



## Features

- Average Forward Current:  $I_{F(AV)}=2A$
- Polarity: Color band denotes cathode

## Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|------|---------|----------|
| ES2A-ES2J  | SMA  | ES2x    | 2000     |

x: From A-J



SMA



## Maxmim Ratings (Ta=25 unless otherwise noted)

| Item                                             | Symbol         | Unit        | Test Conditions                                             | ES2        |     |     |     |     |     |     |     |
|--------------------------------------------------|----------------|-------------|-------------------------------------------------------------|------------|-----|-----|-----|-----|-----|-----|-----|
|                                                  |                |             |                                                             | A          | B   | C   | D   | E   | G   | H   | J   |
| Repetitive Peak Reverse Voltage                  | $V_{RRM}$      | V           |                                                             | 50         | 100 | 150 | 200 | 300 | 400 | 500 | 600 |
| Maximum RMS Voltage                              | $V_{RMS}$      | V           |                                                             | 35         | 70  | 105 | 140 | 210 | 280 | 350 | 420 |
| Average Forward Current                          | $I_{F(AV)}$    | A           | 60Hz Half-sine wave,<br>Resistance load, $T_a=110^{\circ}C$ | 2.0        |     |     |     |     |     |     |     |
| Surge(Non-repetitive)Forward Current             | $I_{FSM}$      | A           | 60Hz Half-sine wave,<br>1 cycle, $T_a=25^{\circ}C$          | 50         |     |     |     |     |     |     |     |
| Operation Junction and Storage Temperature Range | $T_J, T_{STG}$ | $^{\circ}C$ |                                                             | -55 ~ +150 |     |     |     |     |     |     |     |

## Electrcal Characteristics (Ta=25 unless otherwise specified)

| Item                          | Symbol               | Unit | Test Condition                                                   |                     | ES2  |   |   |   |      |   |     |   |
|-------------------------------|----------------------|------|------------------------------------------------------------------|---------------------|------|---|---|---|------|---|-----|---|
|                               |                      |      |                                                                  |                     | A    | B | C | D | E    | G | H   | J |
| Peak Forward Voltage          | V <sub>F</sub>       | V    | I <sub>F</sub> =2.0A                                             |                     | 0.95 |   |   |   | 1.25 |   | 1.7 |   |
| Maximum reverse recovery time | t <sub>rr</sub>      | ns   | I <sub>F</sub> =0.5A,I <sub>R</sub> =1.0A,I <sub>rr</sub> =0.25A |                     | 35   |   |   |   |      |   |     |   |
| Peak Reverse Current          | I <sub>RRM1</sub>    | μA   | V <sub>RM</sub> =V <sub>RRM</sub>                                | T <sub>a</sub> =25℃ | 5.0  |   |   |   |      |   |     |   |
|                               | T <sub>a</sub> =100℃ |      |                                                                  | 100                 |      |   |   |   |      |   |     |   |
| Thermal Resistance(Typical)   | R <sub>θJ-A</sub>    | ℃/W  | Between junction and ambient                                     |                     | 75   |   |   |   |      |   |     |   |
|                               | R <sub>θJ-L</sub>    |      | Between junction and terminal                                    |                     | 20   |   |   |   |      |   |     |   |

## Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

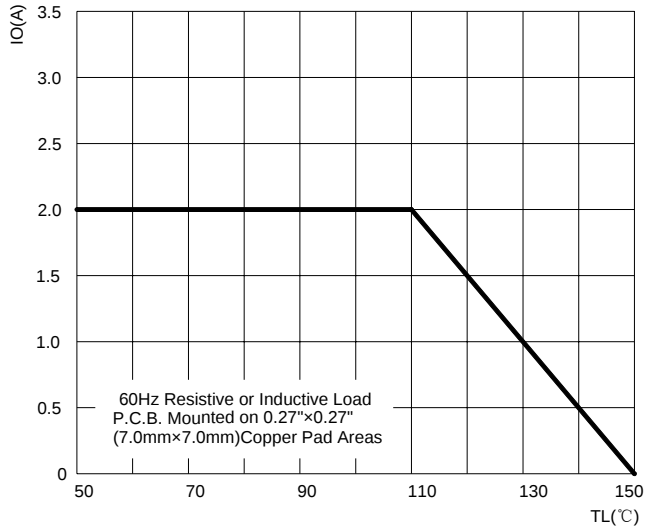


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

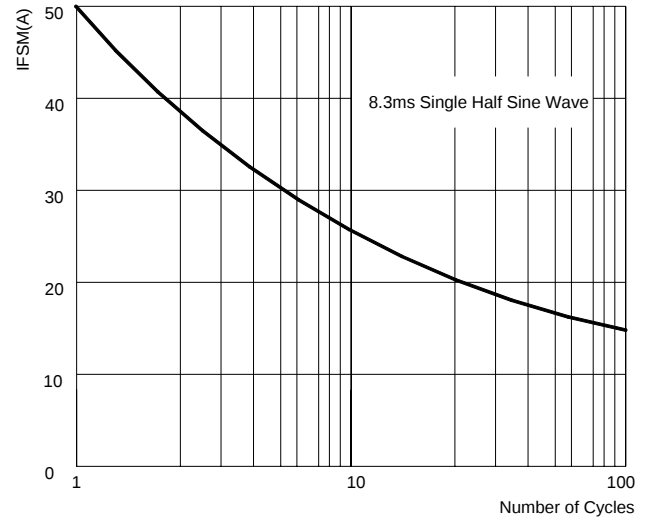


FIG.3: TYPICAL FORWARD CHARACTERISTICS

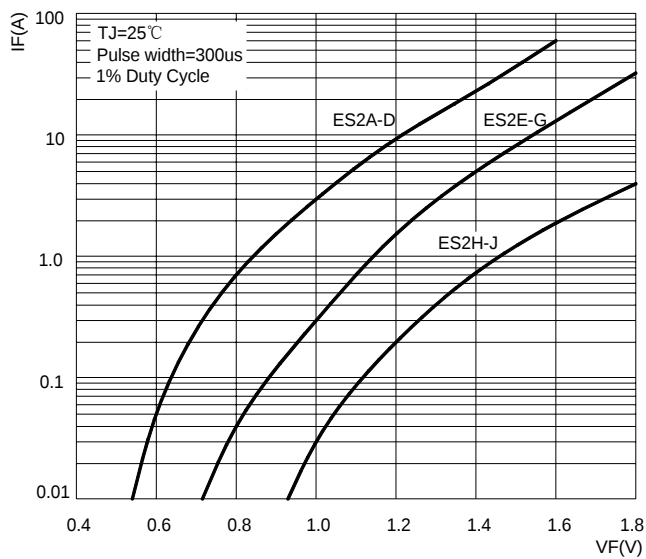


FIG.4: TYPICAL REVERSE CHARACTERISTICS

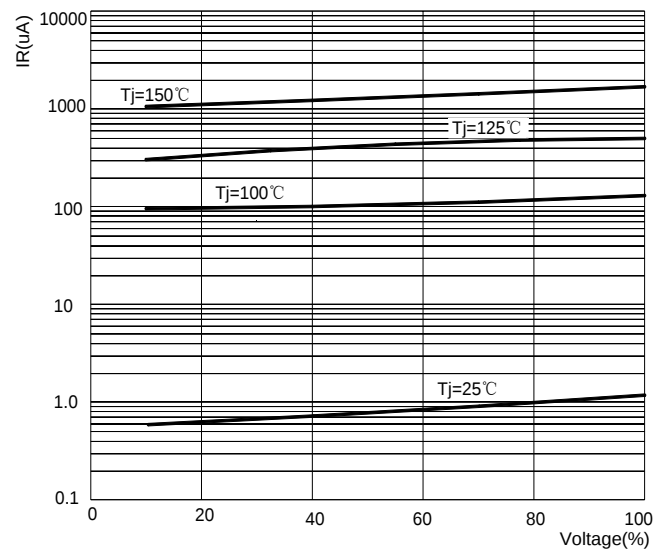
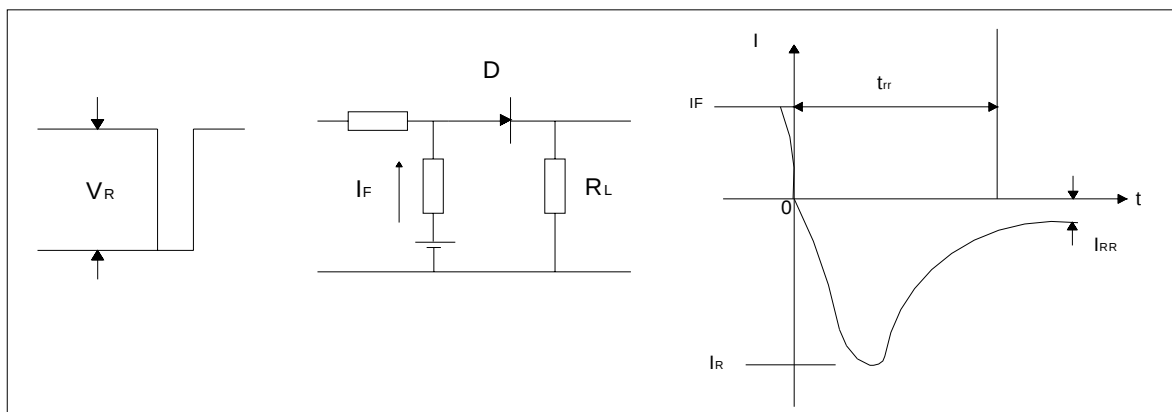


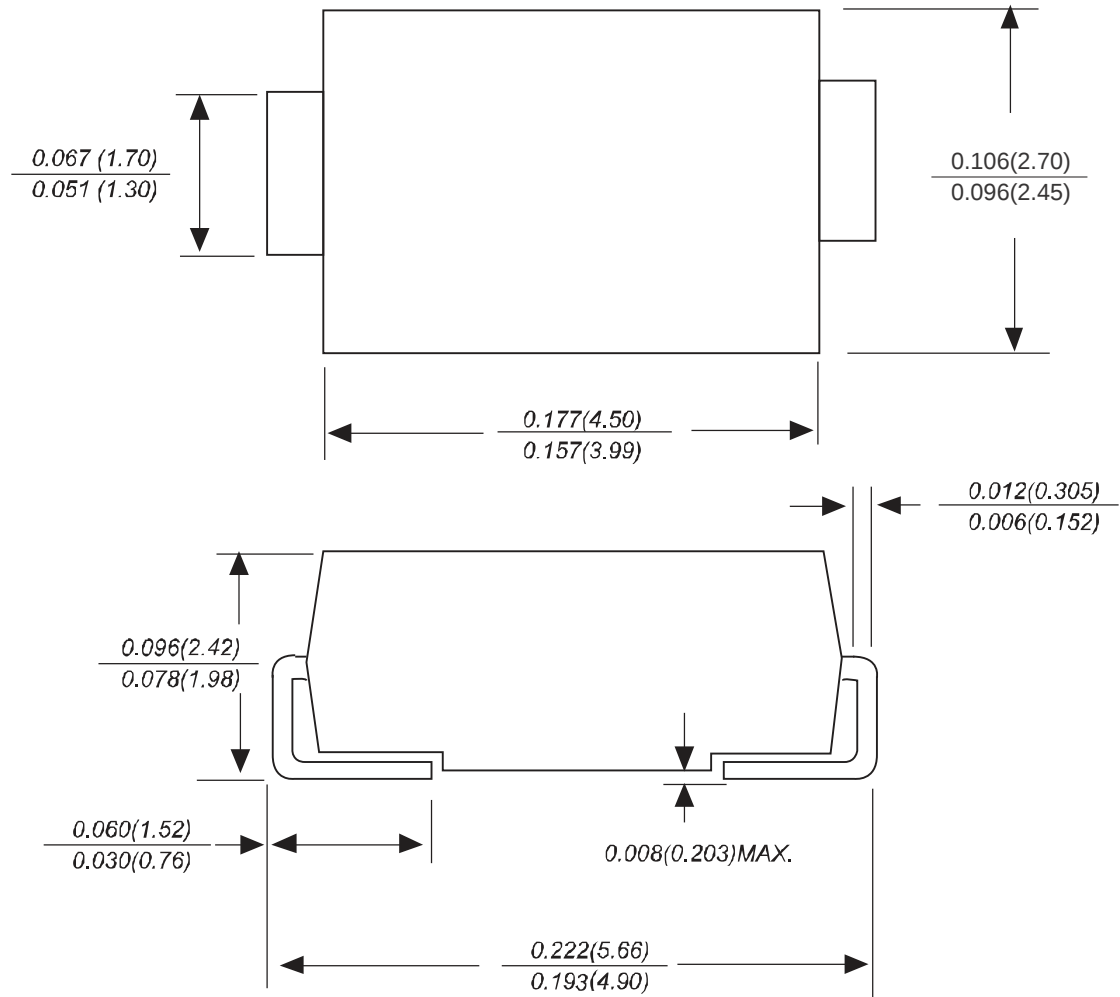
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





## Package Outline Dimensions

### SMA



*Dimensions in inches and (millimeters)*



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