

SUNCOM 新创电源	产品类型	LED 驱动电源 LED INTEGRATED SPECIAL DRIVER		
	产品系列	HVC-50W-56X系列	REV	V2.0

广东新创电源科技有限公司

客户承认书

SPECIFICATION FOR APPROVAL

CUSTOMER/客户名:	
MODEL NO. /产品型号:	HVC-50W-56X系列
Rev. /版本号	V2.0
SAMPLE DATE/送样日期:	

客户确认栏

TESTED BY 检查	CHECKED BY 审核	APPROVED BY 批准
客户备注		

Please return to us one copy of “SPECIFICATION FOR APPROVAL” with you approved signature. /客户确认签章后请回传一份承认书给我公司.

新创确认栏

TESTED BY 检查	CHECKED BY 审核	APPROVED BY 批准

Guangdong Suncom Power Technology Co., Ltd

广东新创电源科技有限公司

No.1 of Yongyi 3rd Road Henglan Town Zhongshan Guangdong China Post code528478

地址：广东省中山市横栏镇永兴工业区永谊三路1号 邮编：528478

TEL:0760-22326609 28168136 FAX:0760-87600929

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◆ Features 产品特性:

- Input Rated voltage : 100-277Vac 50Hz/60Hz
输入额定电压范围:100-277Vac 50Hz/60Hz
- Isolation, constant current mode output
隔离, 恒流模式输出
- Surge Protection: L-N :4KV; L/N- E:6KV
防雷保护: 火线对零线4KV, 火线/零线对地6KV
- 3 in 1 dimming(dim-to-off)
三合一调光 (调光可关断, 隔离设计)
- Over temperature drop current
过温降电流
- Output current is adjustable
输出电流可调
- THD<10%

◆ Applications 产品应用:

Application: Street light、high bay lighting and other lighting lamps
应用于: 路灯、工矿灯等照明灯具

◆ Description 产品描述:

This product is a constant current Power Supply, Specially designed for LED, With low harmonic (< 10%), High Power Factor. Flicker free, Output current can be flexibly adjusted according to LED lamp voltage. 3 in 1 dimming function.Built-in Surge protection, Output open circuit protection, Short circuit protection, Over temperature drop current protection. Greatly improve the safety and reliability of the product.

本产品为恒流驱动电源, 专为LED设计, 具有低谐波 (<10%)、高功率因数、无频闪, 输出电流可根据LED灯电压灵活调节。三合一调光功能。内置防雷保护, 输出开路、短路保护, 过温降电流保护, 极大的提高了产品的安全可靠性能。

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■ MODEL LIST 型号列表

Model 型号	Rated Power 额定输出功率	Input Voltage 输入电压	Output Voltage 输出电压范围	Output Current 输出电流	THD. (Typ)	PF. (Typ)
HVC-50W-56X	50W	100-277Vac	27-56V	0.6-1.5A	8.2%	0.96

NOTE: All parameters NOT special mentioned are measured at 230Vac input,rated load and 25℃ of ambient temperature ; 如未特殊注明，所有参数均在 230Vac 输入、额定负载、25℃环境温度下测量

■ “X” Means Additional Function 后缀“X”功能可选机型表

“X”	ADJ Current (可调电流：后缀A)	0-10V/PWM Dim/Resistor (三合一调光：后缀B)	/
B		√	

■ ELECTRICAL SPECIFICATION 电气规格

◆ 输入性能 Input performance:

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Voltage Range 电压范围	90Vac	100-277Vac	305Vac	
Frequency Range 频率范围	47Hz	50/60Hz	63Hz	
AC Current 交流电流	—	—	0.68A	—
Inrush Current 浪涌电流	—	—	60A	At 230Vac input, 25℃ cold start 环境温度 25℃，230Vac 冷机启动
PF. 功率因数	0.95	0.96	—	At 230Vac input, full load 满载，输入 230Vac 下测量
THD. 总谐波失真	—	8.2%	10%	

