

1N5400G-T Datasheet



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DiGi Electronics Part Number	1N5400G-T-DG
Manufacturer	Diodes Incorporated
Manufacturer Product Number	1N5400G-T
Description	DIODE GEN PURP 50V 3A DO201AD
Detailed Description	Diode 50 V 3A Through Hole DO-201AD

This model 1N5400G-T is available at DiGi Electronics.

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Purchase and inquiry

Manufacturer Product Number:

1N5400G-T

Series:

-

Technology:

Standard

Current - Average Rectified (Io):

3A

Speed:

Standard Recovery >500ns, > 200mA (Io)

Current - Reverse Leakage @ Vr:

5 μ A @ 50 V

Mounting Type:

Through Hole

Supplier Device Package:

DO-201AD

Base Product Number:

1N5400

Manufacturer:

Diodes Incorporated

Product Status:

Active

Voltage - DC Reverse (Vr) (Max):

50 V

Voltage - Forward (Vf) (Max) @ If:

1.1 V @ 3 A

Reverse Recovery Time (trr):

2 μ s

Capacitance @ Vr, F:

40pF @ 4V, 1MHz

Package / Case:

DO-201AD, Axial

Operating Temperature - Junction:

-65°C ~ 150°C

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



1N5400G - 1N5408G

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 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_A = 25°C unless otherwise specified

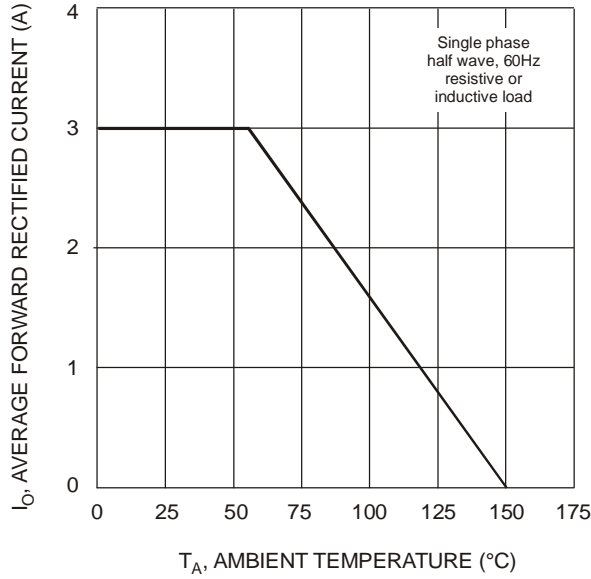
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

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	V _{RRM}										
Working Peak Reverse Voltage	V _{RWM}	50	100	200	300	400	500	600	800	1000	V
DC Blocking Voltage	V _R										
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	I _{RM}	5.0									μA
at Rated DC Blocking Voltage @ T _A = 125°C		100									
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 _{θJA}	16									°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150									°C

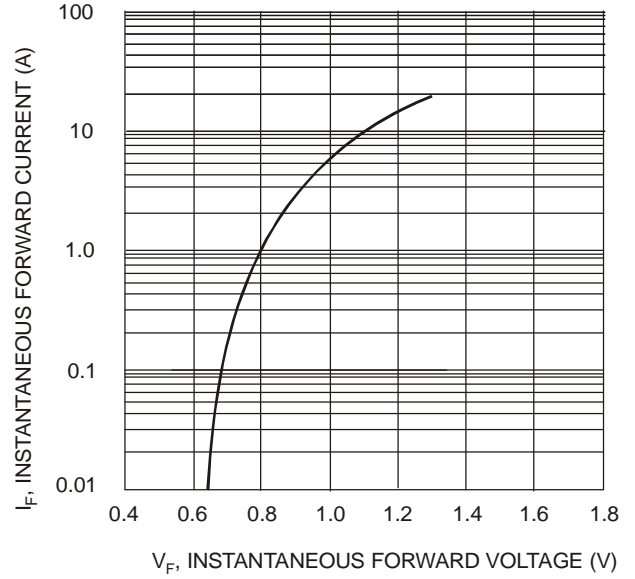
- Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
 2. See <http://www.diodes.com> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
 3. For packaging details, visit our website 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.



