

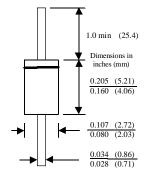
Discrete POWER & Signal Technologies

1N4001GP - 1N4007GP

Features

- Low forward voltage drop.
- High surge current capability.
- High reliability.
- High current capability.





1.0 Ampere Glass Passivated Rectifiers

Absolute Maximum Ratings*

 $T_A = 25$ °C unless otherwise noted

Symbol	Parameter	Value	Units
I _O	Average Rectified Current .375 " lead length @ T _A = 75°C	1.0	Α
İf(surge)	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	30	А
P _D	Total Device Dissipation Derate above 25°C	3.0 20	W mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to ambient	50	°C/W
T _{stg}	Storage Temperature Range	-65 to +175	°C
TJ	Operating Junction Temperature	-65 to +175	°C

^{*}These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Electrical Characteristics

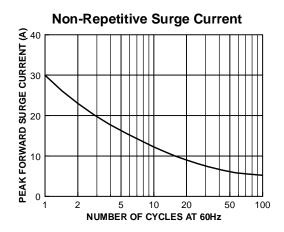
 $T_A = 25$ °C unless otherwise noted

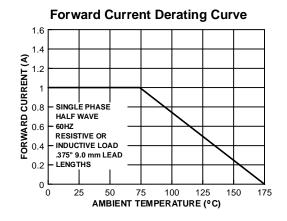
Parameter		Device						Units	
		4001GP	4002GP	4003GP	4004GP	4005GP	4006GP	4007GP	
Peak Repetitive Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Voltage		35	70	140	280	420	560	700	V
DC Reverse Voltage	(Rated V _R)	50	100	200	400	600	800	1000	V
Maximum Reverse Current			•	•	•	•		•	
@ rated V _R	$T_A = 25^{\circ}C$				5.0				μΑ
	$T_A = 125^{\circ}C$				50				μA
Maximum Forward Voltage @ 1.0 A		1.1						V	
Typical Junction Capacitance V _R = 4.0 V, f = 1.0 MHz					8.0				pF

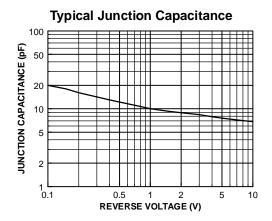
Glass Passivated Rectifiers

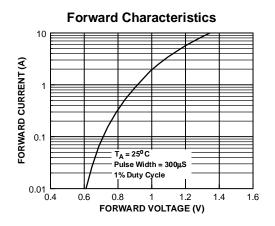
(continued)

Typical Characteristics









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FACTTM QSTM

 $\begin{array}{lll} \mathsf{FACT} \ \mathsf{Quiet} \ \mathsf{Series^{\mathsf{TM}}} & \mathsf{Quiet} \ \mathsf{Series^{\mathsf{TM}}} \\ \mathsf{FAST}^{\tiny{\textcircled{\tiny{\$}}}} & \mathsf{SuperSOT^{\mathsf{TM}}}\text{-3} \\ \mathsf{FASTr^{\mathsf{TM}}} & \mathsf{SuperSOT^{\mathsf{TM}}}\text{-6} \\ \mathsf{GTO^{\mathsf{TM}}} & \mathsf{SuperSOT^{\mathsf{TM}}}\text{-8} \\ \mathsf{HiSeC^{\mathsf{TM}}} & \mathsf{TinyLogic^{\mathsf{TM}}} \end{array}$

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