◆ 输出性能：Output performance

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Voltage Range 电压范围	27VDC	—	56VDC	—
Current range Regulation 电流调节范围(电位器)	0.6A	—	1.5A	—
Rated Power 额定功率	—	—	50W	—
Over Voltage 空载电压	72V	—	80V	—
Efficiency 效率 Measured at full load and 230Vac input	≥89%	90%	—	At 230Vac input, 56V full load 输出56VDC满功率，输入230Vac下测量
Current Tolerance 电流精度	-5%	—	+5%	—
Line Regulation 线性调整率	-3%	—	+3%	—

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Load Regulation 负载调整率	-3%	-	+3%	-
Current Ripple 纹波电流		±3%	<±5%	-
Turn-on Delay Time 启动时间	-	500mS	<1S	Measured at full load and 230Vac input
Short Circuit Protection 短路保护	-	-	7W	Constant flow mode, recovers automatically after fault condition is removed 恒流模式，故障排除后自动恢复

■ 环境：Environment

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Working TEMP 工作温度	-40℃	+25℃	+65℃	-
Storage TEMP 储存温度	-40℃	+25℃	+85℃	-
Working Humidity 工作湿度	20% RH	-	90% RH	-
Storage Humidity 储存湿度	10% RH	-	90% RH	-
Maximum shell TEMP 最大壳温	-	-	+90℃	-

■ 安规和电磁兼容：

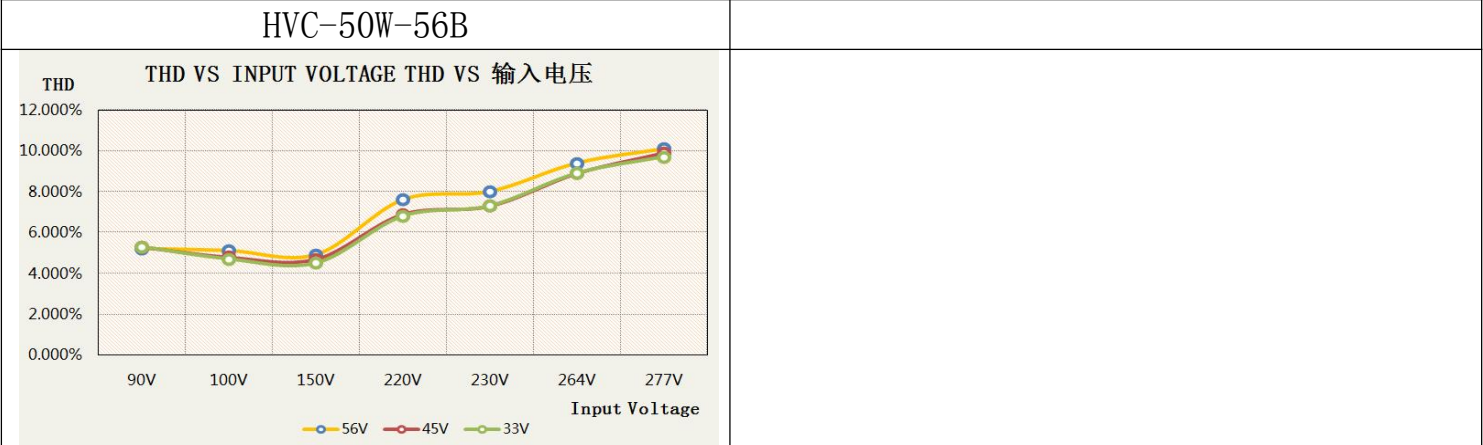
Withstand voltage 耐压	I/P - FG:1.75KVAC, I/P-O/P:3.75KVAC, I/P-调光: 3.75KVAC, O/P-调光: 0.5KVAC
Isolation Resistance 绝缘阻抗	≥10MΩ at I/P - FG 500VDC Test
leakage Current 漏电流	<0.75mA/277Vac
Earthing Resistance 接地电阻	<0.1Ω / 25A 1 min
Surge 浪涌	差模 L-N +/- 4KV (2 ohm), 共模 L, N-E +/- 6KV (12 ohm)
Conducted electromagnetic interference 传导	>3dB
Radiated electromagnetic interference 辐射	>3dB

NOTE:

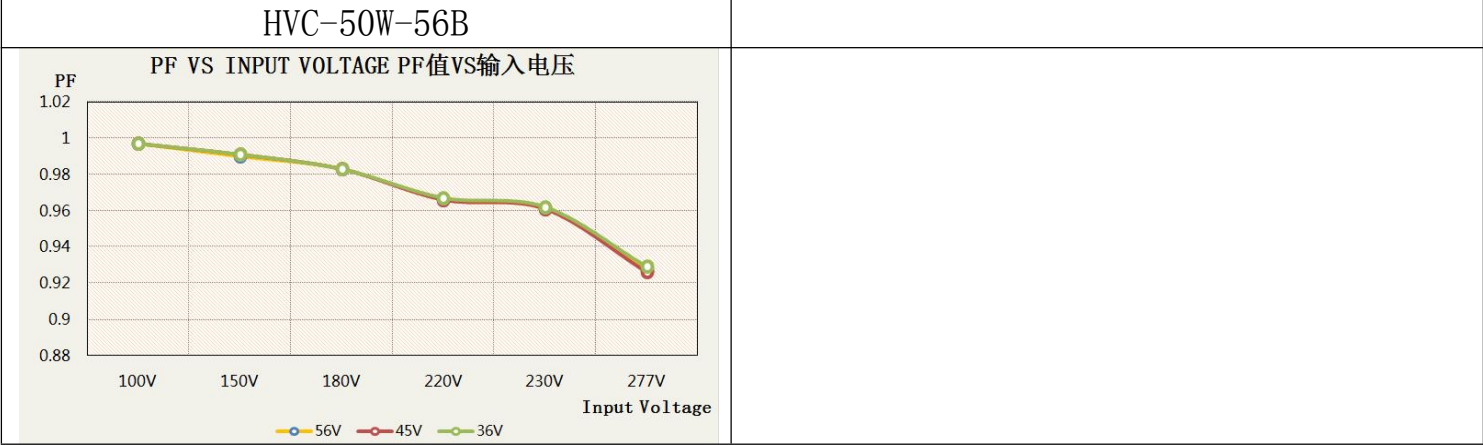
- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25℃ of ambient temperature.
如未特别说明，所有规格参数均在 230Vac (50Hz) 输入，额定负载，环境温度 25℃ 的条件下进行测量
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.
误差：包含设定误差、线性调整率和负载调整率。

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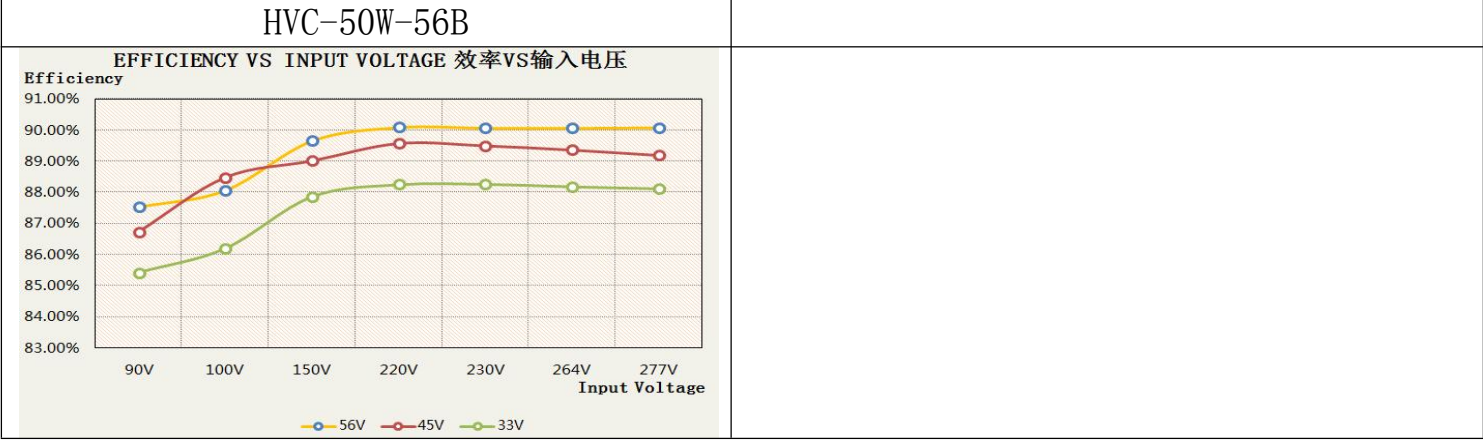
THD VS INPUT VOLTAGE THD VS 输入电压



