



深圳市华浩德电子有限公司

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Product Name:

产品名称

HN56W-02 LED driver

HN56W-02-B1100 FCC ☒ UL ☒

HN56W-02-B1150 FCC ☒ UL ☒

Product Model:

产品型号

HN56W-02-B1200 FCC ☒ UL ☒

HN56W-02-B1250 FCC ☒ UL ☒

HN56W-02-B1300 FCC ☒ UL ☒

版本: REV.: 00



IGNATURE AND SEAL BY US /我司签字盖章

日期:	2017-7-12	
Prepared By 编制	Checked By 审核	Approved By 批准

Please confirm and send it back with signature within 7 days.Otherwise we will assume your acceptance.And if any quality dissent ,will execute according to this product specification.

请确认后七日内回签，如不回签则视贵公司默认接受，在发生品质异常时按此份产品规格书执行。

CUSTOMER APPROVED SIGNATURE /客户承认盖章

Customer Model No.客户型号:

日期:		
ENG./工程	QA/品管	OTHER/其他

Comments 建议:

ECN History 变更履历表

深圳市华信德电子有限公司
文管中心
受控文件



Feature特征:

- ◆ Constant current design. 恒流设计
- ◆ 3 in 1 dimming mode:0-10V,PWM,RX. 三合一调光模式: 0-10v, PWM,RX
- ◆ Smoothly dimming(0-100%),can dim to off. 调光细腻,且可以关断 (0-100%)
- ◆ UL FCC Certified
- ◆ PROTECTION: Short Circuit, Open Circuit 保护: 短路保护, 开路保护
- ◆ Surge protection: 1KV.浪涌保护1KV
- ◆ SELV safe output design SELV. 安全输出设计

Application应用

- ◆ Down light, Panel light, strip light.筒灯, 面板灯, 灯带

■ Introduction 介绍

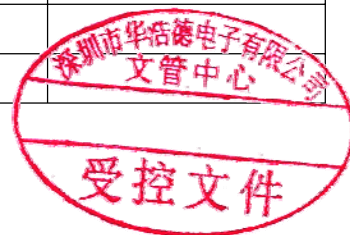
The document detail the electrical, mechanical and environmental specifications of a 56W constant current LED driver with 0-10V Dimming. This LED drive power supply is suitable only for LED load.

此份资料详细描述了一款 56W 带 0-10V 调光的 LED 恒流驱动电源的电器性能, 环境要求等。此款电源只适用于 LED 负载。

■ Model and Key parameters 型号和关键参数

Model 型号	Power(W) 功率	Output Voltage (Vdc) 输出电压	Output current (mA) 输出电流	Efficiency(Typ.) 效率
HN56W-02-B1100	46.2	25-42	1100	86.5%
HN56W-02-B1150	48.3	25-42	1150	86.7%
HN56W-02-B1200	50.4	25-42	1200	86.7%
HN56W-02-B1250	52.5	25-42	1250	86.7%
HN56W-02-B1300	54.6	25-42	1300	86.7%

Note: AC input 230V test for output 36Vdc 注意:输入 230V 测试,输出 36V



■ Technical data 技术参数

Input characteristics 输入特性	
Input Voltage 输入电压	100-347Vac
Input Frequency 输入频率	47-63Hz
Input Current (Typ.) 输入电流 (典型)	650mAmax. @ 100-347Vac & 100% load
Input Current 输入电流	60Amax. @ 230Vac, 25℃
Power factor (Typ.) 功率因数 (典型)	PF>0.9@115VAC/230VAC/347VAC, 100% load
THD 总谐波失真	THD<20% @ 115VAC/230VAC/347VAC, 100% load
Output characteristics 输出特性	
Current accuracy 电流精度	5% ^{注3}
No load Voltage 空载电压	55Vmax
Efficiency 效率	85%@@ 100-347Vac & 100% load, see efficiency vs. load curve for the details
Output Voltage 输出电压	25V-42V
Ripple and Noise 纹波与噪声	500mVp-p
Line Regulation 线性调整率	3% _{lo}
Load Regulation 负载调整率	3% _{lo}
Turn On Delay Time 开机延时	Under normal conditions, the maximum delay time is 1 second
Protection functions 保护功能	
Open circuit 开路保护	When the LED disconnection the product is protected such as hiccup or when it is at the highest point of output voltage, the power supply shall be self-recovery when the fault condition is removed.当 LED 开路时, 产品进入保护状态, 如打嗝或钳在某输出最高电压状态, 产品不会损伤, 当故障排除或重新开机时, 电源恢复工作正常。
Short Circuit 短路保护	The input power shall decrease when the output rail short, the power supply shall be self-recovery when the fault condition is removed.输入功率会相应减小当输出短路时, 短路情况解除后, 电源自动恢复正常。
Environmental conditions 环境条件	
Operating Temperature 工作温度	-20℃ to +50℃
Operating Relative Humidity 湿度	10% to 90% RH, non-condensing
Storage Temperature 储存温度	-30℃ to +70℃
Storage Relative Humidity 储存湿度	5% to 95%RH, non-condensing (Sea level to 2,000 m)
Vibration 振动	10 to 500HZ Sweep at constant acceleration of 1.0G (depth: 3.5mm)for 1 Hour for each of the perpendicular axes X, Y, Z.
Degrees of Protection 防水等级	IP20



