

Voltage Range 600 V
Current 10.0 Ampere

Features

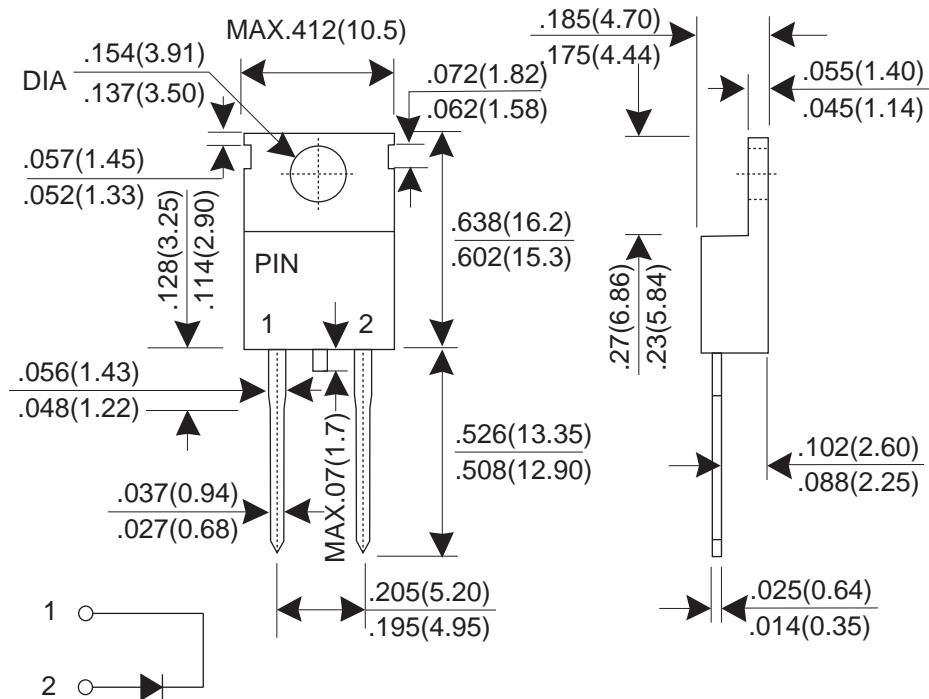
- Fast switching for high efficiency
- Low noise
- Low reverse leakage current
- High voltage super FRD
- PFC application

Mechanical Data

- Case: Molded plastic TO-220AC
- Epoxy: UL 94V-0 rate flame retardant ,
- Terminals: Solderable per MIL-STD-202 method 208
- Mounting position: Any
- Weight: 2.07 grams

Dimensions in inches and (millimeters)

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%.

PARAMTER	SYMBOL	THFR10A06			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 =140°C	I _{F(AV)}	-	-	10.0	A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	-	-	110	A
Instantaneous Forward Voltage @ 10.0 A	V _F	-	-	2.4	V
DC Reverse Current @ T _J =25°C At Rated DC Blocking Voltage @ T _J =150°C	I _R	-	-	10.0 500	uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	-	-	25	nS
Typical junction Capacitance (Note 2)	C _J	-	55	-	pF
Typical Thermal Resistance (Note 3)	R _{θJC}	-	2.0	-	°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, I_{rr} = 0.25A.
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
 (3) Thermal Resistance junction to case.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

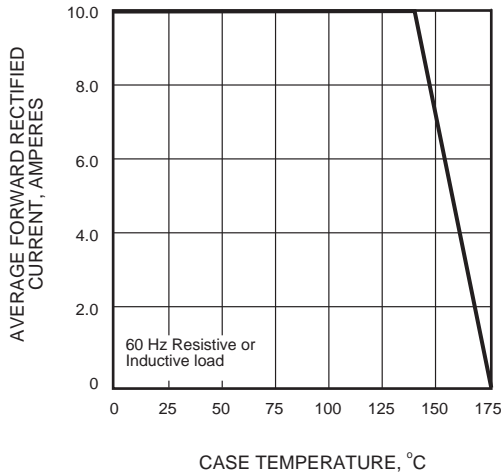


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

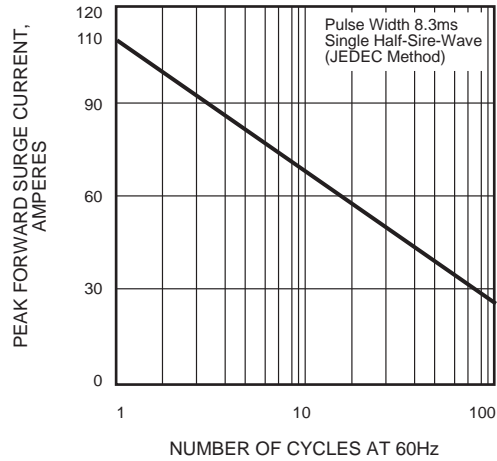


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

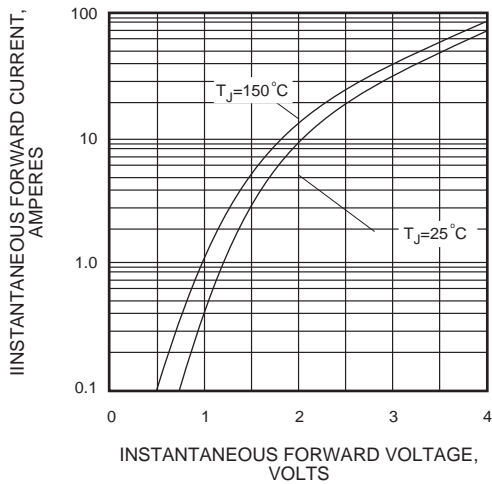


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

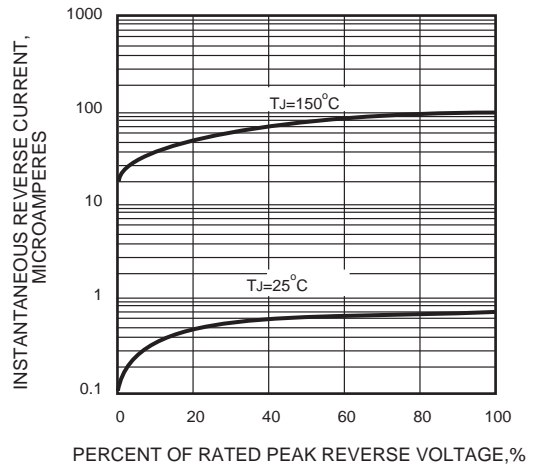


FIG.5 - TYPICAL JUNCTION CAPACITANCE

