

## 1N5400G-1N5408G GENERAL PURPOSE PLASTIC RECTIFIER

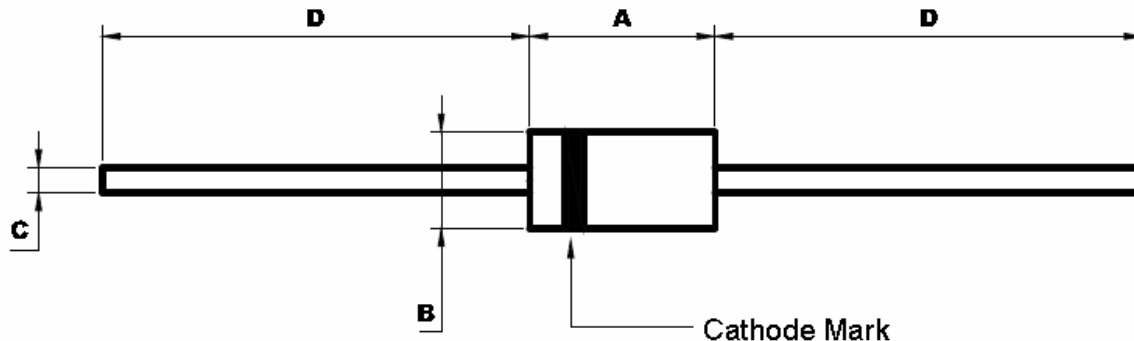
### Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
- 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 DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 1.1 gram

### Mechanical Dimensions: In mm



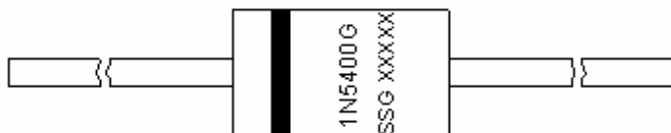
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.335	0.374	8.50	9.50	
B	0.197	0.220	5.00	5.60	Φ
C	0.048	0.052	1.20	1.30	Φ
D	1.000	—	25.40	—	

### DO-201AD



**Marking Diagram:**

Where XXXXX is YYWWL



1N5400G = Part Name  
SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number

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

**Ordering Information**

Device	Package	Shipping
1N5400G-1N5408G	DO-201AD (Pb-Free)	1250 pcs / Tape

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

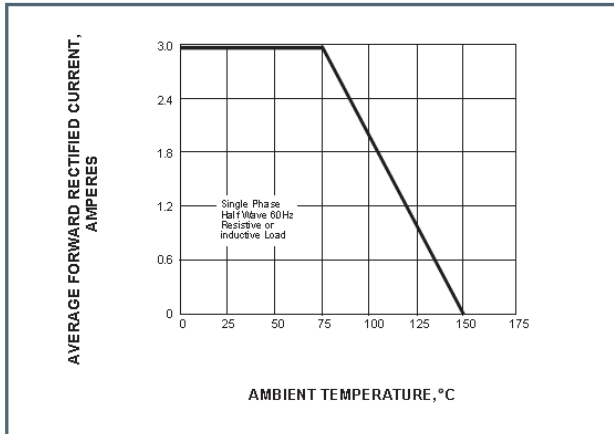


Ratings at 25 C ambient temperature unless otherwise specified.  
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

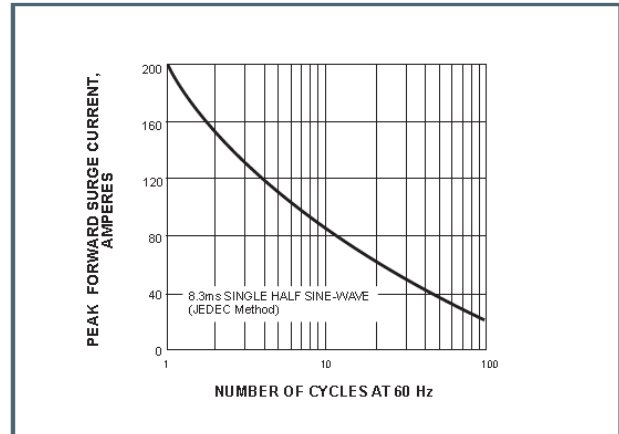
PARAMETER	SYMBOL	1N5400G	1N5401G	1N5402G	1N5403G	1N5404G	1N5405G	1N5406G	1N5407G	1N5408G	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	300	400	500	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	210	280	350	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	300	400	500	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	3.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200									Amps
Maximum instantaneous forward voltage at 3.0A	$V_F$	1.1									Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	5.0 100									$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_J$	30.0									pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	20.0									$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +150									$^\circ\text{C}$

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

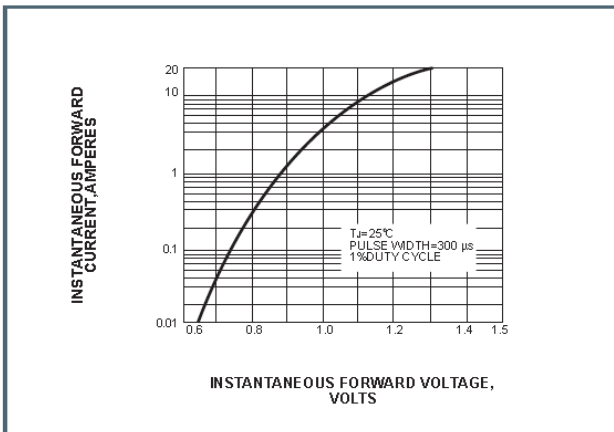
**FIG. 1- FORWARD CURRENT DERATING CURVE**



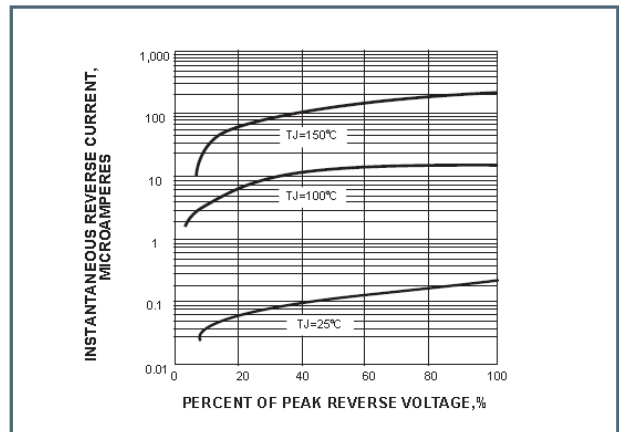
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**



**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..