

**HYPER-FAST
GLASS PASSIVATED RECTIFIER**

REVERSE VOLTAGE – 600Volts
FORWARD CURRENT – 8.0 Amperes

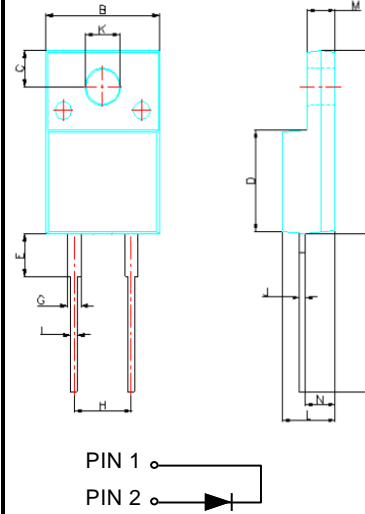
FEATURES

- Soft, Hyper fast switching capability
- Specially suited for discontinuous or critical mode power factor corrections
- High reliability and efficiency
- Low forward voltage drop
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package: TO-220ACFP
- Package Material: "Green" Molding compound, UL flammability classification 94V-0, "Halogen-free".
- Terminals: Lead Free Plating
- Polarity indicator: As marked on the body
- Weight: 1.497 grams (Approximate)
- Lead Free Finish, RoHS Compliant
- Maximum mounting torque = 0.5 N.m (5.1 Kgf.cm)
- Marking code: LTTH806LFW

ITO-220AC(WB)



ITO-220AC(WB)		
DIM	MIN	MAX
A	14.95	15.95
B	10.00	10.40
C	2.76	3.36
D	8.50	8.80
E	3.30	3.90
F	13.00	13.70
G	1.15	1.70
H	4.95	5.25
I	0.50	0.80
J	0.45	0.70
K	3.00 Ø	3.30 Ø
L	4.46	4.87
M	2.48	2.80
N	2.50	2.80
All dimension in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum Average rectified forward current	$I_{F(av)}$	8.0	A
Peak forward surge 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120	A
I^2t Rating for fusing ($3ms \leq t \leq 8.3ms$)	I^2t	60	A ² S
Storage and Operating temperature range	T_{STG}, T_J	-55 ~ +150	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP	MAX	UNIT
Forward voltage(Note 4)	$I_F=8A$ $T_J = 25^\circ C$ $T_J = 125^\circ C$	V_F	1.15 0.94	1.30 1.05	V
Reverse leakage current	$V_R=600V$ $T_J = 25^\circ C$ $T_J = 150^\circ C$	I_R	0.1 50	8.0 --	uA

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance(Note 5)	R_{thJc} R_{thJL}	9 10	°C/W

DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP	MAX	UNIT
Reverse recovery time	$I_F=0.5A, I_{rr}=0.25A, I_R=1.0A$	T_{rr}	47	70	nS

Note:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. 300us pulse width, 2% duty cycle.
5. Thermal resistance test performed in accordance with JESD-51.

