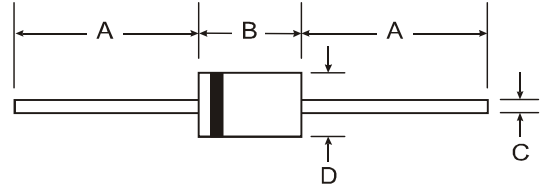


Features

- Glass Passivated Die Construction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Lead Free Finish, RoHS Compliant (Note 4)

Mechanical Data

- Case: DO-41 Plastic
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminals: Finish - Tin. Plated Leads Solderable per MIL-STD-202, Method 208 
- Polarity: Cathode Band
- Ordering Information: See Page 3
- Marking: Type Number
- Weight: 0.30 grams (approximate)



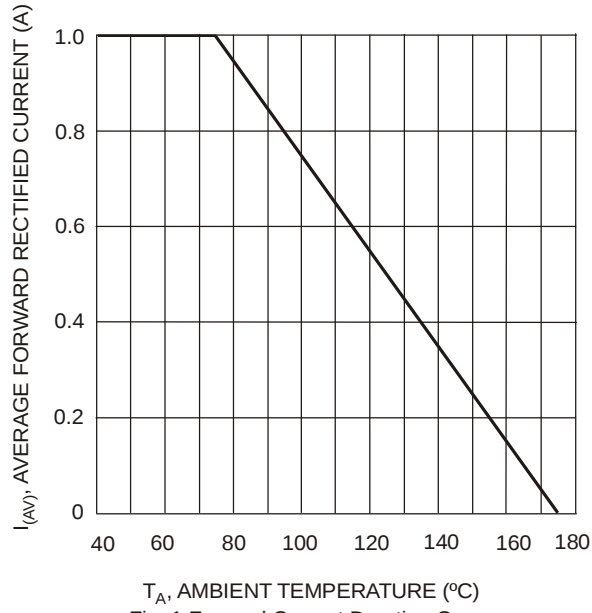
Dim	DO-41 Plastic	
	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

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

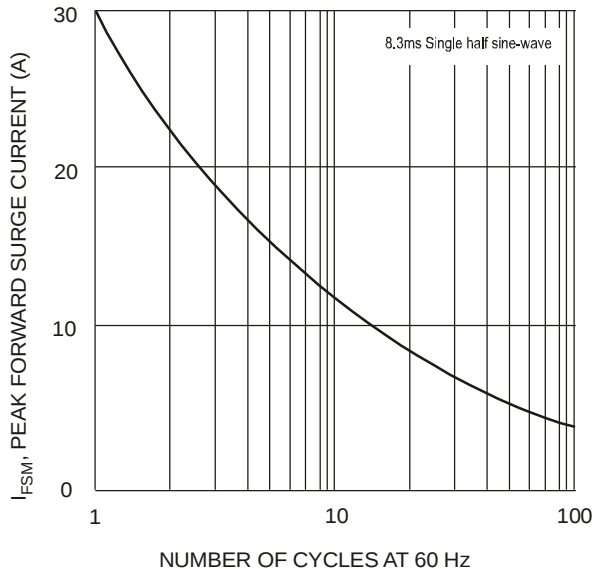
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	1N4001 G	1N4002 G	1N4003 G	1N4004 G	1N4005 G	1N4006 G	1N4007 G	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A = 75°C	I _O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Forward Voltage @ I _F = 1.0A	V _{FM}	1.0							V
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0							μA
at Rated DC Blocking Voltage @ T _A = 125°C		50							
Reverse Recovery Time (Note 3)	t _{rr}	2.0							μs
Typical Total Capacitance (Note 2)	C _T	8.0							pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	100							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

- Notes:
1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. Measured with I_F = 0.5A, I_R = -1A, I_{rr} = 0.25A.
 4. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes.



