



# 3.0A GLASS PASSIVATED RECTIFIER

### **Features and Benefits**

- Glass Passivated Die Construction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 125A Peak
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)

### **Mechanical Data**

- Case: DO-201AD
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish Matte Tin. Plated Leads Solderable per MIL-STD-202, Method@38
- Polarity: Cathode Band Marking: Type Number
- Weight: 1.12 grams (approximate)

## Ordering Information (Note 3)

Device	Packaging	Shipping				
1N5400G-B	DO-201AD	500/Bulk				
1N5400G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5401G-B	DO-201AD	500/Bulk				
1N5401G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5402G-B	DO-201AD	500/Bulk				
1N5402G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5403G-B	DO-201AD	500/Bulk				
1N5403G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5404G-B	DO-201AD	500/Bulk				
1N5404G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5405G-B	DO-201AD	500/Bulk				
1N5405G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5406G-B	DO-201AD	500/Bulk				
1N5406G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5407G-B	DO-201AD	500/Bulk				
1N5407G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				
1N5408G-B	DO-201AD	500/Bulk				
1N5408G-T	DO-201AD	1.2K/Tape & Reel, 13-inch				

## Maximum Ratings and Electrical Characteristics @TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

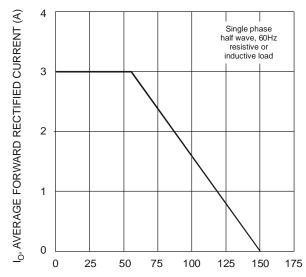
Characteristic	;	Symbol	1N 5400G	1N 5401G	1N 5402G	1N 5403G	1N 5404G	1N 5405G	1N 5406G	1N 5407G	1N 5408G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	300	400	500	600	800	1000	V
RMS Reverse Voltage		V <sub>R(RMS</sub> )	35	70	140	210	280	350	420	580	700	V
Average Rectified Output Current (Note 4) @ 1	A = 55°C	lo					3.0					Α
Non-Repetitive Peak Forward Surge Current 8 single half sine-wave superimposed on rated I		I <sub>FSM</sub>					125					Α
Forward Voltage @	$I_{F} = 3.0A$	$V_{FM}$					1.1					V
•	x = 25°C x = 125°C	$I_{RM}$					5.0 100					μА
Typical Reverse Recovery Time (Note 5)		t <sub>rr</sub>					2.0					μS
Typical Total Capacitance (Note 6)		Ст					40					pF
Typical Thermal Resistance Junction to Ambie	ent	$R_{\theta JA}$					16					°C/W
Operating and Storage Temperature Range		T <sub>J,</sub> T <sub>STG</sub>			•	-6	5 to +15	50		•		°C

Notes:

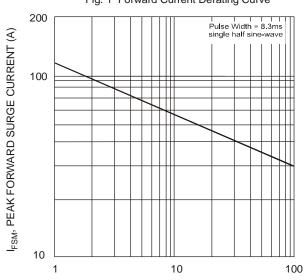
- 1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
- 2. See http://www.diodes.com for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
- See http://www.diodes.com for more information about Diodes incorporated's definitions of Halogen- and
   For packaging details, visit our website at http://www.diodes.com.
   Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
   Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A. See figure 5.
   Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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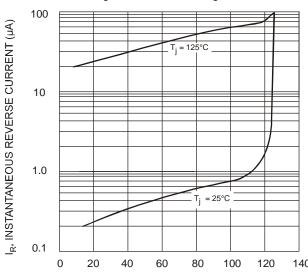




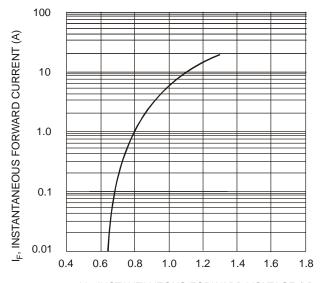
T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



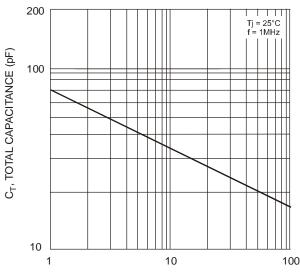
NUMBER OF CYCLES AT 60 Hz Fig. 3 Peak Forward Surge Current



PERCENT OF RATED PEAK VOLTAGE (%) Fig. 5 Typical Reverse Characteristics



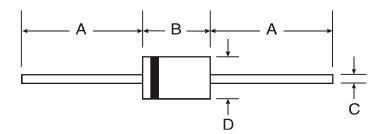
V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



V<sub>R</sub>, REVERSE VOLTAGE (V) Fig. 4 Typical Total Capacitance



### **Package Outline Dimensions**



DO-201AD					
Dim	Min	Max			
Α	25.40	_			
В	7.20	9.50			
С	1.20	1.30			
D	4.80	5.30			
All Dimensions in mm					

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