YENYO

HFR8A12F

Glass Passivated Hyperfast Recovery Rectifier

Voltage Range 1200 V
Current 8.0 Ampere

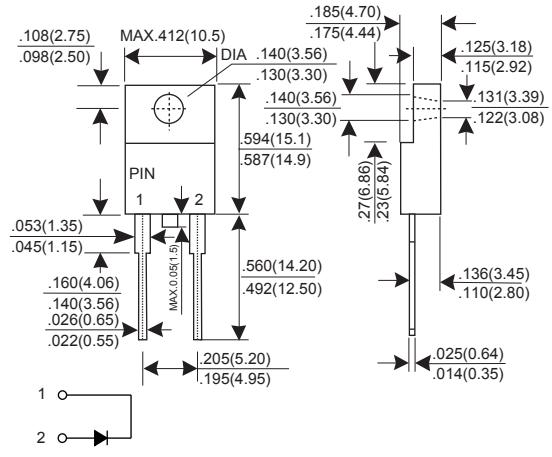
Features

- ✶ Fast switching for high efficiency
- ✶ Low noise
- ✶ Trr = 35ns
- ✶ 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

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	HFR8A12F			UNIT
		Min.	Typ.	Max.	
Recurrent Peak Reverse Voltage	V_{RRM}	-	-	1200	V
RMS Voltage	V_{RMS}	-	-	840	V
DC Blocking Voltage	V_{DC}	-	-	1200	V
Average Forward Rectified Current T_C=140°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	-	-	3.2	V
DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=150°C	I_R	-	-	100 500	uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	-	-	35	nS
Typical junction Capacitance (Note 2)	C_J	-	25	-	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	-	-	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) Junction Capacitance test conditions : V_R = 10V, I_F = 0A.
(3) Thermal Resistance junction to case.

RATINGS AND CHARACTERISTIC CURVES HFR8A12F

FIG.1 - FORWARD CURRENT DERATING CURVE

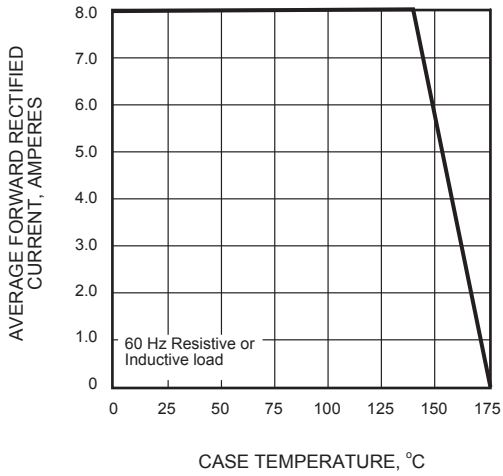


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

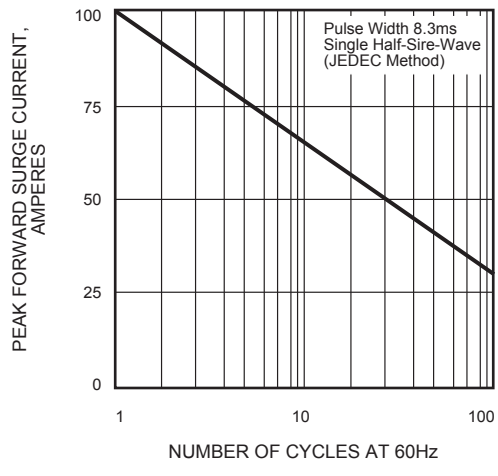


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

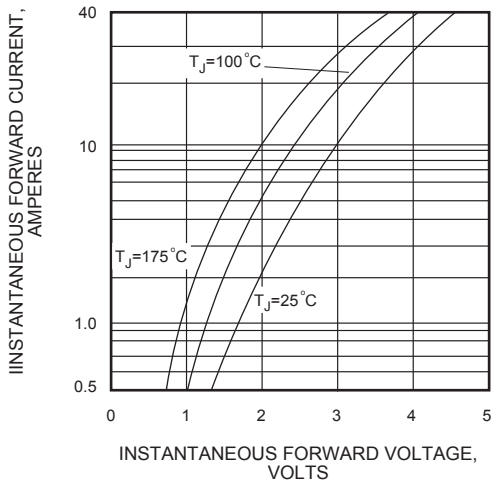


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

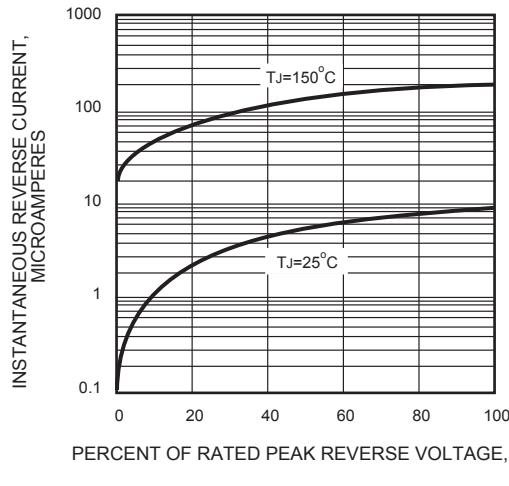


FIG.5 - TYPICAL JUNCTION CAPACITANCE

