



YENYO

# EF8A02 THRU EF8A06

Glass Passivated Efficient Fast Recovery Rectifier

## Features

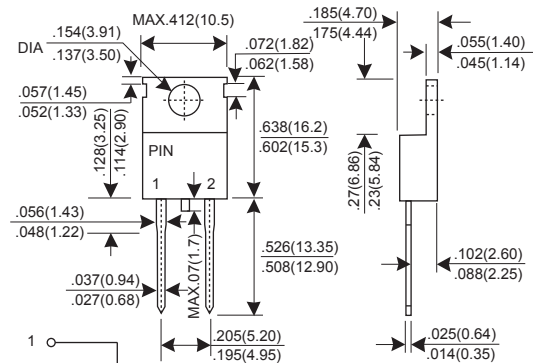
- \* Fast switching for high efficiency
- \* Low forward voltage drop
- \* High current capability
- \* Low reverse leakage current
- \* High surge current capability

## 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: 2.07grams

**Voltage Range 100 to 600 V  
Current 8.0 Ampere**

### 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%.

CHARACTERISTIC	SYMBOL	EF 8A02	EF 8A03	EF 8A05	EF 8A06	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	400	600	V
Maximum RMS Voltage	VRMS	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	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	125				A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.95		1.25	2.4	V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR		10.0			uA
			250			uA
Maximum Reverse Recovery Time (Note 1)	Trr		25			nS
Typical junction Capacitance (Note 2)	CJ		85		50	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 EF8A02 THRU EF8A06

FIG.1 - FORWARD CURRENT DERATING CURVE

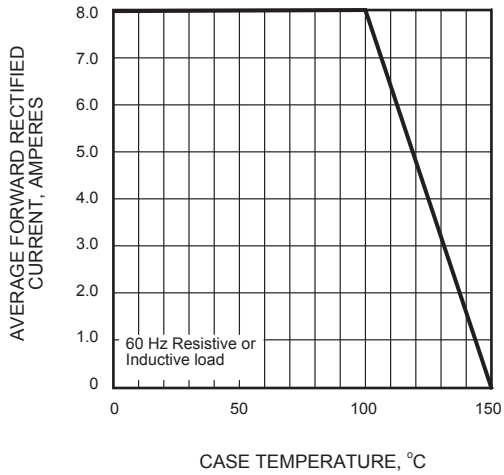


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

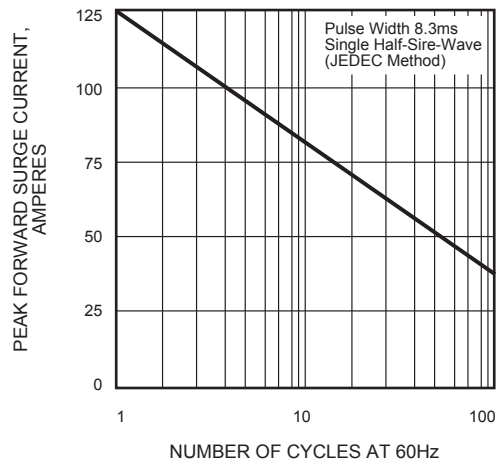


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

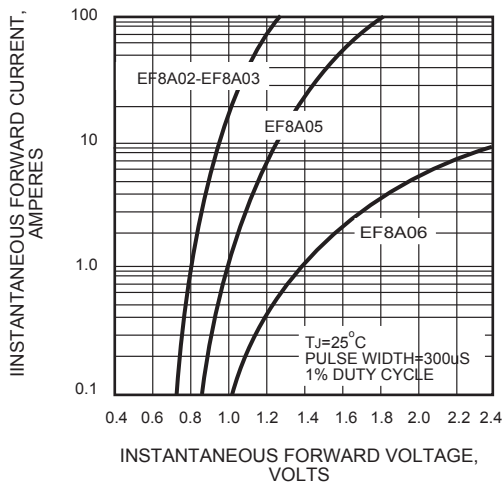


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

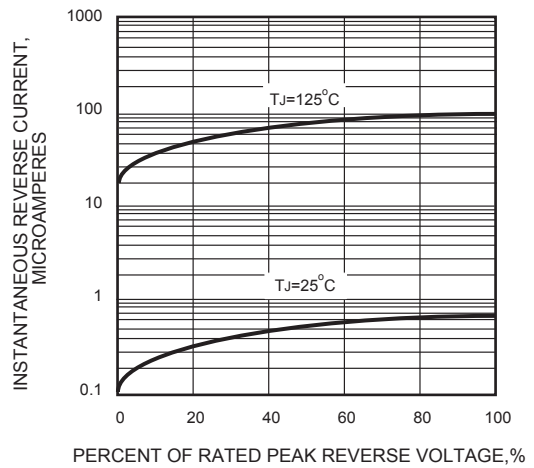


FIG.5 - TYPICAL JUNCTION CAPACITANCE

