

## SS22 THRU SS220

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE**

**20 THRU 200Volts**

**CURRENT**

**2.0 Ampers**

**SMA(DO-214AC)**

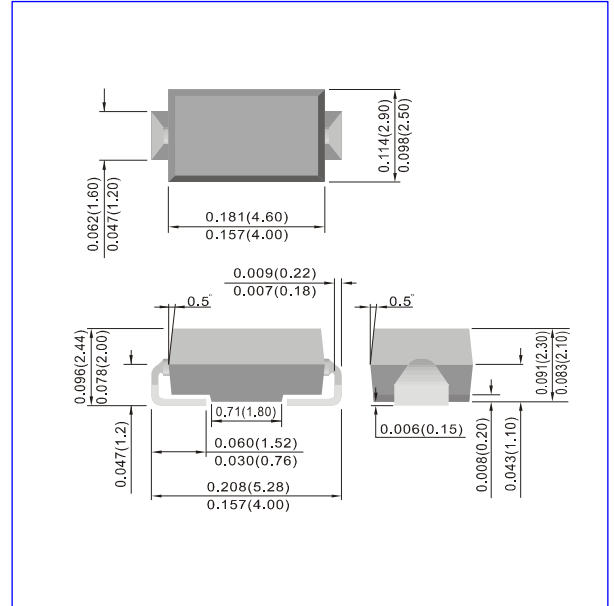
Unit:(mm)

#### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop
- \* Both normal and Pb free product are available:
- \* Normal:80~95%Sn,5~20%Pb
- \* Pb free:99 Sn above can meet Rohs enviroment substance directive request

#### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C(UNLESS OTHERWISE NOTED))

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

| TYPE NUMBER  | SS22       | SS23 | SS24 | SS25 | SS26 | SS28       | SS210 | SS215 | SS220 | UNITS |    |
|--|------------|------|------|------|------|------------|-------|-------|-------|-------|----|
| Maximum Recurrent Peak Reverse Voltage   | 20         | 30   | 40   | 50   | 60   | 80         | 100   | 150   | 200   | V     |    |
| Maximum RMS Voltage  | 14         | 21   | 28   | 35   | 42   | 56         | 70    | 105   | 140   | V     |    |
| Maximum DC Blocking Voltage  | 20         | 30   | 40   | 50   | 60   | 80         | 100   | 150   | 200   | V     |    |
| Maximum Average Forward Rectified Current  | 2.0        |      |      |      |      |            |       |       |       | A     |    |
| See Fig.1  |            |      |      |      |      |            |       |       |       |       |    |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 50         |      |      |      |      |            |       |       |       | A     |    |
| Maximum Instantaneous Forward Voltage at 2.0A  | 0.55       |      | 0.70 |      |      | 0.85       |       | 0.95  |       | V     |    |
| Maximum DC Reverse Current Ta=25°C   | 500        |      |      |      |      |            | 200   |       |       | µA    |    |
| at Rated DC Blocking Voltage Ta=100°C  | 10.0       |      |      |      |      |            | 5.0   |       | 2.0   |       | mA |
| Typical Junction Capacitance (Note1)   | 220        |      |      | 180  |      |            |       |       |       | pF    |    |
| Typical Thermal Resistance R JA (Note 2)   | 75         |      |      |      |      |            |       |       |       | °C/W  |    |
| Operating Temperature Range Tj   | -65 — +125 |      |      |      |      | -65 — +150 |       |       |       |       | °C |
| Storage Temperature Range Tstg   | -65 — +150 |      |      |      |      |            |       |       |       | °C    |    |

**NOTES:**

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

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#### RATING AND CHARACTERISTIC CURVES