Safety compliance 安全标准	
Safety Standard 安规标准	GB19510.1,GB19510.14;EN61347-1,EN61347-2-13;UL8750, CSA C22.2No.250.13-12.
Dielectric Strength 介电强度	I/P-OP:3750VAC/5mA/60S
Insulation Resistance 绝缘电阻	I/P-O/P:>10M Ohms / 500VDC / 25℃ / 70% RH.
Leakage Current 泄露电流	The leakage current shall be less than 0.25mA for Class 2 at maximum input voltage
Surge Immunity 浪涌雷击	Severity Level 等级: Level2/2 级, 差模 1.0kv Severity Level 等级: Level3/3 级, 共模 2.0kv Performance Criterion 性能标准: B
EMI	GB17743, GB17625.1; EN55015, EN61000-3-2, EN61000-3-3.
EMS	EN 61000-4-2, 3,4,5,6,8,11, EN 61547.
Reliability 可靠性	
Life Time 寿命	≥50,000 H@230Vac, 100% load. See lifetime vs. Tc curve for the details
MTBF 平均无故障时间	≥ 200,000H@ 25℃, 230Vac, 80% load. (MIL-HDBK-217F)
Warranty 质保	5 years
Others 其它	
Dimensions 尺寸	180*76*34mm (L*W*H)
Weight 重量	372±5g
Remark 备注	
1. The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25℃ and humidity 50%, AC input 230V and 90% output load.此参数所得包括功率因数, 总谐波失真, 效率等所有测试均在 25℃ 50%湿度 输入电压 230V 以及 90%输出负载的环境下测试。 2.lo is rate output current.	



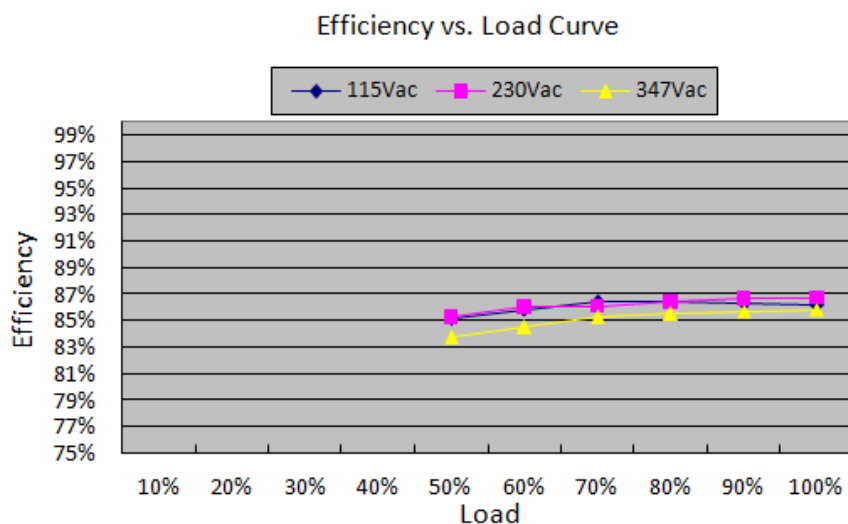
■ Dimmable feature 调光描述

Function			0-10V			PWM			RX			
Yes Or No			√			√			√			
%	0	10	20	30	40	50	60	70	80	90	100	open
0-10V	0	8%	20%	32%	44%	56%	69%	81%	93%	100%	100%	100%
PWM	0	11.%	26%	40%	53%	64%	75%	86%	94%	100%	100%	100%
RX	0	4K Ω	6K Ω	8K Ω	11K Ω	14K Ω	16K Ω	19K Ω	23K Ω	30K Ω	300K Ω	100%

