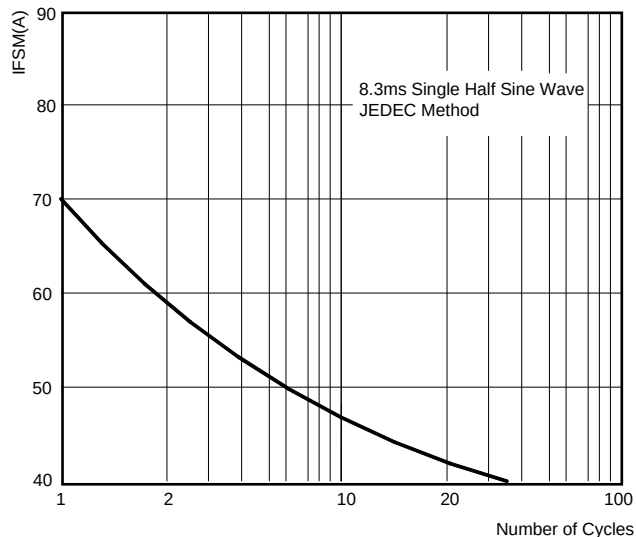


FIG.3: TYPICAL FORWARD CHARACTERISTICS

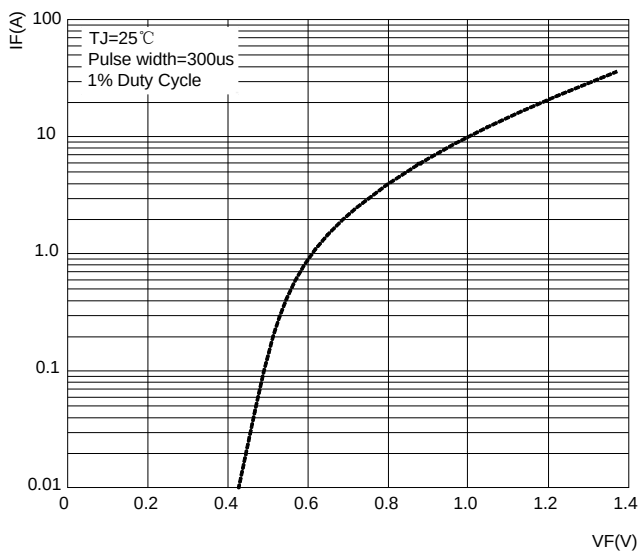
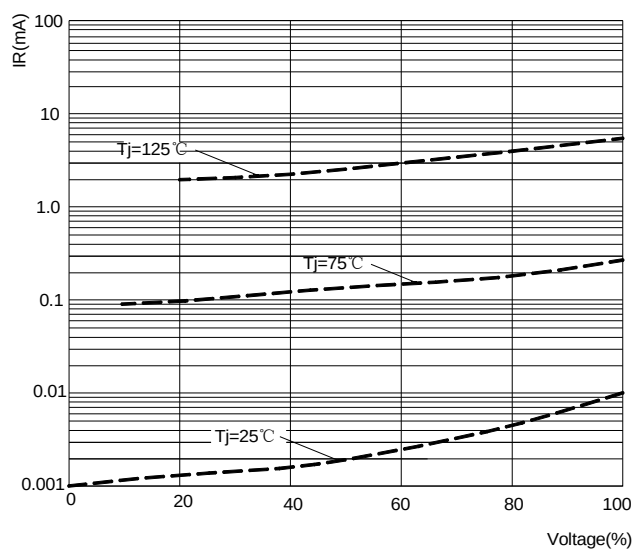
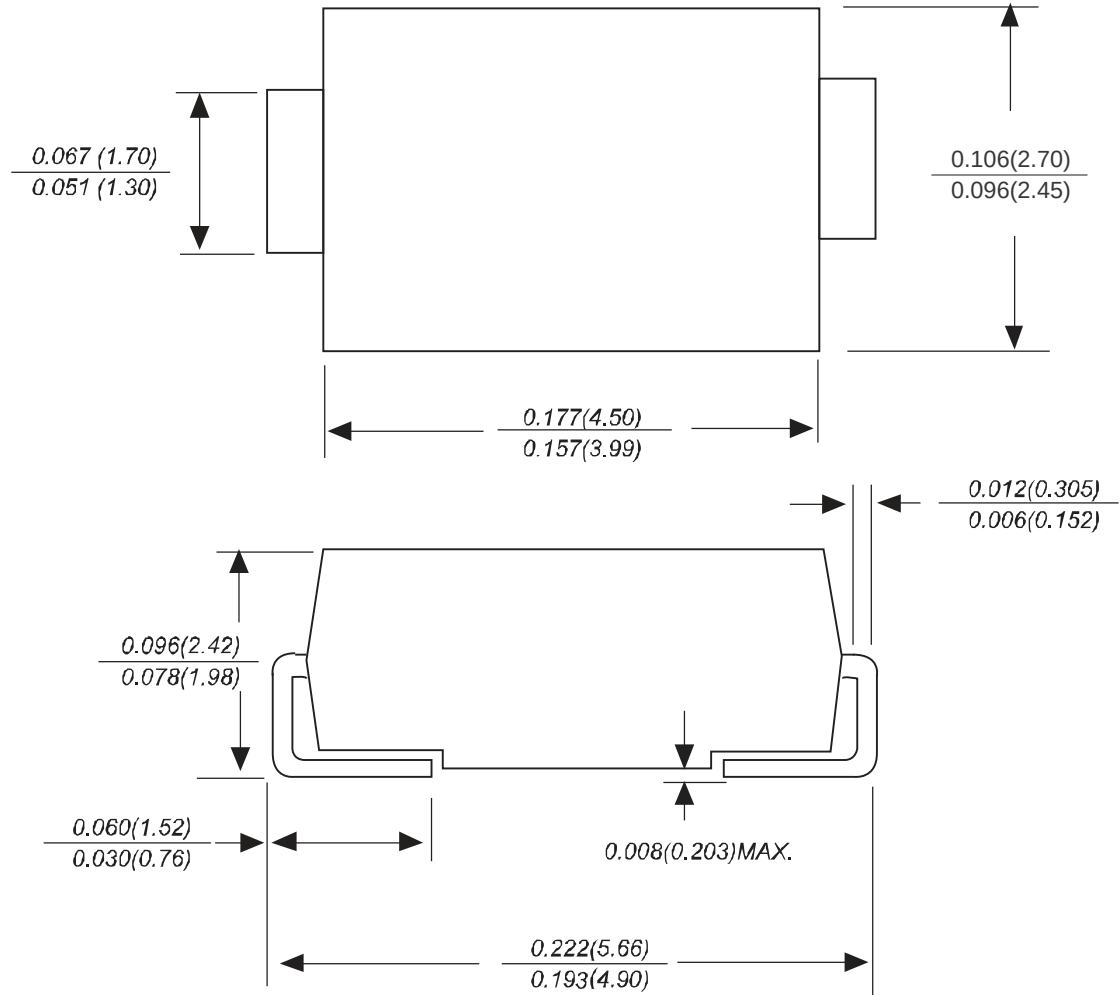


FIG.4: TYPICAL REVERSE CHARACTERISTICS





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



*Dimensions in inches and (millimeters)*



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