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 208 (e3)
- 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 @T_A = 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_{RRM} V_{RWM} V_R	50	100	200	300	400	500	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	580	700	V
Average Rectified Output Current (Note 4) @ T_A = 55°C	I_O	3.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	125									A
Forward Voltage @ I_F = 3.0A	V_{FM}	1.1									V
Peak Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 125°C	I_{RM}	5.0 100									µA
Typical Reverse Recovery Time (Note 5)	t_{rr}	2.0									µs
Typical Total Capacitance (Note 6)	C_T	40									pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	16									°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150									°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.
3. For packaging details, visit our website at http://www.diodes.com.
4. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
5. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.
6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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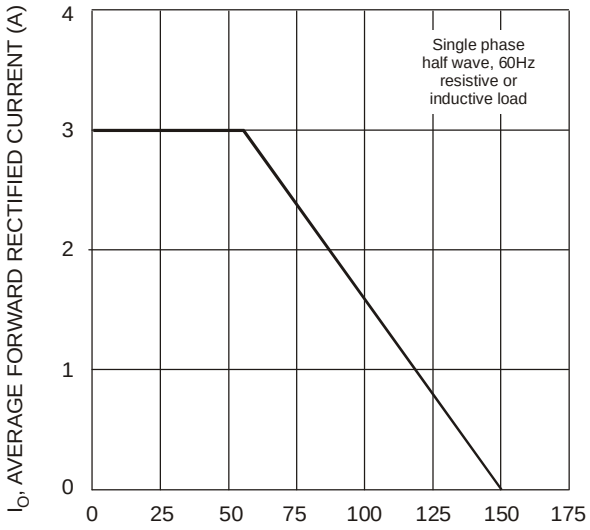


Fig. 1 Forward Current Derating Curve

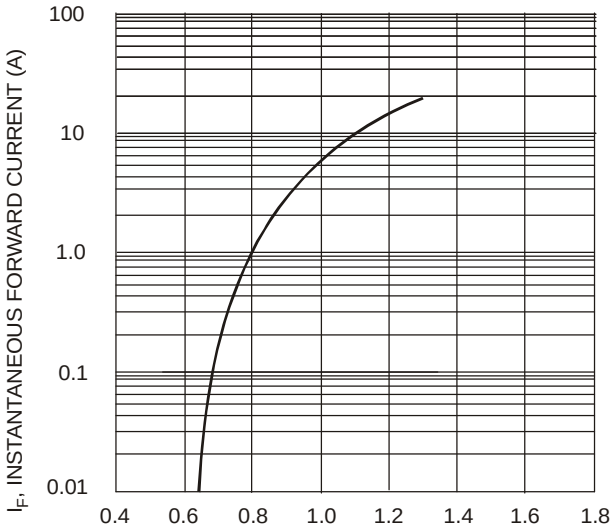


Fig. 2 Typical Forward Characteristics

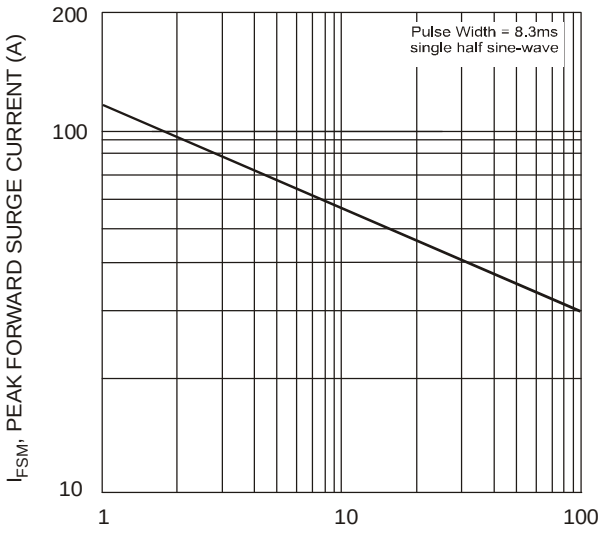


Fig. 3 Peak Forward Surge Current

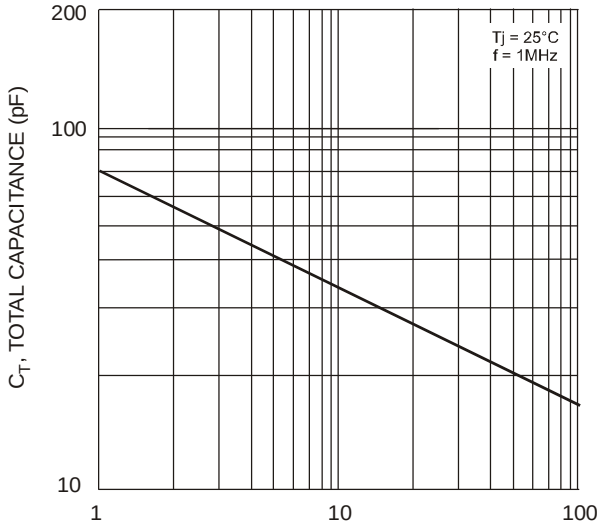


Fig. 4 Typical Total Capacitance

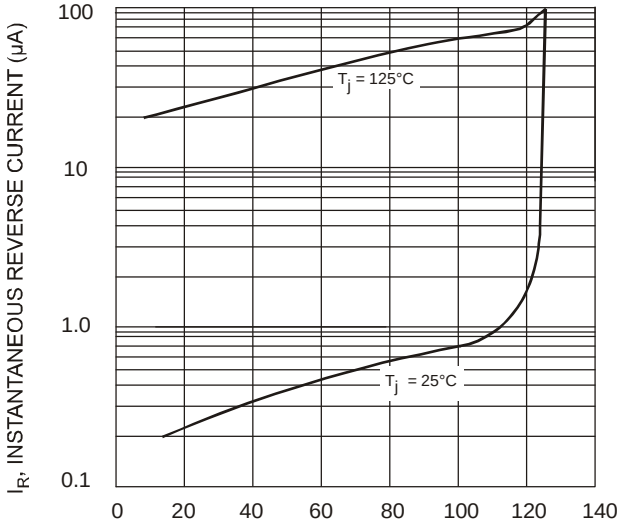
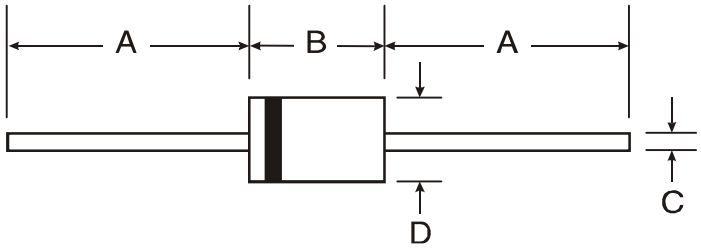


Fig. 5 Typical Reverse Characteristics

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Package Outline Dimensions



DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

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