

# 1N4001G/L - 1N4007G/L

### 1.0A GLASS PASSIVATED RECTIFIER

#### **Features**

- Glass Passivated Die Construction
- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Plastic Material UL Flammability Classification 94V-0

## Mechanical Data

Case: Molded Plastic

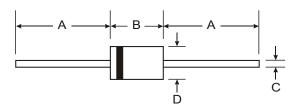
Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208 Polarity: Cathode Band

 Weight: DO-41 0.30 grams (approx) A-405 0.20 grams (approx)

A-405 0.20 grams (app Mounting Position: Any

Marking: Type Number



	DO-41	Plastic	A-405					
Dim	Min	Max	Min	Max				
Α	25.40	_	25.40	_				
В	4.06	5.21	4.10	5.20				
С	0.71	0.864	0.53	0.64				
D	2.00	2.72	2.00	2.70				
All Dimensions in mm								

"L" Suffix Designates A-405 Package No Suffix Designates DO-41 Package

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# **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		1N4001 G/GL	1N4002 G/GL	1N4003 G/GL	1N4004 G/GL	1N4005 G/GL	1N4006 G/GL	1N4007 G/GL	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		50	100	200	400	600	800	1000	V
RMS Reverse Voltage		35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub>	= 75°C I <sub>O</sub>	1.0							Α
Non-Repetitive Peak Forward Surge Currer 8.3ms single half sine-wave superimposed rated load (JEDEC Method)	nt on I <sub>FSM</sub>	30							А
Forward Voltage @ I <sub>F</sub>	= 1.0A V <sub>FM</sub>	1.0					V		
	= 25°C = 125°C I <sub>RM</sub>	5.0 50							μΑ
Reverse Recovery Time (Note 3)	t <sub>rr</sub>	2.0							μs
Typical Junction Capacitance (Note 2)	Cj	8.0							pF
Typical Thermal Resistance Junction to Ambient		100							K/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  $I_F = 0.5A$ ,  $I_R = -1A$ ,  $I_{rr} = 0.25A$ .



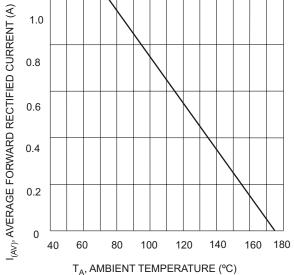
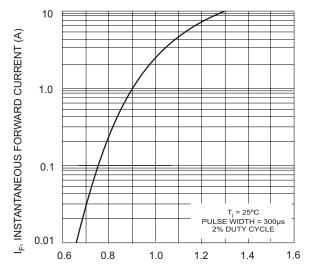
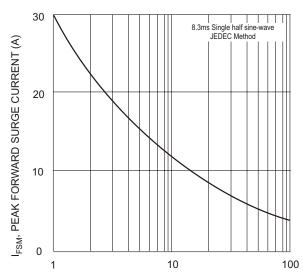


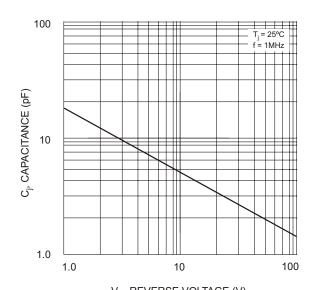
Fig. 1 Forward Current Derating Curve



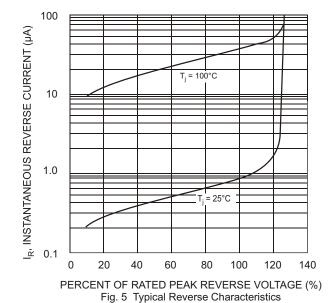
 $V_{\text{F}}$ , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



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



 $V_R$ , REVERSE VOLTAGE (V) Fig. 4 Typical Junction Capacitance



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Datasheets for electronics components.