



GP1601 THRU GP1607

16.0 AMPS. Glass Passivated Rectifiers



Voltage Range
50 to 1000 Volts
Current
16.0 Amperes

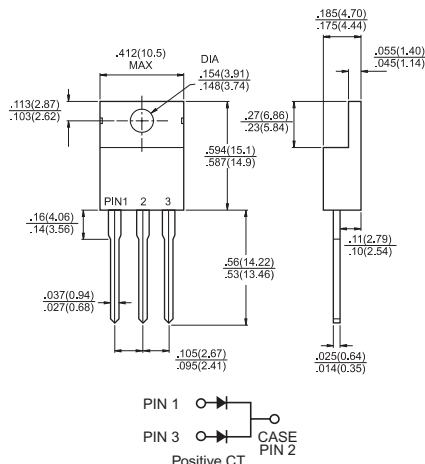
Features

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

Mechanical Data

- ✧ Cases: TO-220 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: 250°C/10 seconds .16", (4.06mm) from case.
- ✧ Weight: 2.24 grams

TO-220



Dimensions in inches and (millimeters)

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 | GP 1601 | GP 1602 | GP 1603 | GP 1604 | GP 1605 | GP 1606 | GP 1607 | Units |
|---|---------------|---------|---------|---------|---------|---------|---------|----------|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T _C = 100°C | 16.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | 150 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @8.0A | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ T _C =25°C at Rated DC Blocking Voltage @ T _C =125°C | 10 250 | | | | | | | uA uA |
| Typical Junction Capacitance (Note 1) | 50 | | | | | | | pF |
| Typical Thermal Resistance R _{θJC} (Note 2) | 3.0 | | | | | | | °C/W |
| Operating and Storage Temperature Range T _J , T _{STG} | - 65 to + 150 | | | | | | | °C |

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

2. Thermal Resistance from Junction to Case per Leg Mounted on Heatsink.

RATINGS AND CHARACTERISTIC CURVES (GP1601 THRU GP1607)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

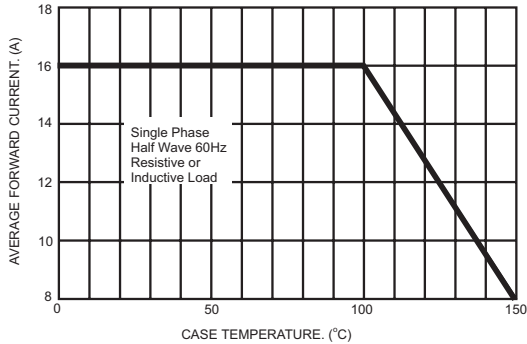


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

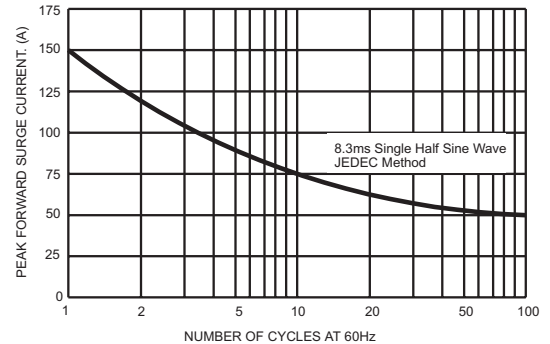


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

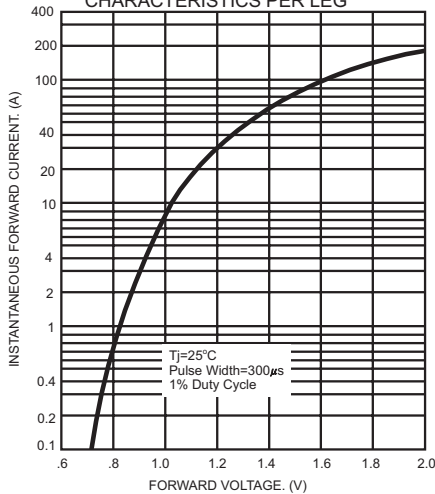


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

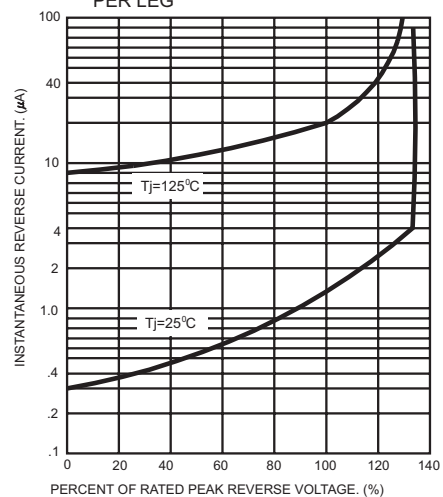


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

