

## Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
260°C/10 seconds at terminals

## Mechanical Data

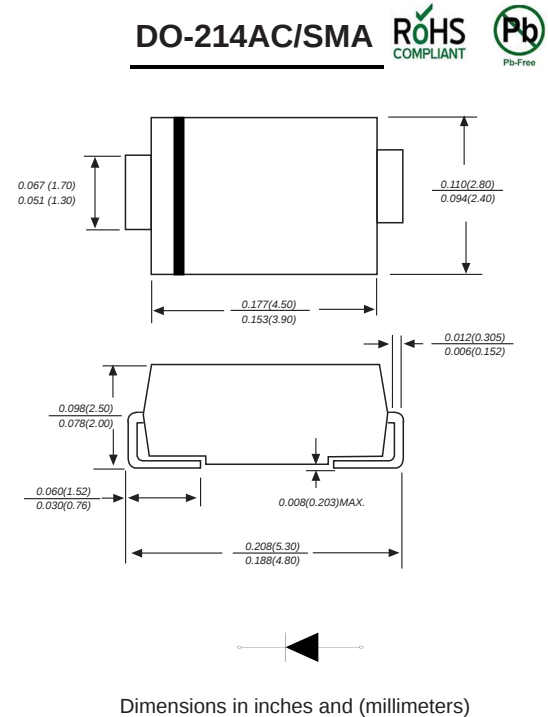
**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.0023 ounce, 0.07 grams



## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter                                                                          | SYMBOLS           | SS          |    |      |      |             |     |      |     | UNITS |
|------------------------------------------------------------------------------------|-------------------|-------------|----|------|------|-------------|-----|------|-----|-------|
|                                                                                    |                   | 22          | 24 | 245  | 26   | 28          | 210 | 215  | 220 |       |
| Maximum repetitive peak reverse voltage                                            | V <sub>RRM</sub>  | 20          | 40 | 45   | 60   | 80          | 100 | 150  | 200 | V     |
| Maximum RMS voltage                                                                | V <sub>RMS</sub>  | 14          | 28 | 31.5 | 42   | 56          | 70  | 105  | 140 | V     |
| Maximum DC blocking voltage                                                        | V <sub>DC</sub>   | 20          | 40 | 45   | 60   | 80          | 100 | 150  | 200 | V     |
| Maximum average forward rectified current at T <sub>L</sub> =100°C                 | I <sub>(AV)</sub> | 2.0         |    |      |      |             |     |      |     | A     |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>  | 50.0        |    |      |      |             |     |      |     | A     |
| Maximum instantaneous forward voltage at 2.0A                                      | V <sub>F</sub>    | 0.55        |    |      | 0.70 | 0.85        |     | 0.95 |     | V     |
| Maximum DC reverse current<br>at rated DC blocking voltage                         | I <sub>R</sub>    | 0.2<br>10   |    |      |      | 0.05<br>5   |     |      |     | mA    |
| Typical thermal resistance                                                         | R <sub>qJA</sub>  | 80.0        |    |      |      |             |     |      |     | °C/W  |
| Operating junction temperature range                                               | T <sub>J</sub>    | -55 to +125 |    |      |      | -55 to +150 |     |      |     | °C    |
| Storage temperature range                                                          | T <sub>STG</sub>  | -55 to +150 |    |      |      |             |     |      |     | °C    |

