

# SS22 THRU SS210

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 V

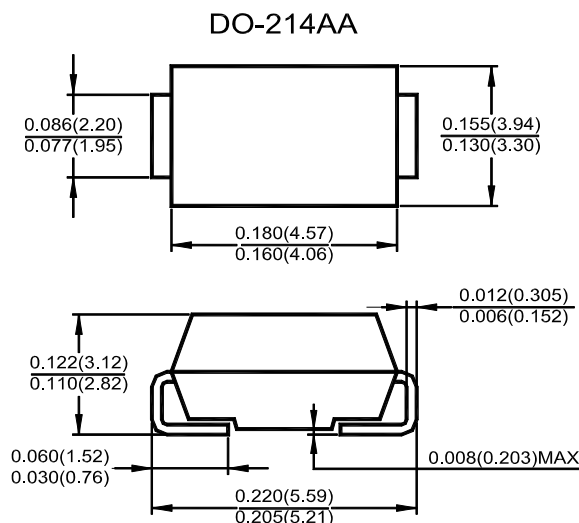
Forward Current - 2 A

### Features

- The plastic package carries UL Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- Built-in strain relief, ideal for automated placement

### Mechanical Data

- Case: JEDEC DO-214AA molded plastic body
- Terminal: Leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

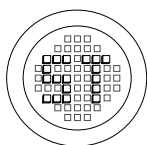
### Maximum Ratings and Electrical Characteristics

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

| Parameter                                                                                  |                         | Symbols           | SS22        | SS23 | SS24 | SS25        | SS26 | SS28 | SS210 | 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>(AV)</sub> | 2           |      |      |             |      |      |       | A    |
| Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method) |                         | I <sub>FSM</sub>  | 50          |      |      |             |      |      |       | A    |
| Maximum Instantaneous Forward Voltage at 2 A                                               |                         | V <sub>F</sub>    | 0.55        |      |      | 0.7         |      | 0.85 |       | V    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage                                    | T <sub>A</sub> = 25 °C  | I <sub>R</sub>    | 0.5         |      |      |             |      |      |       | mA   |
|                                                                                            | T <sub>A</sub> = 100 °C |                   | 20          |      |      | 10          |      |      |       |      |
| Typical Junction Capacitance <sup>1)</sup>                                                 |                         | C <sub>J</sub>    | 220         |      |      | 180         |      |      | pF    |      |
| Typical Thermal Resistance <sup>2)</sup>                                                   |                         | R <sub>θJA</sub>  | 75          |      |      |             |      |      |       | °C/W |
| Operating Junction Temperature Range                                                       |                         | T <sub>J</sub>    | -65 to +125 |      |      | -65 to +150 |      |      | °C    |      |
| Storage Temperature Range                                                                  |                         | T <sub>S</sub>    | -65 to +150 |      |      |             |      |      |       | °C   |

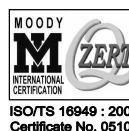
<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 VDC.

<sup>2)</sup> P.C.B mounted with 0.2 X 0.2"(5 X 5 mm) copper pad areas.