**RATING AND CHARACTERISTIC CURVES
LTTH806LFW**

FIG.1- FORWARD CURRENT DERATING CURVE

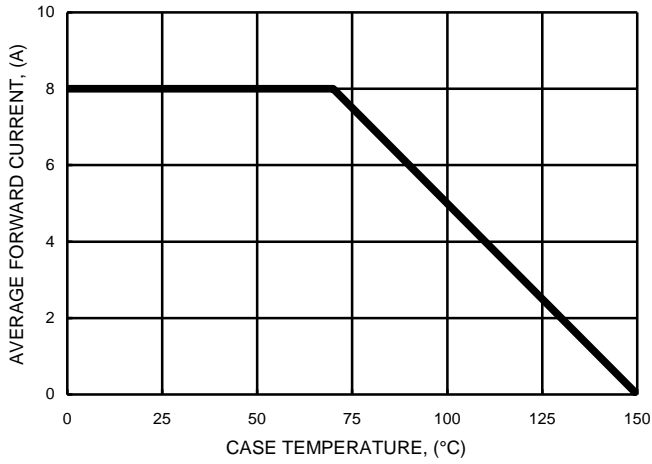


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

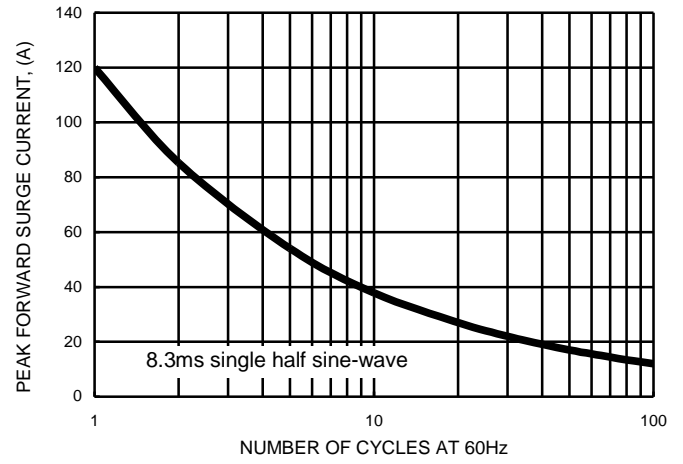


FIG.3- TYPICAL FORWARD CHARACTERISTICS

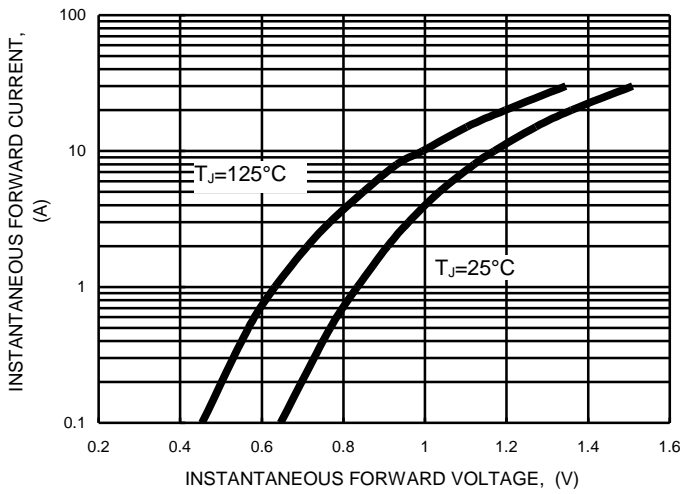


FIG.4- TYPICAL JUNCTION CAPACITANCE

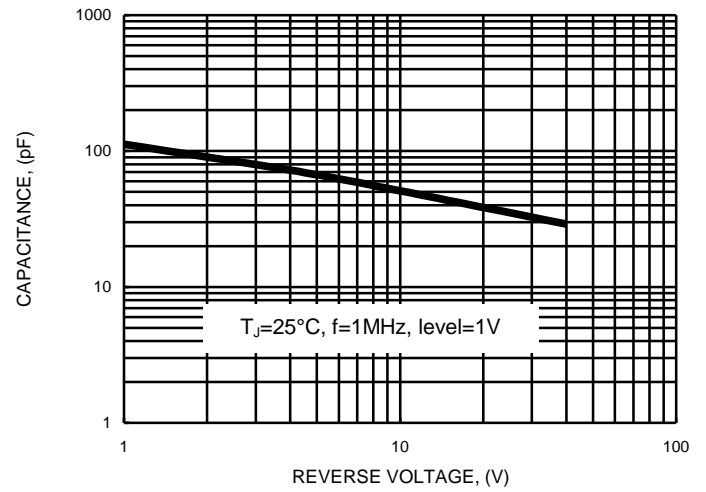
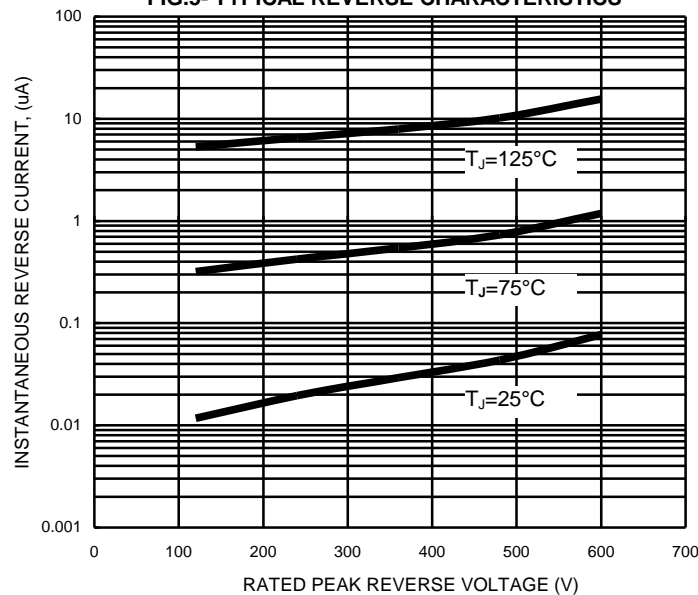


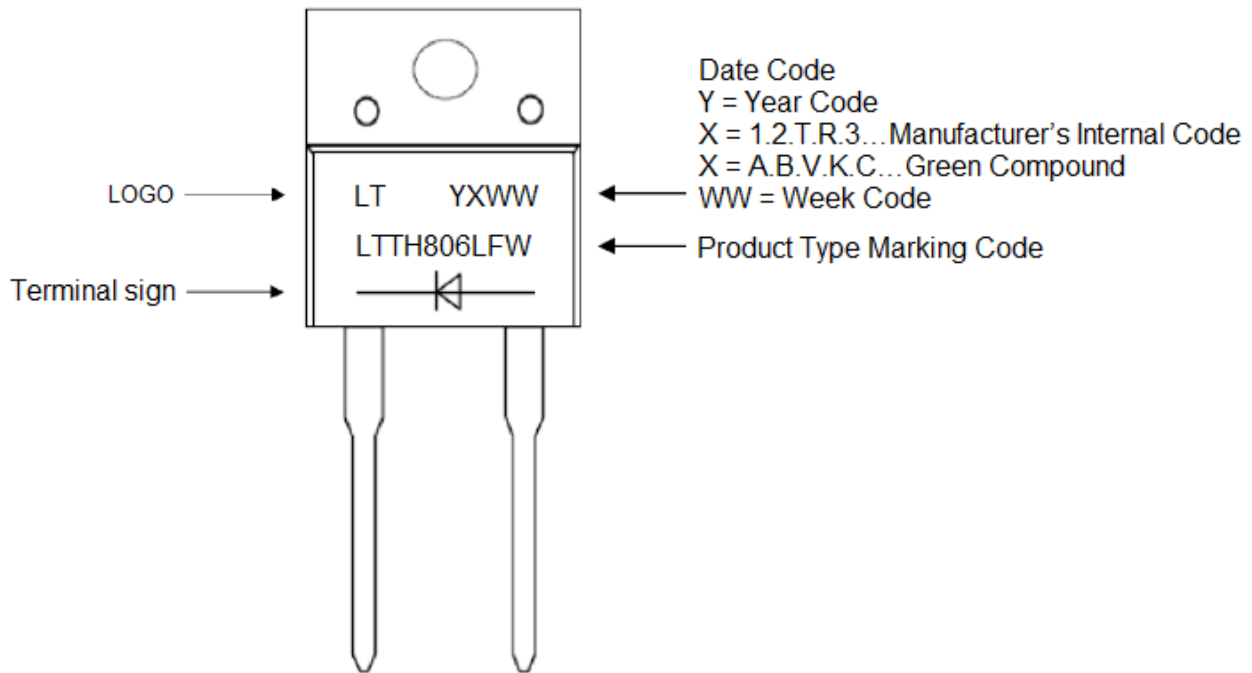
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
LTTH806LFW_NC	ITO-220AC(WB)	50pcs	Tube

Marking Information :



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