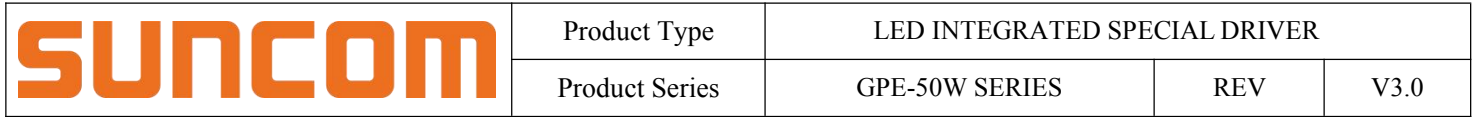


	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GPE-50W SERIES	REV	V3.0

SPECIFICATION FOR APPROVAL

CUSTOMER:			
MODEL NO.:	GPE-50W SERIES		
Rev.:	V3.0		
SAMPLE DATE:			
Customer Confirmation			
TESTED BY	CHECKED BY	APPROVED BY	
NOTE			
Please return to us one copy of “SPECIFICATION FOR APPROVAL” with you approved signature.			
SUNCOM Confirmation			
TESTED BY	CHECKED BY	APPROVED BY	
Guangdong Suncom Power Technology Co.,Ltd. No.1 of Yongyi 3rd Road Henglan Town Zhongshan Guangdong China Post code528478 TEL:0760-22326609 28168136 FAX:0760-87600929			



LED INTEGRATED SPECIAL DRIVER

GPE-50W SERIES

V3.0

■ CHANGE HISTORY

[illegible]

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GPE-50W SERIES	REV	V3.0

◆ Features :

- Input Voltage: 100-277Vac 50Hz/60Hz
- Isolation, Constant current mode output
- Ultra high efficiency (up to 90%)
- Surge Protection: L-N :4KV
- Input over / under-voltage protection
- Over temperature drop current
- THD<10%



◆ Applications

Application: Street light, high bay lighting, track light, wash wall lamp or other lighting lamps

◆ Description

This product is a constant current drive power supply, specially designed for LED, with low harmonic (< 10%), high power factor. Built-in surge protection, input over / under voltage protection, over temperature drop current function, over temperature drop current function, output open-circuit, short-circuit protection, greatly improve the safety and reliability of the product.



Product Type

LED INTEGRATED SPECIAL DRIVER

Product Series

GPE-50W SERIES

REV

V3.0

■ MODEL LIST

Model	Rated Power	Input Voltage	Output Voltage	Output Current	THD. (Typ)	PF. (Typ)
GPE-50W1A5-38	50W	100-277Vac	22-38V	1500mA	6.2%	0.98
GPE-50W1A35-38	50W	100-277Vac	22-38V	1350mA	5.9%	0.98
GPE-50W1A2-45	50W	100-277Vac	30-45V	1200mA	5.9%	0.98
GPE-50W900-56	50W	100-277Vac	34-56V	900mA	6.7%	0.98
GPE-50W600-87	50W	100-277Vac	54-87V	600mA	5.9%	0.98

NOTE: All parameters NOT special mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature

■ ELECTRICAL SPECIFICATION

◆ Input performance:

Parameter	Min.	Typ.	Max.	Notes
Voltage Range	100Vac	120-277Vac	305Vac	-
Frequency Range	47Hz	50/60Hz	63Hz	-
AC Current	-	-	0.68A	-
Inrush Current	-	-	30A	At 230Vac input, 25℃ cold start
PF.	0.95	0.98	-	At 230Vac input, full load
THD.	-	6.7%	10%	

◆ Output performance

Parameter	Min.	Typ.	Max.	Notes
Voltage Range	22VDC	-	38VDC	GPE-50W1A5-38 (1.5A current, maximum load 33V) GPE-50W1A35-38
	30VDC	-	45VDC	GPE-50W1A2-45 (1.2A current, maximum load 42V)
	34VDC	-	56VDC	GPE-50W900-56



