

**3.0Amp Surface Mounted Schottky Barrier Rectifiers**

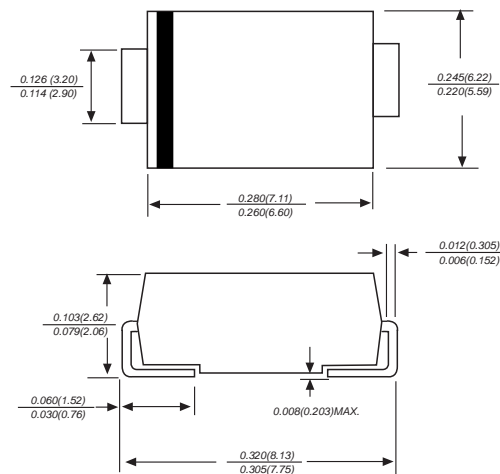
**Features**

- ◆ 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  
250°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 :** 0.008 ounce, 0.225 grams

**DO-214AB/SMC** **RoHS COMPLIANT** **Pb-Free**



Dimensions in inches and (millimeters)

**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           | SS32        | SS34 | SS36       | SS38 | SS310 | SS315 | SS320 | UNITS |
|--|-------------------|-------------|------|------------|------|-------|-------|-------|-------|
| Maximum repetitive peak reverse voltage  | V <sub>RRM</sub>  | 20          | 40   | 60         | 80   | 100   | 150   | 200   | V     |
| Maximum RMS voltage  | V <sub>RMS</sub>  | 14          | 28   | 42         | 56   | 70    | 105   | 140   | V     |
| Maximum DC blocking voltage  | V <sub>DC</sub>   | 20          | 40   | 60         | 80   | 100   | 150   | 200   | V     |
| Maximum average forward rectified current at T <sub>L</sub> =100°C                                       | I <sub>(AV)</sub> | 3.0         |      |            |      |       |       |       | A     |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load                       | I <sub>FSM</sub>  | 80.0        |      |            |      |       |       |       | A     |
| Maximum instantaneous forward voltage at 3.0A  | V <sub>F</sub>    | 0.55        | 0.70 | 0.85       | 0.95 |       |       |       | V     |
| Maximum DC reverse current at rated DC blocking voltage<br>T <sub>A</sub> =25°C<br>T <sub>A</sub> =125°C | I <sub>R</sub>    | 0.5<br>50   |      | 0.05<br>10 |      |       |       |       | mA    |
| Typical thermal resistance   | R <sub>qJA</sub>  | 47.0        |      |            |      |       |       |       | °C/W  |
| Operating junction temperature range   | T <sub>J</sub>    | -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