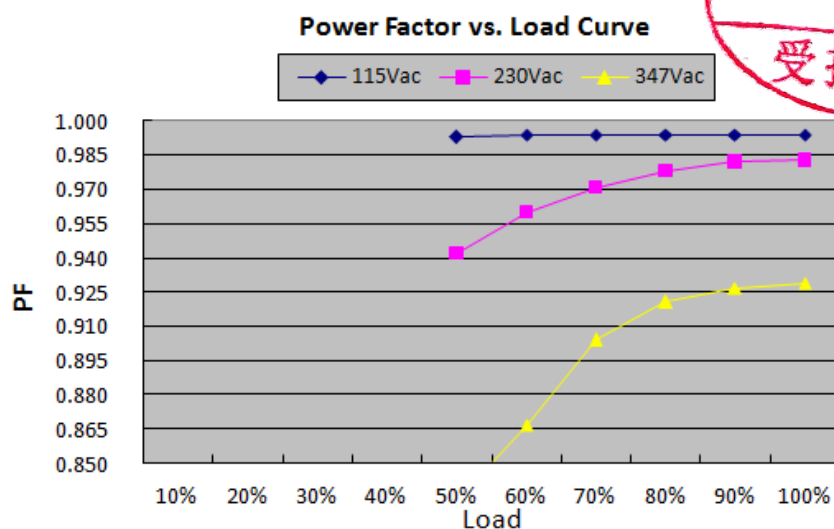
Note:

- % Refers to the percentage of the dimming signal %为调光信号百分比
- 0-10V PWM RX refers to three different dimming way, the percentage of output current under the corresponding dimming signal percentage 0-10V PWM RX 为 3 种调光方式, 在对应的调光信号百分比下电源输出的电流百分比

