



## Features

- ✧ UL Recognized File # E-326243
- ✧ Glass passivated chip junction.
- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

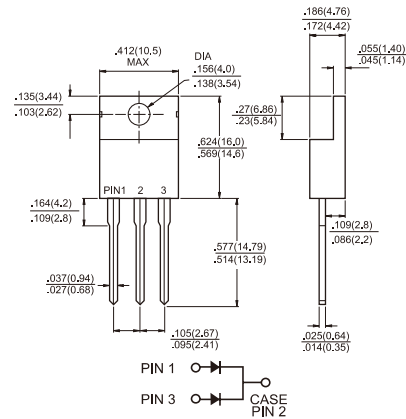
## Mechanical Data

- ✧ Cases: TO-220AB molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated, lead free. solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260 °C /10 seconds .16",(4.06mm) from case.
- ✧ Weight: 2.24 grams

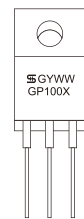
# GP1001 - GP1007

## 10.0 AMPS. Glass Passivated Rectifiers

### TO-220AB



Dimensions in inches and (millimeters)



Marking Diagram

GP100X = Specific Device Code  
 G = Green Compound  
 Y = Year  
 WW = Work Week

## 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	GP 1001	GP 1002	GP 1003	GP 1004	GP 1005	GP 1006	GP 1007	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current · 375"(9.5mm) Lead Length @T <sub>C</sub> = 100 °C	I <sub>F(AV)</sub>	10.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	125							A
Maximum Instantaneous Forward Voltage @5.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at @ T <sub>A</sub> =25 °C Rated DC Blocking Voltage (Note 1) @ T <sub>A</sub> =125 °C	I <sub>R</sub>	5.0 200							uA uA
Typical Junction Capacitance ( Note 3 )	C <sub>j</sub>	30							pF
Typical Thermal Resistance ( Note 2 )	R <sub>θJC</sub>	3.0							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 65 to + 150							°C

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle  
 2. Mounted on Heatsink size 2" x 3" x 0.25" Al-Plate.  
 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATINGS AND CHARACTERISTIC CURVES (GP1001 THRU GP1007)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

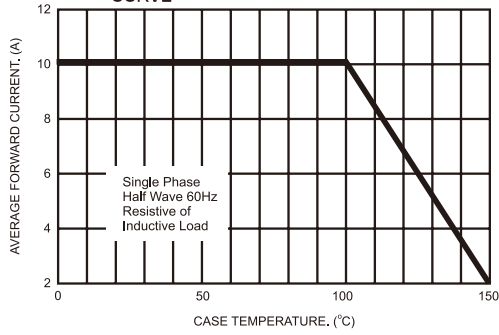


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER LEG

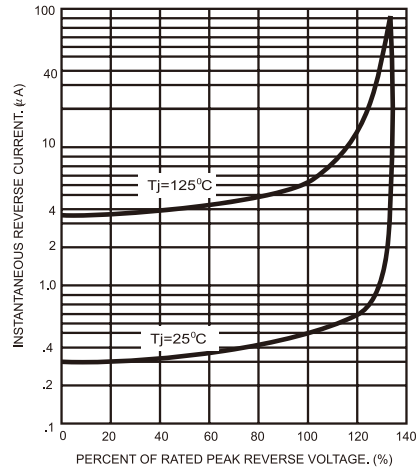


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

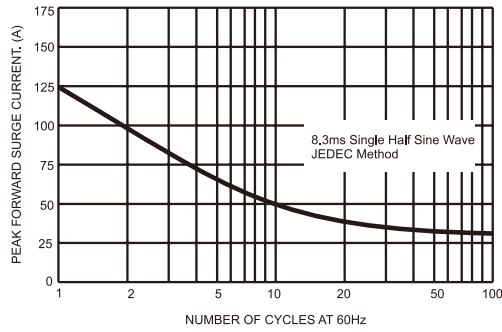


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

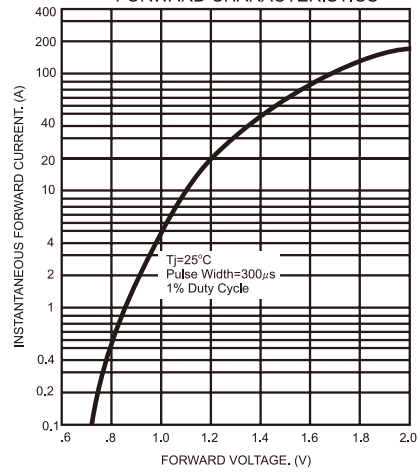


FIG.4- TYPICAL JUNCTION CAPACITANCE

