



YENYO

# HFR8L06F

Glass Passivated Hyperfast Recovery Rectifier

## Features

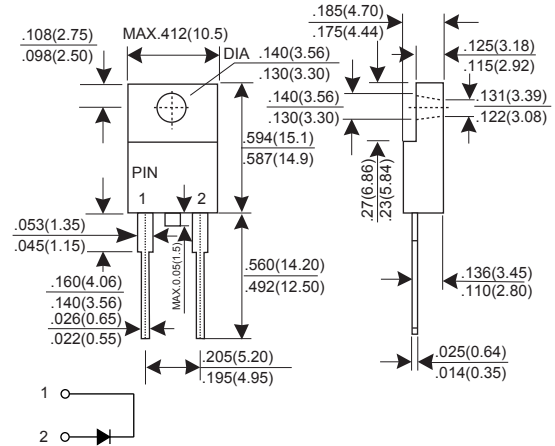
- ★ Fast switching for high efficiency
- ★ Low noise
- ★ Low VF
- ★ Low reverse leakage current
- ★ High voltage super FRD
- ★ PFC application

## Mechanical Data

- ★ Case: Molded plastic ITO-220AC
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208
- ★ Mounting position: Any
- ★ Weight: 1.73 grams

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

### ITO-220AC



Dimensions in inches and (millimeters)

## Maximum Ratings $T_c = 25^\circ\text{C}$ , Unless Otherwise Specified

Item	Symbol	Conditions	UNIT
Recurrent Peak Reverse Voltage	VRRM	600	V
RMS Voltage	VRMS	420	V
DC Blocking Voltage	VDC	600	V
Average Forward Rectified Current $T_c=140^\circ\text{C}$	IF(AV)	8.0	A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	100	A
Operating Junction and Storage Temperature Range	TJ, TSTG	-65 ~ +175	$^\circ\text{C}$

## Electrical/Thermal Characteristics $T_c = 25^\circ\text{C}$ , Unless Otherwise Specified

Item	Symbol	Conditions	Min.	Typ.	Max.	UNIT
Instantaneous Forward Voltage	VF	IF = 8A	-	-	1.3	V
DC Reverse Current	IR	VR = 600V	-	-	10.0	uA
At Rated DC Blocking Voltage		VR = 600V TJ=150 $^\circ\text{C}$	-	-	500	uA
Maximum Reverse Recovery Time	Trr	IF = 0.5A, IR = 1.0A, Irr = 0.25A	-	-	50	nS
Typical junction Capacitance	CJ	f = 1.0 MHz, VR = 4.0 V DC	-	50	-	pF
Typical Thermal Resistance	R $\theta$ /C	Junction to Case	-	-	2.2	$^\circ\text{C}/\text{W}$

# RATINGS AND CHARACTERISTIC CURVES HFR8L06F

FIG.1 - FORWARD CURRENT DERATING CURVE

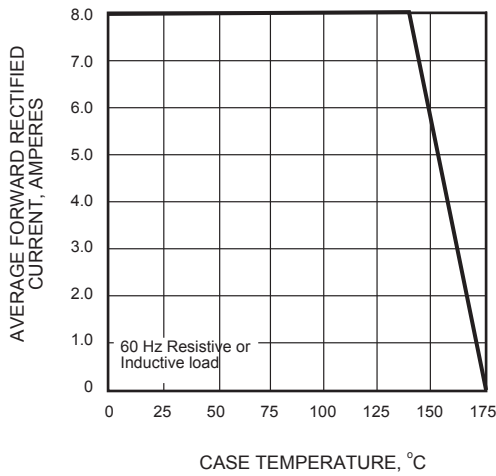


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

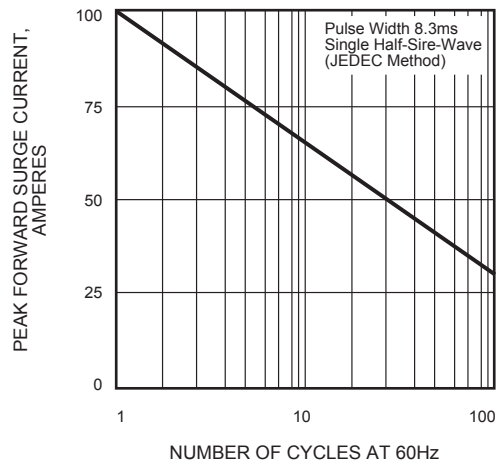


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

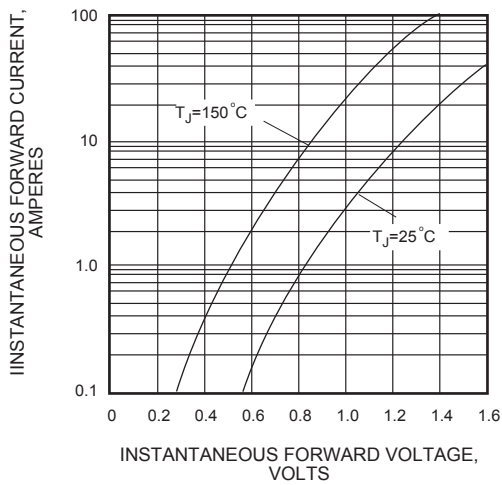


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

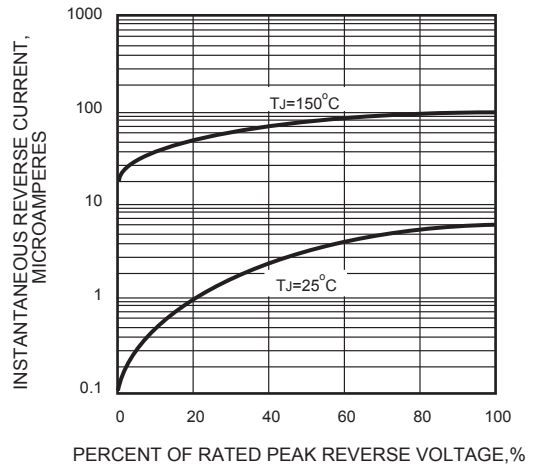


FIG.5 - TYPICAL JUNCTION CAPACITANCE

