



GPA1601 THRU GPA1607

16.0 AMPS. Glass Passivated Rectifiers



Voltage Range
50 to 1000 Volts
Current
16.0 Amperes

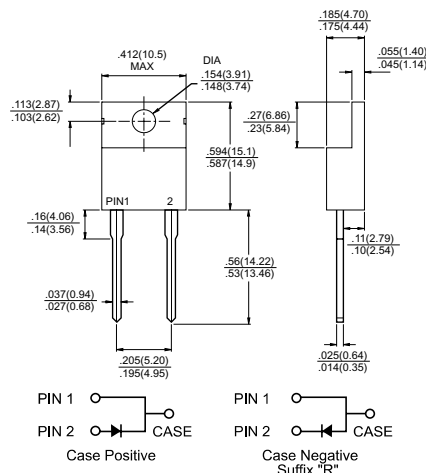
Features

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

Mechanical Data

- ✧ Cases: TO-220A 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-220A



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	GPA 1601	GPA 1602	GPA 1603	GPA 1604	GPA 1605	GPA 1606	GPA 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)	250							A
Maximum Instantaneous Forward Voltage @16.0A	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)	100							pF
Typical Thermal Resistance RθJC (Note 2)	2.0							°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 Ambient .375"(9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (GPA1601 THRU GPA1607)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

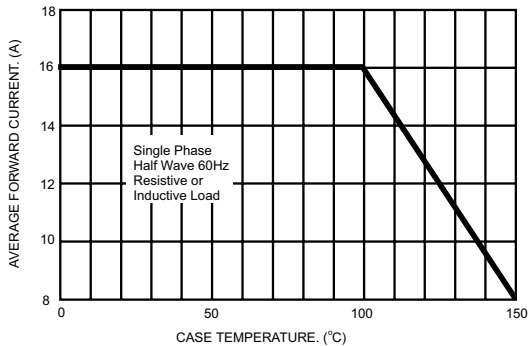


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

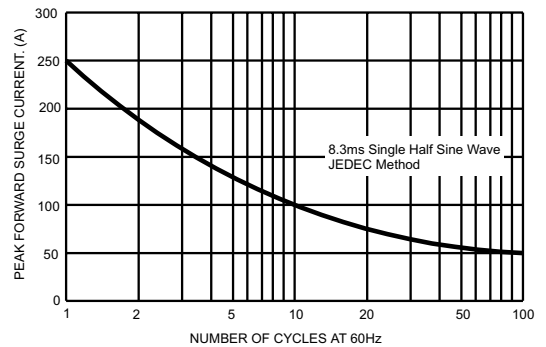


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

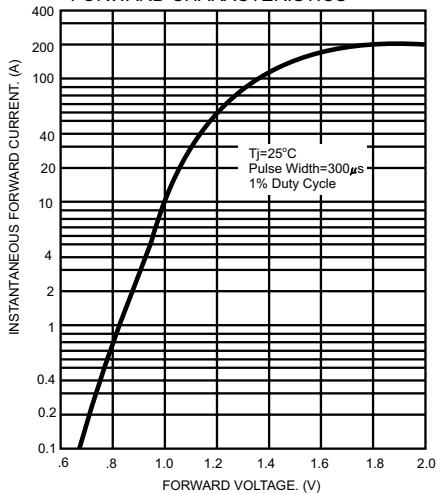


FIG.4- TYPICAL REVERSE CHARACTERISTICS

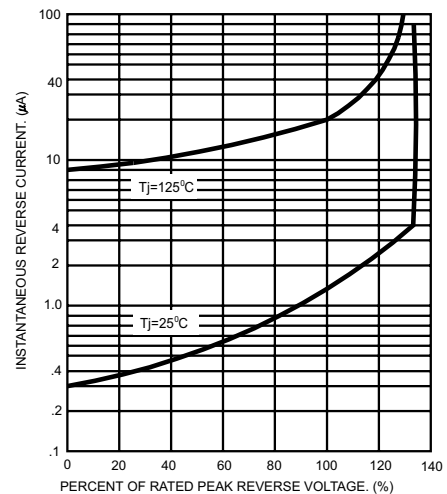


FIG.5- TYPICAL JUNCTION CAPACITANCE

