

**HYPER-FAST  
GLASS PASSIVATED RECTIFIER**

**REVERSE VOLTAGE – 600Volts  
FORWARD CURRENT – 15 Ampere**

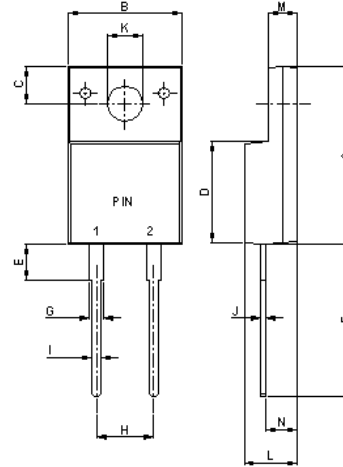
**FEATURES**

- Specially suited for critical mode Power Factor Corrections
- High reliability and efficiency
- ITO-220AC
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- Available in "Green" Package: ITO-220AC
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

**MECHANICAL DATA**

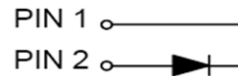
- Package: ITO-220AC
- Package Material: Plastic material, UL flammability classification 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Lead Free Plating
- Polarity indicator: As marked on the body
- Weight: 0.06 ounces, 1.70 grams (Approximate)
- Component in accordance to RoHs 2002/95/EC
- Maximum mounting torque = 0.5 N.m (5.1 Kgf.cm)

**ITO-220AC**



ITO-220AC		
DIM.	MIN.	MAX.
A	15.50	16.50
B	10.0	10.40
C	3.00	3.50
D	9.00	9.30
E	2.90	3.60
F	13.46	14.22
G	1.15	1.70
H	4.83	5.33
I	0.75	1.00
J	0.45	0.70
K	3.00 $\varnothing$	3.30 $\varnothing$
L	4.36	4.77
M	2.48	2.80
N	2.50	2.80

All Dimensions in millimeter



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
Ratings at 25°C ambient temperature unless otherwise specified.

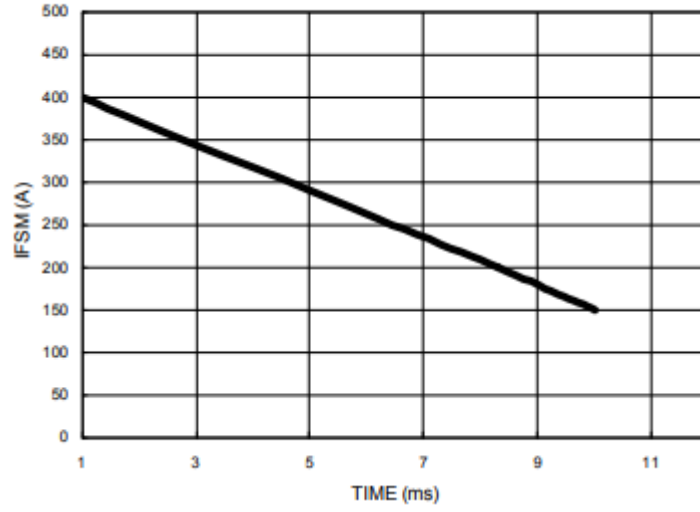
PARAMETER	SYMBOL	LTTH1506DF			UNIT		
Device marking code	Note	LTTH1506DF			---		
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600			V		
Average Rectified Output Current @ $\delta = 0.5$ See Fig.1	$I_F$	15			A		
Peak Forward Surge Current 8.3ms single half sine-wave	$I_{FSM}$	120			A		
Storage temperature range	$T_{STG}$	-55 to +150			°C		
Operating junction temperature range	$T_J$	-55 to +150			°C		
PARAMETER	TEST CONDITIONS		SYMBOL	Min.	Typ.	Max.	UNIT
Breakdown voltage	$I_R = 60\mu A$	$T_J = 25^\circ C$	$V_B$	600	---	---	V
Forward Voltage (4)	$I_F = 15A$	$T_J = 25^\circ C$ $T_J = 125^\circ C$	$V_F$	---	2.25 1.60	2.90 1.80	V
Leakage Current	$V_R = 600V$	$T_J = 25^\circ C$ $T_J = 125^\circ C$ $T_J = 150^\circ C$	$I_R$	---	0.5 70 300	60 800 2400	$\mu A$
Reverse recovery time	$I_F = 0.5A$ $I_{rr} = 0.25A$ $I_R = 1.0A$	$T_J = 25^\circ C$	$t_{rr}$	---	26	30	ns
THERMAL CHARACTERISTIC			SYMBOL	Typical			UNIT
Typical thermal resistance_Junction to Case			$R_{\theta JC}$	3.0			°C/W
Typical thermal resistance_Junction to Lead			$R_{\theta JL}$	3.0			°C/W

**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.  $R_{\theta JL}$  is measured at the PIN 2,  $R_{\theta JC}$  is measured at the top center of body.



FIG.7- IFSM CAPABILITY CURVE

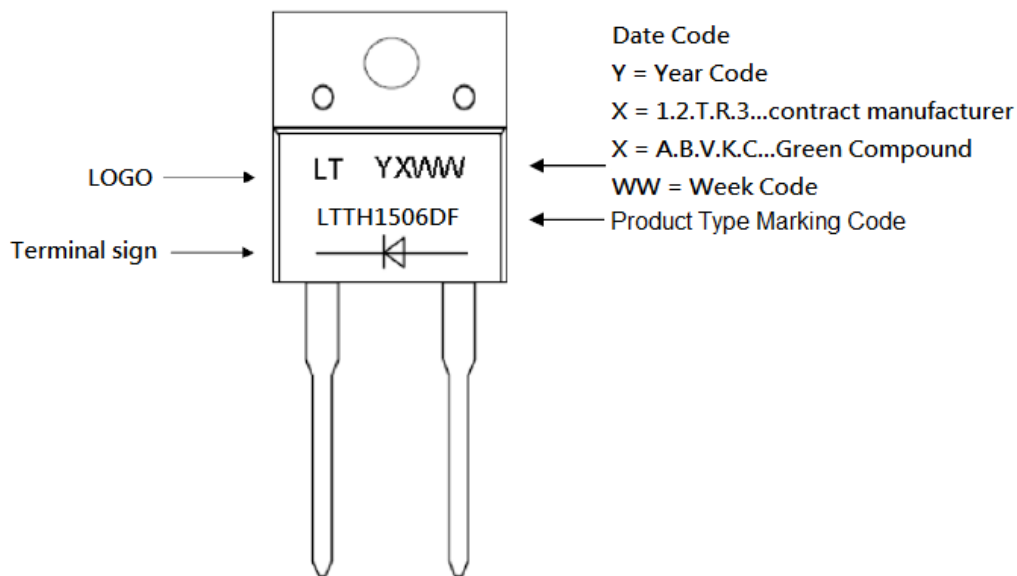


### Ordering Information:



Part Number		Package	Packing	
Lead Free	Green		Qty.	Carrier
NA	LTTH1506DF_HF	ITO-220AC	50pcs	Tube
LTTH1506DF	NA	ITO-220AC	50pcs	Tube

### Marking Information:



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