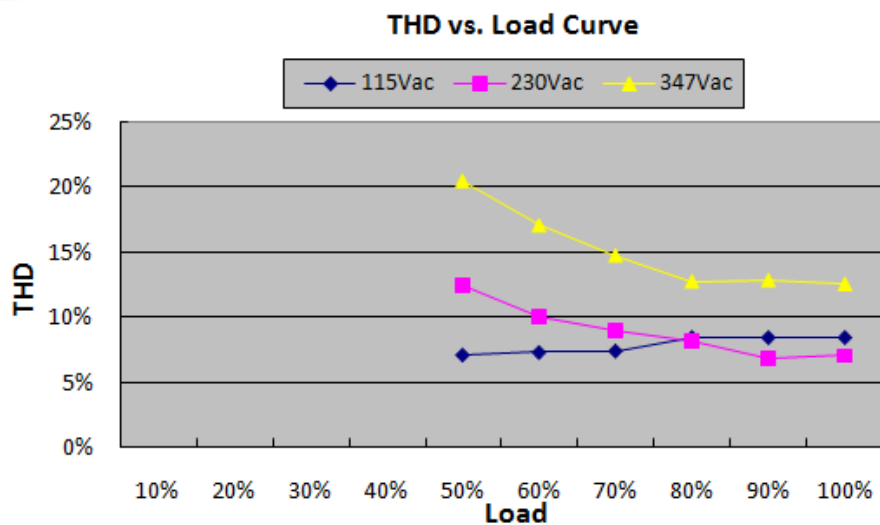
■ Efficiency vs. Load 效率负载



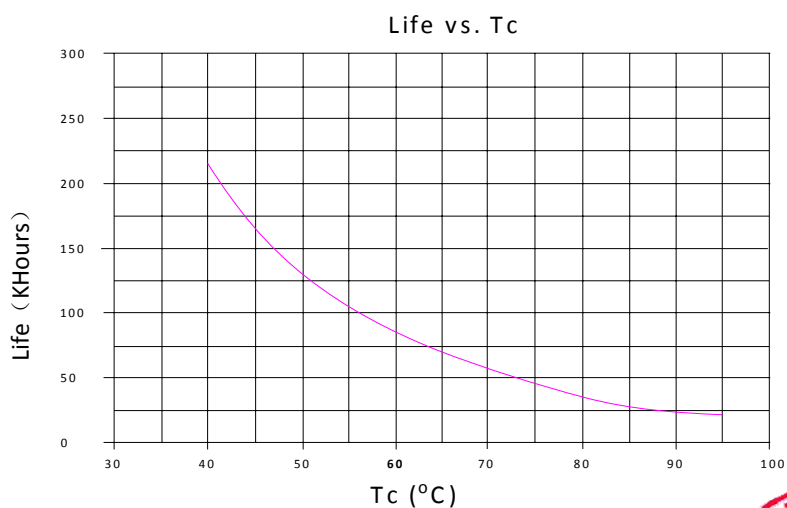
■ Power Factor 功率因素



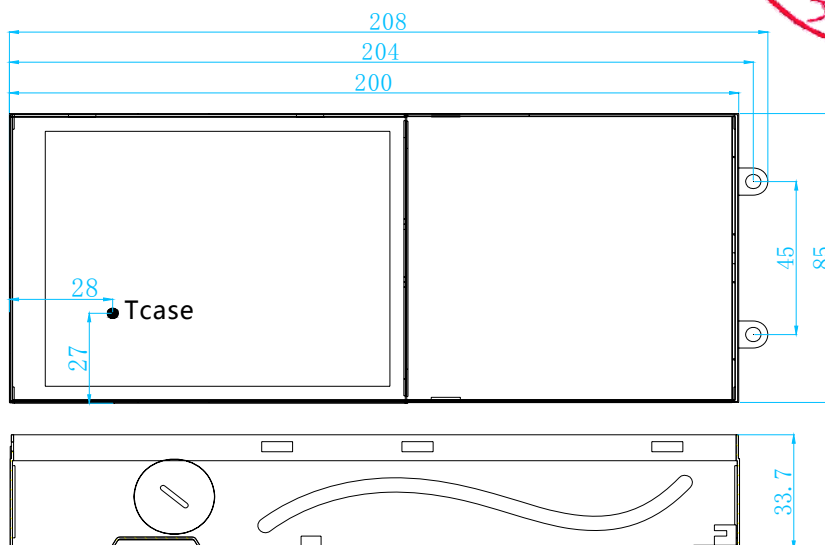
■ THD vs. Load THD 和负载



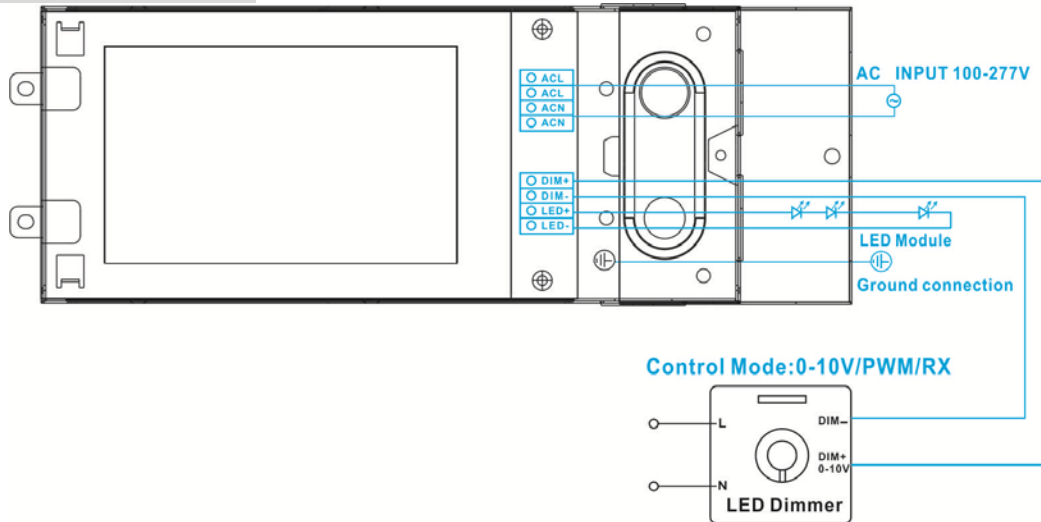
Life vs. Tc 寿命和温度



Dimensional Drawing (unit: mm) 尺寸图



■ Cabling scheme 接线图



■ LABEL 标签



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DIMMABLE LED DRIVER

Model: HN56W-02-B1300

Input Voltage	Input Current	PF	Output Voltage	Output Current	Ta(°C)
100-347V~ 50/60Hz	0.65A	0.9	25-42V	1300mA	50°C

0-10V / PWM / RX Dimming
Dry or damp location use only
Short circuit protection

● TC:90°C

Class 2

UL LISTED
E479229
Class P

FC

MADE IN CHINA

RoHS

YYMM

Input

○ ACL
○ ACN

Output

○ DIM+
○ DIM-
○ LED+
○ LED-

Wire preparation
push in
IN:24-14AWG
OUT:22-16AWG

7-8mm

备注:此型号激光带 LOGO 的标签都按上图模版只改电流,具体电流按客户订单要求,标签中有两处要按订单电流变化,MODEL:HN56W-02-B1300(例如订单电流是 1200mA,型号 MODEL:HN56W-02-B1200),另一处是 Output Current 下面改成 1200mA) 其它电流都按此规则变化。

包装, 运输, 贮存 Package,Transportation & Storage

1.包装 Package

a. 包装箱的外形尺寸为（单位：mm）:长 X 宽 X 高=485*342*201mm;

package box outside dimension: L×W×H =485*342*201mm (unit: mm);

b. 每箱产品的包装数量为 28 台;

product number in each box: 28PCS;

c. 整箱毛重 KG

whole box gross weight: kg;

2. 运输 Transportation

适用于车，船，飞机运输，运输中应遮蓬，防晒，文明装卸。

Packaging is designed suitable for transportation by truck, ship, and plane. The products should be shielded from sunshine, and loaded and unloaded carefully.

3. 贮存 Storage

产品贮存应符合 GB3873-83 的规定。

贮存期限超过一年的产品要重新检验，合格后方可使用。