

1N4001GP - 1N4007GP

Features

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



DO-41 COLOR BAND DENOTES CATHODE

General Purpose Rectifiers (Glass Passivated)

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value			Units				
		4001GP	4002GP	4003G	4004GP	4005GP	4006GP	4007GP	
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current, .375 " lead length @ T _A = 75°C	1.0			Α				
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	30			А				
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.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_{D}	Power Dissipation	3.0	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	50	°C/W

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Device					Units		
		4001GP	4002GP	4003G	4004GP	4005GP	4006GP	4007GP	1
V_{F}	Forward Voltage @ 1.0 A				1.1				V
I _R	Reverse Current @ rated V_R $T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$			μA μA					
Ст	Total Capacitance V _R = 4.0 V, f = 1.0 MHz	8.0			pF				

General Purpose Rectifiers (Glass Passivated)

(continued)

Typical Characteristics

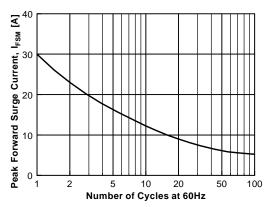


Figure 1. Non-Repetitive Surge Current

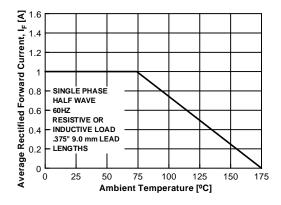


Figure 2. Forward Current Derating Curve

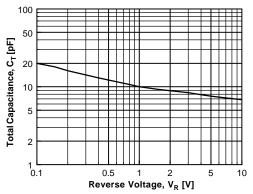


Figure 3. Total Capacitance

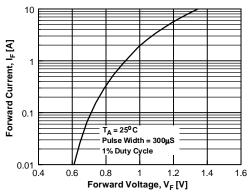


Figure 4. Forward Voltage Characteristics

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Rev. H