

Technical Data Data Sheet N1649, Rev. - Green Products

# FF107M SUFACE MOUNT FAST RECOVERY RECTIFIER

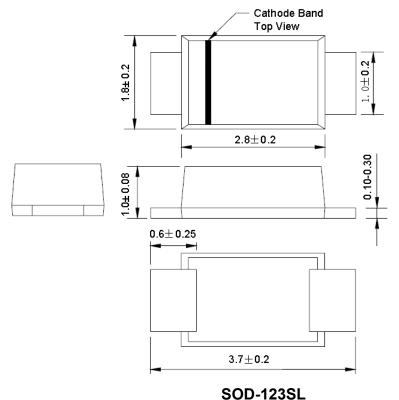
## Features:

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed: 250 C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension
- Glass passivated chip junction
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

## **Mechanical Data:**

- Case: JEDEC SOD-123SL molded plastic body over passivated chip
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight:0.0007 ounce, 0.02 grams

#### **Mechanical Dimensions: In mm**



Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 (86) 25-87123907
 FAX (86) 25-87123900
 World Wide Web Site - http://www.sangdest.com.cn
 E-Mail Address - sales@ sangdest.com.cn



**Green Products** 

Technical Data Data Sheet N1649, Rev. -

# Marking Diagram:



Cautions: Molding resin Epoxy resin UL:94V-0

# **Ordering Information:**

| Device | Package                | Shipping       |
|--------|------------------------|----------------|
| FF107M | SOD-123SL<br>(Pb-Free) | 5000pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 (86) 25-87123907 •
 FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •



**Technical Data** Data Sheet N1649, Rev. - **Green Products** 

#### 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 | FFM107      | UNITS |
|--|---------|-------------|-------|
| Maximum repetitive peak reverse voltage          | VRRM    | 1000        | VOLTS |
| Maximum RMS ∨oltage                              | VRMS    | 700         | VOLTS |
| Maximum DC blocking voltage                      | VDC     | 1000        | VOLTS |
| Maximum a∨erage forward rectified current        | Iavi    | 1.2         | Amp   |
| at TA=65°C (NOTE 1)                              |         | 1.2         |       |
| Peak forward surge current                       |         |             |       |
| 8.3ms single half sine-wa∨e superimposed on      | IFSM    | 50.0        | Amps  |
| rated load (JEDEC Method) T∟=25°C                |         |             |       |
| Maximum instantaneous forward voltage at 1.2A    | VF      | 1.3         | Volts |
| Maximum DC reverse current TA=25°C               | IR      | 5.0         | μA    |
| at rated DC blocking voltage TA=125°C            |         | 50.0        |       |
| Maximum reverse recovery time (NOTE 2)           | trr     | 250         | ns    |
| Typical junction capacitance (NOTE 3)            | CJ      | 15          | pF    |
| Typical thermal resistance (NOTE 2)              | Reja    | 50.0        | °C/W  |
| Operating junction and storage temperature range | J,TSTG  | -55 to +150 | °C    |

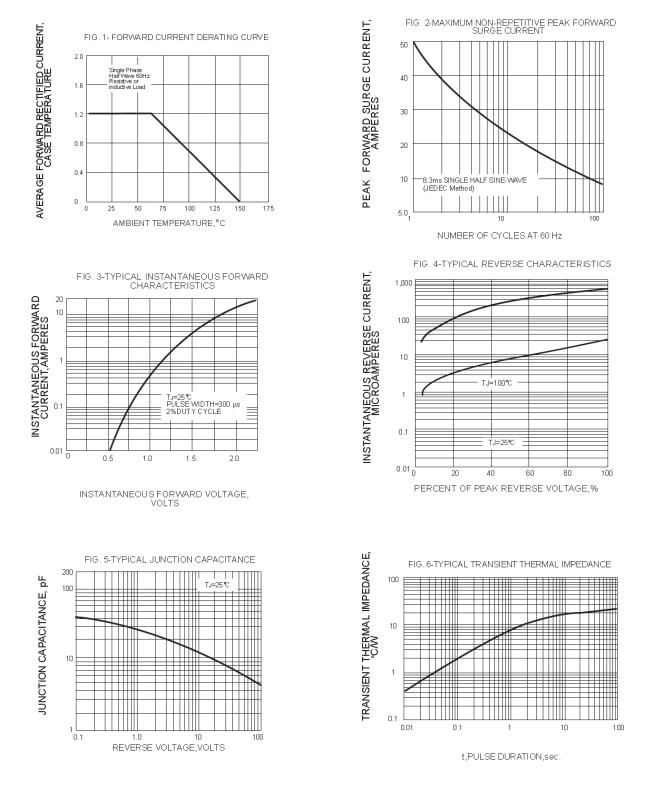
Note: 1.Averaged over any 20ms period.

2.Measured with IF=0.5A, IR=1A, Irr=0.25A. 3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

• Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 • • FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn • MICROELECTRONICS

FF107M Green Products

## Technical Data Data Sheet N1649, Rev. -



Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 (86) 25-87123907 •
FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •



#### Technical Data Data Sheet N1649, Rev. -

# Green Products

#### DISCLAIMER:

1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).

2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.

3- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC - Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.

4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.

5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.