

**HYPER-FAST
GLASS PASSIVATED RECTIFIER**

**REVERSE VOLTAGE – 600Volts
FORWARD CURRENT – 8.0 Ampere**

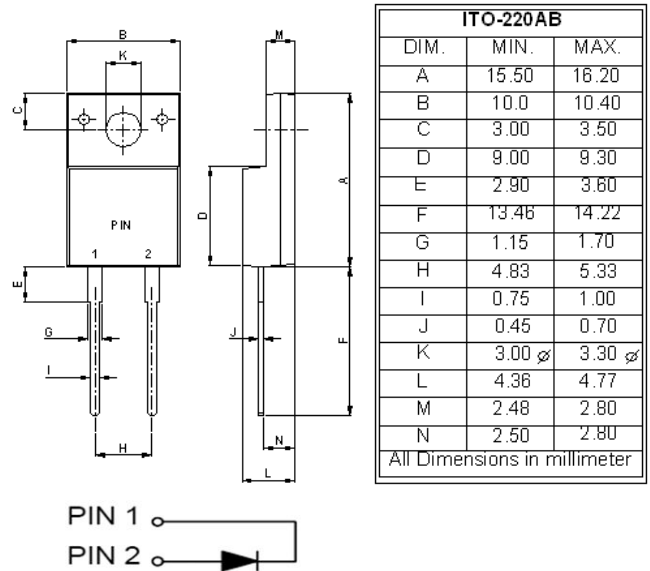
FEATURES

- Soft, Hyper fast switching capability
- Specially suited for critical mode Power Factor Corrections.
- High reliability and efficiency

MECHANICAL DATA

- Case: JEDEC ITO-220AC
- Case Material: Plastic material, UL flammability classification 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Lead Free Plating
- Polarity indicator: As marked on the body
- Weight: 0.06 ounces, 1.7 grams
- Component in accordance to RoHs 2002/95/EC
- Maximum mounting torque = 0.5 N.m (5.1 Kgf.cm)

ITO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter			Symbol	LTTH806SDF		Unit
Maximum Repetitive Peak Reverse Voltage			V_{RRM}	600		V
Average Rectified Output Current See FIG.1			I_F	8.0		A
Forward Voltage (1)	IF=8.0A	Tj=25°C	Symbol	Min.	Max.	V
			V_F	1.8	3.4	
Reverse Leakage Current	VR=600V	Tj=25°C	I_R	15		uA
		Tj=125°C		200		
Reverse recovery time	IF= 0.5A Irr= 0.25A IR =1.0A	Tj=25°C	t_{rr}	21		ns
Thermal characteristics (GBD)			Symbol	Value		Unit
Non Repetitive Forward Surge Current		TP=10ms	I_{FSM}	60		A
Operation and Storage temperature range			T_J, T_{STG}	-55 to +175		°C
Typical thermal resistance_Junction to Case (2)			$R_{\theta JC}$	2.7		°C/W
Typical thermal resistance_Junction to Lead (2)			$R_{\theta JL}$	4.5		°C/W
Dynamic electrical characteristics (GBD)			Symbol	Typical	Max.	Unit
Reverse recovery time	IF=1A, dIF/dt=-200A/μs, VR=30V	Tj=25°C	t_{rr}	12	18	ns
Reverse recovery current	IF=8 A, dIF/dt=-200A/μs, V =200V	Tj=25°C	I_{RM}	1.8	2.2	A
Reverse recovery charges		Tj=125°C		5	6.0	
			Tj=25°C	Q_{rr}	60	---
		Tj=125°C	220		---	

Note :

- (1) 300us Pulse Width, 2% Duty Cycle.
- (2) Thermal Resistance test performed in accordance with JESD-51. Rthj-L is measured at the PIN 2, Rthj-C is measured at the top centre of body.
- (3) GBD means Guaranteed By Design, the spec is basically follow designer simulation.