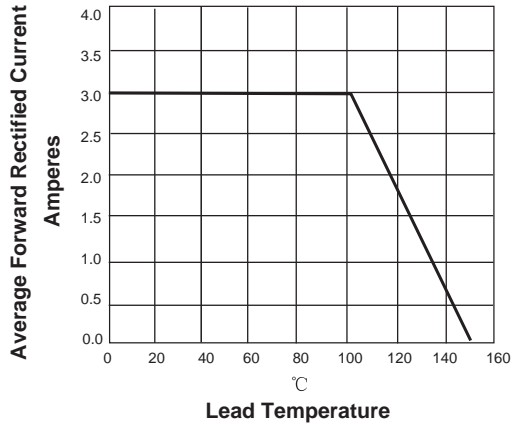


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

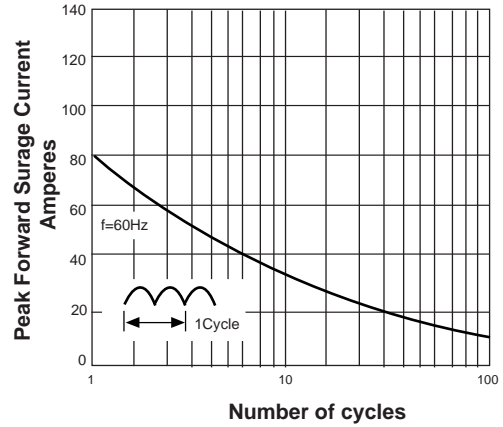


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

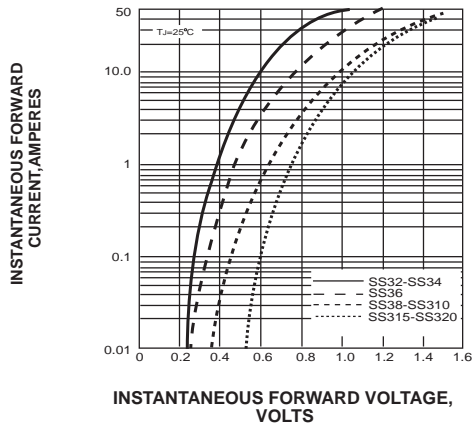
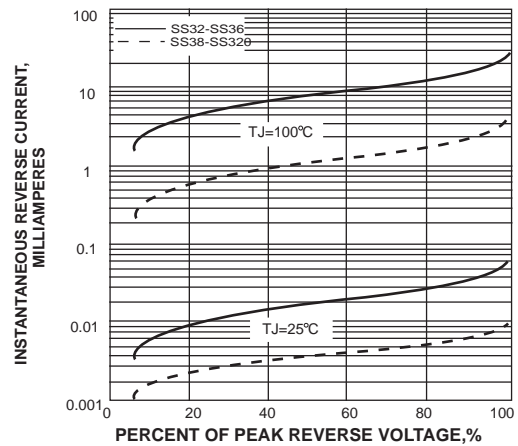
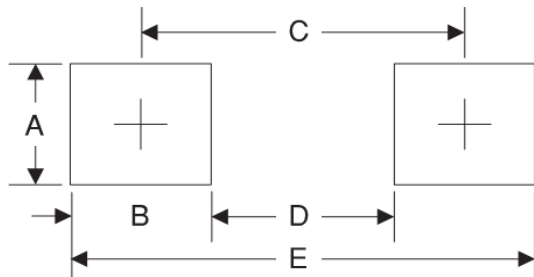


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

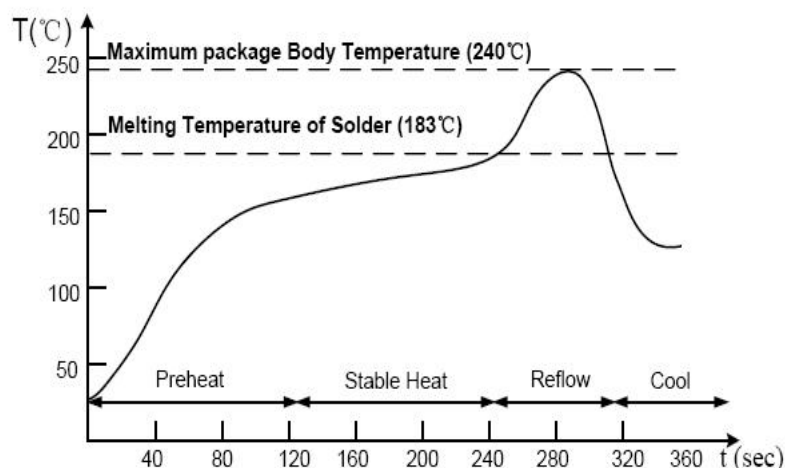


**Suggested Pad Layout**



| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A      | 3.30      | 0.130       |
| B      | 2.50      | 0.098       |
| C      | 6.80      | 0.268       |
| D      | 4.40      | 0.173       |
| E      | 9.40      | 0.370       |

**Suggested Soldering Temperature Profile**

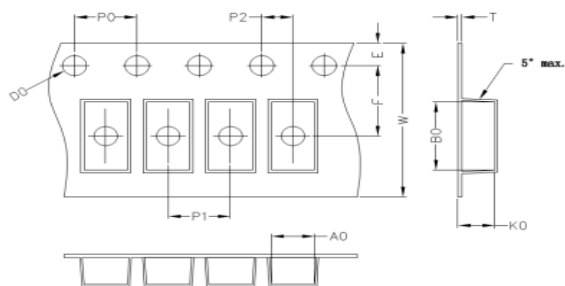


**Note**

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°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)**



|           |           |           |           |          |                  |
|-----------|-----------|-----------|-----------|----------|------------------|
| <b>A0</b> | <b>B0</b> | <b>K0</b> | <b>D0</b> | <b>E</b> | <b>F</b>         |
| 6.05      | 8.31      | 2.54      | 1.55      | 1.75     | 7.50             |
| <b>P0</b> | <b>P1</b> | <b>P2</b> | <b>T</b>  | <b>W</b> | <b>Tolerance</b> |
| 4.0       | 8.0       | 2.0       | 0.25      | 16       | 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) |
|---------|-----------|----------------|------------------|---------------|----------------|------------------|--------------------|
| SMC     | 13'       | 330            | 3.0              | 340           | 6.0            | 360*360*360      | 48                 |