

1.0 Reference and Address			
Report Number	210609111GZU-001	Original Issued: 21-Jun-2021	Revised: None
Standard(s)	Class 2 Power Units [UL 1310:2018 Ed.7+R:16Aug2019]		
	Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2#223:2015 Ed.3]		
Applicant	Xiamen Innov Electronics Tech. Co., Ltd.	Manufacturer	Xiamen Innov Electronics Tech Co.,Ltd.
Address	1F/3F-5F, Bldg 5, No. 943, Tonglong 2nd Rd, Torch Hi-Tech Industrial Zone, Xiang'an, XIAMEN, Fujian	Address	1F/3F-5F, Bldg 5, No. 943, Tonglong 2nd Rd, Torch Hi-Tech Industrial Zone, Xiang'an, XIAMEN, Fujian
Country	China	Country	China
Contact	Weijie Tu	Contact	Weijie Tu
Phone	0592-7766227	Phone	0592-7766227
FAX	NA	FAX	NA
Email	iwtwfnso@126.com	Email	iwtwfnso@126.com

2.0 Product Description	
Product	Class 2 Power Supply
Brand name	Invcy
Description	The product covered by this report is a direct plug-in type Power Supply for indoor use only.
Models	IVP followed by 0500 to 3000; followed by -; followed by 0100 to 2500; may be followed by W, or D.
Model Similarity	IVPxxxx-yyyzy represent model IVP followed by 0500 to 3000; followed by -; followed by 0100 to 2500; may be followed by W, or D. xxxx represents the output voltage which can be any number from 0500 to 3000 representing 5.0V to 30.0V. yyyy represents the output current which can be any number from 0100 to 2500 representing 0.1A to 2.5A. z represents the external enclosure type which can be W, D or Blank. All the models have the same priamry circuit, except for the secondary circuit, enclosure type, secondary winding of Transformer and some components rating.
Ratings	Input: 100-240V~, 50/60Hz, 0.5A Output: 5.0-30.0Vdc, 0.1-2.5A, Max.18W
Other Ratings	NA

3.0 Product Photographs

Photo 1 - External view for model IVPxxxx-yyyy



Photo 2 - External view for model IVPxxxx-yyyy

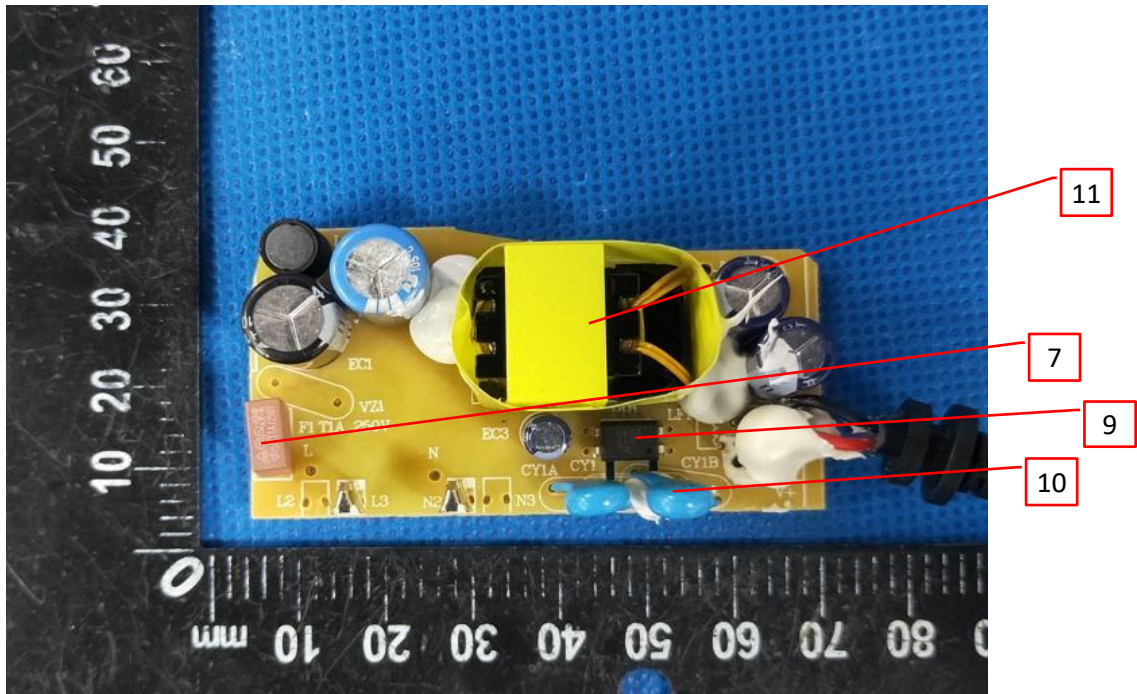


3.0 Product Photographs

Photo 3 - Internal view for model IVPxxxx-yyyy



Photo 4 - PCB top side view for model IVPxxxx-yyyy (without D7, LF1)



3.0 Product Photographs

Photo 5 - PCB top side view for model IVPxxxx-yyyy (without D7, with LF1)

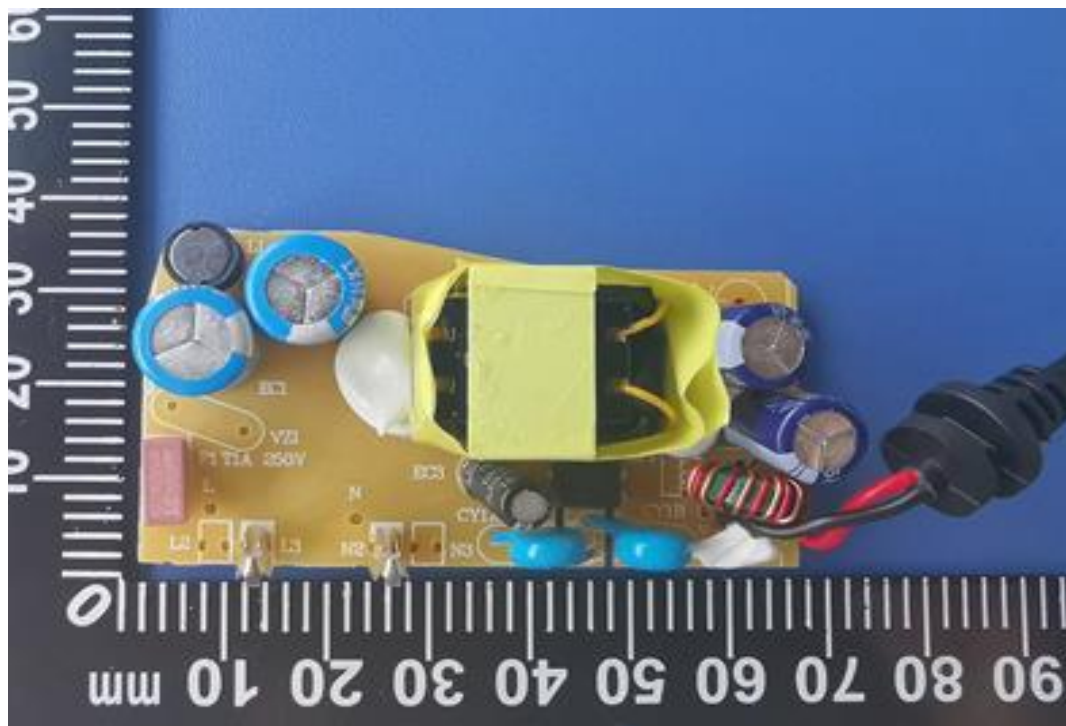
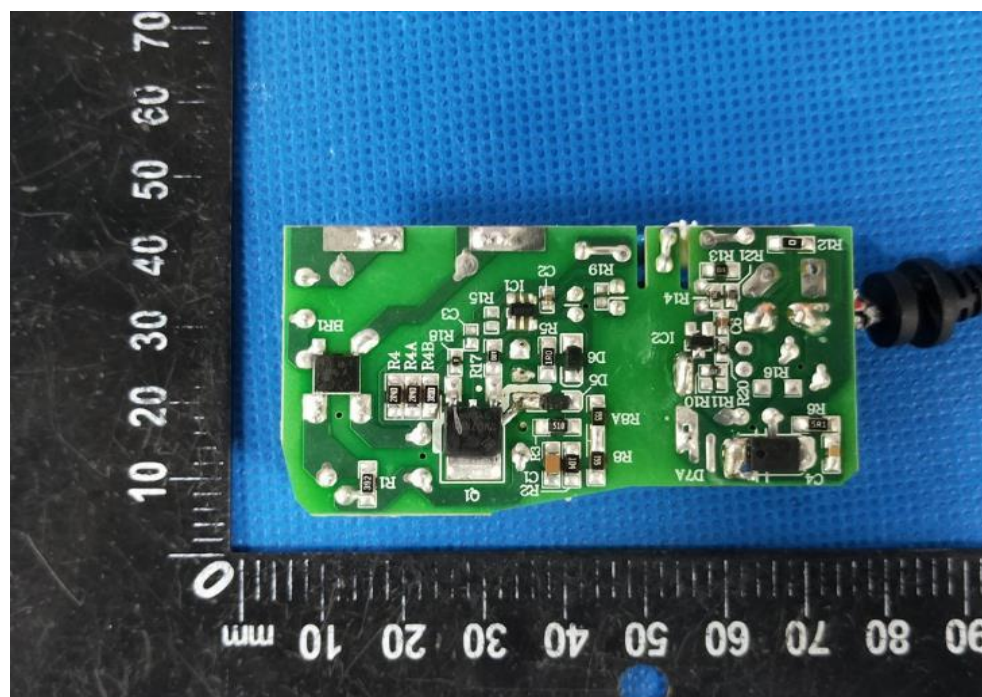


