

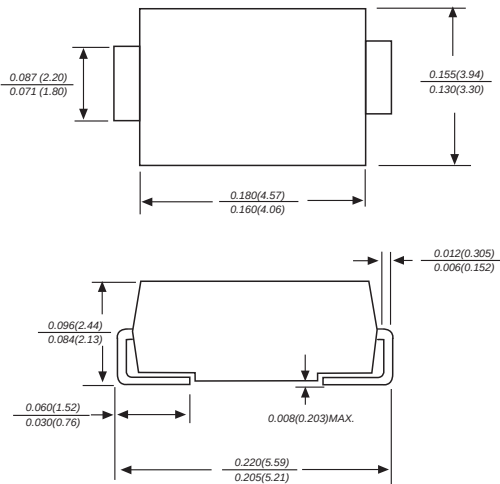


# SS22 THRU SS2200

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Amperes

### DO-214AA/SMB



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: 250°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%.

| MDD Catalog Number                                                                                              | SYMBOLS          | SS22        | SS23 | SS24 | SS25 | SS26 | SS28 | SS210       | SS2150 | SS2200 | UNITS |
|-----------------------------------------------------------------------------------------------------------------|------------------|-------------|------|------|------|------|------|-------------|--------|--------|-------|
| Maximum repetitive peak reverse voltage                                                                         | V <sub>RRM</sub> | 20          | 30   | 40   | 50   | 60   | 80   | 100         | 150    | 200    | VOLTS |
| Maximum RMS voltage                                                                                             | V <sub>RMS</sub> | 14          | 21   | 28   | 35   | 42   | 56   | 70          | 105    | 140    | VOLTS |
| Maximum DC blocking voltage                                                                                     | V <sub>DC</sub>  | 20          | 30   | 40   | 50   | 60   | 80   | 100         | 150    | 200    | VOLTS |
| Maximum average forward rectified current at T <sub>L</sub> (see fig.1)                                         | I <sub>AV</sub>  | 2.0         |      |      |      |      |      |             |        |        | Amps  |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method)          | I <sub>FSM</sub> | 50.0        |      |      |      |      |      |             |        |        | Amps  |
| Maximum instantaneous forward voltage at 2.0A                                                                   | V <sub>F</sub>   | 0.55        |      |      | 0.70 |      | 0.85 |             |        | 0.95   | Volts |
| 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     |       |
|                                                                                                                 |                  | 10.0        |      |      |      | 5.0  |      | 2.0         |        |        |       |
| Typical junction capacitance (NOTE 1)                                                                           | C <sub>J</sub>   | 220         |      |      | 180  |      |      |             |        |        | pF    |
| Typical thermal resistance (NOTE 2)                                                                             | R <sub>θJA</sub> | 75.0        |      |      |      |      |      |             |        |        | °C/W  |
| Operating junction temperature range                                                                            | T <sub>J</sub>   | -50 to +125 |      |      |      |      |      | -50 to +150 |        |        | °C    |
| Storage temperature range                                                                                       | T <sub>STG</sub> | -50 to +150 |      |      |      |      |      |             |        |        | °C    |

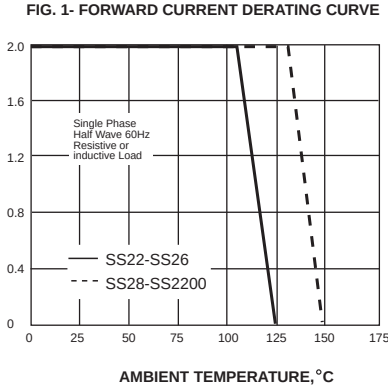
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

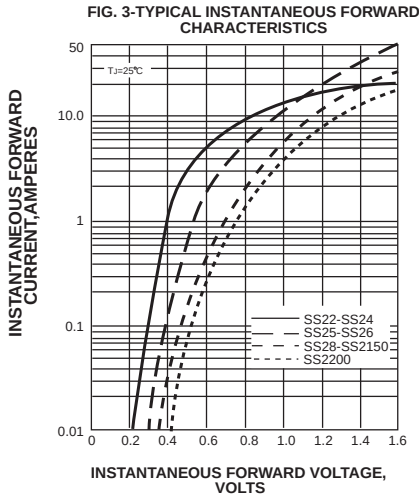
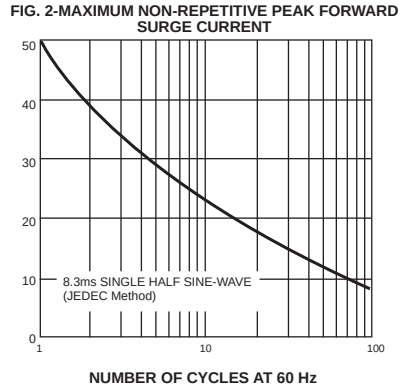
MDD ELECTRONIC

# RATINGS AND CHARACTERISTIC CURVES SS22 THRU SS2200

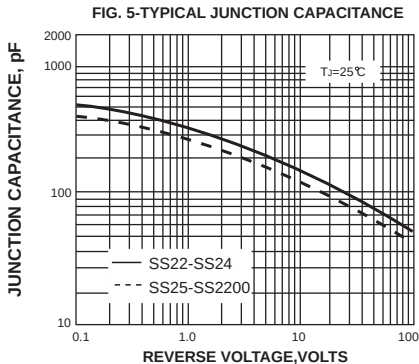
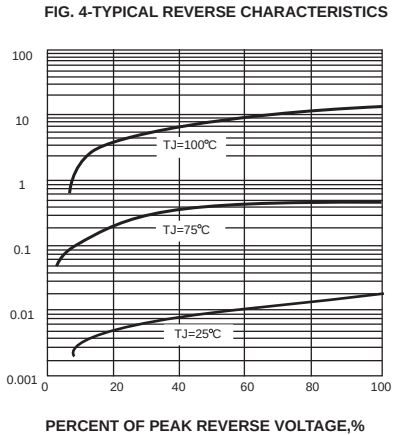
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



PEAK FORWARD SURGE CURRENT,  
AMPERES



INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE,  
°C/W

