



# GPF1001 THRU GPF1007

Isolation 10.0 AMPS. Glass Passivated Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
10.0 Amperes

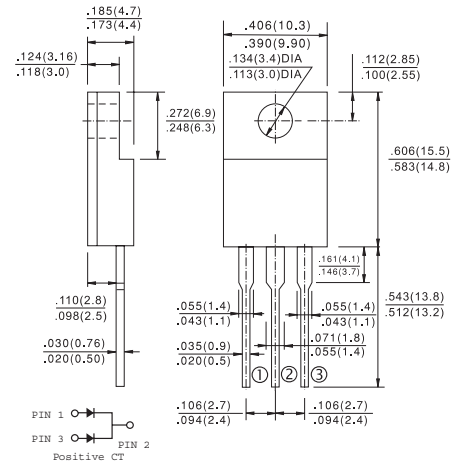
## Features

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

## Mechanical Data

- ✧ Cases: ITO-220AB molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C / 0.25" (6.35mm) from case 10 seconds
- ✧ Mounting torque: 5 in – 1bs max.
- ✧ Weight: 2.24 grams

## ITO-220AB



## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

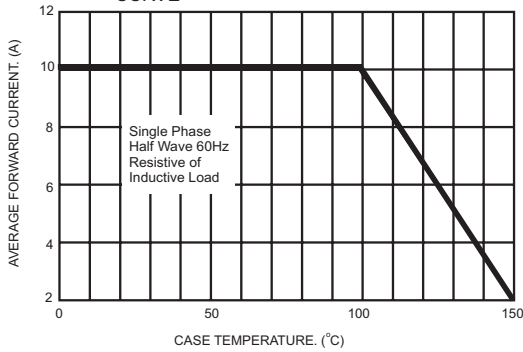
Type Number	Symbol	GPF 1001	GPF 1002	GPF 1003	GPF 1004	GPF 1005	GPF 1006	GPF 1007	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C = 100^\circ\text{C}$	$I_{(AV)}$	10.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	125							A
Maximum Instantaneous Forward Voltage @ 5.0A	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_C=25^\circ\text{C}$ at Rated DC Blocking Voltage	$I_R$	5.0							uA
Typical Junction Capacitance ( Note 1)	$C_j$	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5.0							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	- 65 to + 150							$^\circ\text{C}$

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

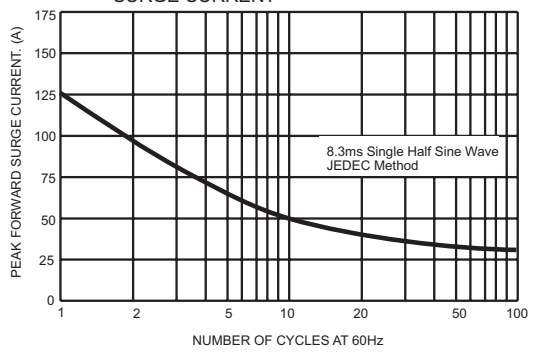
2. Thermal Resistance from Junction to Case Mounted on Heatsink size 2" x 3" x 0.25" Al-Plate

## RATINGS AND CHARACTERISTIC CURVES (GPF1001 THRU GPF1007)

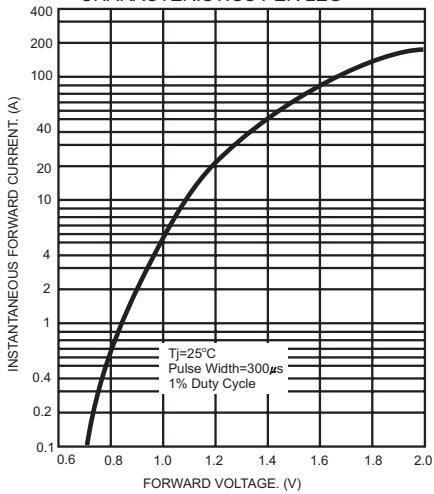
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



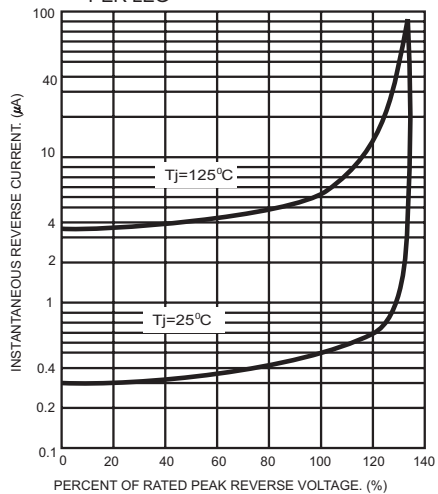
**FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**



**FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG**



**FIG.5- TYPICAL JUNCTION CAPACITANCE**

