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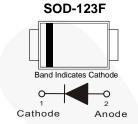


August 2015

# SS24FL / SS26FL Surface Mount Schottky Barrier Rectifier

#### **Features**

- Ultra Thin Profile Maximum Height of 1.08 mm
- UL Flammability 94V-0 Classification
- MSL 1
- · RoHS Compliant / Green Mold Compound
- Industrial Device Qualified per AEC-Q101 Standards.
  - \* see authorized use policy



## **Ordering Information**

| Part Number | Number Top Mark Package |          | Packing Method |  |
|-------------|-------------------------|----------|----------------|--|
| SS24FL      | GP                      | SOD-123F | Tape and Reel  |  |
| SS26FL      | GQ                      | SOD-123F | Tape and Reel  |  |

### **Absolute Maximum Ratings**

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only. Values are at  $T_A = 25^{\circ}\text{C}$  unless otherwise noted.

| Symbol             | Parameter   | Va     | Unit   |       |
|--------------------|---|--------|--------|-------|
|                    | Falanietei  | SS24FL | SS26FL | Oilit |
| V <sub>RRM</sub>   | Peak Reverse Voltage                                    | 40     | 60     | V     |
| V <sub>R</sub>     | Reverse Voltage   | 40     | 60     | V     |
| I <sub>F(AV)</sub> | Average Rectified Current at T <sub>A</sub> = 75°C 2.0  |        | Α      |       |
| I <sub>FSM</sub>   | Non-Repetitive Peak Forward Surge Current at t = 8.3 ms |        | 0      | Α     |
| T <sub>J</sub>     | Operating Junction Temperature Range -55 to +125        |        | °C     |       |
| T <sub>STG</sub>   | Storage Temperature Range -55 to +125                   |        | °C     |       |

## **Thermal Characteristics**

Values are at  $T_A = 25$ °C unless otherwise noted.

| Symbol          | Parameter  | Value | Unit |
|-----------------|--|-------|------|
| $R_{\theta JA}$ | Typical Thermal Resistance, Junction-to-Ambient <sup>(1)</sup> | 60    | °C/W |

#### Note:

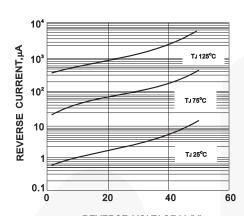
1. Mounted with minimum recommended pad size, PC board FR4.

## **Electrical Characteristics**

Values are at  $T_A = 25$ °C unless otherwise noted.

| Symbol          | Parameter                 | Conditions  | S      | Min. | Тур.  | Max. | Unit |
|-----------------|---------------------------|---|--------|------|-------|------|------|
| BV <sub>R</sub> | Reverse Breakdown Voltage | I <sub>R</sub> = 500 μA   | SS24FL | 40   |       |      | V    |
|                 |                           |   | SS26FL | 60   |       |      |      |
| V <sub>F</sub>  | Forward Voltage           | I <sub>F</sub> = 2.0 A  | SS24FL |      |       | 0.55 | V    |
|                 |                           |   | SS26FL |      |       | 0.70 |      |
| I <sub>R</sub>  | Reverse Leakage Current   | $V_R = V_{RRM}$   | SS24FL |      |       | 100  | μΑ   |
|                 |                           |   | SS26FL |      |       | 40   |      |
| T <sub>rr</sub> | Reverse Recovery Time     | I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1 A,<br>I <sub>rr</sub> = 0.25 A | SS24FL |      | 9.495 |      | - ns |
|                 |                           |   | SS26FL |      | 8.260 |      |      |

## **Typical Performance Characteristics**



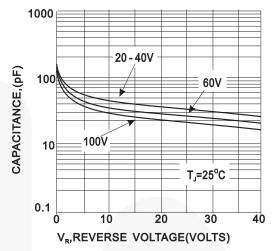


Figure 2. Typical Junction Characteristic

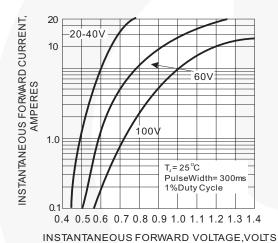


Figure 3. Typical Instantaneous Forward Characteristics

# **Physical Dimensions** 1.95 1.50 2.86 3.90 1.80 3.00 3.30 2.50 (0.35) 1.15 0.50 LAND PATTERN RECOMMENDATION 4°-10° 1.08 0.20 0.80 0.05 +/-0.10 A NOTES: A. THIS PACKAGE DOES NOT CONFORM TO ANY STANDARDS. B. ALL DIMENSIONS ARE IN MILLIMETERS. C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS. D. DRAWING FILE NAME: MA02BREV5 FAIRCHILD , Figure 4. 2-LEAD, SOD123F, NON-JEDEC, FLAT TERMINAL





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