PF VS INPUT VOLTAGE PF 值 VS 输入电压

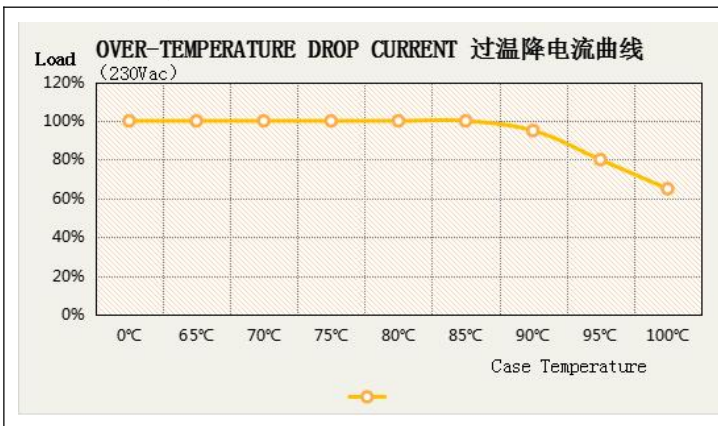


EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压



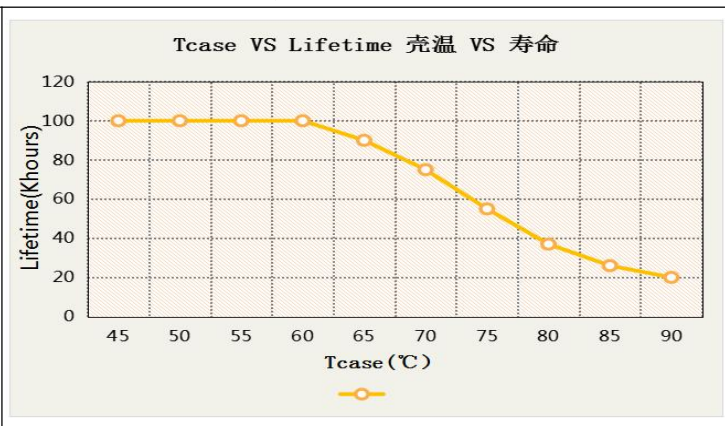
OVER-TEMPERATURE DROP CURRENT

过温降电流曲线



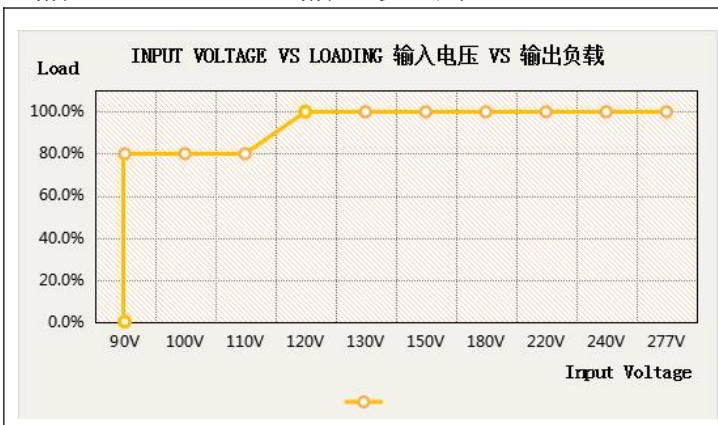
TCASE VS LIFETIME

壳温VS寿命



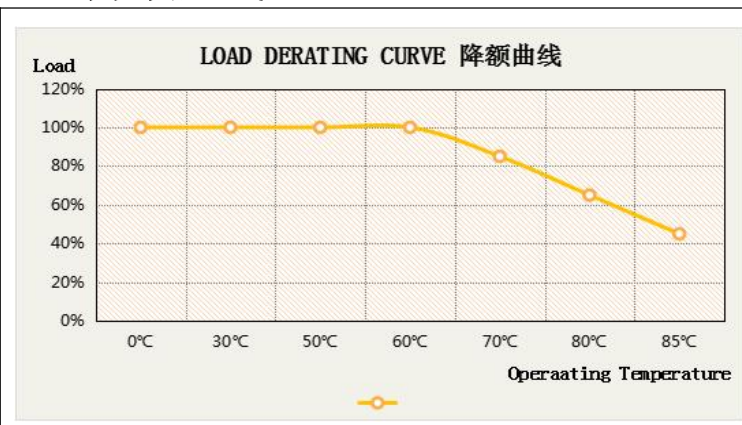
INPUT VOLTAGE VS LOADING

输入 电压 VS 输出负载



LOAD DERATING CURVE

降额曲线



THE DIMMING CURVE 调光曲线

三合一调光功能 (B型) :

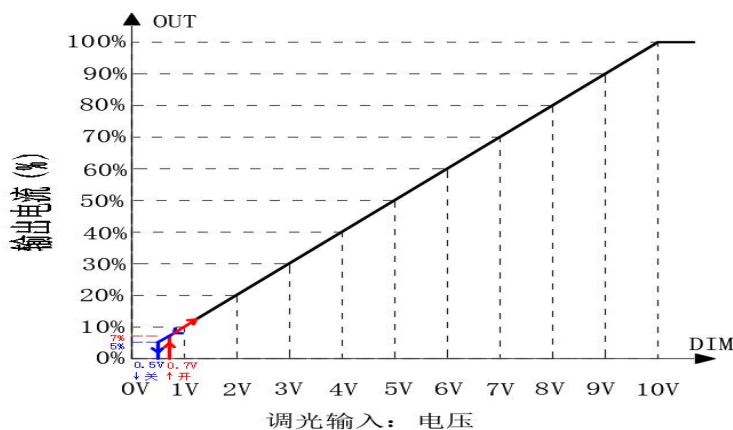
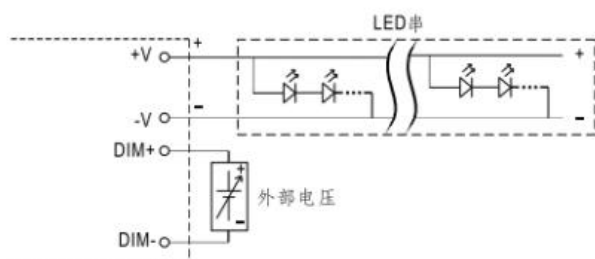
在DIM+ (兰色线) 和DIM- (白色线) 间连接一个100K电阻或0-10V直流电压或PWM信号, 即可调整输出恒电流的数值

调光端口输出电流: 100uA (典型值)

三合一调光曲线

0-10V调光

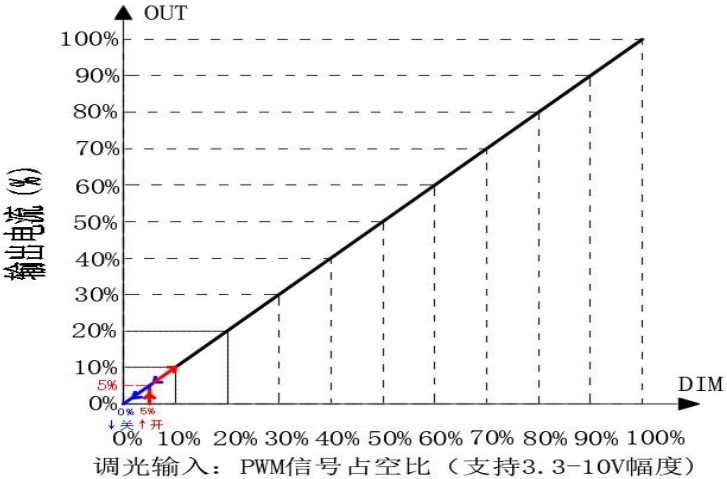
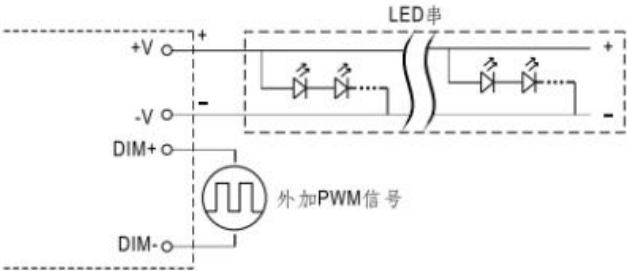
用外加0-10VDC电压



PWM调光 (PWM频率 1KHZ)

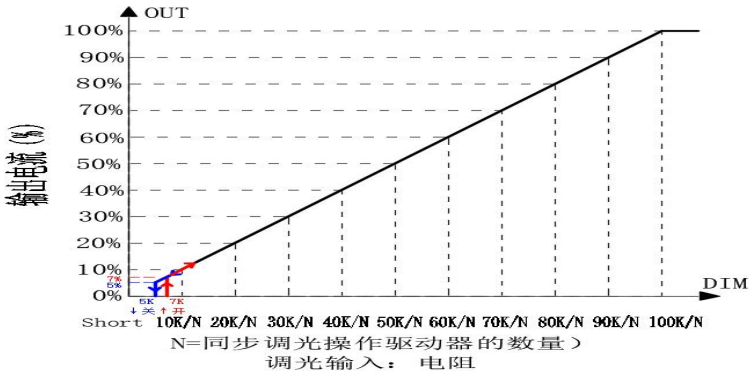
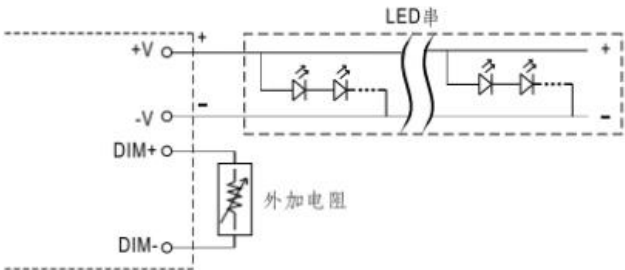
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用外加 PWM信号（频率0.5K-5K）



电阻调光（100K）

用外加电阻（0-100K）



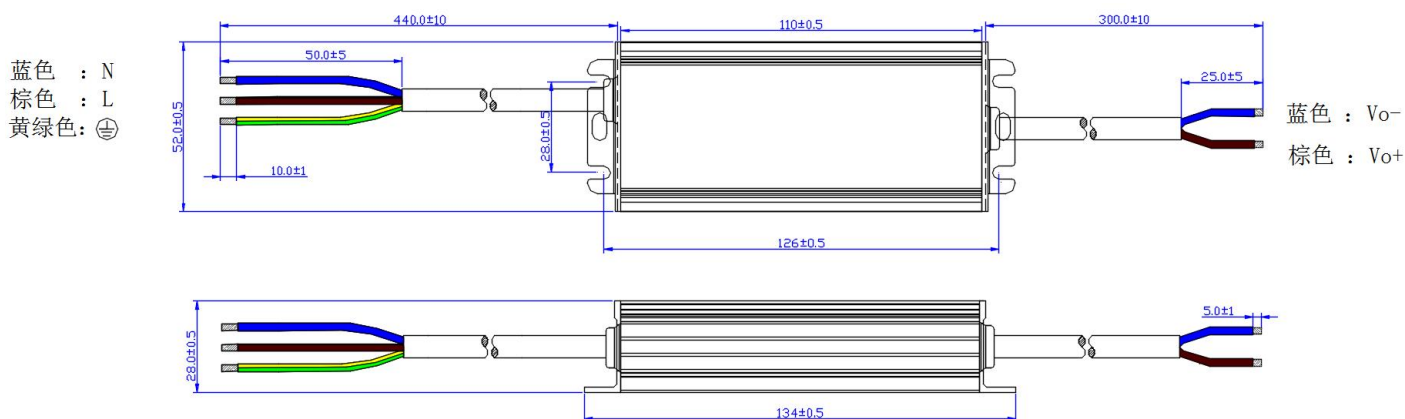
MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:

Bare plate dimension 裸板尺寸	100*39*21mm (L*W*H)
final dimension 成品尺寸	132*52*28mm (L*W*H)
Product Weight 产品重量	365g

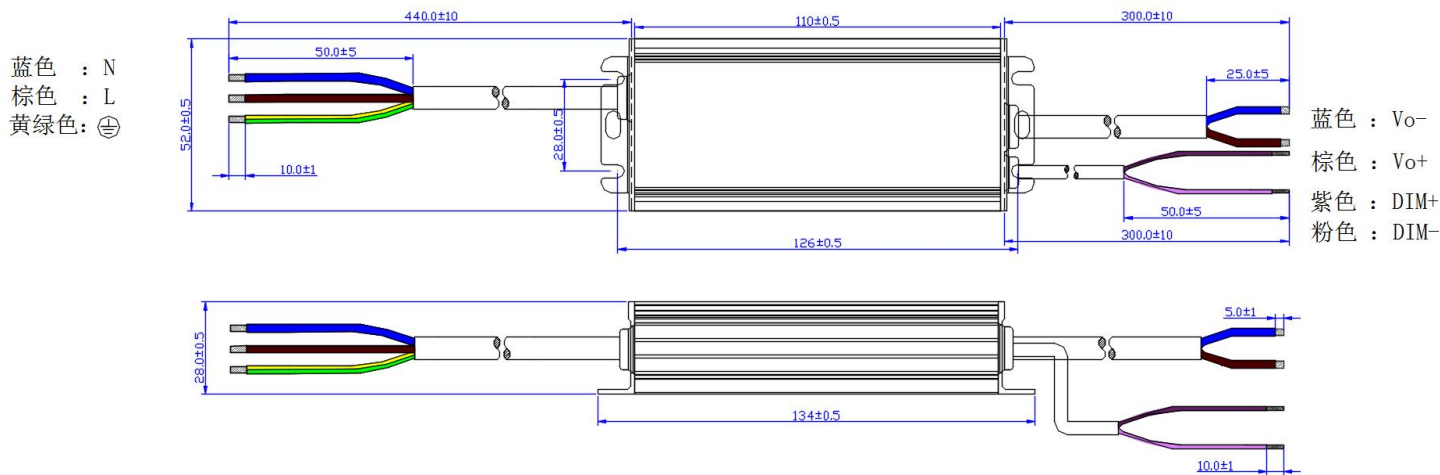
Case No. 机壳型号: 50W

Unit 单位:mm

HVC-50W-56A



HVC-50W-56B



Nameplate 铭牌

尺寸:84*29mm 样式: 贴纸

HVC-50W-56A		HVC-50W-56B	
SUNCOM HVC-50W-56A (型号)LED控制装置 INPUT 输入端 ☐ ACL-(BN棕)BK-黑 ☐ ACN-(BU蓝)WH-白 ☒ (GN绿/YL黄) *277 for North American only. Suitable for dry,Damp and wet locations No. 1-02, Yongyi Road Three, Yongxing Industry Zone, Henglan Town, Zhongshan City, 528478 Guangdong, China Vin(输入):100-240V~0.68A 50/60Hz Vin(输入):277V~0.25A 50/60Hz η:≥89% PF:≥0.95 •tc Vout(输出):27-56V=600-1500mA Max.(最大电压):Uout 80V= Rated Power(额定功率):50W (BN棕)RD-红 Vo + (BU蓝)BK-黑 Vo - (VT紫)DIM + (PK粉)DIM - ta:50°C@Vin100-200V~ ta:60°C@Vin200-277V~ tc:90°C 广东新创电源科技有限公司 GUANGDONG SUNCOM POWER TECHNOLOGY CO.,LTD CE CB CCC IP67 SUNCOM HVC-50W-56B (型号)LED控制装置 INPUT 输入端 ☐ ACL-(BN棕)BK-黑 ☐ ACN-(BU蓝)WH-白 ☒ (GN绿/YL黄) *277 for North American only. Suitable for dry,Damp and wet locations No. 1-02, Yongyi Road Three, Yongxing Industry Zone, Henglan Town, Zhongshan City, 528478 Guangdong, China Vin(输入):100-240V~0.68A 50/60Hz Vin(输入):277V~0.25A 50/60Hz η:≥89% PF:≥0.95 •tc Vout(输出):27-56V=600-1500mA Max.(最大电压):Uout 80V= Rated Power(额定功率):50W (BN棕)RD-红 Vo + (BU蓝)BK-黑 Vo - (VT紫)DIM + (PK粉)DIM - ta:50°C@Vin100-200V~ ta:60°C@Vin200-277V~ tc:90°C 广东新创电源科技有限公司 GUANGDONG SUNCOM POWER TECHNOLOGY CO.,LTD CE CB CCC IP67			