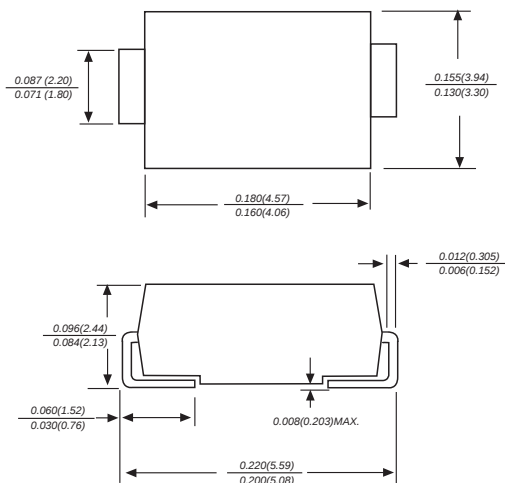


#### DO-214AA



Dimensions in inches and (millimeters)

#### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

#### MECHANICAL DATA

**Case:** JEDEC DO-214AA molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 grams

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

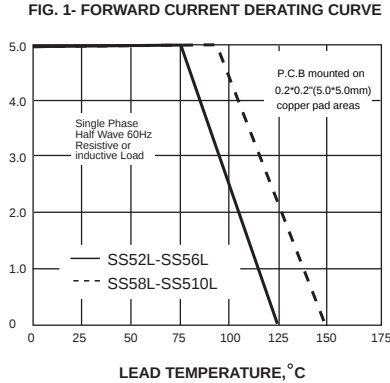
Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

|                                                                                                                 | SYMBOLS           | SS52L       | SS53L | SS54L | SS55L | SS56L | SS58L       | SS510L | UNITS |
|-----------------------------------------------------------------------------------------------------------------|-------------------|-------------|-------|-------|-------|-------|-------------|--------|-------|
| Maximum repetitive peak reverse voltage                                                                         | V <sub>RRM</sub>  | 20          | 30    | 40    | 50    | 60    | 80          | 100    | V     |
| Maximum RMS voltage                                                                                             | V <sub>RMS</sub>  | 14          | 21    | 28    | 35    | 42    | 56          | 70     | V     |
| Maximum DC blocking voltage                                                                                     | V <sub>DC</sub>   | 20          | 30    | 40    | 50    | 60    | 80          | 100    | V     |
| Maximum average forward rectified current at T <sub>L</sub> (see fig.1)                                         | I <sub>(AV)</sub> | 5.0         |       |       |       |       |             |        | A     |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load                            | I <sub>FSM</sub>  | 100.0       |       |       |       |       |             |        | A     |
| Maximum instantaneous forward voltage at 5.0A                                                                   | V <sub>F</sub>    | 0.45        |       |       | 0.50  |       | 0.7         |        | V     |
| Maximum DC reverse current      T <sub>A</sub> =25°C<br>at rated DC blocking voltage      T <sub>A</sub> =100°C | I <sub>R</sub>    | 0.5         |       |       |       |       | 0.2         |        | mA    |
|                                                                                                                 |                   | 20          |       |       |       |       | 10          |        |       |
| Typical junction capacitance (NOTE 1)                                                                           | C <sub>J</sub>    | 200         |       |       |       |       |             |        | pF    |
| Typical thermal resistance (NOTE 2)                                                                             | R <sub>θJA</sub>  | 68.0        |       |       |       |       |             |        | °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    |

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SS52L THRU SS510L

AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



PEAK FORWARD SURGE CURRENT,  
AMPERES

