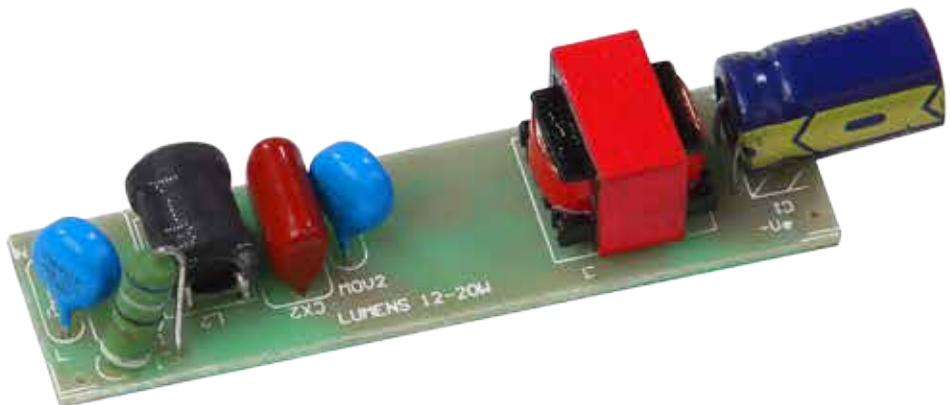




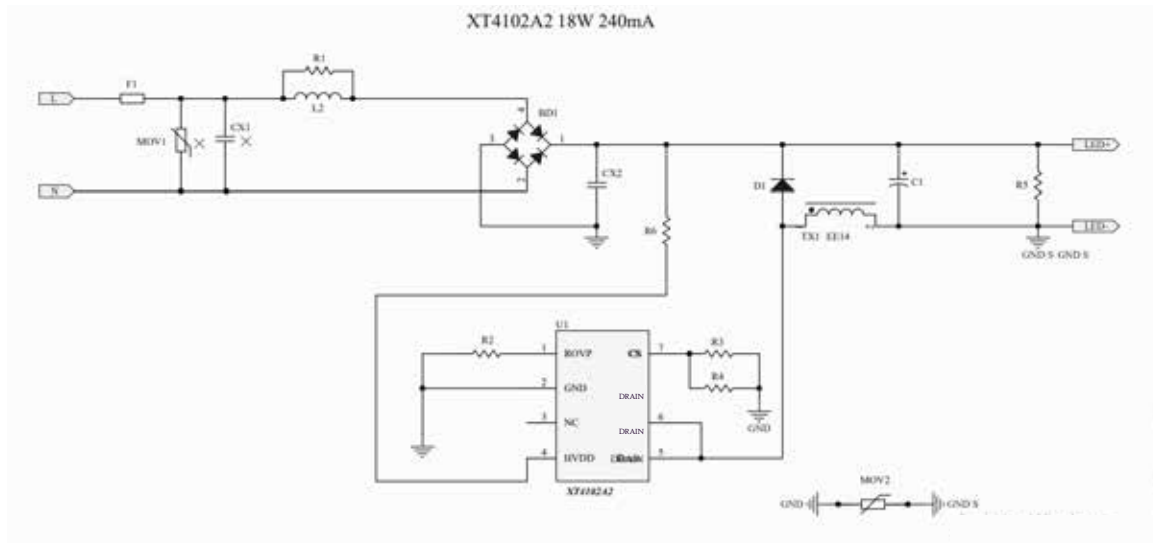
# 18W-72V/240mA BATTEN DRIVER



## General Specification

Solution	XT4102A2
AC Input	90~300VAC
DC Output	45-81V/0.240A
Efficiency	>88%@230VAC
Power Factor	0.99 @72V 0.240A
Over Voltage Foldback	>300VAC
Under Voltage Foldback	<165VAC
Max. Withstanding Voltage	440VAC
Surge	4KV