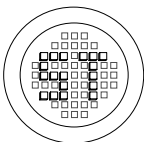
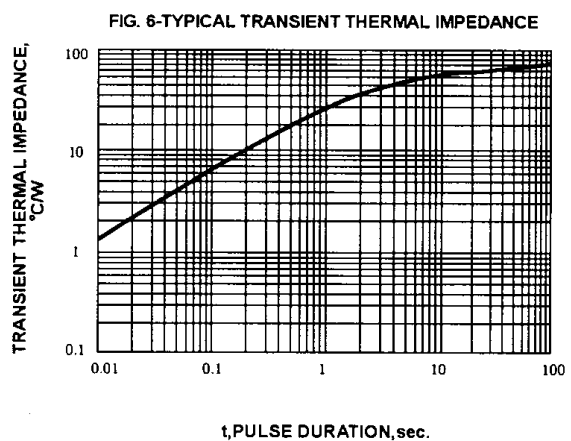
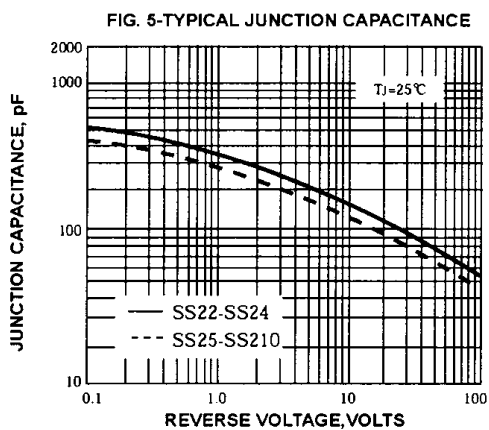
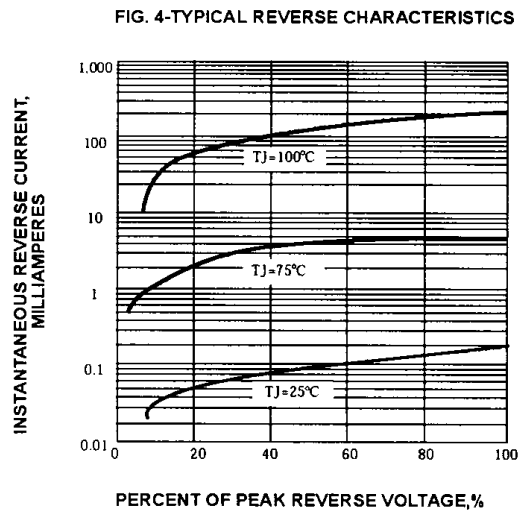
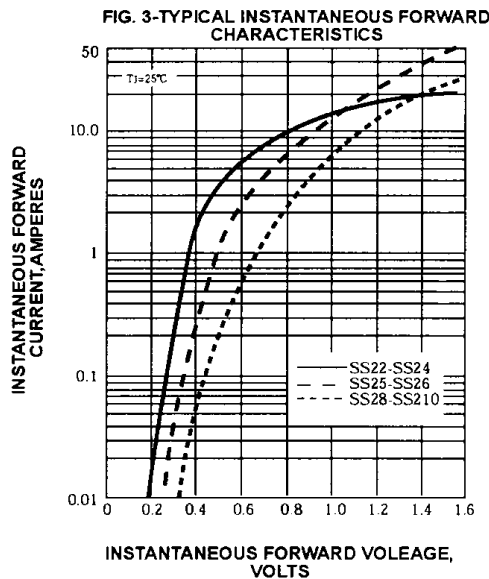
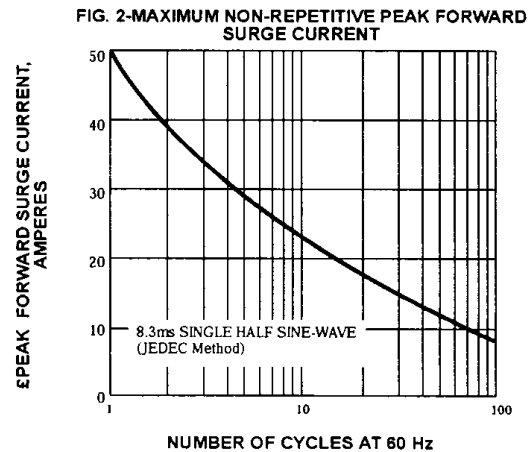
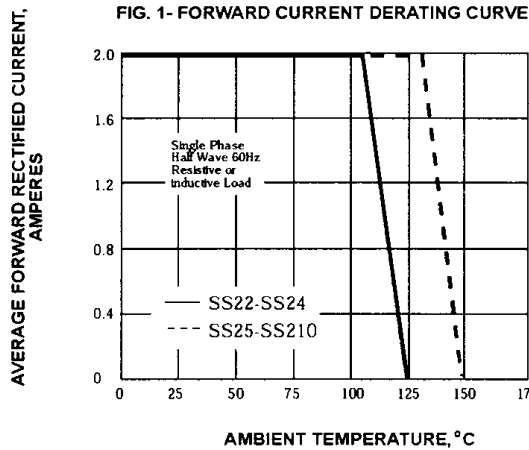
**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 14/03/2006 C

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ISO/TS 16949 : 2002  
Certificate No. 05103

ISO 14001:2004  
Certificate No. 7116

ISO 9001:2000  
Certificate No. 0506098

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