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

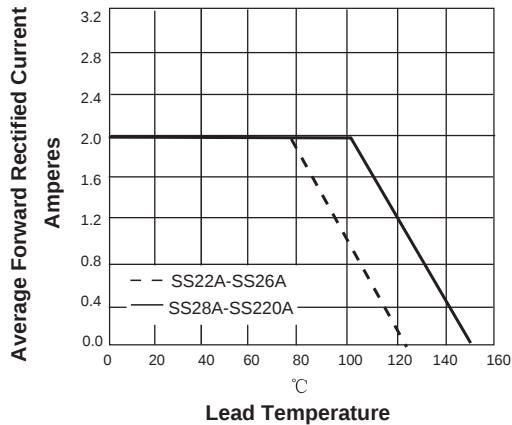


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

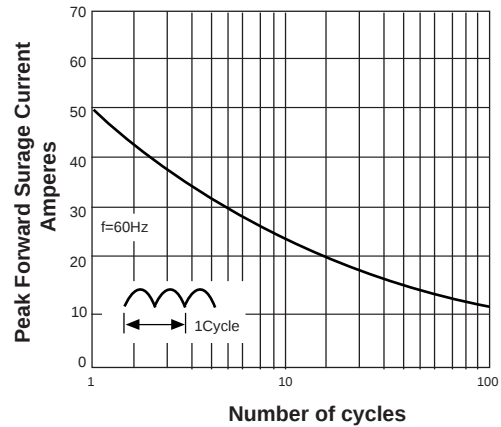


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

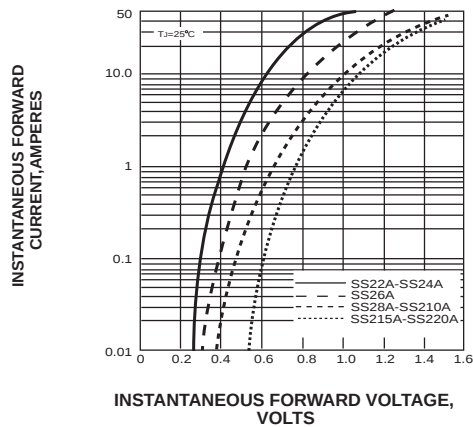
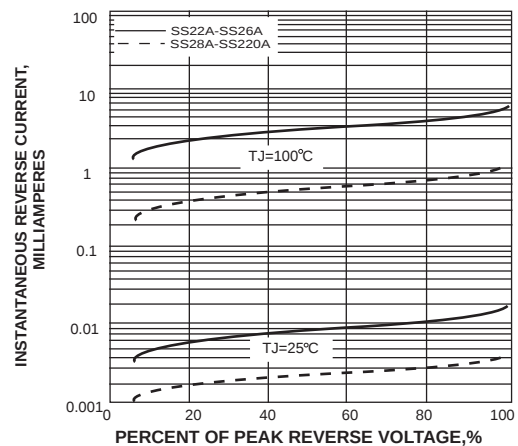
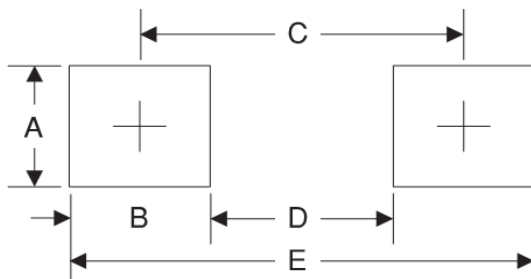


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

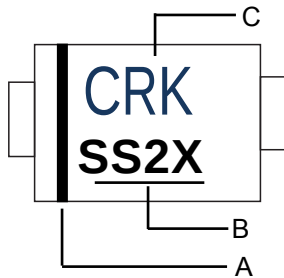


## Suggested Pad Layout



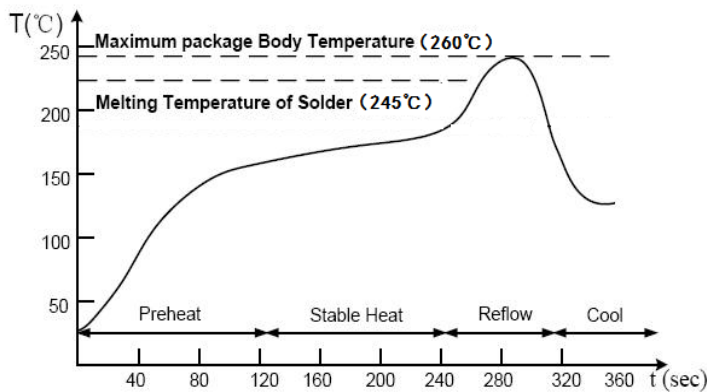
| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A      | 1.68      | 0.066       |
| B      | 1.52      | 0.060       |
| C      | 3.90      | 0.154       |
| D      | 2.41      | 0.095       |
| E      | 5.45      | 0.215       |

## Marking



| Symbol | Explanation                  |
|--------|------------------------------|
| A      | Color Band Denotes Cathode   |
| B      | Product Name, X : 2.4.....20 |
| C      | Logo                         |

## Suggested Soldering Temperature Profile

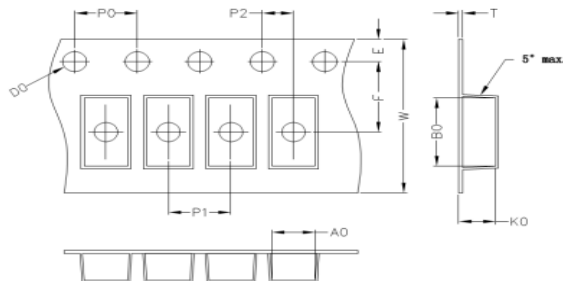


### Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 260°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

## Package Information

### Carrier Dimension(mm)



| A0   | B0   | K0   | D0   | E    | F         |
|------|------|------|------|------|-----------|
| 2.80 | 5.30 | 2.36 | 1.55 | 1.75 | 5.50      |
| P0   | P1   | P2   | T    | W    | Tolerance |
| 4.0  | 4.0  | 2.0  | 0.25 | 12   | 0.1       |

### Package Specifications

| Package | Reel Size | Reel DIA. (mm) | Q'TY/Reel (Kpcs) | Box Size (mm) | QTY/Box (Kpcs) | Carton Size (mm) | Q'TY/Carton (Kpcs) |
|---------|-----------|----------------|------------------|---------------|----------------|------------------|--------------------|
| SMA     | 11'       | 278            | 5                | 285           | 10             | 355*310*310      | 80                 |
|         | 13'       | 330            | 7.5              | 340           | 15             | 360*360*360      | 120                |