## Schematic



## Bill Of Material

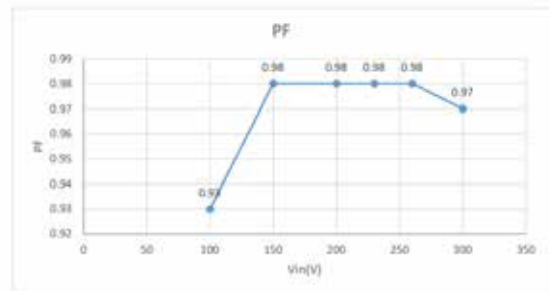
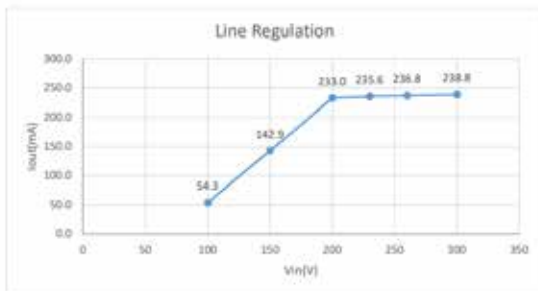
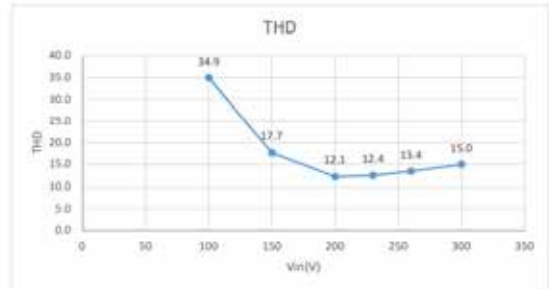
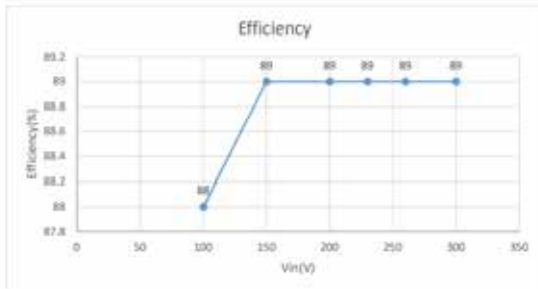
SR. NO.	PART	DISCRPTION	LOCATION	VOLUME	Price/Piece	Total Price
1	MOV	7D621	MOV1	1		
2	MOV	7D511	MOV2	1		
3	POLY CAP	0.1uF/630V 10mm	CX2	1		
4	FUSE	68R/TH 2W	F1	1		
5	BRIDGE RECFR	MB10F	BD1	1		
6	ELCO	100uF/100V	C1	1		
7	DIODE	ES1JF	D1	1		
8	RESISTOR	5.1K 1206 5%	R1	1		
9	RESISTOR	1.8R, 1.6R/1206 1%	R4,R3	2		
10	RESISTOR	300K/1206 1%	R2, R5	2		
11	RESISTOR	22K/1206 5%	R6	1		
12	IC	XT4102A2	U1	1		
13	TX	EE14 (4+4) 0.960mH	TX1	1		
14	DRUM INDUCTOR	8X10mm 2mH	L1	1		

## Electricals Parameters

PARAMETERS AT 72V OUTPUT									
S.No.	Vin(V)	Iin(mA)	Pin(W)	PF	THD(Current)	Vout(V)	Iout(mA)	Pout(W)	Efficiency(%)
1	100	47.22	4.42	0.93	34.9	72.30	54.3	3.91	88
2	150	79.84	11.67	0.98	17.7	72.32	142.9	10.38	89
3	200	94.93	18.85	0.98	12.1	72.33	233.0	16.76	89
4	230	83.24	18.91	0.98	12.4	72.33	235.6	16.99	89
5	260	73.51	19.07	0.98	13.4	72.33	236.8	17.17	89
6	300	65.74	19.23	0.97	15.0	72.33	238.8	17.33	89
PARAMETERS AT 65V OUTPUT									
1	230	75.45	17.15	0.98	13.07	65.31	235.0	15.4	0.89



## Graphical Representation



## Inductor Details

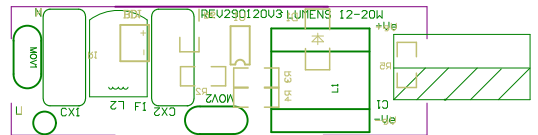
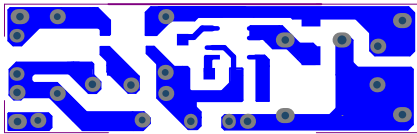
XT4102A2 18W				
CORE:- EE14		18W/240mA		
	TURNS	WIRE(SWG)	PIN NO. (S--E)	INDUCTANCE
P1	120	34SWG	1--4	0.966mH
			8 NO. DUMMY	



<b>DRUM INDUCTOR</b>	
8X10mm	2mH



## PCB layout



## Surge Report

SURGE VOLTAGE	ANGLE	POSITIVE/NEGATIVE	NO. OF PULSE	INTERVAL(SEC)	PASS/FAIL
3KV	0	+	5	40	PASS
		-	5	40	PASS
	90	+	5	40	PASS
		-	5	40	PASS
	180	+	5	40	PASS
		-	5	40	PASS
	270	+	5	40	PASS
		-	5	40	PASS
3.5KV	0	+	5	40	PASS
		-	5	40	PASS
	90	+	5	40	PASS
		-	5	40	PASS
	180	+	5	40	PASS
		-	5	40	PASS
	270	+	5	40	PASS
		-	5	40	PASS
4KV	0	+	5	40	PASS
		-	5	40	PASS
	90	+	5	40	PASS
		-	5	40	PASS
	180	+	5	40	PASS
		-	5	40	PASS
	270	+	5	40	PASS
		-	5	40	PASS