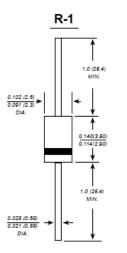


Green Products

1F1 THRU 1F7

FAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- ◆ Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
- 250°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension
- ◆ 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: R-1 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.007 ounce, 0.20 grams

MARKING DIAGRAM



Where XXXXX is YYWWL

1F1 = Part Name SSG = SSG YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

ORDERING INFORMATION

Device	Package	Shipping
1F1-1F7	R-1 (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 •



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	1F1	1F2	1F3	1F4	1F5	1F6	1F7	UNITS
Maximum repetitive peak reverse voltage		50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage		35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage		50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at Ta=25 ℃		1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		25.0						Amps	
Maximum instantaneous forward voltage at 1.0A		1.3						Volts	
Maximum DC reverse current Ta=25 ℃ at rated DC blocking voltage Ta=100 ℃		5.0 50.0						μА	
Maximum reverse recovery time (NOTE 1)	trr		15	0		250	5	00	ns
Typical junction capacitance (NOTE 2)		15.0							pF
Typical thermal resistance (NOTE 3)		50.0						°C/W	
Operating junction and storage temperature range		-65 to +150							°C

Note:1.Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A

^{2.}Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

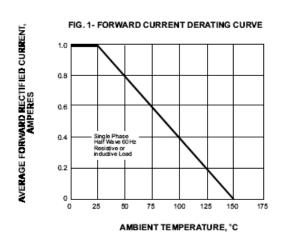
[•] Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •

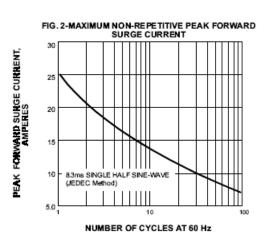
[•] FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •

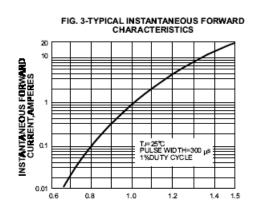


Green Products

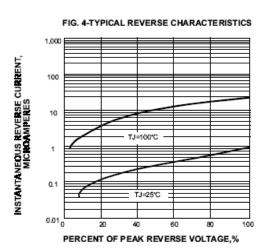
RATINGS AND CHARACTERISTIC CURVES 1F1 THRU 1F7

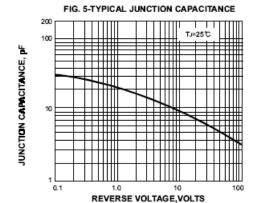


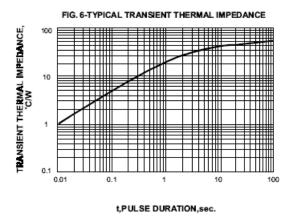




INSTANTANEOUS FORWARD VOLEAGE, VOLTS







[•] 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

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..

[•] FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •