

Micro Commercial Components



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## Features

- Halogen free available upon request by adding suffix "-HF"
- **Glass Passivated Junction**
- Low Current Leakage and Low Cost
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information) Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1 .

### Maximum Ratings

- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C
- Maximum Thermal Resistance; 20 °C/W Junction To Lead

| MCC<br>Catalog<br>Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak<br>Reverse<br>Voltage | Maximum<br>RMS<br>Voltage | Maximum<br>DC<br>Blocking<br>Voltage |
|--------------------------|-------------------|--|---------------------------|--------------------------------------|
| 1N4001GP                 | 1N4001GP          |  | 35V                       | 50V                                  |
| 1N4002GP                 | 1N4002GP          | 100V   | 70V                       | 100V                                 |
| 1N4003GP                 | 1N4003GP          | 200V   | 140V                      | 200V                                 |
| 1N4004GP                 | 1N4004GP          | 400V   | 280V                      | 400V                                 |
| 1N4005GP                 | 1N4005GP          | 600V   | 420V                      | 600V                                 |
| 1N4006GP                 | 1N4006GP          |  | 560V                      | 800V                                 |
| 1N4007GP                 | 1N4007GP          | 1000V  | 700V                      | 1000V                                |

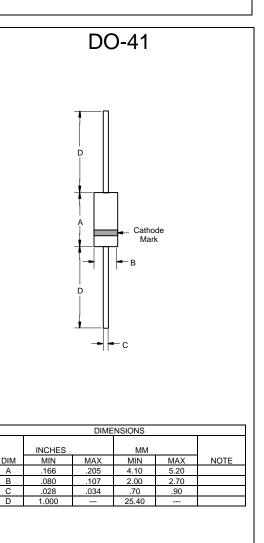
Electrical Characteristics @ 25°C Unless Otherwise Specified

| I <sub>F(AV)</sub> | 1.0A   | T <sub>A</sub> = 75°C  |
|--------------------|--|--|
| I <sub>FSM</sub>   | 30A  | 8.3ms, half sine   |
|                    |  |  |
|                    |  |  |
| VF                 | 1.1V   | I <sub>FM</sub> = 1.0A;  |
|                    |  | $T_J = 25^{\circ}C^*$  |
|                    |  |  |
| I <sub>R</sub>     | 5.0μΑ  | $T_J = 25^{\circ}C$  |
|                    | 50µA   | T <sub>J</sub> = 125°C   |
|                    | •  |  |
| CJ                 | 15pF   | Measured at  |
|                    | •  | 1.0MHz, V <sub>R</sub> =4.0V   |
| Trr                | 2.0µs  | l <sub>⊧</sub> =0.5A, l <sub>R</sub> =1.0A,  |
| - 11               |  | I <sub>rr</sub> =0.25A   |
|                    | I <sub>FSM</sub><br>V <sub>F</sub><br>I <sub>R</sub> | I <sub>FSM</sub> 30A   V <sub>F</sub> 1.1V   I <sub>R</sub> 5.0μA   50μA   C <sub>J</sub> 15pF |

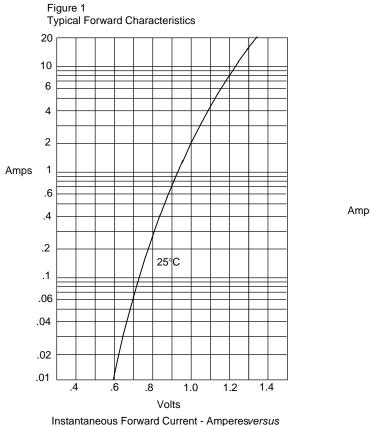


1N4001GP THRU 1N4007GP

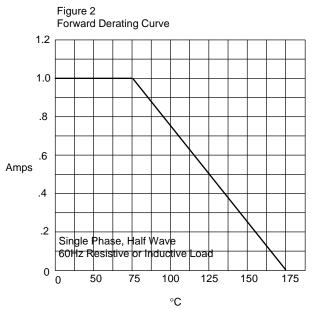
## 1 Amp Glass **PassivatedRectifier** 50 - 1000 Volts



### 1N4001GP thru 1N4007GP



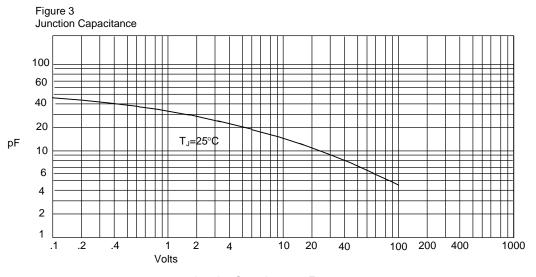
Instantaneous Forward Voltage - Volts



 $\cdot M \cdot C \cdot C \cdot$ 

**Micro Commercial Components** 

Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C

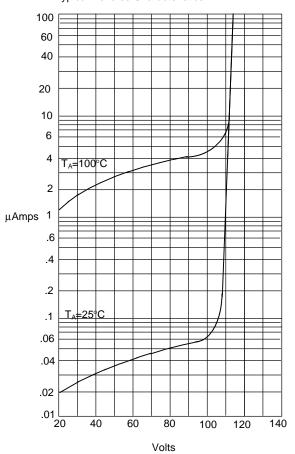


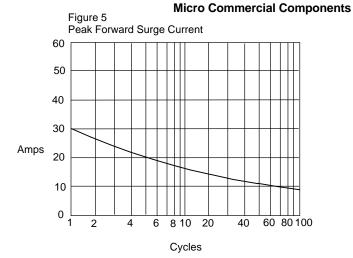
Junction Capacitance - pF*versus* Reverse Voltage - Volts

### 1N4001GP thru 1N4007GP



Figure 4 Typical Reverse Characteristics





Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts



#### **Ordering Information :**

| Device         | Packing                      |  |
|----------------|------------------------------|--|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel        |  |
| Part Number-AP | Ammo Packing: 5Kpcs/Ammo Box |  |
| Part Number-BP | Bulk: 50Kpcs/Carton          |  |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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