



# SS22U THRU SS220U

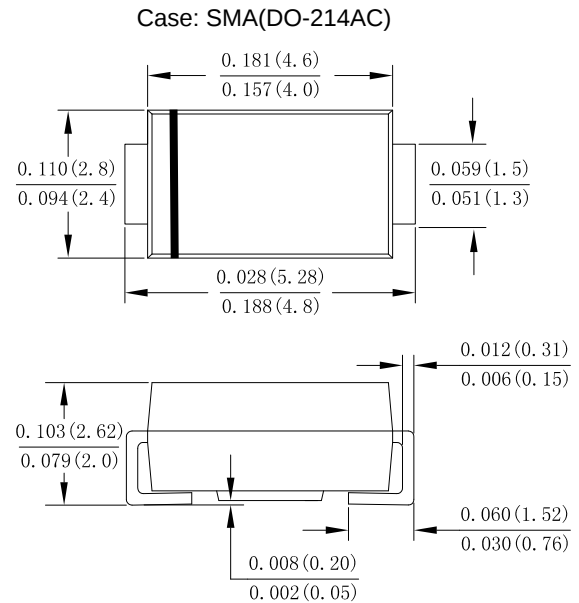
2.0AMP Surface Mount Schottky Barrier Rectifier

## Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 60A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

## Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

| Type Number                                                                                      | SYMBOL              | SS 22U      | SS 23U | SS 24U | SS 245U | SS 25U | SS 26U | SS 28U | SS 210U | SS 215U | SS 220U | Unit             |
|--------------------------------------------------------------------------------------------------|---------------------|-------------|--------|--------|---------|--------|--------|--------|---------|---------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                           | V <sub>RRM</sub>    | 20          | 30     | 40     | 45      | 50     | 60     | 80     | 100     | 150     | 200     | V                |
| Maximum RMS Voltage                                                                              | V <sub>RMS</sub>    | 14          | 21     | 28     | 31      | 35     | 42     | 56     | 70      | 105     | 140     | V                |
| Maximum DC Blocking Voltage                                                                      | V <sub>DC</sub>     | 20          | 30     | 40     | 45      | 50     | 60     | 80     | 100     | 150     | 200     | V                |
| Average Rectified Output Current @T <sub>L</sub> =100°C                                          | I <sub>F (AV)</sub> | 2.0         |        |        |         |        |        |        |         |         |         | A                |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>    | 60          |        |        |         |        |        |        |         |         |         | A                |
| Rating for fusing (t<8.3ms)                                                                      | I <sup>2</sup> t    | 14.94       |        |        |         |        |        |        |         |         |         | A <sup>2</sup> s |
| Forward Voltage @IF=2.0A                                                                         | V <sub>FM</sub>     | 0.50        |        |        |         | 0.67   |        | 0.82   |         | 0.90    |         | V                |
| Peak Reverse Current @T <sub>A</sub> =25 °C                                                      | I <sub>R</sub>      | 0.1         |        |        |         |        |        | 0.05   |         |         |         | mA               |
| At Rated DC Blocking Voltage @T <sub>A</sub> =100 °C                                             |                     | 10          |        |        |         |        |        | 5      |         |         |         |                  |
| Typical Junction Capacitance (Note 1)                                                            | C <sub>J</sub>      | 100         |        |        |         |        |        | 50     |         |         |         | pF               |
| Typical Thermal Resistance                                                                       | RθJA                | 110         |        |        |         |        |        |        |         |         |         | °C/W             |
| Operating Temperature Range                                                                      | T <sub>J</sub>      | -55 to+150  |        |        |         |        |        |        |         |         |         | °C               |
| Storage Temperature Range                                                                        | T <sub>STG</sub>    | -55 to +150 |        |        |         |        |        |        |         |         |         | °C               |

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



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Fig. 1 Forward Current Derating Curve

