High Precision PSR APFC Isolated LED Driver

JI-S1535HI



# JHA INSTRUMENT

# 36W ISOLATED HPF LED DRIVER



## Features:

- Wide input voltage range 100VAC to AC300VAC
- Withstand voltage 450VAC
- Highly accurate constant LED current (+/-3%)
- High Power Factor (PF)
- THD Less than 5%
- Cycle-by-Cycle Current Limit
- NO EMI/RFI Noise
- Isolated
- Excellent Line and Load Regulation
- High Efficiency
- Auto Recovery
- Three wire system for better grounding and shock proof
- Excellent heat management
- Dusk to Dawn with light sensing (optional)

## Protections:

- Short Circuit
- Over Temperature
- Under-voltage
- Surge > 4.7KVA (>10KVA optional)
- Over load
- Over-voltage auto-cut at 270VAC
- Open Circuit
- Transformer Saturation

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## Rating:

<ul> <li>Input Voltage</li> </ul>	120-280VAC	<ul> <li>Output Voltage</li> </ul>	36 VDC
<ul> <li>Input Power</li> </ul>	36W	<ul> <li>Output Power</li> </ul>	31.5 W
Operating     Temperature	0-45 0C	Output Current	850 mA

# Application:

Street light Flood light Ceiling light Constant Current Power Supply

# **Test Report:**

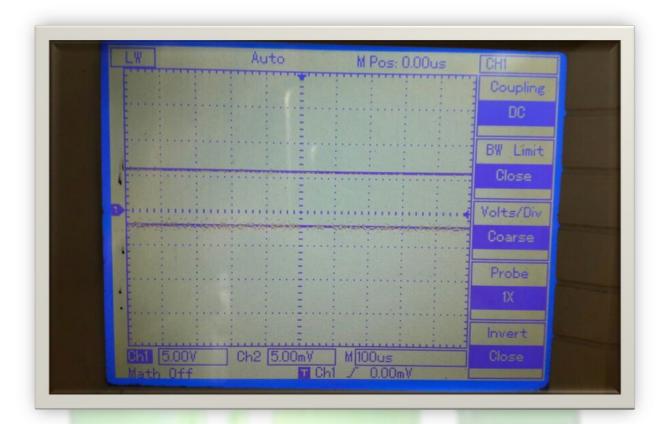
PART NO: JI-S1535HI0850039-WH

SL	AC	AC	Input	Input	PF	THD	Output	Output	Output	EFF %
No	Input	Input	(S)	(P)		%	(V)	(mA)	(W)	
	(V)	(I)								
1	100	0.340	33.8	33.8	1.000	5	36.5	760	27.74	82.07
2	120	0.291	35.7	35.6	1.000	6	36.8	810	29.80	83.73
3	140	0.266	36.4	36.2	0.9945	6	36.9	830	30.62	84.60
4	160	0.230	36.7	36.4	0.9918	7	37.0	840	31.08	85.38
5	180	0.203	36.8	36.2	0.9863	7	37.0	850	31.45	86.8
6	200	0.181	36.7	36.0	0.9809	7	37.0	850	31.45	86.8
7	220	0.168	36.9	36.0	0.9729	9	37.0	850	31.45	86.8
8	230	0.161	37.3	36.0	0.9696	11	37.0	850	31.45	86.8
9	240	0.157	37.2	36.0	0.9641	11	37.0	850	31.45	86.8
10	260	0.145	37.7	36.0	0.9580	14	37.0	850	31.45	86.8
11	280	0.137	38.4	36.0	0.9483	14	37.0	850	31.45	86.8
12	300	0.019	5.7	0.2	0.0357	25	00.0	000	00.00	00.00

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## **Output Waveform:**



## **Recommend Load Condition:**

With 3030 LED: 1W, 6V, 150mA

Total No of LED – 36 No of LED in series – 6 No of LED in Parallel - 6

With 5630/5730 LED: 0.5W, 3-3.4V, 150mA

Total No of LED – 72 No of LED in series – 12 No of LED in Parallel - 6

With 2835 LED: 0.5W, 3-3.4V, 150mA

Total No of LED – 72 No of LED in series – 12 No of LED in Parallel - 6

With 2835 LED: 1W, 9V, 100mA

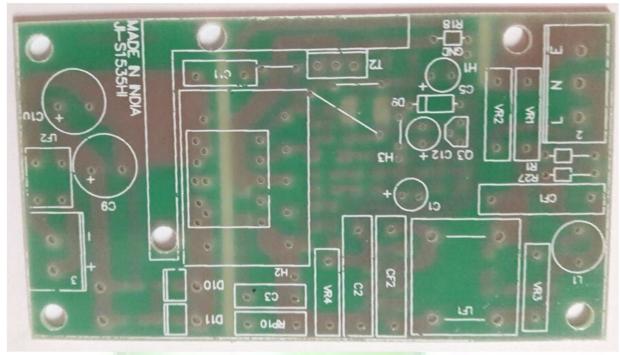
Total No of LED – 36 No of LED in series – 4 No of LED in Parallel - 9

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## Dimension:



Length - 94mm



## Ordering Information:

Part No: JI-S1535HIAAAAVVV-WH/NH

Where

AAAA – Current in mill ampere

VVV - Voltage in voltWH - With Heat sinkNH - Without Heat sink

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