

# 1N4001G THRU 1N4007G

1.0 AMP. Glass Passivated Rectifiers

#### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

### **Mechanical Data**

- Case: Molded plastic DO-41
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- · Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- · Lead Free: For RoHS/Lead Free Version

## **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified

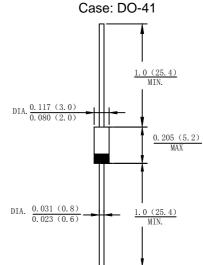
Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Average Rectified Output Current (Note 1) @T <sub>L</sub> =75 °C	F(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ifsm	30							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	3.735							A <sup>2</sup> s
Forward Voltage @IF=1.0A	Vfm	1.0							V
Peak Reverse Current @T <sub>A</sub> =25°C	R	5.0 100							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125°C	IR								
Typical Junction Capacitance (Note 2)	CJ	12							pF
Typical Thermal Resistance Junction to Ambient	Reja	65							°C/W
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	Tstg	-55 to +150							°C

Note: 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 D.C



Dimensions in inches and (millimeters)



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Fig. 1 Forward Current Derating Curve

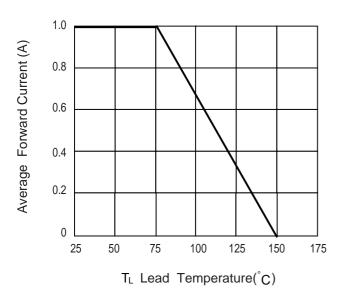
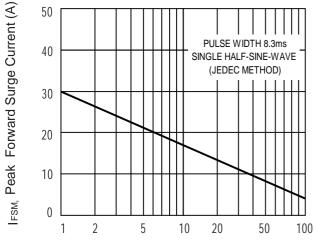
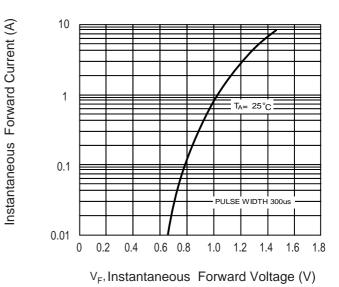


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

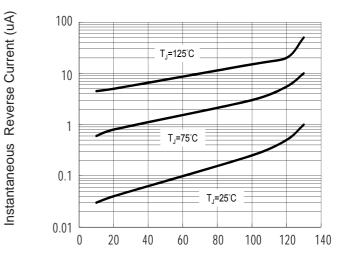


Number Of Cycles At 60 Hz

Fig. 2 Typ. Forward Characteristics



### Fig.4 Typical Reverse Chracteristics



Percent Of Rated Peak Reverse Voltage (%)



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