

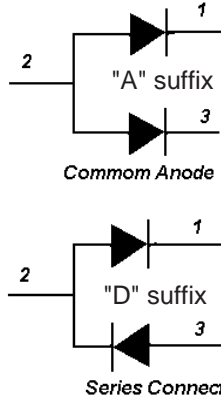
# 10 Amp Glass Passivated Standard Rectifiers

FG10A01~07

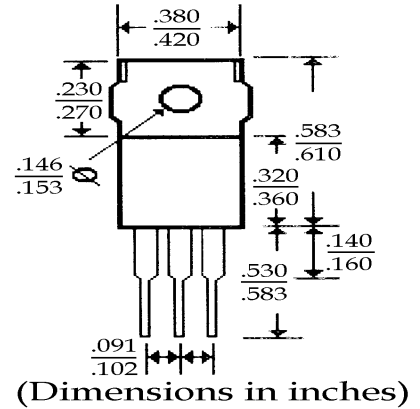
## Description



TO-220AB



## Mechanical Dimensions



### Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260°C/10 seconds .16", (4.06mm) from case

### Mechanical Data

- ✧ Cases: TO-220AB molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ Weight: 2.24 grams

### 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	FG	FG	FG	FG	FG	FG	FG	Units
		10A01	10A02	10A03	10A04	10A05	10A06	10A07	
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 .375"(9.5mm) Lead Length @ $T_c = 100^\circ C$	$I_{(AV)}$	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 @ $T_c=25^\circ C$ at Rated DC Blocking Voltage	$I_R$	5.0							uA
Typical Junction Capacitance ( Note 1)	$C_j$	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	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 Mounted on Heatsink size 2" x 3" x 0.25" Al-Plate

## RATINGS AND CHARACTERISTIC CURVES (GP1001 THRU GP1007)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

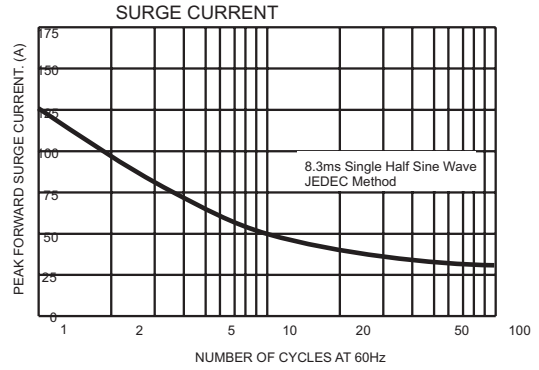
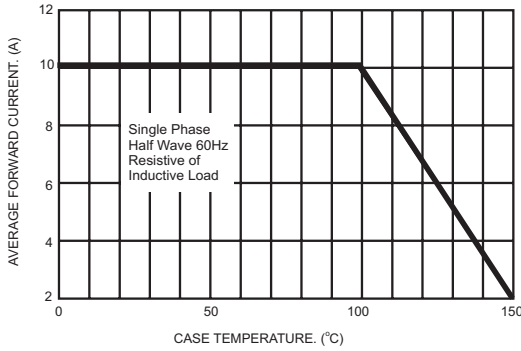


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

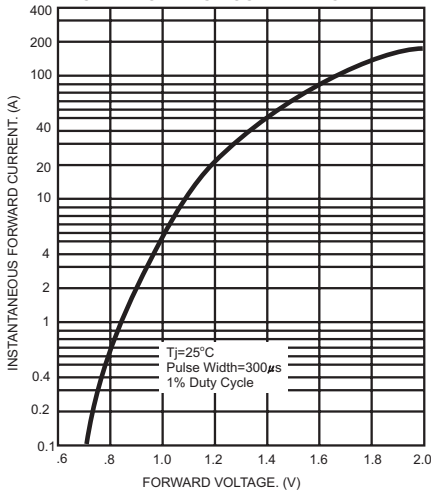


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

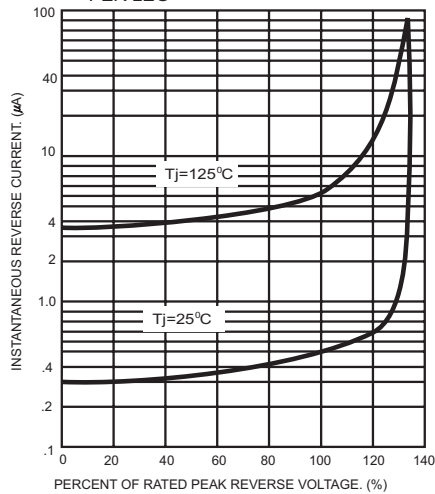


FIG.5- TYPICAL JUNCTION CAPACITANCE

