

**Micro Commercial Components** 



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# 1N4001GPL THRU 1N4007GPL

## **Features**

- Halogen free available upon request by adding suffix "-HF"
- Glass Passivated Junction
- 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 +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 20 °C/W Junction To Lead

MCC	Device	Maximum	Maximum	Maximum
Catalog Number	Marking	Recurrent Peak	RMS Voltage	DC Blocking
Number		Reverse	Voltage	Voltage
		Voltage		J
1N4001GPL	1N4001GL	50V	35V	50V
1N4002GPL	1N4002GL	100V	70V	100V
1N4003GPL	1N4003GL	200V	140V	200V
1N4004GPL	1N4004GL	400V	280V	400V
1N4005GPL	1N4005GL	600V	420V	600V
1N4006GPL	1N4006GL	800V	560V	800V
1N4007GPL	1N4007GL	1000V	700V	1000V

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

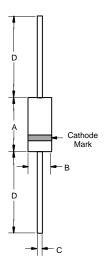
Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> = 75°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_{F}$	1.1V	$I_{FM} = 1.0A;$ $T_J = 25^{\circ}C^{*}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 50μA	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V
Typical Reverse Recovery Time	T <sub>rr</sub>	2.0µs	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A

<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

# 1 Amp Glass Passivated Rectifier 50 - 1000 Volts



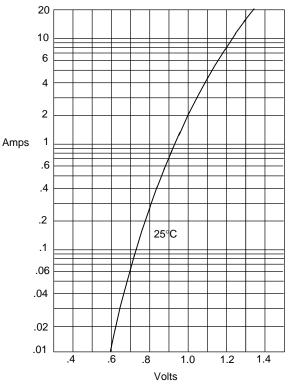


DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.166	.205	4.10	5.20			
В	.080	.107	2.00	2.70			
С	.028	.034	.70	.90			
D	1.000		25.40				

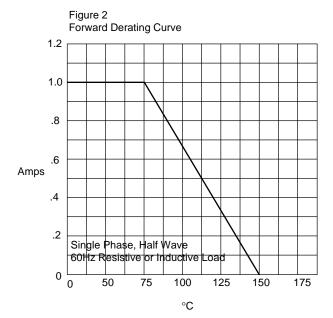
#### 1N4001GPL thru 1N4007GPL



Figure 1 Typical Forward Characteristics

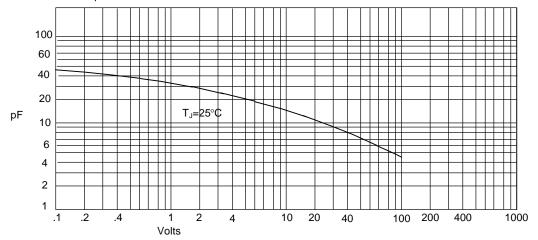


Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperesversus Ambient Temperature -°C

Figure 3
Junction Capacitance

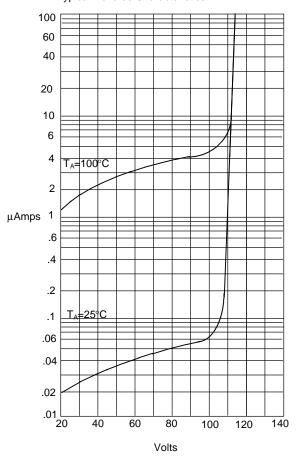


Junction Capacitance - pF*versus* Reverse Voltage - Volts

### 1N4001GPL thru 1N4007GPL

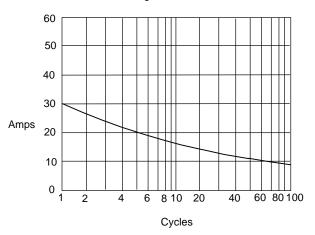


Figure 4
Typical Reverse Characteristics



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

Figure 5 Peak Forward Surge Current



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



#### **Micro Commercial Components**

#### **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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