

## RB551M3-30 Schottky Diode



### Features

- Low Forward Voltage Schottky Rectifier
- SOD323F Thin SMD package
- RoHS compliant
- UL 94 V-0 / Green EMC
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Schematic & Pin Configuration



### Mechanical Characteristics

- Case: SOD-323F, Molded plastic
- Matte Tin (Sn) Lead finish
- Polarity: Cathode Band
- Weight: 0.004 grams(approx)

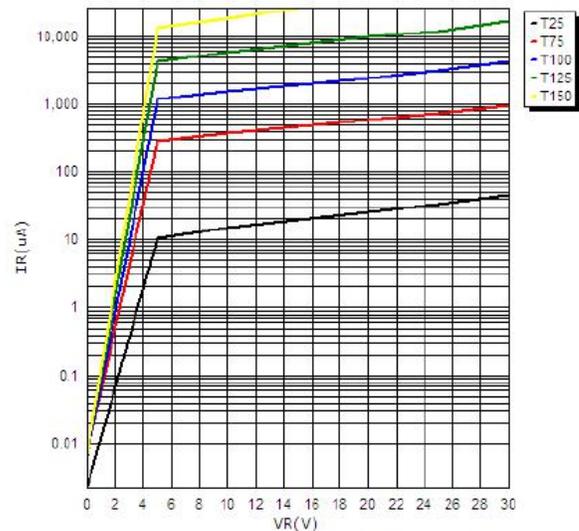
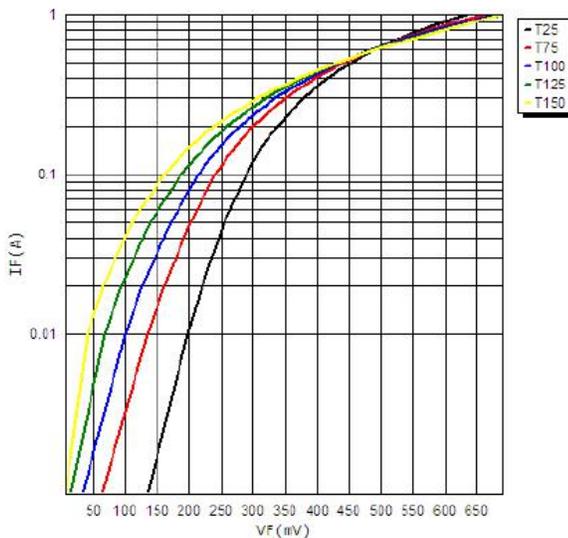
### Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non- Repetitive Peak Reverse Voltage	$V_{RM}$	30	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	20	V
Continuous Forward Current	$I_O$	500	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	5	A
Power Dissipation	$P_D$	200	mW
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125	$^{\circ}\text{C}$

**Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified**

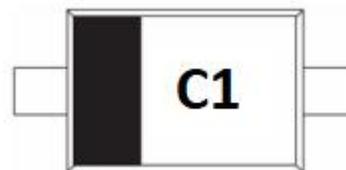
Characteristic	Symbol	Min	Max	Units	Test Condition
Breakdown Voltage	V <sub>BR</sub>	30	-	V	@I <sub>R</sub> =500uA
Forward Voltage*	V <sub>FM</sub>	-	0.36 0.47	V	@I <sub>F</sub> =100mA @I <sub>F</sub> =500mA
Reverse Leakage Current*	I <sub>RM</sub>	-	100	uA	@V <sub>R</sub> =20V

\* Pulse width < 300 μs, duty cycle < 2%

**Ratings and Characteristics Curves**

**Ordering Information**

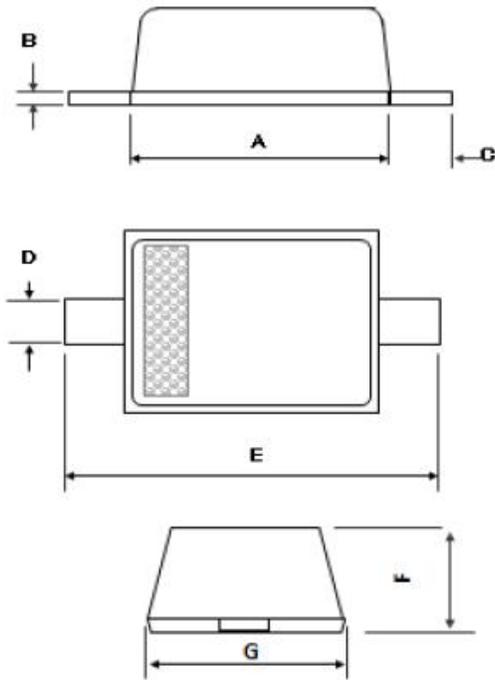
Device	Package	Shipping	Tape wide	Emboss pitch
RB551M3-30	SOD-323F	3000pcs / reel	8mm	4mm

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Marking Diagram**


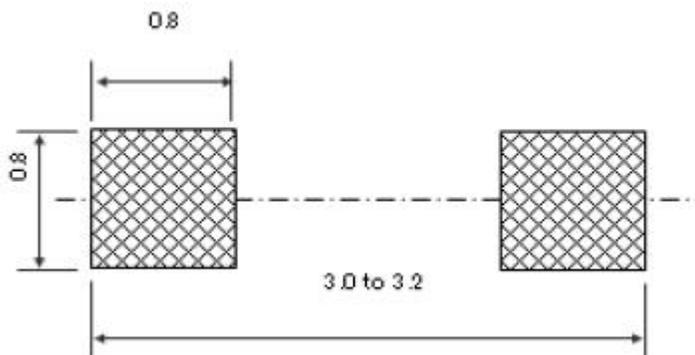
C1 = Marking Code

**Mechanical Dimensions SOD-323F**



SYMBOL	Millimeters	
	Min.	Max.
A	1.60	1.80
B	0.06	0.21
C	0.30	0.50
D	0.25	0.40
E	2.30	2.70
F	0.60	0.75
G	1.15	1.35

**Land Pattern Recommendation SOD-323F (Millimeters)**



Tolerance:  $\pm 0.05\text{mm}$

**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 Diode Solutions 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 Diode Solutions 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 Diode Solution 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 Diode Solutions 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 Diode Solutions.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Diode Solutions.
- 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..