FIG.1- FORWARD CURRENT DERATING CURVE

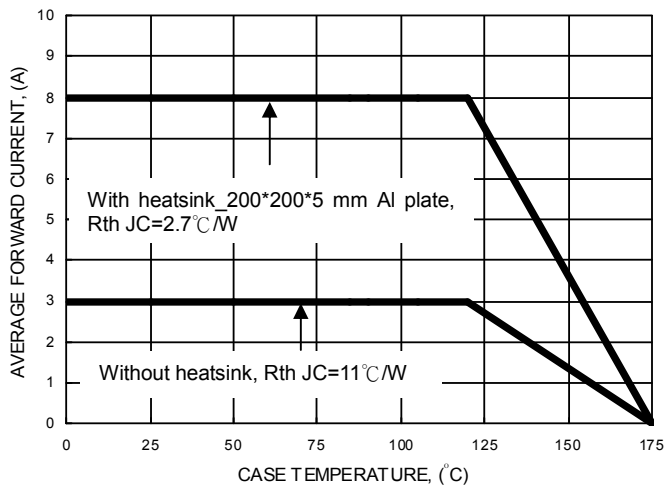


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

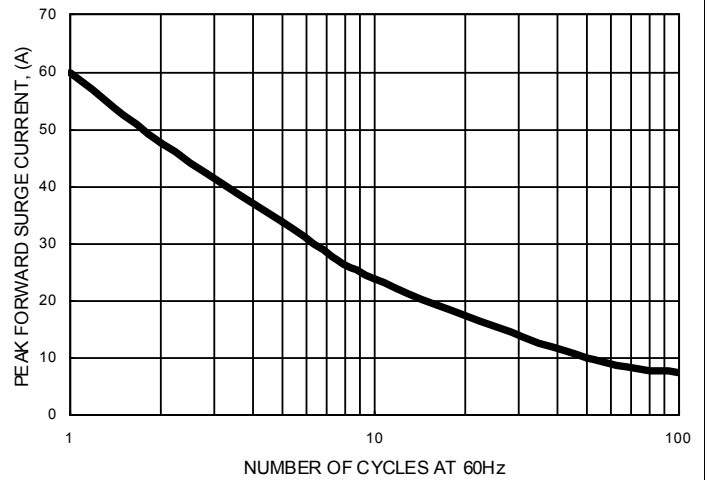


FIG.3- TYPICAL FORWARD CHARACTERISTICS

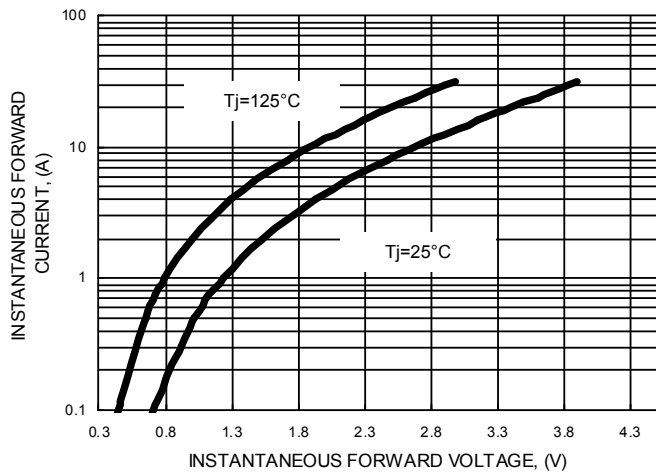


FIG.4- TYPICAL JUNCTION CAPACITANCE

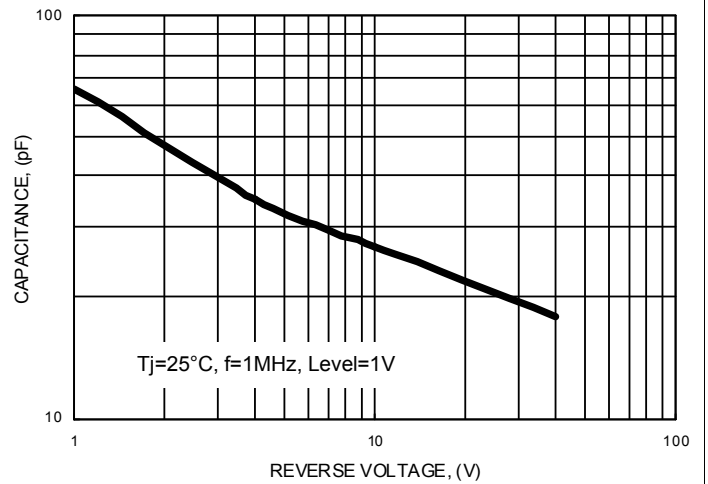
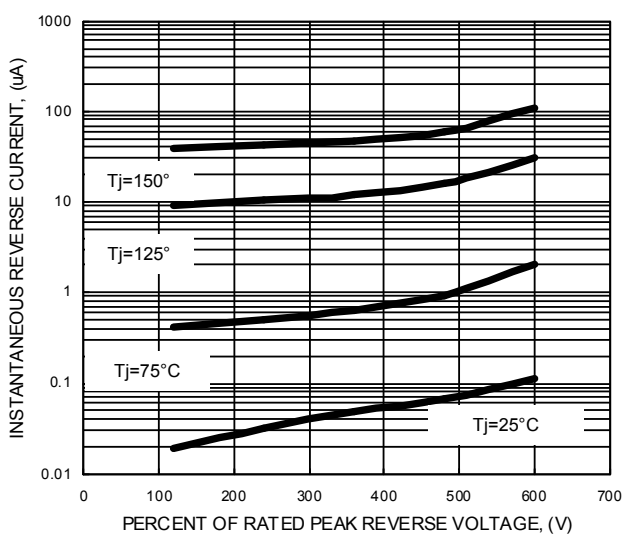


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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