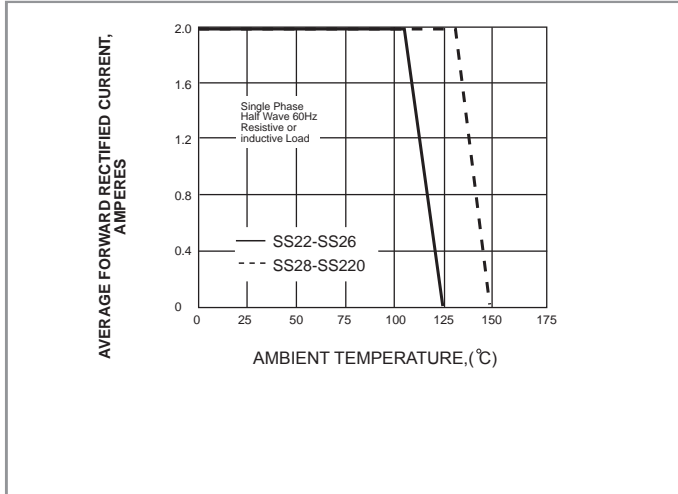


Fig. 1 FORWARD CURRENT DERATING CURVE

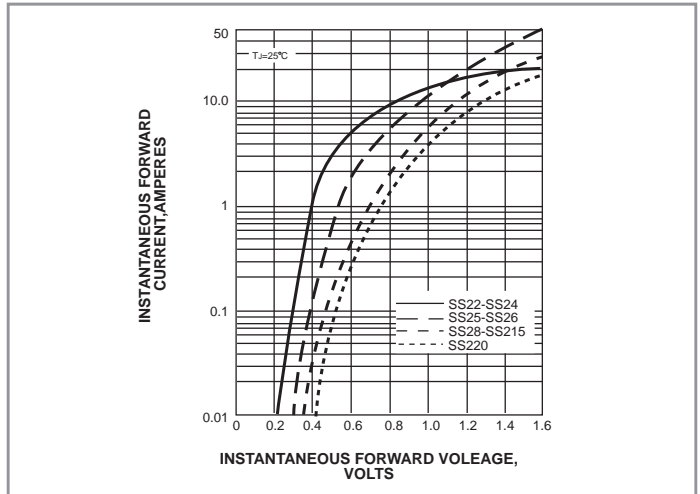


Fig. 2 TYPICAL INSTANTANEOUS FORWARD CURRENT-VOLTAGE CHARACTERISTICS

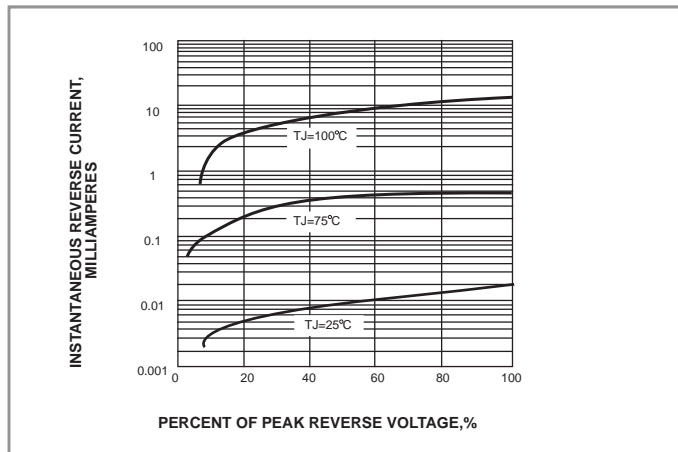


Fig. 3 TYPICAL REVERSE CHARACTERISTICS

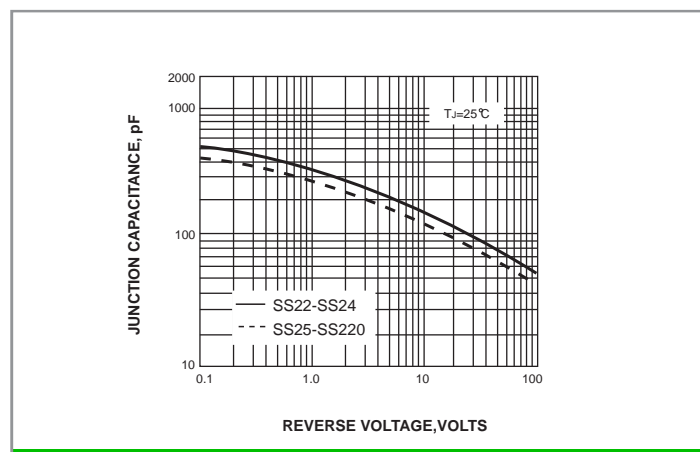


Fig. 4 TYPICAL JUNCTION CAPACITANCE CHARACTERISTICS

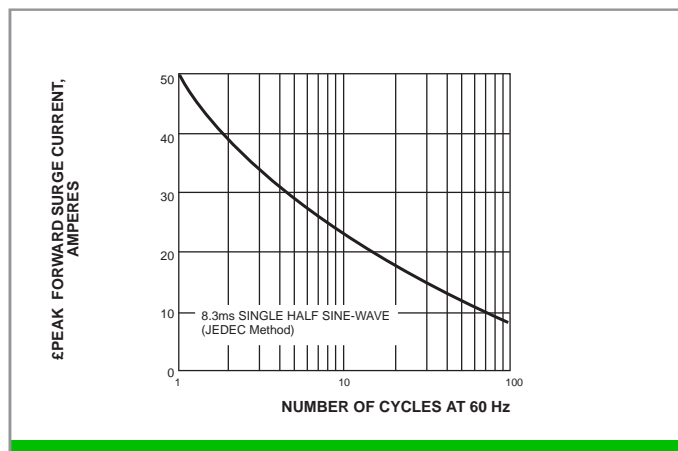


Fig. 5- MAXIMUM NON-REPETITIVE SURGE CURRENT CHARACTERISTICS