T_A , AMBIENT TEMPERATURE ($^{\circ}$ C)
Fig. 1 Forward Current Derating Curve



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

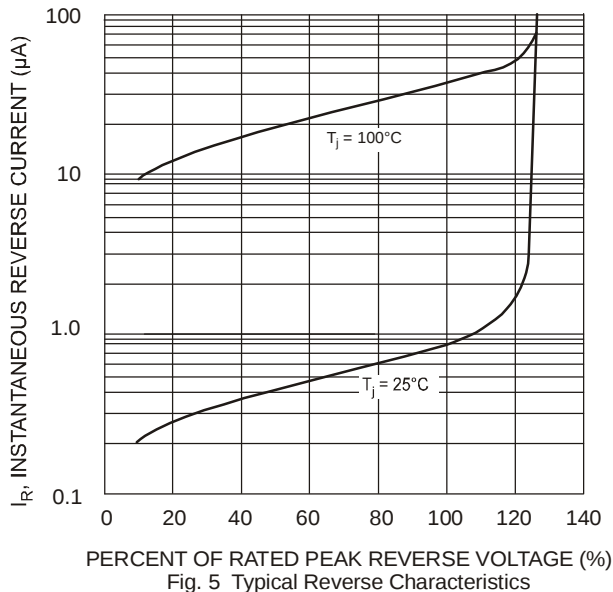


Fig. 5 Typical Reverse Characteristics

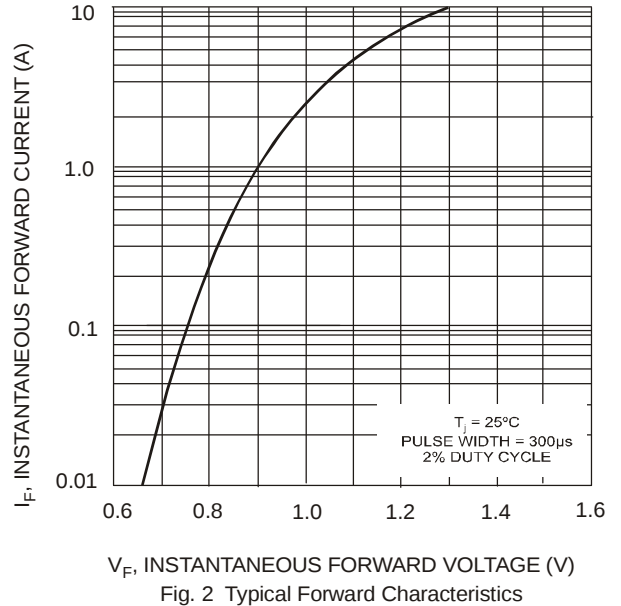


Fig. 2 Typical Forward Characteristics

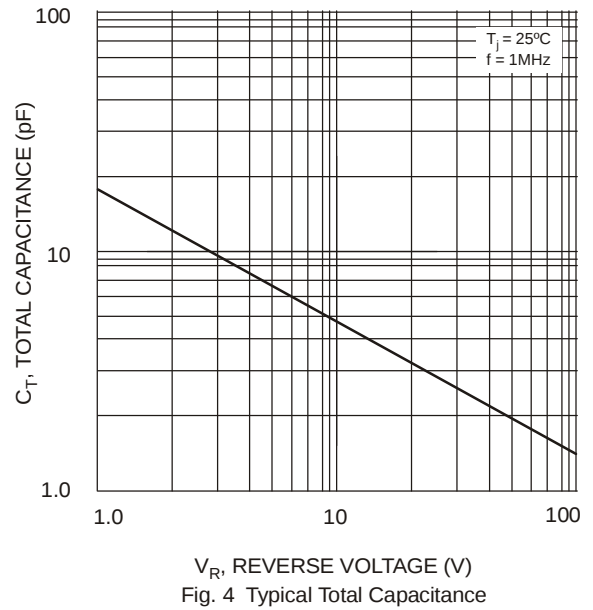


Fig. 4 Typical Total Capacitance

Ordering Information (Note 5)

Device	Packaging	Shipping
1N4001G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch
1N4002G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch
1N4003G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch
1N4004G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch
1N4005G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch
1N4006G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch
1N4007G-T	DO-41 Plastic	5K/Tape & Reel, 13-inch

Notes: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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