

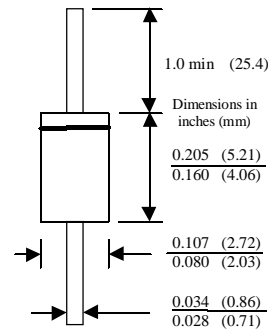
1N4001GP - 1N4007GP

Features

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



DO-41
COLOR BAND DENOTES CATHODE



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	A
i _{f(surge)}	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	30	A
P _D	Total Device Dissipation Derate above 25°C	3.0 20	W mW/°C
R _{θJA}	Thermal Resistance, Junction to ambient	50	°C/W
T _{stg}	Storage Temperature Range	-65 to +175	°C
T _J	Operating Junction Temperature	-65 to +175	°C

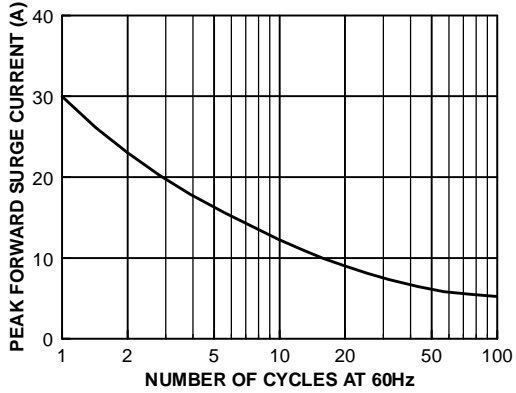
*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Electrical Characteristics T_A = 25°C unless otherwise noted

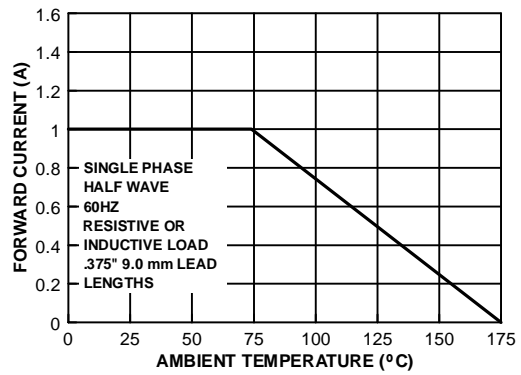
Parameter	Device							Units
	4001GP	4002GP	4003GP	4004GP	4005GP	4006GP	4007GP	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
Maximum Reverse Current @ rated V _R T _A = 25°C	5.0							μA
	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

Typical Characteristics

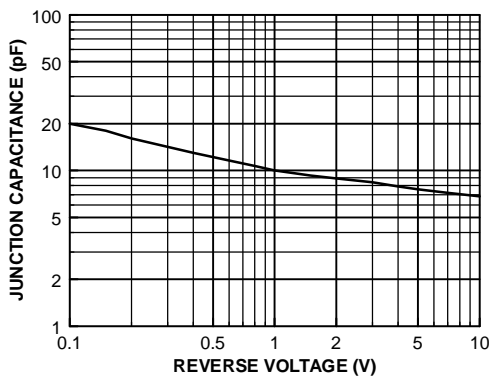
Non-Repetitive Surge Current



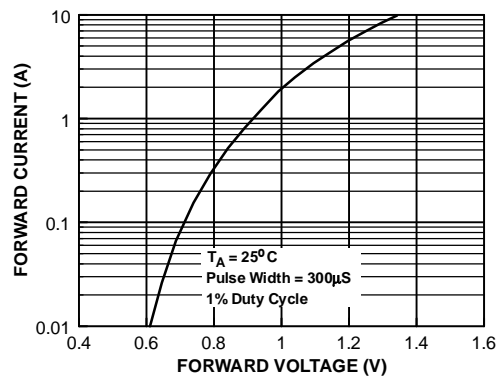
Forward Current Derating Curve



Typical Junction Capacitance



Forward Characteristics



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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FASTr™	SuperSOT™-6
GTO™	SuperSOT™-8
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.