

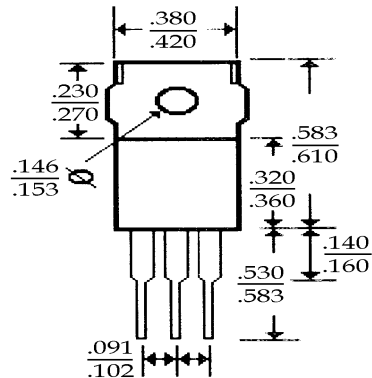
Description

Mechanical Dimensions

FG25A01G~25A07G



TO-220AB



(Dimensions in inches)

Features

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

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
- ◇ 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
		25A01	25A02	25A03	25A04	25A05	25A06	25A07	
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 @ $T_c = 100^\circ C$	$I_{(AV)}$	25.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	400							A
Maximum Instantaneous Forward Voltage @ 12.5A	V_F	1.1							V
Maximum DC Reverse Current @ $T_c = 25^\circ C$ at Rated DC Blocking Voltage	I_R	10							uA uA
Typical Junction Capacitance (Note 1)	C_j	100							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.3							C/W
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175							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 (FG25A01G THRU FG25A07G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

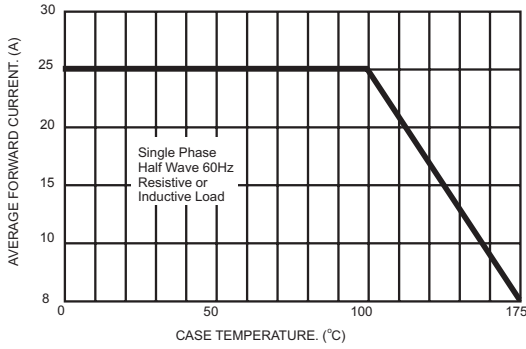


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

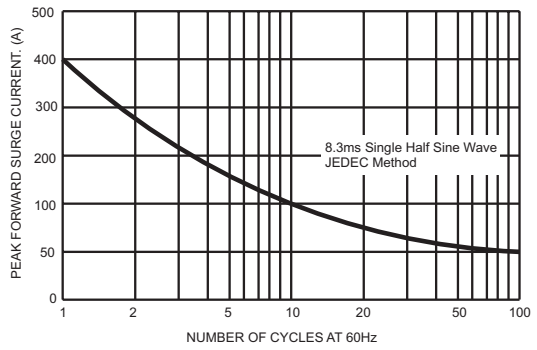


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

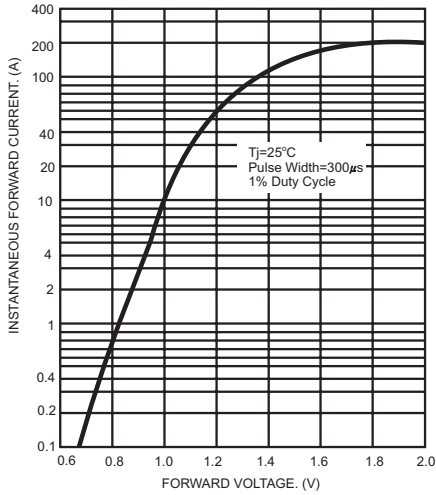


FIG.4- TYPICAL REVERSE CHARACTERISTICS

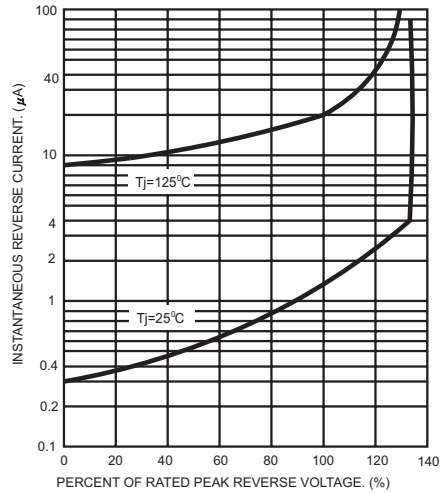


FIG.5- TYPICAL JUNCTION CAPACITANCE