Photo 6 - PCB Bottom side view for model IVPxxxx-yyyy (with D7A)



3.0 Product Photographs

Photo 7 - PCB top side view for model IVPxxxx-yyyy (with D7, without LF1)

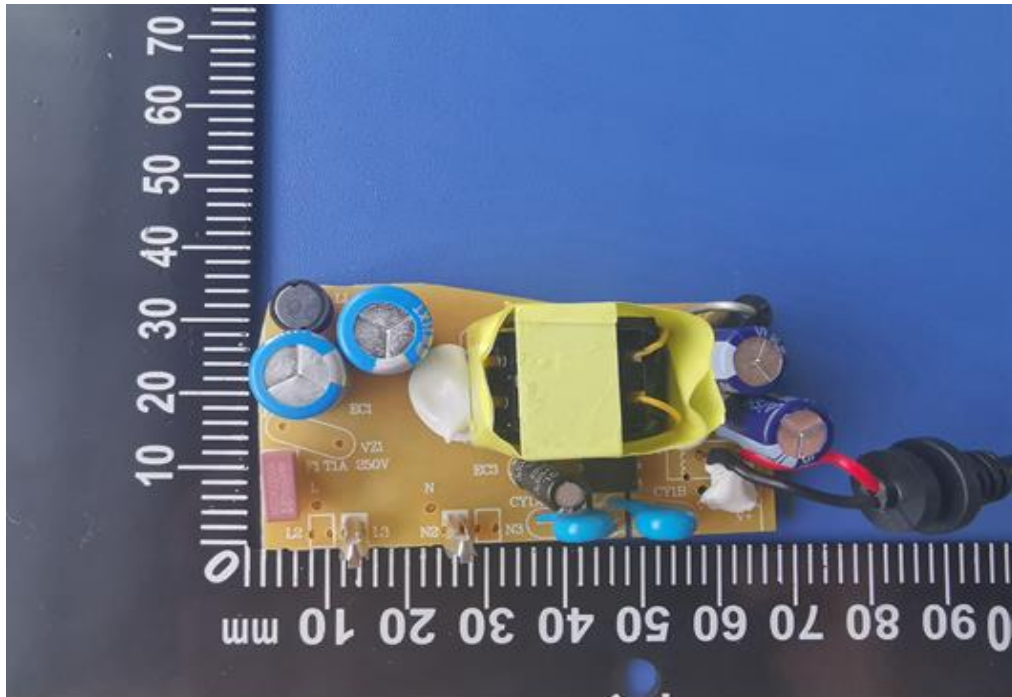
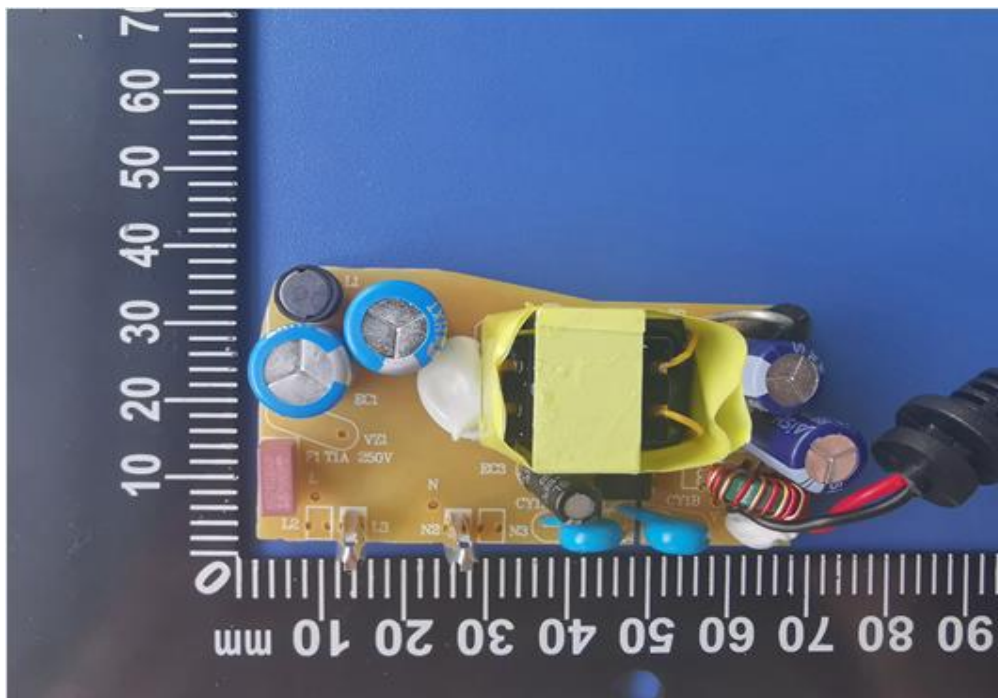
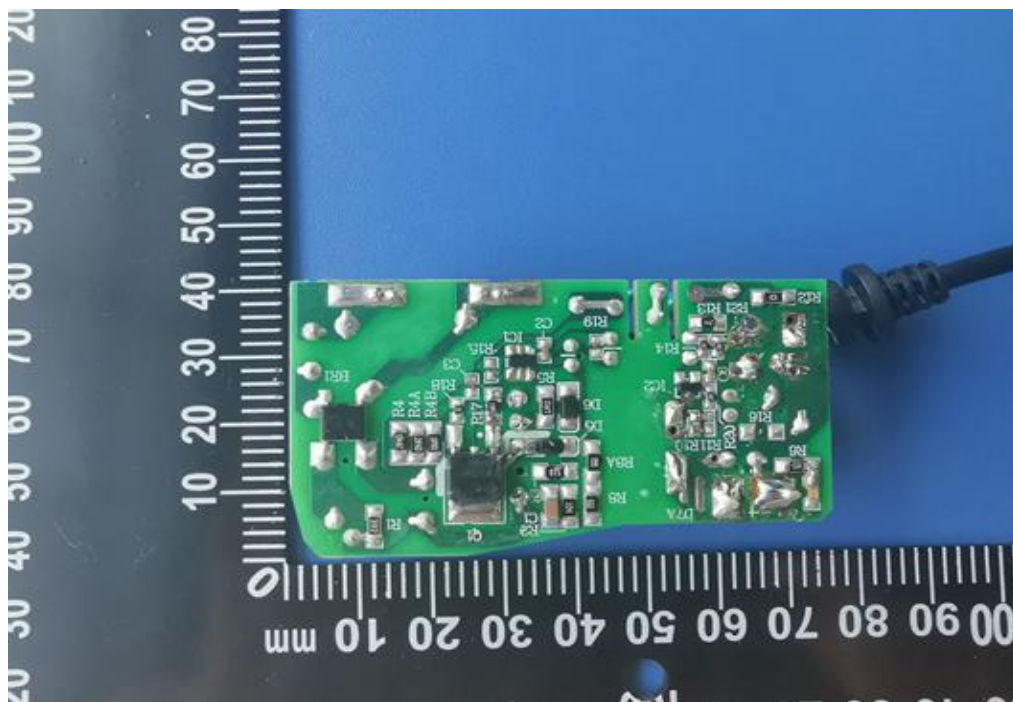


Photo 8 - PCB top side view for model IVPxxxx-yyyy (with D7 , LF1)



3.0 Product Photographs

Photo 9 - PCB Bottom side view for model IVPxxxx-yyyy (without D7A)



3.0 Product Photographs

Photo 11 - External view for model IVPxxxx-yyyyW

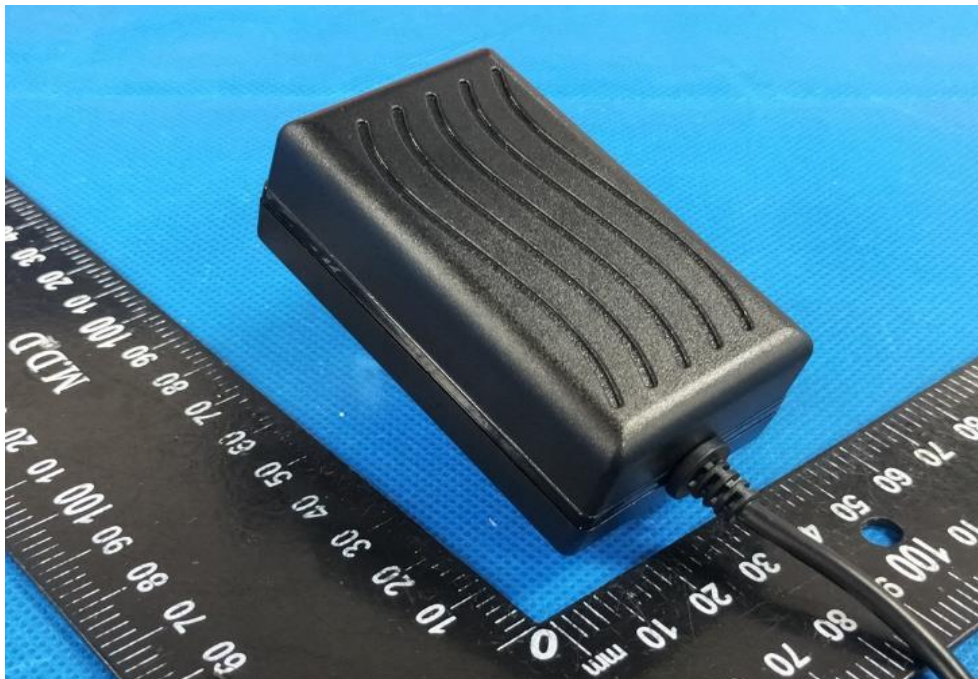


Photo 12 - External view for model IVPxxxx-yyyyD



3.0 Product Photographs

Photo 13 - Internal view for model IVPxxxx-yyyyW represent model IVPxxxx-yyyyD

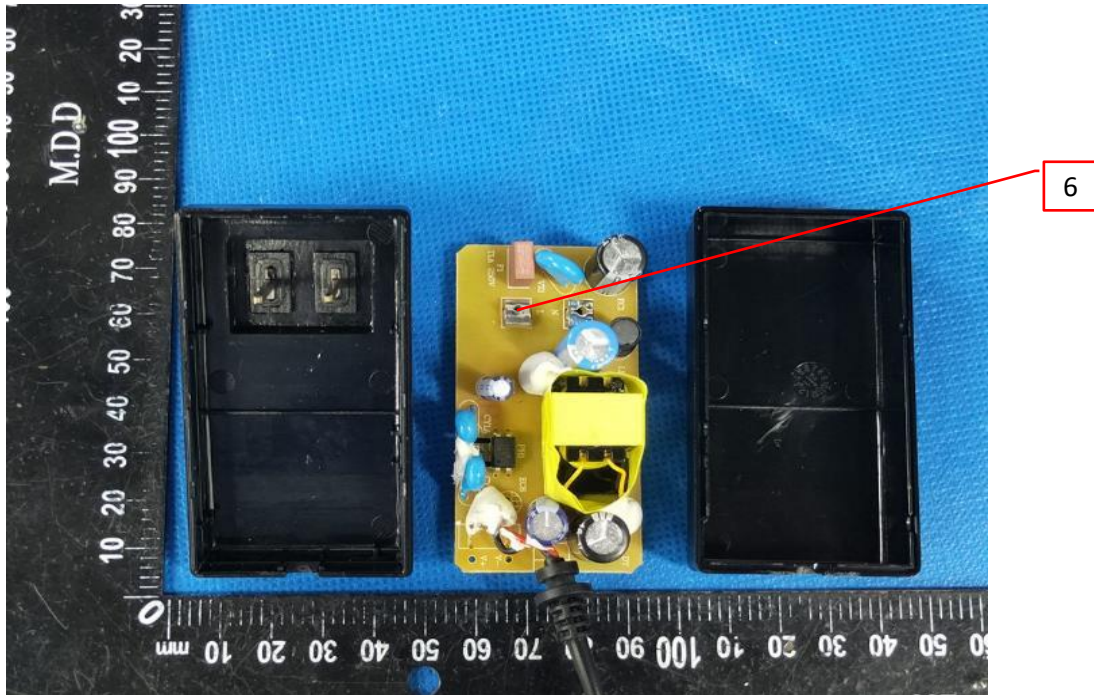
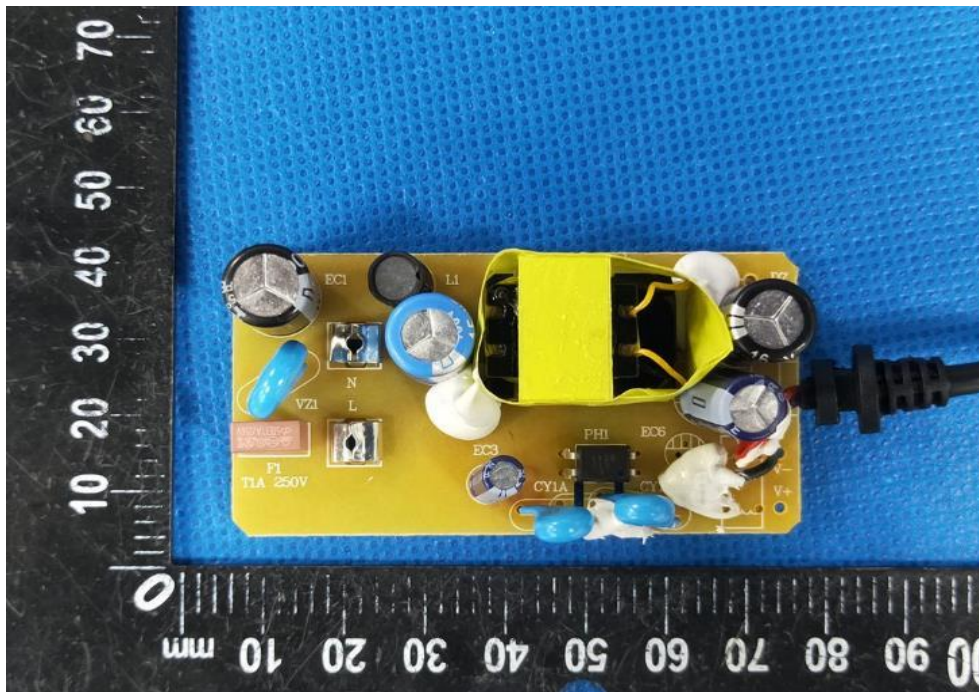


Photo 14 - PCB top side view for model IVPxxxx-yyyyW (without D7, LF3)



3.0 Product Photographs

Photo 15 - PCB bottom side view for model IVPxxxx-yyyyW (with D7A)

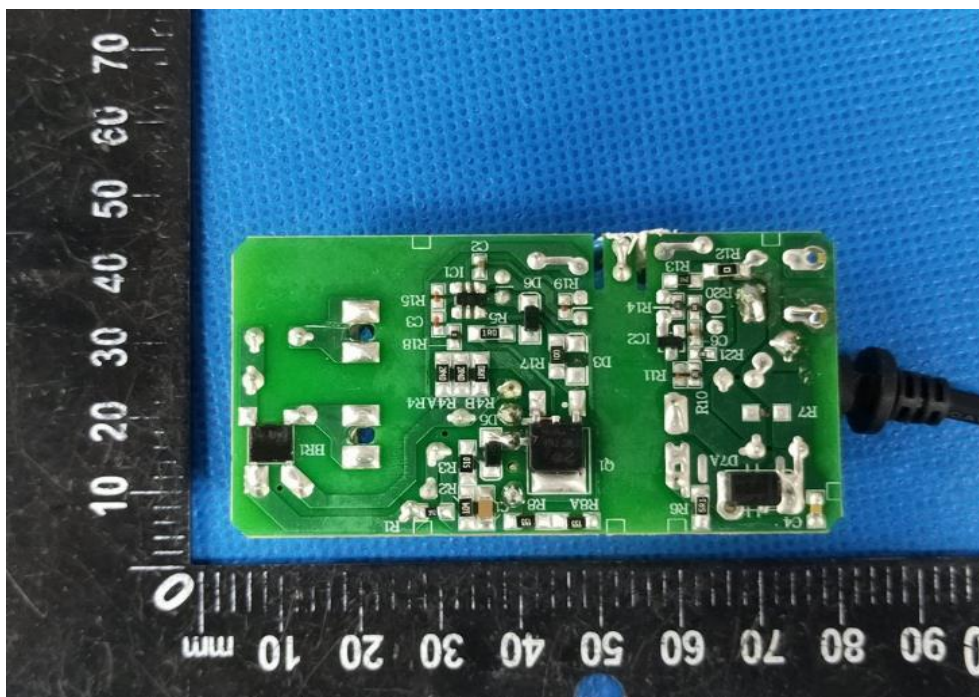
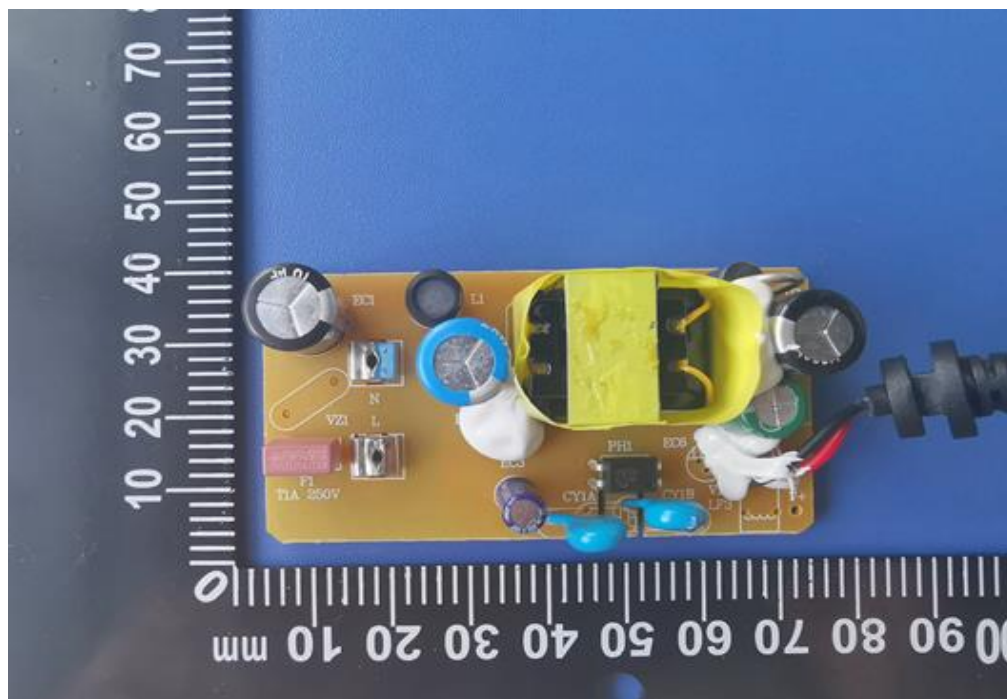


Photo 16 - PCB component side view for model IVPxxxx-yyyyW (with D7, without LF3)



3.0 Product Photographs

Photo 17 - PCB top side view for model IVPxxxx-yyyyW (with D7 and LF3)

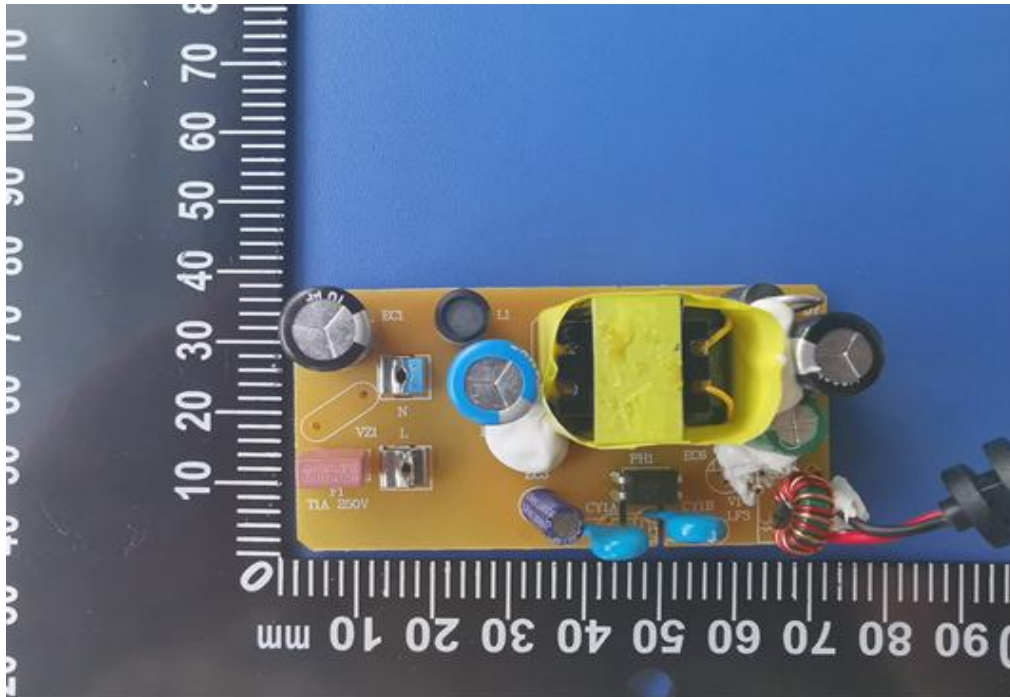
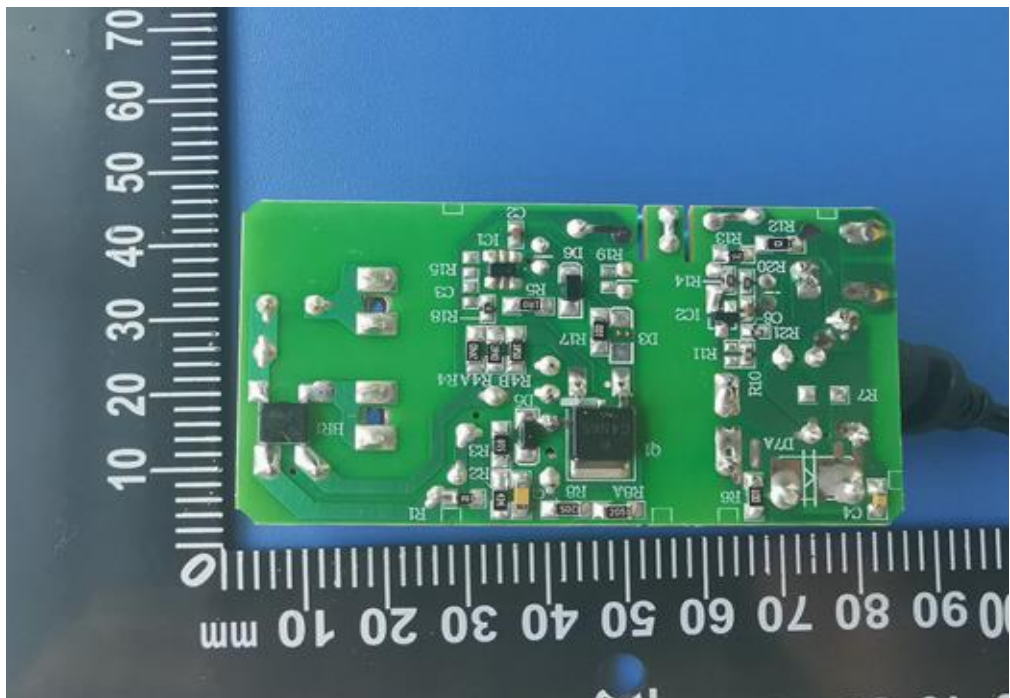


Photo 18 - PCB bottom side view for model IVPxxxx-yyyyW (without D7A)



3.0 Product Photographs

Photo 19 - PCB top side view for model IVPxxxx-yyyyD (with D7, without LF3)

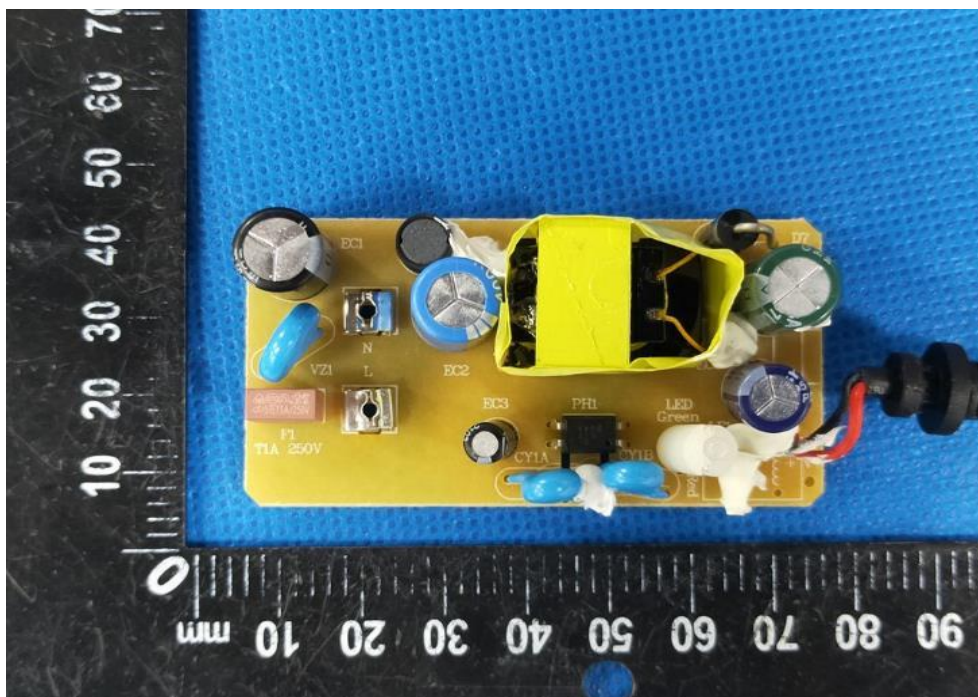
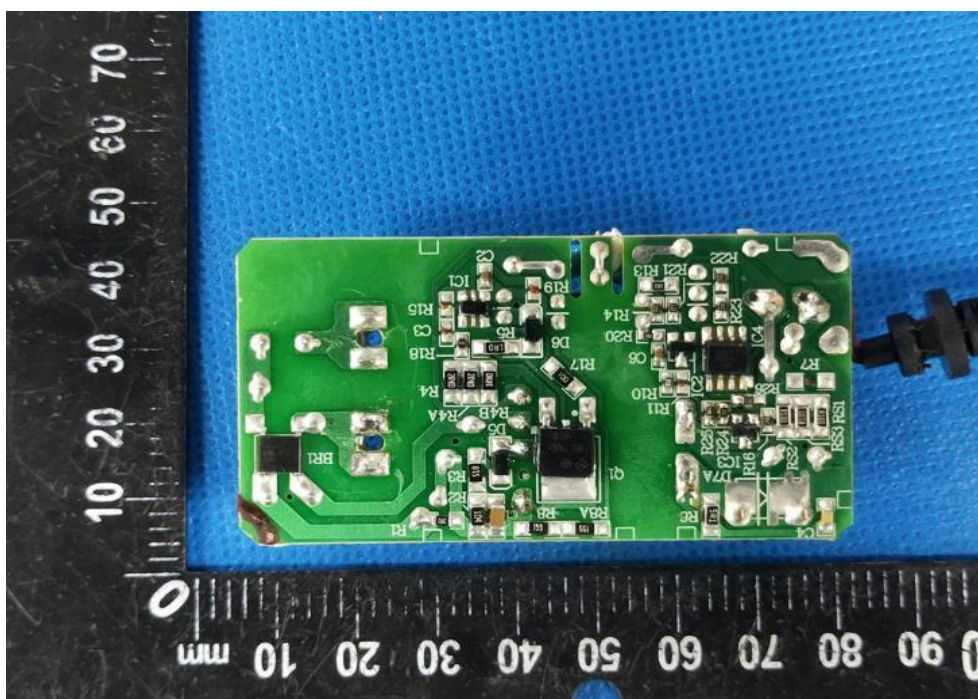


Photo 20 - PCB top side view for model IVPxxxx-yyyyD (without D7A)



3.0 Product Photographs

Photo 21 - PCB top side view for model IVPxxxx-yyyyD (without D7, LF1)

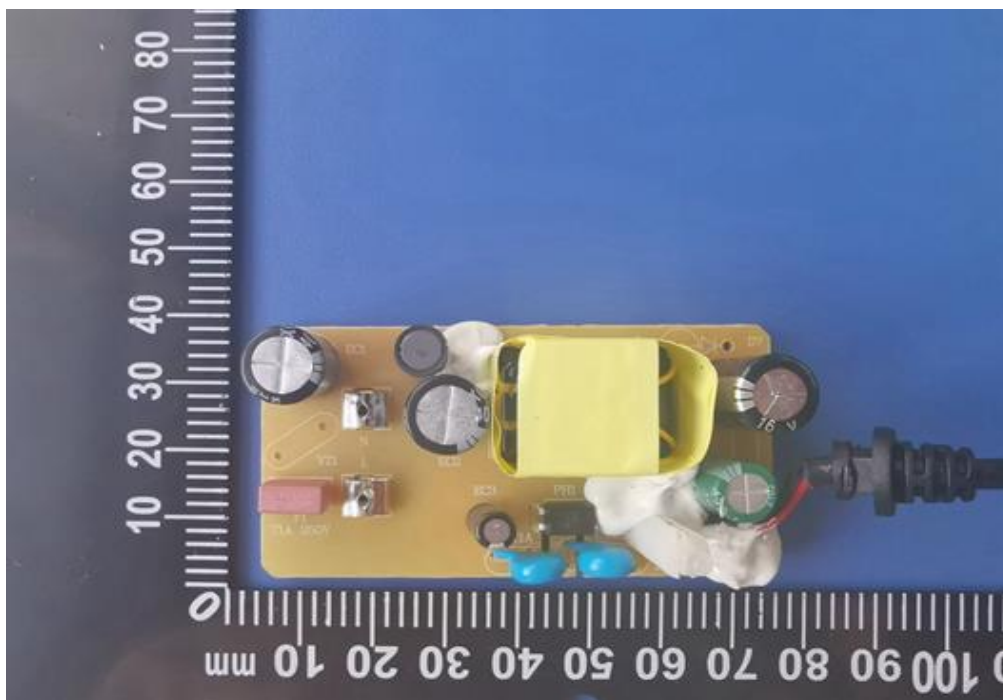
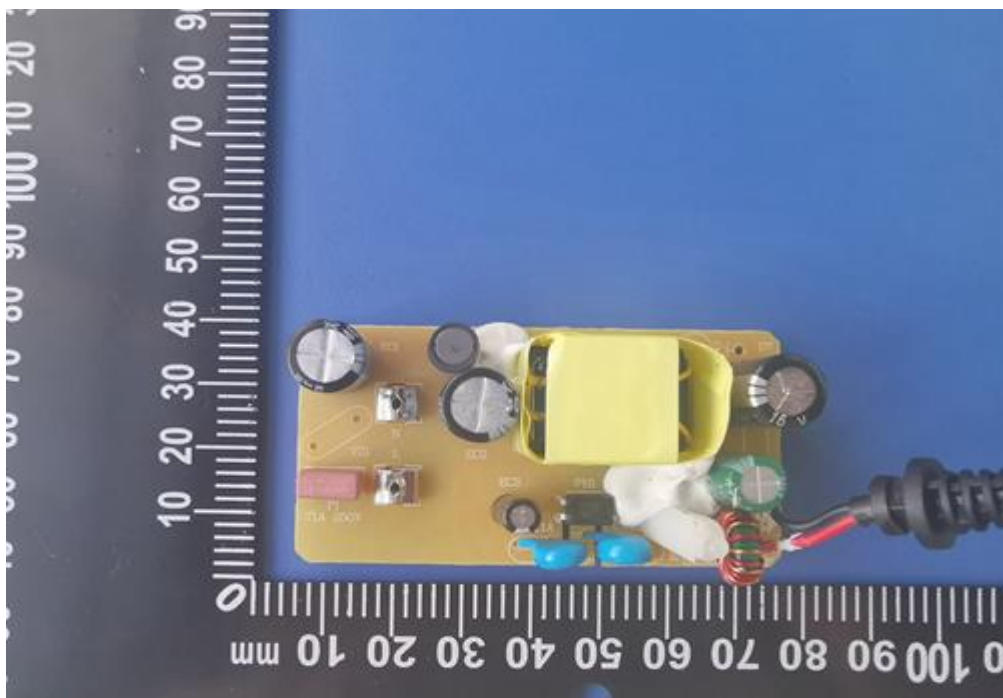


Photo 22 - PCB top side view for model IVPxxxx-yyyyD (without D7, with LF1)



3.0 Product Photographs

Photo 23 - PCB Bottom side view for model IVPxxxx-yyyyD (with D7A)

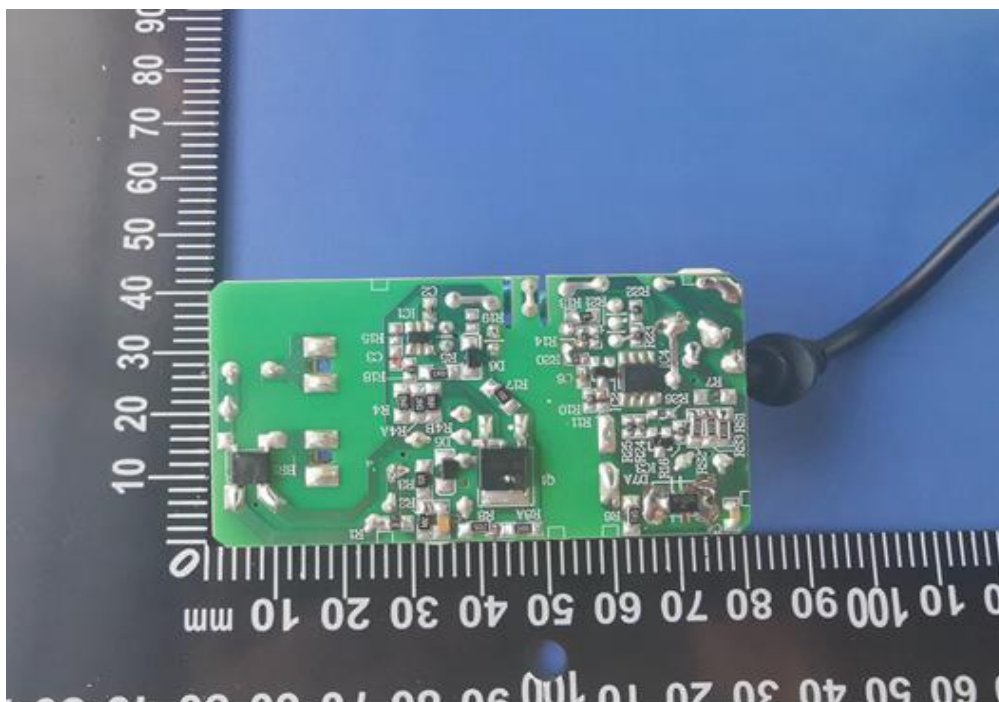
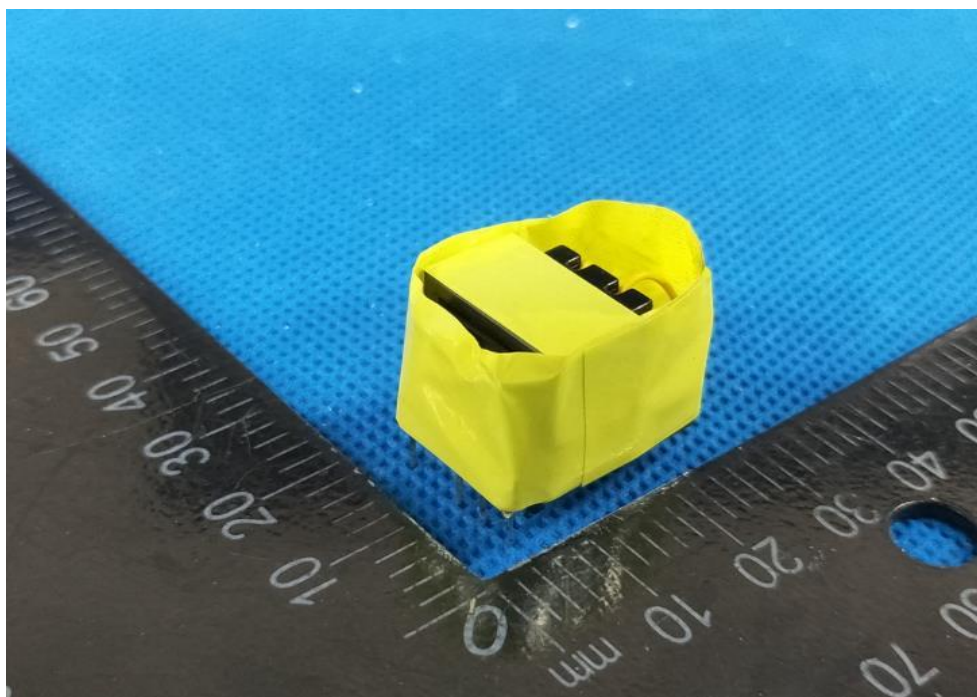


Photo 24 - Transformer view



3.0 Product Photographs

Photo 25 - Transformer view

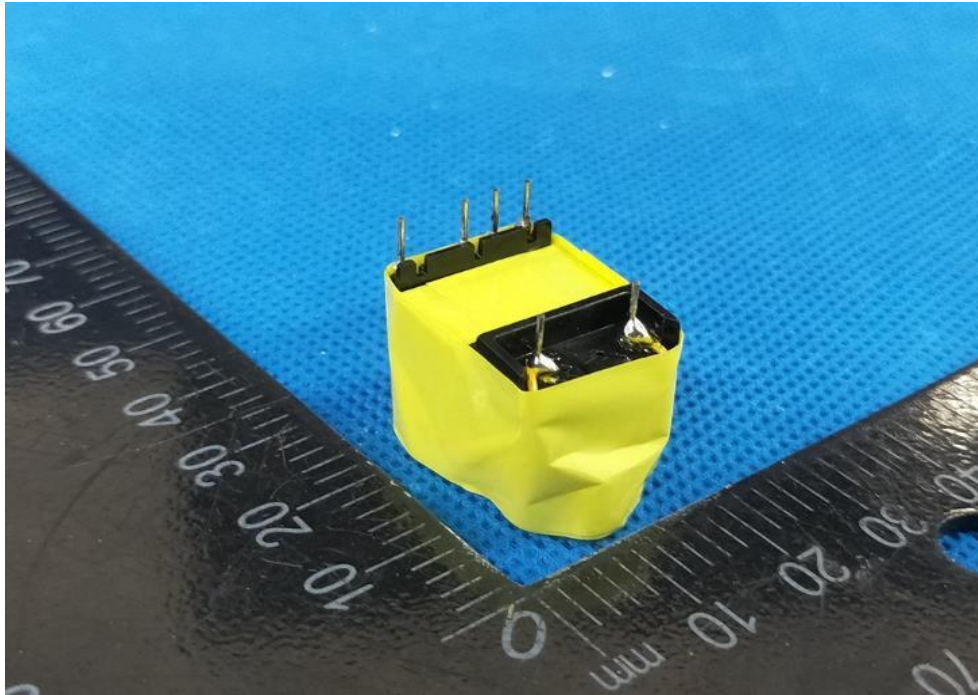
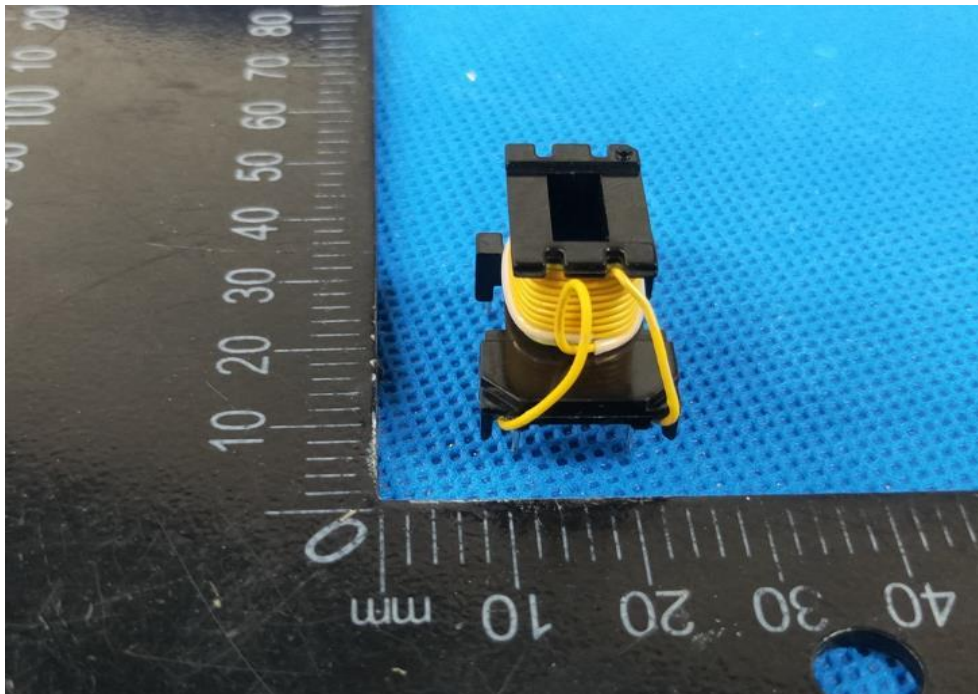
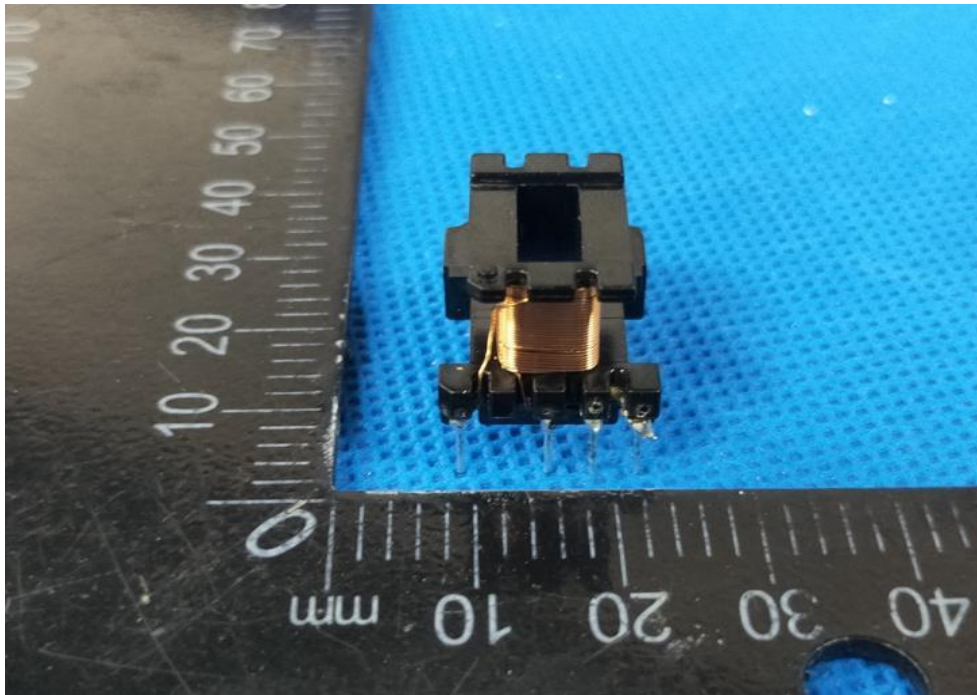


