



GPF1001 THRU GPF1007

Isolation 10.0 AMPS. Glass Passivated Rectifiers



Voltage Range
50 to 1000 Volts
Current
10.0 Amperes

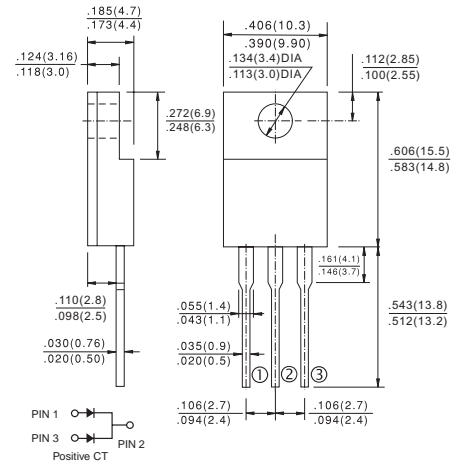
Features

- ✧ 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 | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C_j | 30 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 5.0 | | | | | | | $^\circ\text{C}/\text{W}$ |
| 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

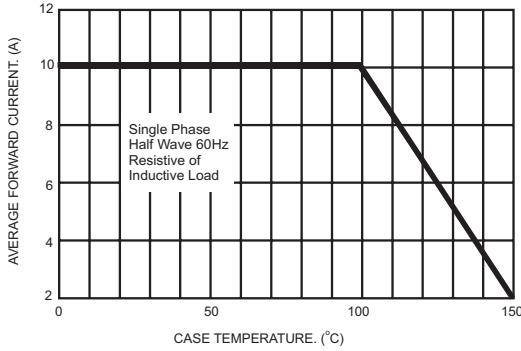


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

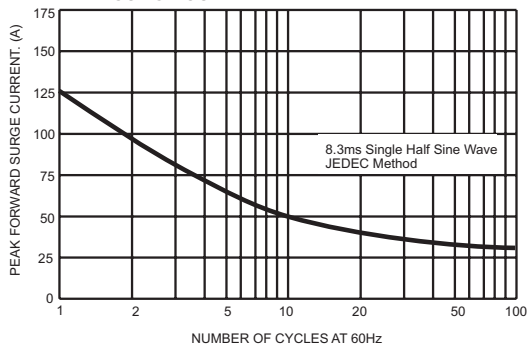


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

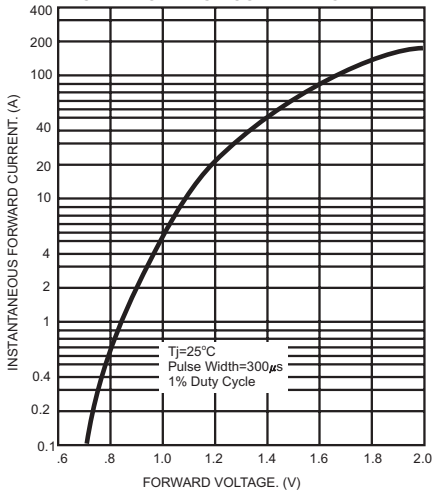


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

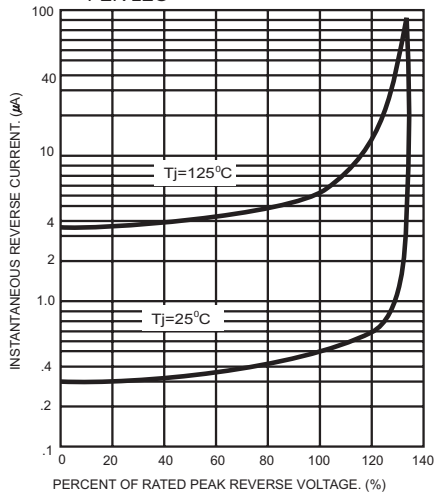


FIG.5- TYPICAL JUNCTION CAPACITANCE

