

## **Glass Passivated Rectifiers**

#### **FEATURES**

- Glass passivated chip junction
- High current capability, Low VF
- High reliability
- High surge current capability
- Low power loss, high efficiency
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

## **MECHANICAL DATA**

#### Case: DO-201AD

Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - green compound (halogen-free) Base P/N with prefix "H" on packing code - AEC-Q101 qualified Terminal: Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 1A whisker test with prefix "H" on packing code meet JESD 201 class 2 whisker test Weight: 1.2 g (approximately)



**DO-201AD** 



		1N	1N	1N	1N	1N	1N	1N	UNIT
PARAMETER	SYMBOL	5400G	5401G	5402G	5404G	5406G	5407G	5408G	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	3				-	А		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	125					А		
Maximum instantaneous forward voltage (Note 1) @ 3 A	V <sub>F</sub>	1.1 1.0				V			
Maximum reverse current @ rated VR $T_J$ =25 $^{\circ}C$ $T_J$ =125 $^{\circ}C$	I <sub>R</sub>	5 100					μA		
Typical junction capacitance (Note 2)	Cj	25					pF		
Typical thermal resistance	R <sub>θjC</sub> R <sub>θjA</sub>	15 45					<sup>o</sup> C/W		
Operating junction temperature range	TJ	- 55 to +150				OO			
Storage temperature range	T <sub>STG</sub>	- 55 to +150				°C			

Note2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



# 1N5400G thru 1N5408G

Taiwan Semiconductor

ORDERING INFORMATION						
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
	QUALIFIED		CODE			
1N540xG (Note 1)	Prefix "H"	A0	- Suffix "G"	DO-201AD	500 / Ammo box	
		R0		DO-201AD	1,250 / 13" Paper reel	
		B0		DO-201AD	500 / Bulk packing	
		X0		DO-201AD	Forming	

Note 1: "x" defines voltage from 50V (1N5400G) to 1000V (1N5408G)

EXAMPLE							
PREFERRED P/N	PREFERRED P/N PART NO. QUALIFIED PACK		PACKING CODE	ACKING CODE GREEN COMPOUND CODE			
1N5408G A0	1N5408G		A0				
1N5408G A0G	1N5408G		A0	G	Green compound		
1N5408GHA0	1N5408G	Н	A0		AEC-Q101 qualified		

100

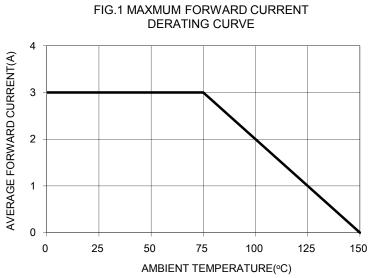
10

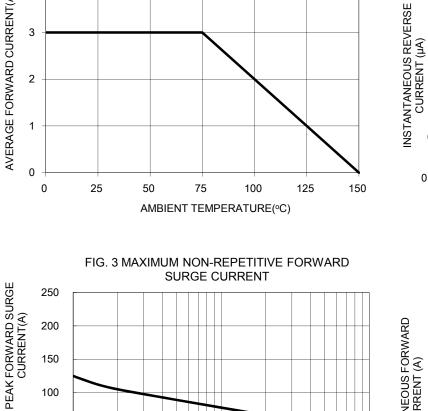
1

0.1

## **RATINGS AND CHARACTERISTICS CURVES**

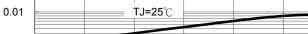
(TA=25°C unless otherwise noted)

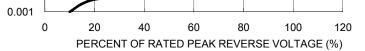


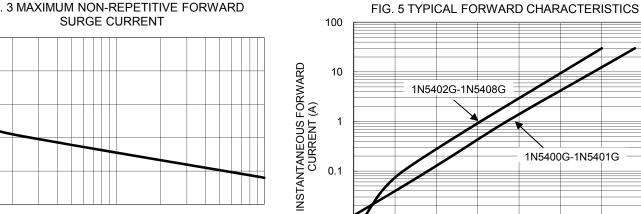


10

NUMBER OF CYCLES AT 60 Hz







0.01

0.6

0.7

0.8

0.9

FORWARD VOLTAGE (V)

1

1.1

100

TJ=125°C ≣

**TJ=75°**℃

FIG. 2 TYPICAL REVERSE CHARACTERISTICS

100

50

0

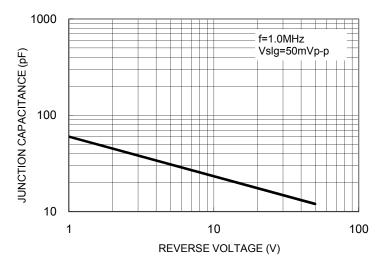
1

1.3

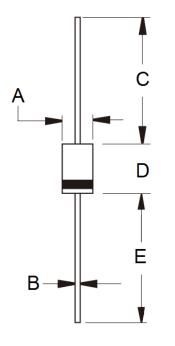
1.2



#### FIG. 4 TYPICAL JUNCTION CAPACITANCE



## PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm)	Unit (inch)		
Dilvi.	Min Max		Min	Max	
А	5.00	5.60	0.197	0.220	
В	1.20	1.30	0.048	0.052	
С	25.40	-	1.000	-	
D	8.50	9.50	0.335	0.375	
E	25.40	-	1.000	-	

## MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code



### Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or seling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Taiwan Semiconductor: 1N5407GHR0 1N5400GHR0 1N5401GHR0 1N5406GHR0 1N5402GHR0