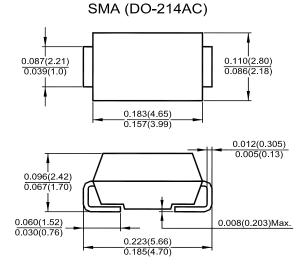
# SS12D THRU SS110D

## Surface Mount Schottky Barrier Rectifiers Reverse Voltage - 20 to 100 V Forward Current - 1 A

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- · For surface mounted applications
- · Metal silicon junction, majority carrier conduction
- · Built-in strain relief, ideal for automated placement
- Low power loss, high efficiency.
- High forward surge current capability



#### **Mechanical Data**

- Case: SMA (DO-214AC) molded plastic body
- **Terminals:** leads solderable per MIL-STD-750, Method 2026
- · Polarity: color band denotes cathode end

Dimensions in inches and (millimeters)

## **Maximum Ratings and Electrical Characteristics**

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

| Parameter   | Symbols            | SS12D         | SS13D     | SS14D | SS15D | SS16D | SS18D | SS110D | Unit |
|---|--------------------|---------------|-----------|-------|-------|-------|-------|--------|------|
| 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   | I <sub>F(AV)</sub> | 1             |           |       |       |       |       | А      |      |
| Peak Forward Surge Current 8.3 ms Single Half<br>Sine-wave Superimposed on Rated Load<br>(JEDEC Method) | I <sub>FSM</sub>   | 30            |           |       |       |       |       |        | А    |
| Maximum Instantaneous Forward Voltage at 1 A  | V <sub>F</sub>     |               | 0.55 0.75 |       |       |       | 0     | .85    | V    |
| Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Blocking Voltage $T_a = 100^{\circ}C$        | I <sub>R</sub>     | 0.5           |           |       |       |       |       |        | mA   |
|   |                    | 20            |           |       |       |       |       |        |      |
| Typical Junction Capacitance 1)   | Cj                 | 110           |           |       |       |       |       |        | pF   |
| Typical Thermal Resistance <sup>2)</sup>  | $R_{\thetaJA}$     | 88            |           |       |       |       |       |        | °C/W |
| Operating Junction Temperature Range  | Tj                 | - 55 to + 125 |           |       |       |       |       |        | °C   |
| Storage Temperature Range   | T <sub>stg</sub>   | - 55 to + 150 |           |       |       |       |       |        | °C   |

 $^{1)}$  Measured at 1MHz and applied reverse voltage of 4 V D.C.

 $^{2)}$  P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