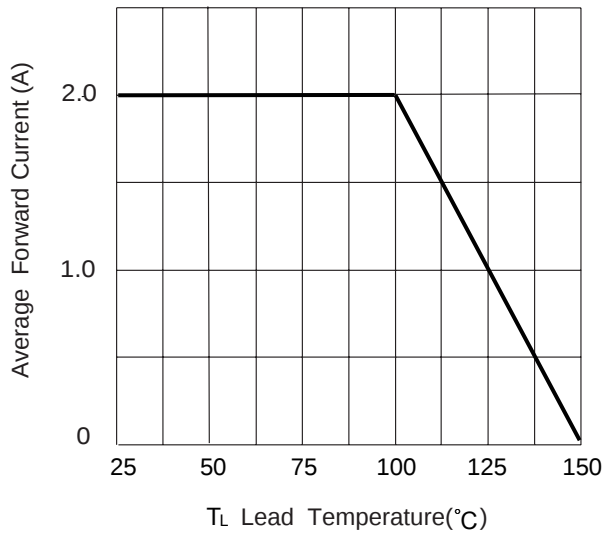


Fig. 2 Typ. Forward Characteristics

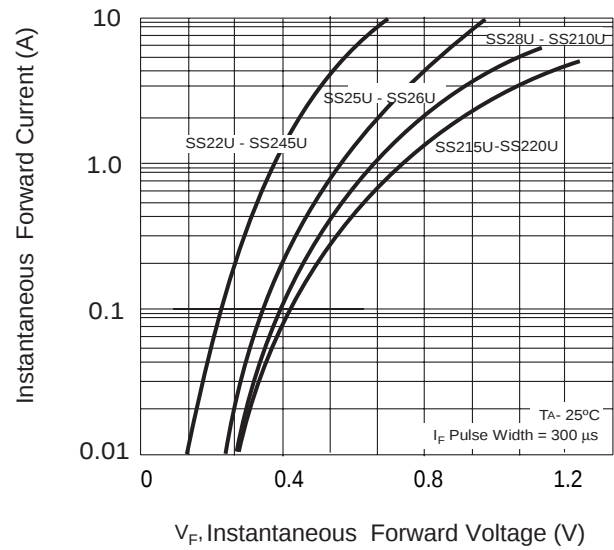


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

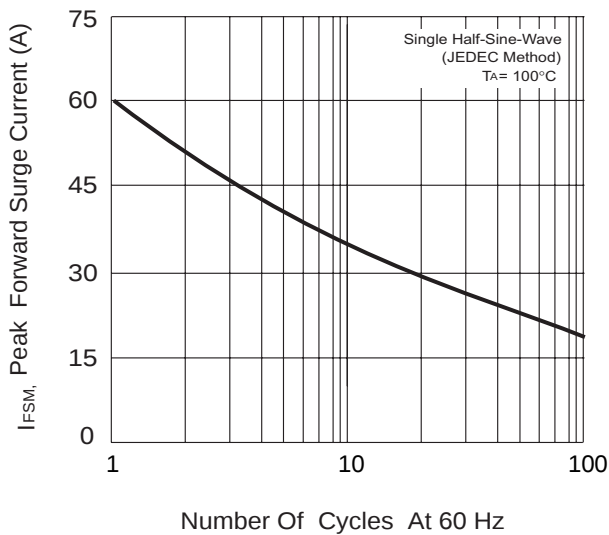


Fig.4 Typical Reverse Characteristics (per element)

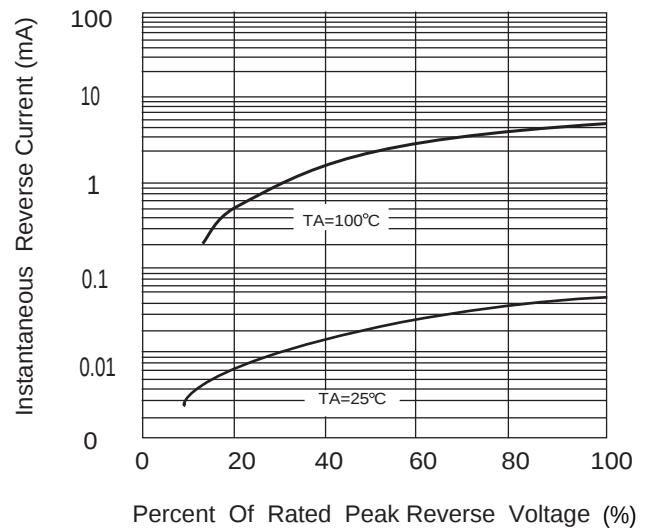
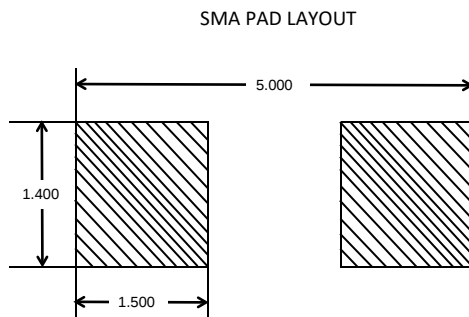


Fig.5 Mounting PAD Layout





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