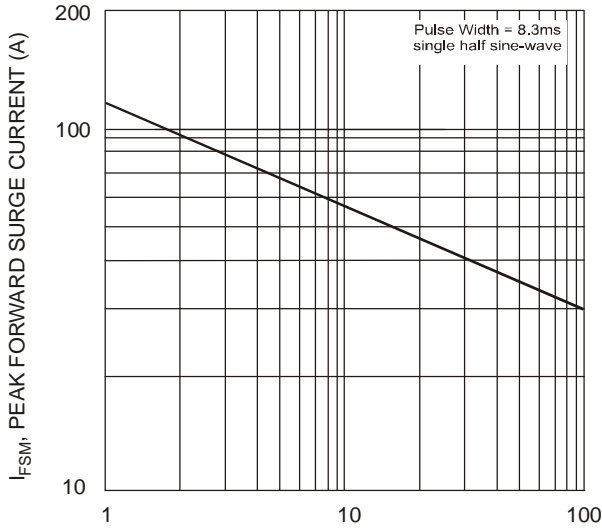
1N5400G - 1N5408G



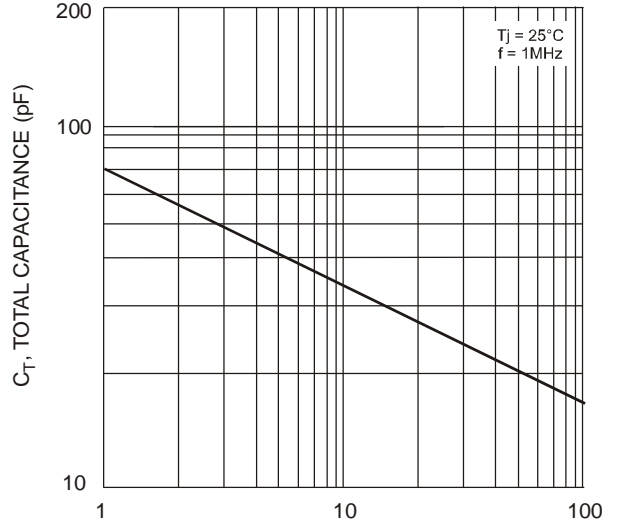
TA, AMBIENT TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



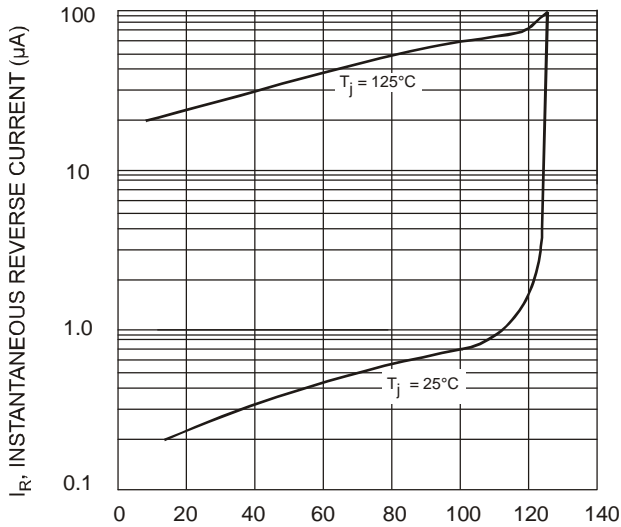
VF, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



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

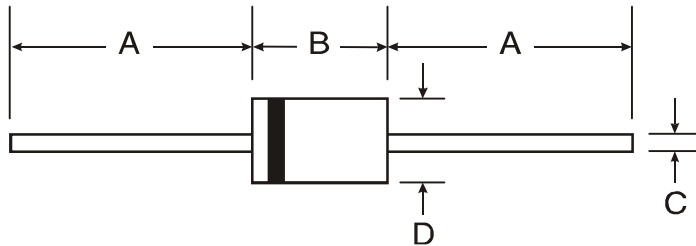


VR, REVERSE VOLTAGE (V)
Fig. 4 Typical Total Capacitance



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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