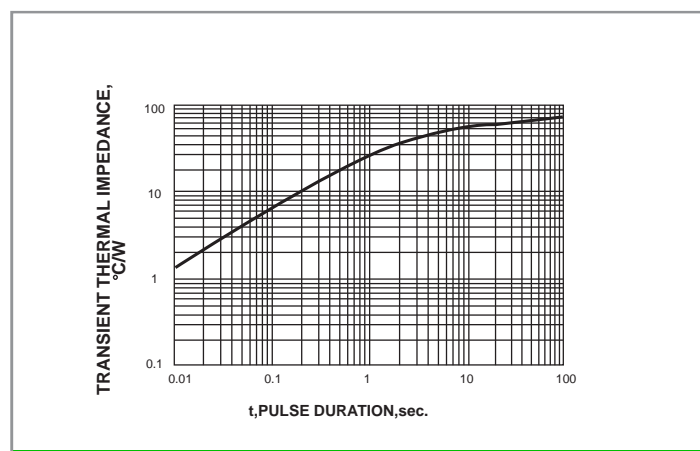


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE CHARACTERISTICS

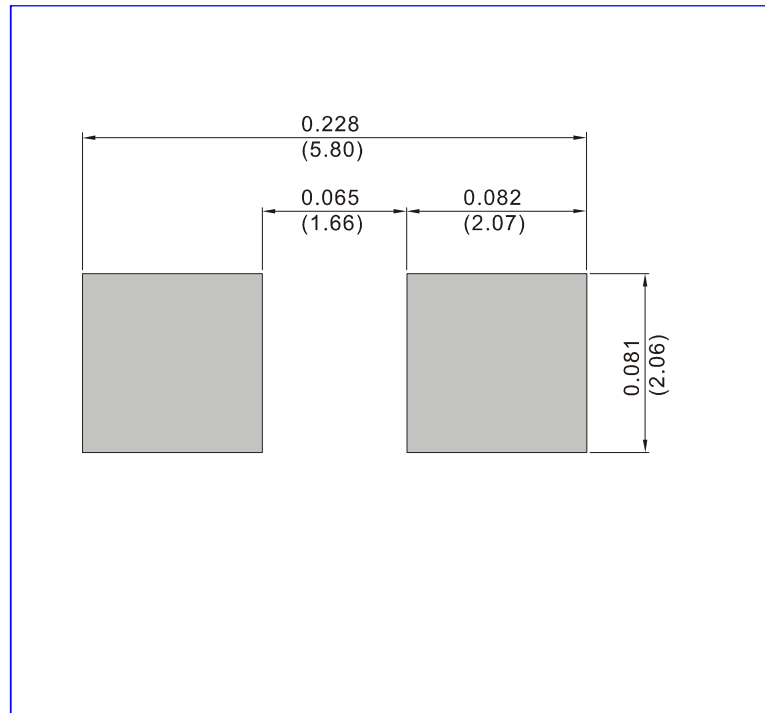
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**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**



**MOUNTING PAD LAYOUT**

SMA(DO-214AC)

Unit : inch(mm)



**ORDER INFORMATION**

- Packing information
  - T/R - 5K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel