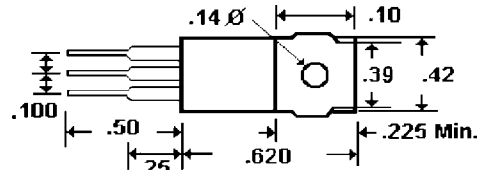
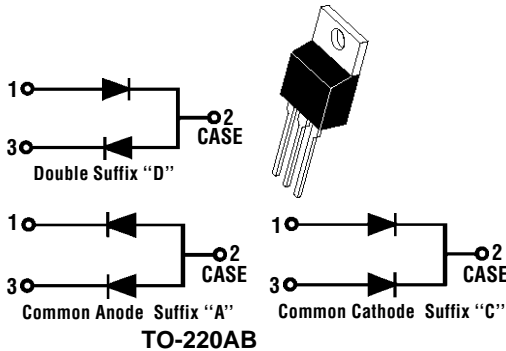


**Description**

**Mechanical Dimensions**



Dimensions in inches

**Features**

**Mechanical Dimensions**

- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ Weight: 2.24 grams

- ◇ 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
- ◇ High temperature soldering guaranteed: 260°C/10 seconds .16",(4.06mm) from case.

**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
		16A01	16A02	16A03	16A04	16A05	16A06	16A07	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	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>(AV)</sub>	16.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150							A
Maximum Instantaneous Forward Voltage @8.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @ T <sub>C</sub> =25°C at Rated DC Blocking Voltage @ T <sub>C</sub> =125°C	I <sub>R</sub>	10 250							uA uA
Typical Junction Capacitance ( Note 1)	C <sub>j</sub>	50							pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>	1.5							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 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 (FG16A01 THRU FG16A07)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

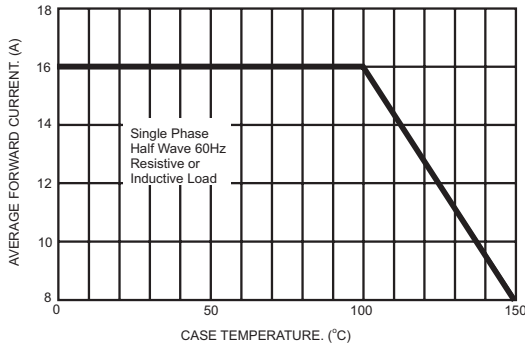


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

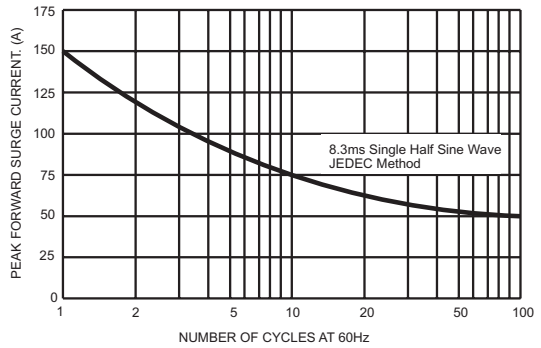


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

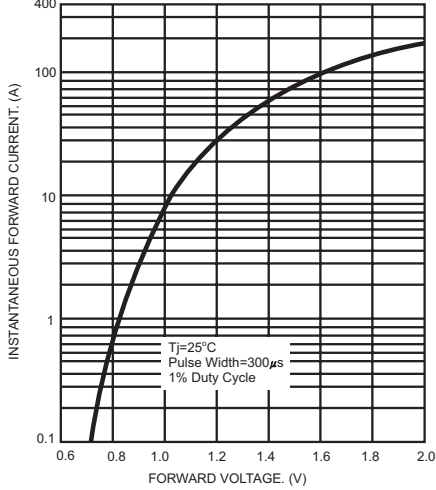


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

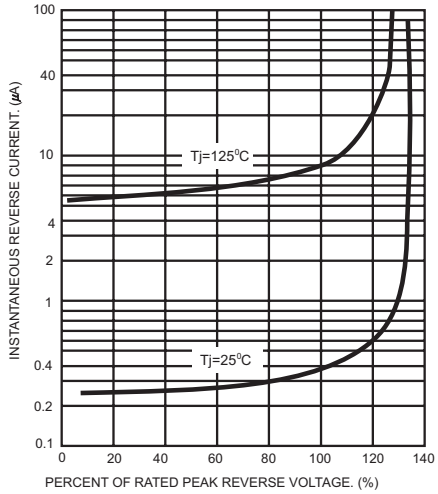


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