Product Type

LED INTEGRATED SPECIAL DRIVER

Product Series

GPE-50W SERIES

REV

V3.0

	54VDC	-	87VDC	GPE-50W600-87 (0.6Acurrent, maximum load 84V)
Rated Current	1420mA	1480mA	1560mA	GPE-50W1A5-38
	1280mA	1340mA	1410mA	GPE-50W1A35-38
	1120mA	1180mA	1250mA	GPE-50W1A2-45
	840mA	880mA	930mA	GPE-50W900-56
	560mA	590mA	620mA	GPE-50W600-87
Rated Power	-	50W	-	-
Over Voltage	45V	-	50V	GPE-50W1A5-38 GPE-50W1A35-38
	60V	-	70V	GPE-50W1A2-45 GPE-50W900-56
	100V		110V	GPE-50W600-87
Efficiency Measured at full load and 230Vac input	90%	90.3%	-	GPE-50W1A5-38
	90%	90.5%		GPE-50W1A35-38
	90%	90.5%	-	GPE-50W1A2-45
	90%	91.0%	-	GPE-50W900-56
	91%	92.0%	-	GPE-50W600-87
Current Tolerance	-5%	-	+5%	-
Line Regulation	-3%	-	+3%	-
Load Regulation	-3%	-	+3%	-
Current Ripple	-	±65%	<±70%	-
Turn-on Delay Time	-	500mS	<1S	Measured at full load and 230Vac input
Short Circuit Protection	-	-	1W	Hiccup mode,recovers automatically after fault condition is removed
Over-temperature protection	-	90℃	-	Shell Tc point temperature, Drop current mode, the current automatically recovers after over temperature release
Under Voltage Protection	100Vac	105Vac	108Vac	After the input voltage is reduced to the under voltage point, Reduce output current , resume work after the AC voltage is normal
Over Voltage Protection	315Vac	325Vac	335Vac	Turn off the output voltage , resume work after the AC voltage is normal

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GPE-50W SERIES	REV	V3.0

Environment

Parameter	Min.	Typ.	Max.	Notes
Working TEMP	-40℃	+25℃	+65℃	-
Storage TEMP	-40℃	+25℃	+85℃	-
Working Humidity	20% RH	-	90% RH	-
Storage Humidity	10% RH	-	90% RH	-
Maximum shell TEMP	-	-	+90℃	-

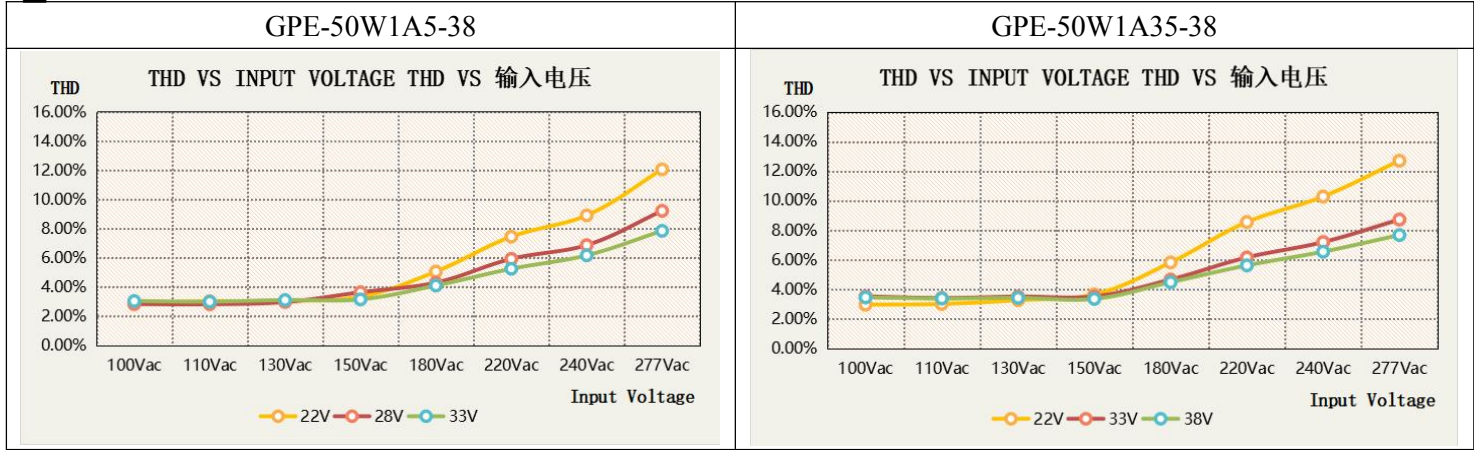
Safety and EMC:

Withstand voltage	I/P - O/P:1.5KVAC
Isolation resistance	≧ 10MΩ at I/P - FG 500VDC Test
Leakage current	<0.75mA/277Vac
Earthing resistance	/
Surge	L-N +/- 4KV (2 ohm)
Conducted electromagnetic interference	/
Radiated electromagnetic interference	/

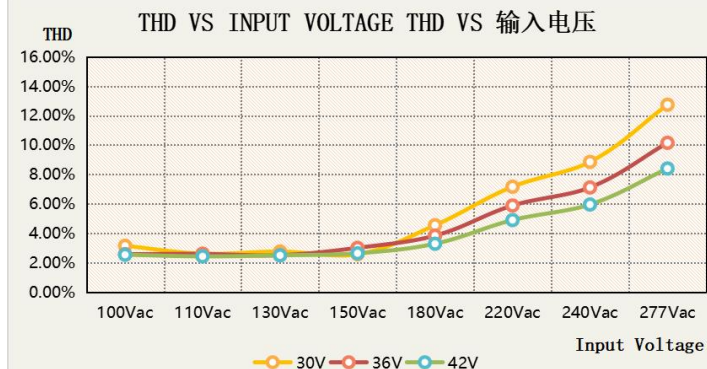
NOTE:

- 1)All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25℃ of ambient temperature.
- 2) Tolerance:includes set up tolerance,lineregulation and load regulation.

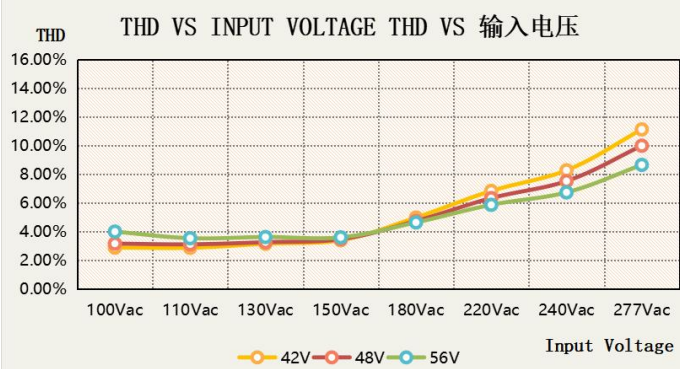
THD VS INPUT VOLTAGE



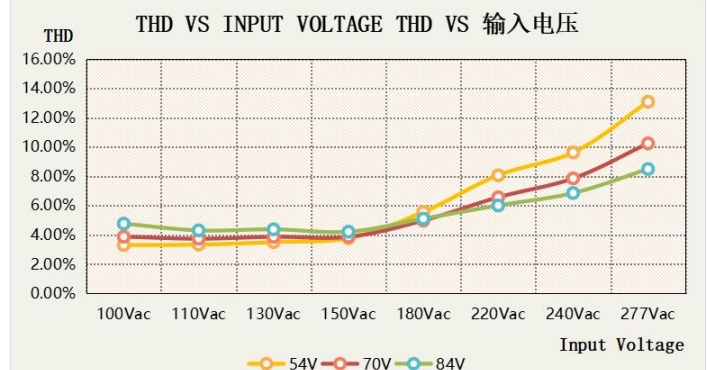
GPE-50W1A2-45



GPE-50W900-56

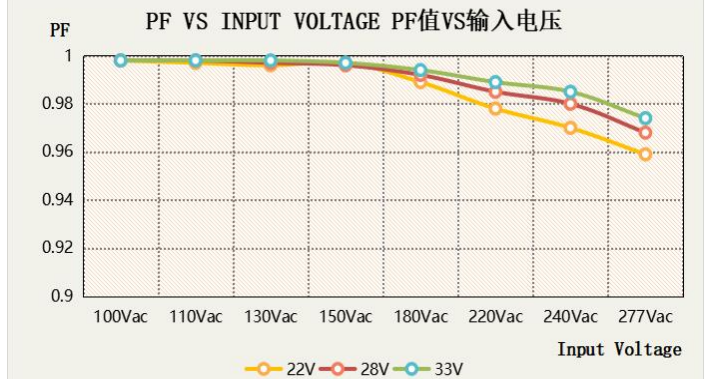


GPE-50W600-87

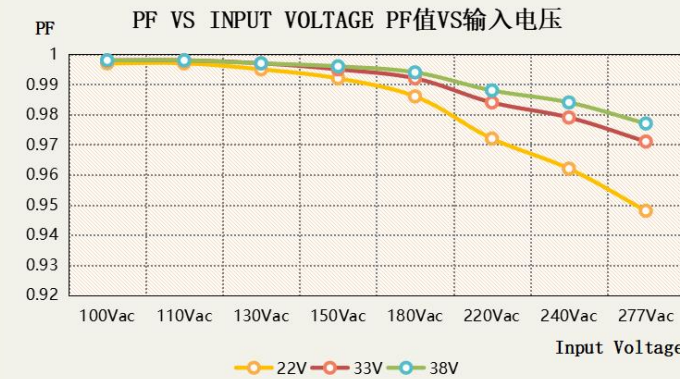


PF VS INPUT VOLTAGE

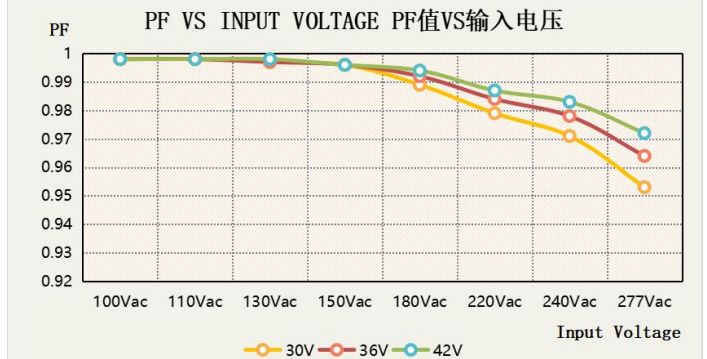
GPE-50W1A5-38



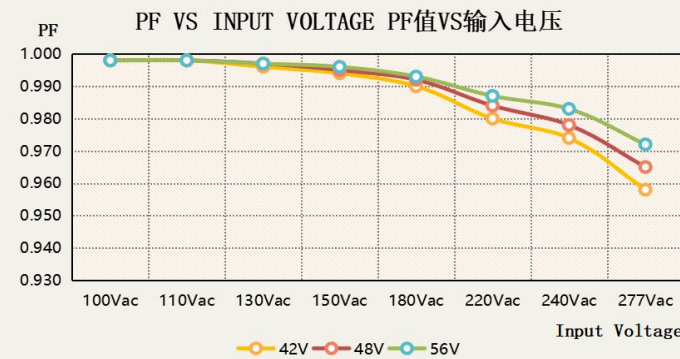
GPE-50W1A35-38



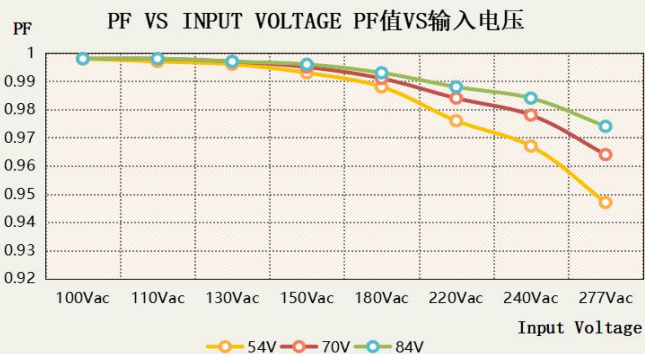
GPE-50W1A2-45



GPE-50W900-56

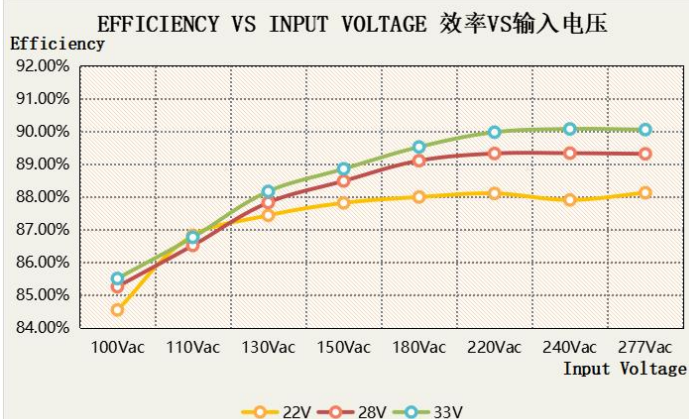


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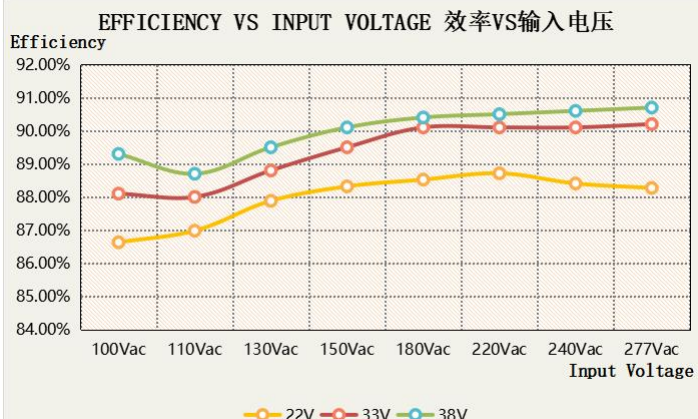


EFFICIENCY VS INPUT VOLTAGE

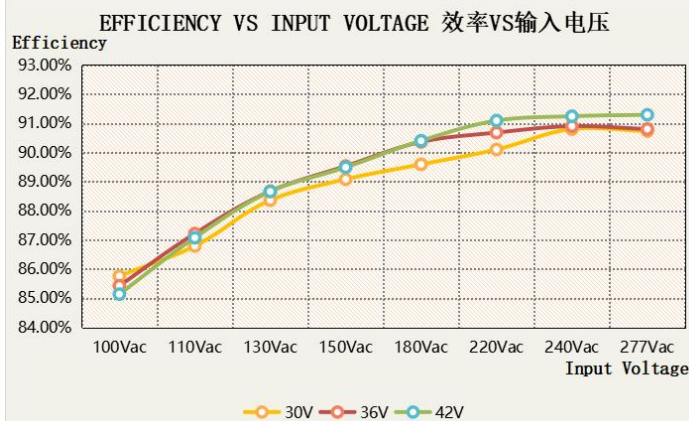
GPE-50W1A5-38



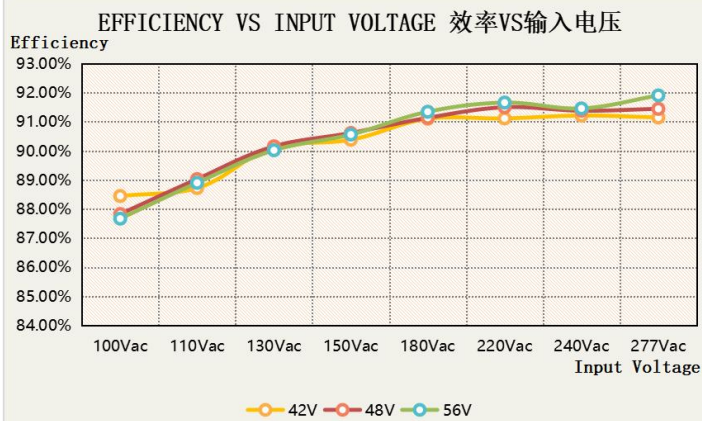
GPE-50W1A35-38



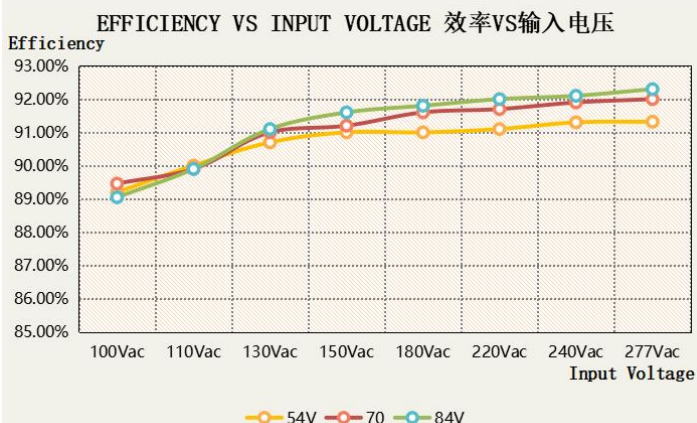
GPE-50W1A2-45



GPE-50W900-56

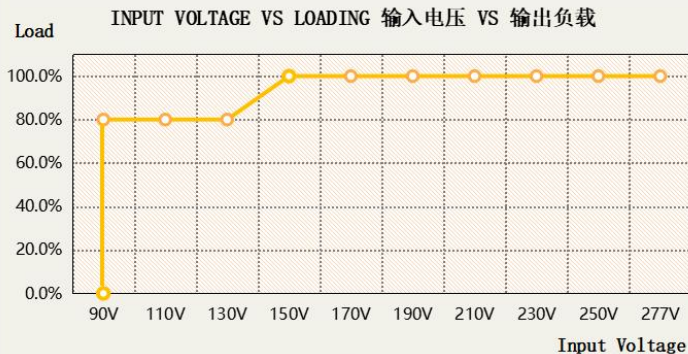
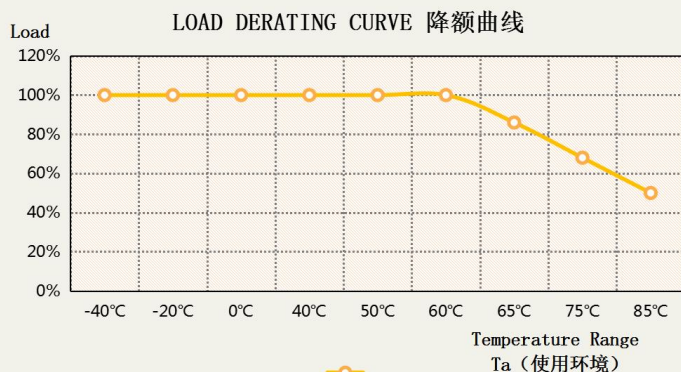


GPE-50W600-87



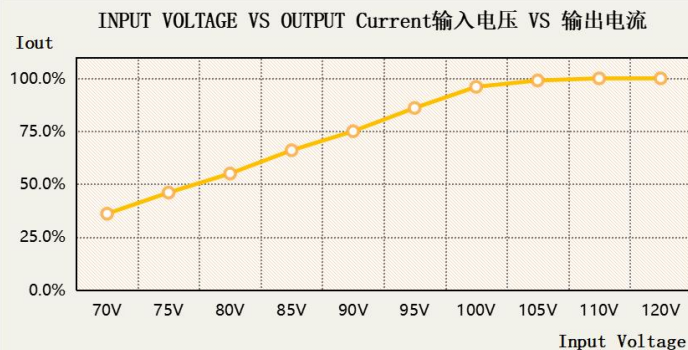
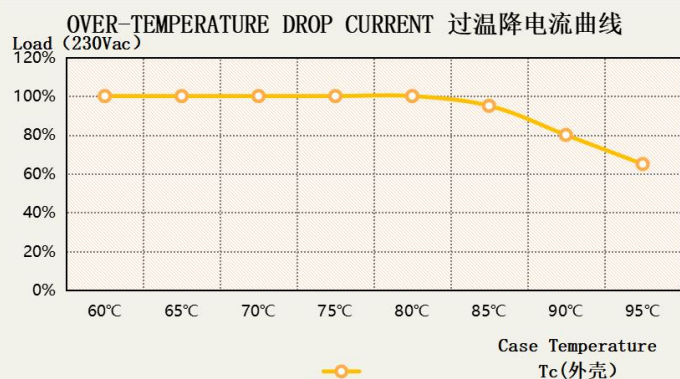
LOAD DERATING CURVE

INPUT VOLTAGE VS LOADING



OVER-TEMPERATURE DROP CURRENT

UNDER-VOLTAGE DROP CURRENT

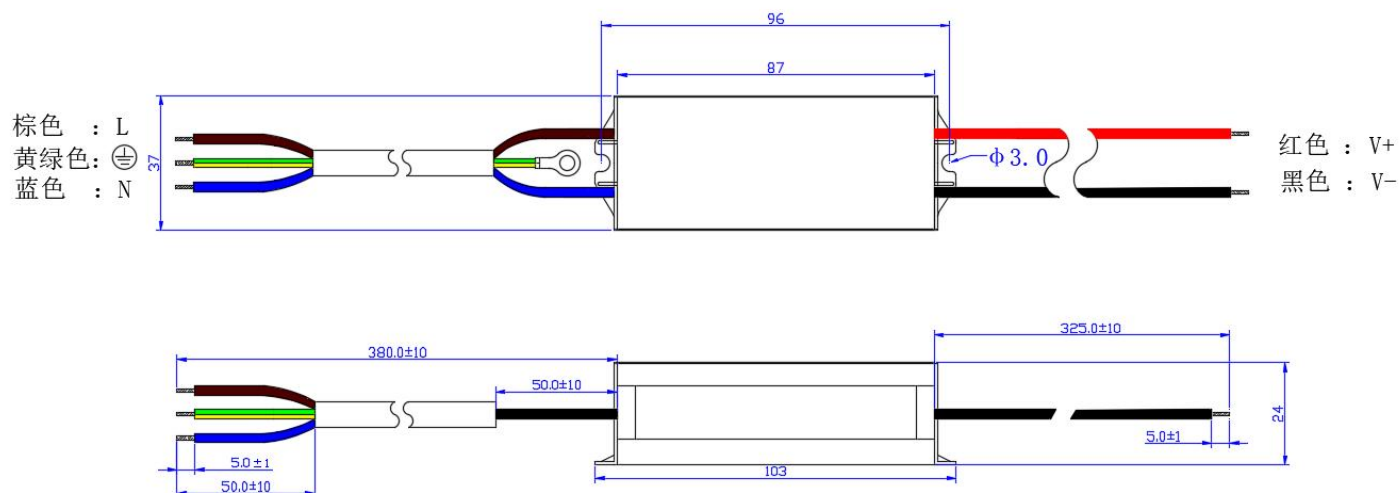


MECHANICAL SPECIFICATION & PACKING

Bare Plate Dimension	70*28.5*20mm(L*W*H)
Final Dimension	103*37*24mm
Product Weight	160g

Case No.: 50W

Unit : mm



SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GPE-50W SERIES	REV	V3.0

Nameplate

Dimension: 85*29mm Style: sticker

GPE-50W1A5-38

SUNCOM		GPE-50W1A5-38	(型号)LED控制装置
INPUT 输入端	Vin(输入):100-277V~0.68A 50/60Hz	Vout(输出):22-38V $\approx$ 1500mA $\pm$ 5%	OUTPUT 输出端
☐ ACL(BN棕)	η : $\geq$ 90% PF: $\geq$ 0.95 •tc	Max.Uout(最大电压): 50V $\approx$	(RD红)Vo + $\bigcirc$
☐ ACN(BU蓝)	ta:65°C tc:90°C	Rated Power(额定功率):50W	(BK黑)Vo - $\bigcirc$
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD	SELV IP65  

GPE-50W1A35-38

SUNCOM		GPE-50W1A35-38	(型号)LED控制装置
INPUT 输入端	Vin(输入):100-277V~0.68A 50/60Hz	Vout(输出):22-38V $\approx$ 1350mA $\pm$ 5%	OUTPUT 输出端
☐ ACL(BN棕)	η : $\geq$ 90% PF: $\geq$ 0.95 •tc	Max.Uout(最大电压): 50V $\approx$	(RD红)Vo + $\bigcirc$
☐ ACN(BU蓝)	ta:65°C tc:90°C	Rated Power(额定功率):50W	(BK黑)Vo - $\bigcirc$
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD	SELV IP65  

GPE-50W1A2-45

SUNCOM		GPE-50W1A2-45	(型号)LED控制装置
INPUT 输入端	Vin(输入):100-277V~0.68A 50/60Hz	Vout(输出):30-45V $\approx$ 1200mA $\pm$ 5%	OUTPUT 输出端
☐ ACL(BN棕)	η : $\geq$ 90% PF: $\geq$ 0.95 •tc	Max.Uout(最大电压): 70V $\approx$	(RD红)Vo + $\bigcirc$
☐ ACN(BU蓝)	ta:65°C tc:90°C	Rated Power(额定功率):50W	(BK黑)Vo - $\bigcirc$
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD	SELV IP65  

GPE-50W900-56

SUNCOM		GPE-50W900-56	(型号)LED控制装置
INPUT 输入端	Vin(输入):100-277V~0.68A 50/60Hz	Vout(输出):34-56V $\approx$ 900mA $\pm$ 5%	OUTPUT 输出端
☐ ACL(BN棕)	η : $\geq$ 90% PF: $\geq$ 0.95 •tc	Max.Uout(最大电压): 70V $\approx$	(RD红)Vo + $\bigcirc$
☐ ACN(BU蓝)	ta:65°C tc:90°C	Rated Power(额定功率):50W	(BK黑)Vo - $\bigcirc$
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD	SELV IP65  

GPE-50W600-87

SUNCOM		GPE-50W600-87	(型号)LED控制装置
INPUT 输入端	Vin(输入):100-277V~0.68A 50/60Hz	Vout(输出):54-87V $\approx$ 600mA $\pm$ 5%	OUTPUT 输出端
☐ ACL(BN棕)	η : $\geq$ 91% PF: $\geq$ 0.95 •tc	Max.Uout(最大电压): 110V $\approx$	(RD红)Vo + $\bigcirc$
☐ ACN(BU蓝)	ta:65°C tc:90°C	Rated Power(额定功率):50W	(BK黑)Vo - $\bigcirc$
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD	SELV IP65  