

### 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 638
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 1.12 grams (approximate)

### Ordering Information (Note 3)

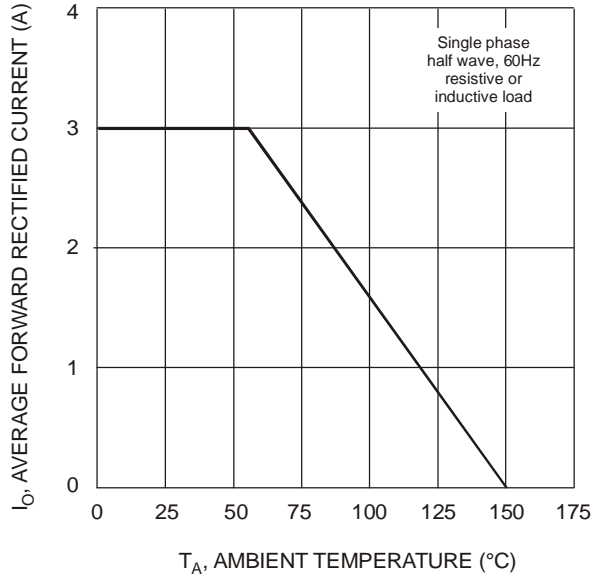
Device	Packaging	Shipping
1N5400G-B	DO-201AD	500/Bulk
1N5400G-T	DO-201AD	1.2K/Tape & Reel, 13-inch
1N5401G-B	DO-201AD	500/Bulk
1N5401G-T	DO-201AD	1.2K/Tape & Reel, 13-inch
1N5402G-B	DO-201AD	500/Bulk
1N5402G-T	DO-201AD	1.2K/Tape & Reel, 13-inch
1N5403G-B	DO-201AD	500/Bulk
1N5403G-T	DO-201AD	1.2K/Tape & 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<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	1N5400G	1N5401G	1N5402G	1N5403G	1N5404G	1N5405G	1N5406G	1N5407G	1N5408G	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>										
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	300	400	500	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>										
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	210	280	350	420	580	700	V
Average Rectified Output Current (Note 4)	I <sub>O</sub>	3.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	125									A
Forward Voltage @ I <sub>F</sub> = 3.0A	V <sub>FM</sub>	1.1									V
Peak Reverse Current @ T <sub>A</sub> = 25°C	I <sub>RM</sub>	5.0									μA
at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C		100									
Typical Reverse Recovery Time (Note 5)	t <sub>rr</sub>	2.0									μs
Typical Total Capacitance (Note 6)	C <sub>T</sub>	40									pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	16									°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150									°C

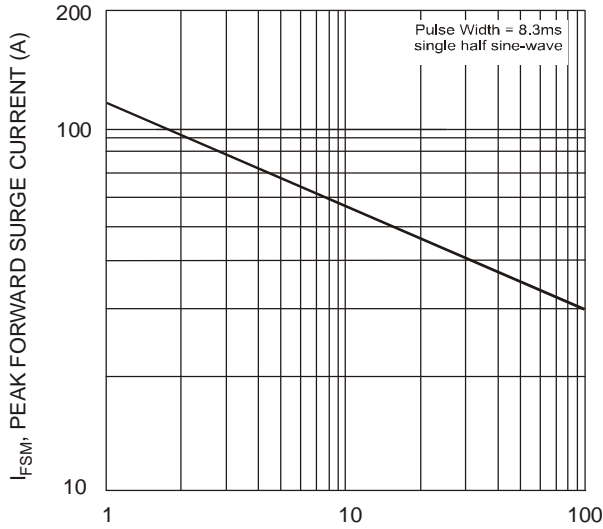
- Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
  2. See <http://www.diodes.com> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
  3. For packaging details, visit our 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<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A. See figure 5.
  6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



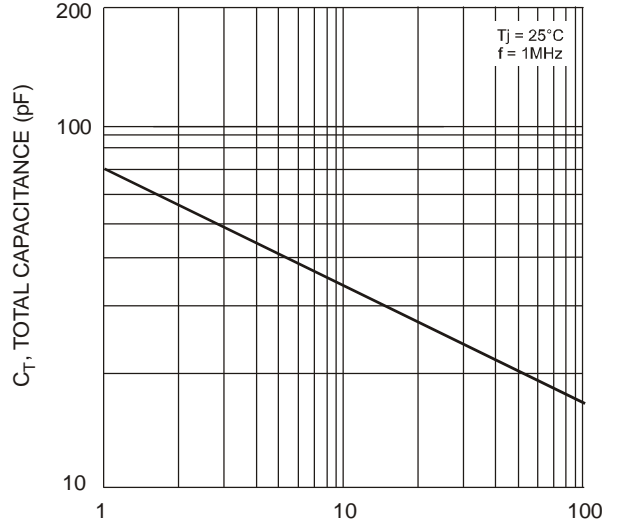
T<sub>A</sub>, AMBIENT TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



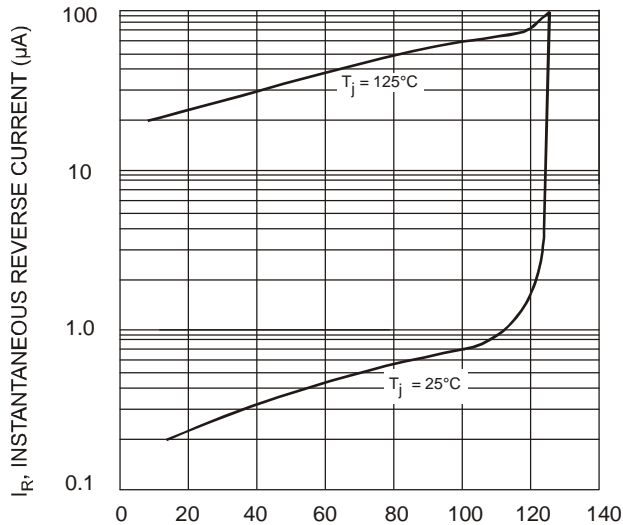
V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



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



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



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

## 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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