

# Glass Passivated Ultra Fast Recovery Rectifier

## UF8A01-G THRU UF8A05-G

Voltage Range 50 to 600 V

Current 8.0 Ampere

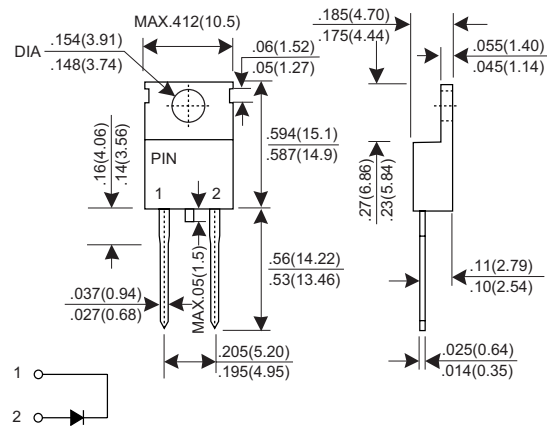
### Features

- \* Fast switching for high efficiency
- \* Low forward voltage drop
- \* High current capability
- \* Low reverse leakage current
- \* High surge current capability

### Mechanical Data

- \* Case: Molded plastic TO-220AC
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-202 method 208
- \* Polarity: Color band denotes cathode
- \* Mounting position: Any
- \* Weight: 2.03 grams

### TO-220AC



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	UF 8A01-G	UF 8A02-G	UF 8A03-G	UF 8A04-G	UF 8A05-G	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	8.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	150					A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	1.0		1.3		1.7	V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10.0 250					uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75	nS
Typical junction Capacitance (Note 2)	CJ	65					pF
Typical Thermal Resistance (Note 3)	RθJC	2.2					°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 150					°C

NOTES : (1) Reverse recovery test conditions IF = 0.5A, IR = 1.0A, Irr = 0.25A.  
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.  
(3) Thermal Resistance junction to case.

## RATINGS AND CHARACTERISTIC CURVES UF8A01-G THRU UF8A05-G

FIG.1 - FORWARD CURRENT DERATING CURVE

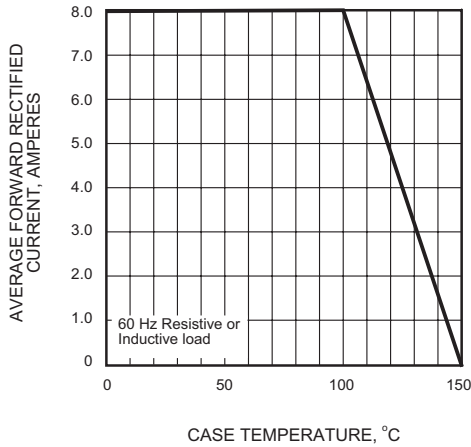


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

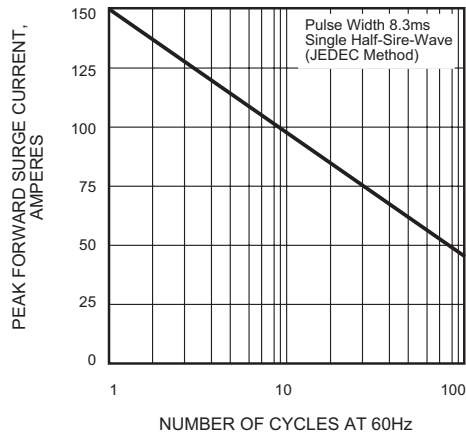


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

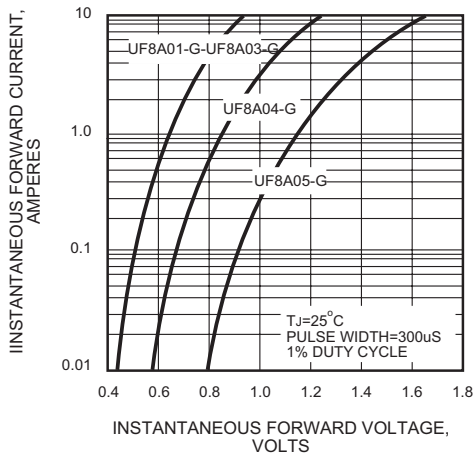


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

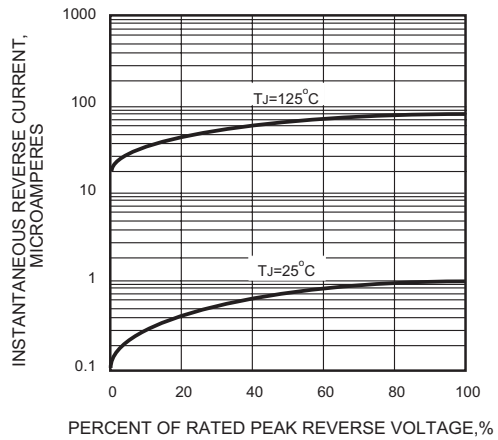


FIG.5 - TYPICAL JUNCTION CAPACITANCE

