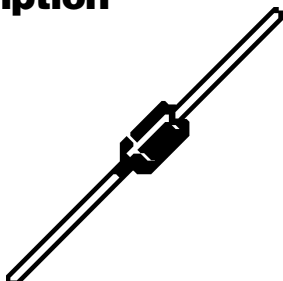


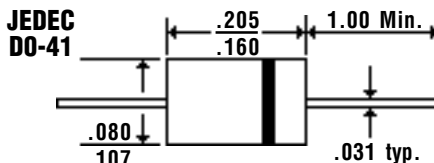
# 1.0 Amp MEGARECTIFIERS

1N4001GP...7GP Series

## Description



## Mechanical Dimensions



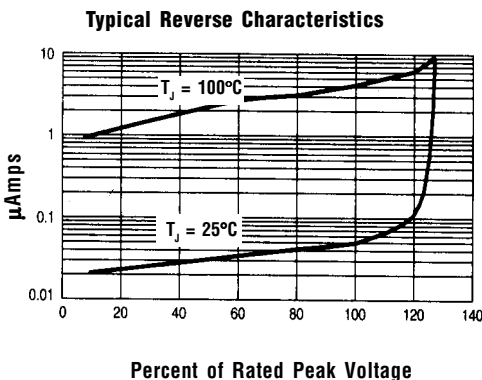
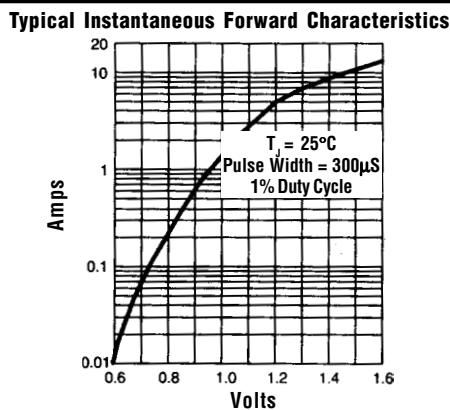
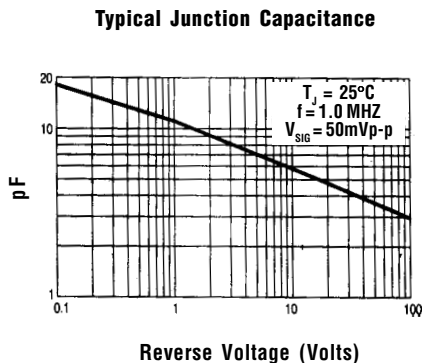
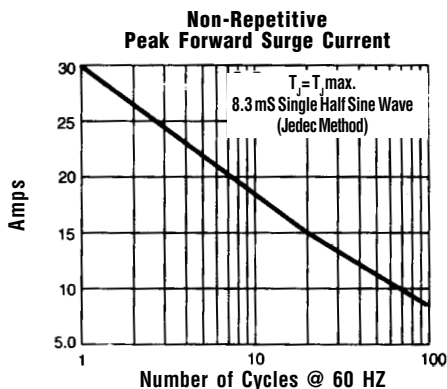
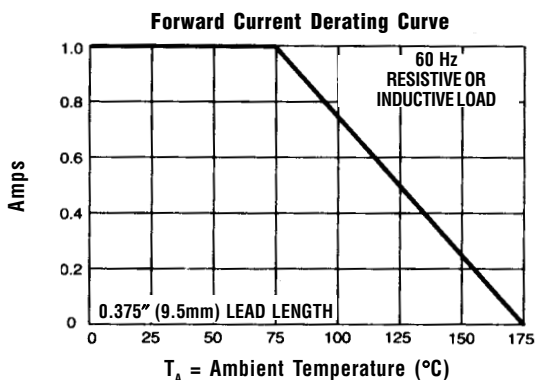
## Features

- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- CAPABILITY OF MEETING ENVIRONMENTAL STANDARDS OF MIL-S-19500
- SINTERED GLASS CAVITY-FREE JUNCTION

| Electrical Characteristics @ 25°C.                                                                | 1N4001GP . . . 7GP Series |           |           |            |           |           |           | Units |
|---------------------------------------------------------------------------------------------------|---------------------------|-----------|-----------|------------|-----------|-----------|-----------|-------|
| Maximum Ratings                                                                                   | 1N4001 GP                 | 1N4002 GP | 1N4003 GP | 1N4004 GP  | 1N4005 GP | 1N4006 GP | 1N4007 GP |       |
| Peak Repetitive Reverse Voltage... $V_{RRM}$                                                      | 50                        | 100       | 200       | 400        | 600       | 800       | 1000      | Volts |
| RMS Reverse Voltage... $V_{R(rms)}$                                                               | 35                        | 70        | 140       | 280        | 420       | 560       | 700       | Volts |
| DC Blocking Voltage... $V_{DC}$                                                                   | 50                        | 100       | 200       | 400        | 600       | 800       | 1000      | Volts |
| Average Forward Rectified Current... $I_{F(av)}$<br>Current 3/8" Lead Length @ $T_A = 75^\circ C$ |                           |           |           | 1.0        |           |           |           | Amps  |
| Non-Repetitive Peak Forward Surge Current... $I_{FSM}$<br>½ Sine Wave Superimposed on Rated Load  |                           |           |           | 30         |           |           |           | Amps  |
| Forward Voltage @ 1.0A... $V_F$                                                                   |                           |           |           | 1.1        |           |           |           | Volts |
| Full Load Reverse Current... $I_R(av)$<br>Full Cycle Average @ $T_A = 75^\circ C$                 |                           |           |           | 30         |           |           |           | µAmps |
| DC Reverse Current... $I_R$<br>@ Rated DC Blocking Voltage                                        |                           |           |           | 5          |           |           |           | µAmps |
|                                                                                                   |                           |           |           | 50         |           |           |           | µAmps |
| Typical Junction Capacitance... $C_j$ (Note 1)                                                    |                           |           |           | 8.0        |           |           |           | pF    |
| Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)                                            |                           |           |           | 45         |           |           |           | °C/W  |
| Typical Reverse Recovery Time... $t_{RR}$ (Note 3)                                                |                           |           |           | 2.0        |           |           |           | µS    |
| Operating & Storage Temperature Range... $T_J, T_{STRG}$                                          |                           |           |           | -65 to 175 |           |           |           | °C    |

# 1.0 Amp MEGARECTIFIERS

1N4001GP... 07GP Series



Ratings at  
25 Deg. C ambient  
temperature  
unless otherwise  
specified.

Single Phase Half  
Wave, 60 HZ  
Resistive or  
Inductive Load.

For Capacitive  
Load, Derate  
Current by 20%.

- NOTES:**
1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
  2. Thermal Resistance from Junction to Ambient at 3/8" Lead Length, P.C. Board Mounted.
  3. Reverse Recovery Condition  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$ .