YENYO

# HFR8A06F

Glass Passivated Hyperfast Recovery Rectifier

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

## Features

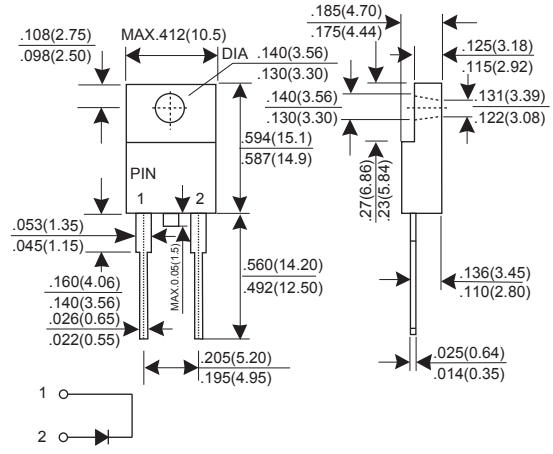
- ✶ Fast switching for high efficiency
- ✶ Low noise
- ✶ Low reverse leakage current
- ✶ High voltage super FRD
- ✶ PFC application



## 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: 1.73grams

**ITO-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 | HFR8A06F | | | UNIT |
|---|---|---|---|---|---|
| | | Min. | Typ. | Max. | |
| Recurrent Peak Reverse Voltage | $V_{RRM}$ | - | - | 600 | V |
| RMS Voltage | $V_{RMS}$ | - | - | 420 | V |
| DC Blocking Voltage | $V_{DC}$ | - | - | 600 | V |
| Average Forward Rectified Current $T_C$=100°C | $I_{F(AV)}$ | - | - | 8.0 | A |
| Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$ | - | - | 100 | A |
| Instantaneous Forward Voltage @ 8.0 A | $V_F$ | - | - | 2.4 | V |
| DC Reverse Current @$T_J$=25°C<br>At Rated DC Blocking Voltage @$T_J$=150°C | $I_R$ | - | - | 10.0<br>500 | uA<br>uA |
| Maximum Reverse Recovery Time (Note 1) | Trr | - | - | 20 | nS |
| Typical junction Capacitance (Note 2) | $C_J$ | - | 50 | - | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta JC}$ | - | 2.2 | - | °CW |
| Operating Junction and Storage Temperature Range | $T_J$, $T_{STG}$ | -65 | - | 175 | °C |

NOTES : (1) Reverse recovery test conditions $I_F$ = 0.5A, $I_R$ = 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 HFR8A06F

FIG.1 - FORWARD CURRENT DERATING CURVE

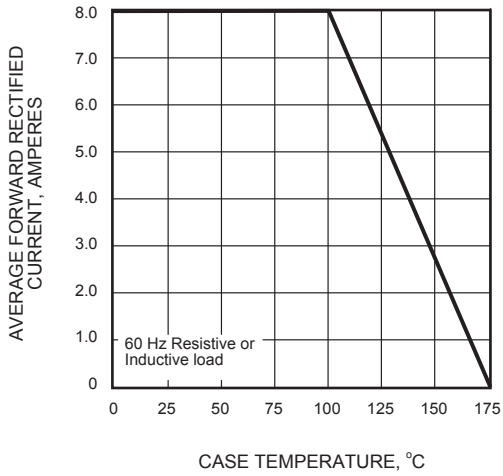



FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

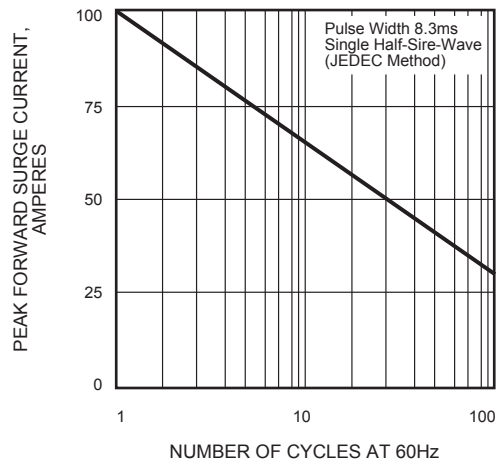



FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

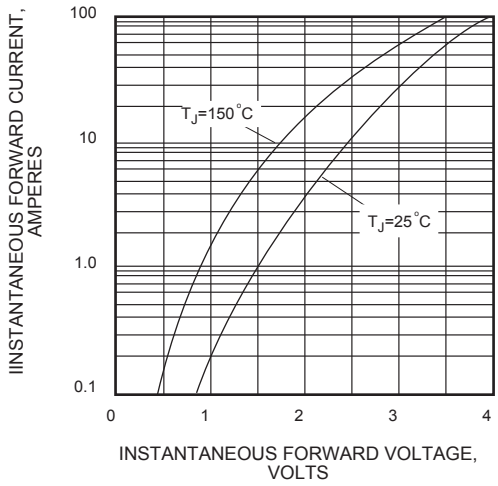



FIG.4 - TYPICAL REVERSE CHARACTERISTICS

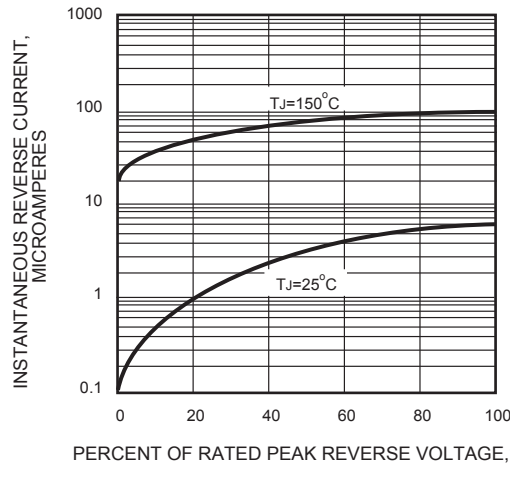
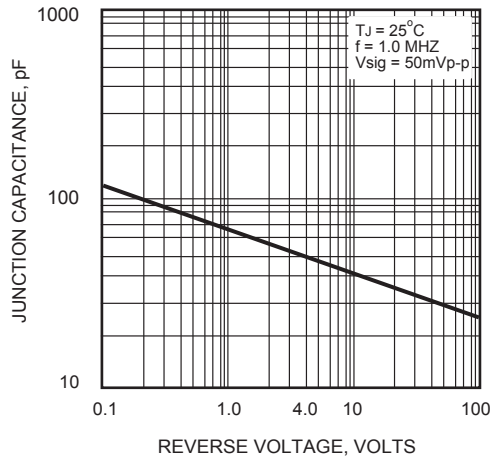



FIG.5 - TYPICAL JUNCTION CAPACITANCE

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