

# TDS:EMIC

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電源管理



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LDO穩壓器



觸摸芯片



MOS管



運算放大器



存儲芯片



MCU



串口通信

## SS510-TD

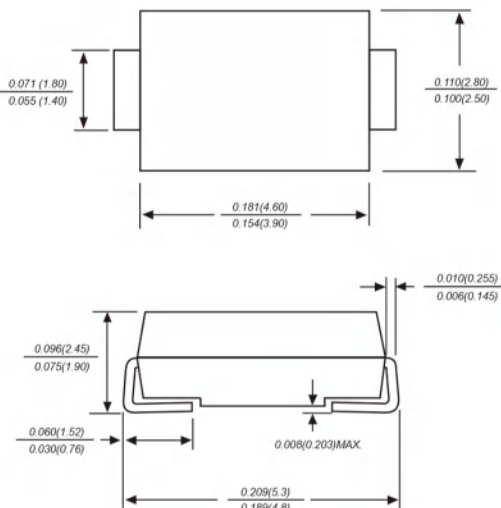
產品規格說明書

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts    Forward Current - 5.0 Amperes

#### SMA

#### DO-214AC



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-214AC 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           | SS52        | SS53 | SS54 | SS55        | SS56 | SS58 | SS510 | SS515 | SS520 | 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> | 5.0         |      |      |             |      |      |       |       |       | Amps  |    |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method)         | I <sub>FSM</sub>  | 150.0       |      |      |             |      |      |       |       |       | Amps  |    |
| Maximum instantaneous forward voltage at 5.0A                                                               | V <sub>F</sub>    | 0.45        | 0.55 |      | 0.70        |      | 0.85 |       |       |       | 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         |      |      |             |      | 0.1  |       |       |       | mA    |    |
|                                                                                                             |                   | 10          |      |      |             |      | 2    |       |       |       |       |    |
| Typical junction capacitance (NOTE 1)                                                                       | C <sub>J</sub>    | 800         |      |      |             |      | 500  |       |       |       |       | pF |
| Typical thermal resistance (NOTE 2)                                                                         | R <sub>qJA</sub>  | 55.0        |      |      |             |      |      |       |       |       | °C/W  |    |
| Operating junction temperature range                                                                        | T <sub>J</sub>    | -65 to +125 |      |      | -65 to +150 |      |      |       |       |       | °C    |    |
| Storage temperature range                                                                                   | T <sub>STG</sub>  | -65 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 SS54