Photo 26 - Transformer view



3.0 Product Photographs

Photo 27 - Transformer view



4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1	1	Enclosure	mitsubishi engineering-plastics corp	FIN-7500+	PC, V-0, HWI:0, HAI:0, CTI:3, RTI:115, min. 1.5 mm thickness	cURus
1	2	Plug holder	mitsubishi engineering-plastics corp	FIN-7500+	PC, V-0, HWI:0, HAI:0, CTI:3, RTI:115, min. 1.5 mm thickness	cURus
1	3	Output cord	XIAMEN ZHENZHEN ELECTRONIC TECHNOLOGY CO LTD	2464	AWM, min. 80°C, min. 300V, , min. 24AWG, min. 1800 mm length.	cURus
				2468		cURus
				1185		cURus
				Various		cURus
1	4	Blade	Various	Various	Cooper materials. Size refer to Illustration 4.	NR
3	5	PCB	Various	Various	Single layer printed wiring boards, V-0, 130°C, with min.1.0mm thick. Comply with UL 796.	cURus
3, 13	6	Clip	Various	Various	Cooper materials with min.0.2 mm thick.	NR
4	7	Fuse	XC ELECTRONICS (SHENZHEN) CORP LTD	5TE	T1A, AC 250V, size: 8.35mm x 4mm x 7.8mm .	cURus
			SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP	T1A, AC 250V, size: 8.5mm x 4mm x 8.1mm .	cURus
			XIAMEN SET ELECTRONICS CO LTD	SPT478	T1A, AC 250V, size: 8.4mm x 4.1mm x 7.35mm	cURus
			DONGGUAN ANLU ELECTRONICS TECHNOLOGY CO LTD	AMT	T1A, AC 250V, size: 8.4mm x 4mm x 8.2mm	cURus
4	8	Varistor (not shown, Optional)	Various	Various	AC 300V, min. 85°C	cURus
4	9	Optocoupler	BRIGHT LED ELECTRONICS CORP	BPC-817MXXXXXX*	Double protection optical isolators, providing 5000 Vac isolation, 110° C.	cURus
			EVERLIGHT ELECTRONICS CO LTD	EL817	Double protection optical isolators, providing 5000 Vac isolation, 110° C.	cURus
			Fujian Lightning Optoelectronic Co Ltd	TD817B	Double protection optical isolators, providing 5000 Vac isolation, 110° C.	cURus
			ZHUHAI DAPENG ELECTRONICS TECHNOLOGY CO LTD	DP-817B	Double protection optical isolators, providing 5000 Vac isolation,110° C.	cURus

4.0 Critical Components

Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
4	10	Y-capacitor (Optional)	Various	Various	Y1 or Y2 type, Each Max. 2200pF, Min. 250Vac, 125°C. two Y-capacitor series connection	cURus
			Various	Various	Y1 type, Each Max. 2200pF, Min. 250Vac, 125°C. one Y-capacitor use only.	cURus
4	11	Transformer-1	Xiamen Haoshengxing Industry & Trade Co Ltd	0201-0520	Input voltage: 100-240V~, 50/60Hz, 0.5A output voltage: 5-11.9Vdc. Included item 11a Class B Insulation system. It consist of bobbin, magnet wire(as primary winding), Triple insulate wire(as secondary winding), Teflon tube, Varnish. Refer to Illustration 3 for Specifications. For models with output voltage 5.0V to 11.9V.	NR
4	11a	Insulation system (not shown)	Xiamen Haoshengxing Industry & Trade Co Ltd	HAIM-18.1	Class B	cURus
4	12	Transformer-2 (not shown)	Xiamen Haoshengxing Industry & Trade Co Ltd	0201-0519	Input voltage: 100-240V~, 50/60Hz, 0.5A output voltage: 12-30Vdc Included item 11a Class B Insulation system. It consist of bobbin, magnet wire(as primary winding), Triple insulate wire(as secondary winding), Teflon tube, Varnish. Refer to Illustration 3 for Specifications. For models with output voltage 12V to 30V.	NR
1	13	Label (not shown)	Various	Various	Suitable for affixed on plastic surface,min. 80°C. comply with UL 969.	NR

NOTES:

- 1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.
- 2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.
- 3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. **Spacing** - In primary circuits, _4.8_ mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
2. **Mechanical Assembly** - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. **Corrosion Protection** - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. **Accessibility of Live Parts** - All uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
5. **Grounding** - This product is not provided with a means of grounding as all live parts are enclosed in non-metallic enclosure.
6. **Internal Wiring** - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets.
7. **Schematics** - Refer to Illustration No. 1, 1a, 2, 2a, 2b or schematics requiring verification during Field Representative Inspection Audits schematics.
Illustration No. 1, 1a, 2, 2a, 2b - Verify whether the circuit diagram and PCB layout are identical as the products.
8. **Markings** - The product is marked on a labeling system as described in item No.13 of Section 4.0 or lasered on enclosure surface as follows:
 - Class 2 Power Supply
 - Applicant's name or brand name
 - model name
 - date of manufacture
 - electrical ratings (volts, amperes & frequency)
9. **Cautionary Markings** - The following are required:
CAUTION RISK OF ELECTRIC SHOCK. DRY LOCATION USE ONLY.
ATTENTION RISQUES DE CHOC ÉLECTRIQUE
ENDROIT SEC UTILISER UNIQUEMENT
SEE INSTRUCTION MANUAL FOR USE IN COUNTRIES OTHER THAN THE U.S.A.
VOIRLEMANUEL D'UTILISATION POUR UNEUTILISATIONDANSDES PAYSAUTRES QUELESETATS-UNIS
Note: "CAUTION", "ATTENTION" with min. 3,2 mm high and others with min.1.6 mm high.

6.0 Critical Features

10. Installation, Operating and Safety Instructions -The following are required:
"IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS" and "DANGER – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS" in letters of 1/8 inch (3.18 mm) high.
 - a) Be sure voltage selector is in correct voltage position before plugging in.
 - b) For use in the U.S.A., the voltage selector switch must be placed in the 120 volt position. For use in countries other than the U.S.A., the voltage selector may need to be placed in other than the 120 volt position. Confirm the voltage available at each country location before using the product.
 - c) For connection to a supply not in the U. S. A., use an attachment plug adapter of the proper configuration for the power outlet, if needed.Or
If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.
11. Transformer - Supplier records must be provided that indicate the received shipment of transformers (section 4.0, item 11,12) was constructed as indicated in Illustration No. 3 . These records must be available at the factory for inspection on every received shipment.

7.0 Illustrations

Illustration 1 - Circuit diagram for model IVPxxxx-yyyyW and IVPxxxx-yyyy

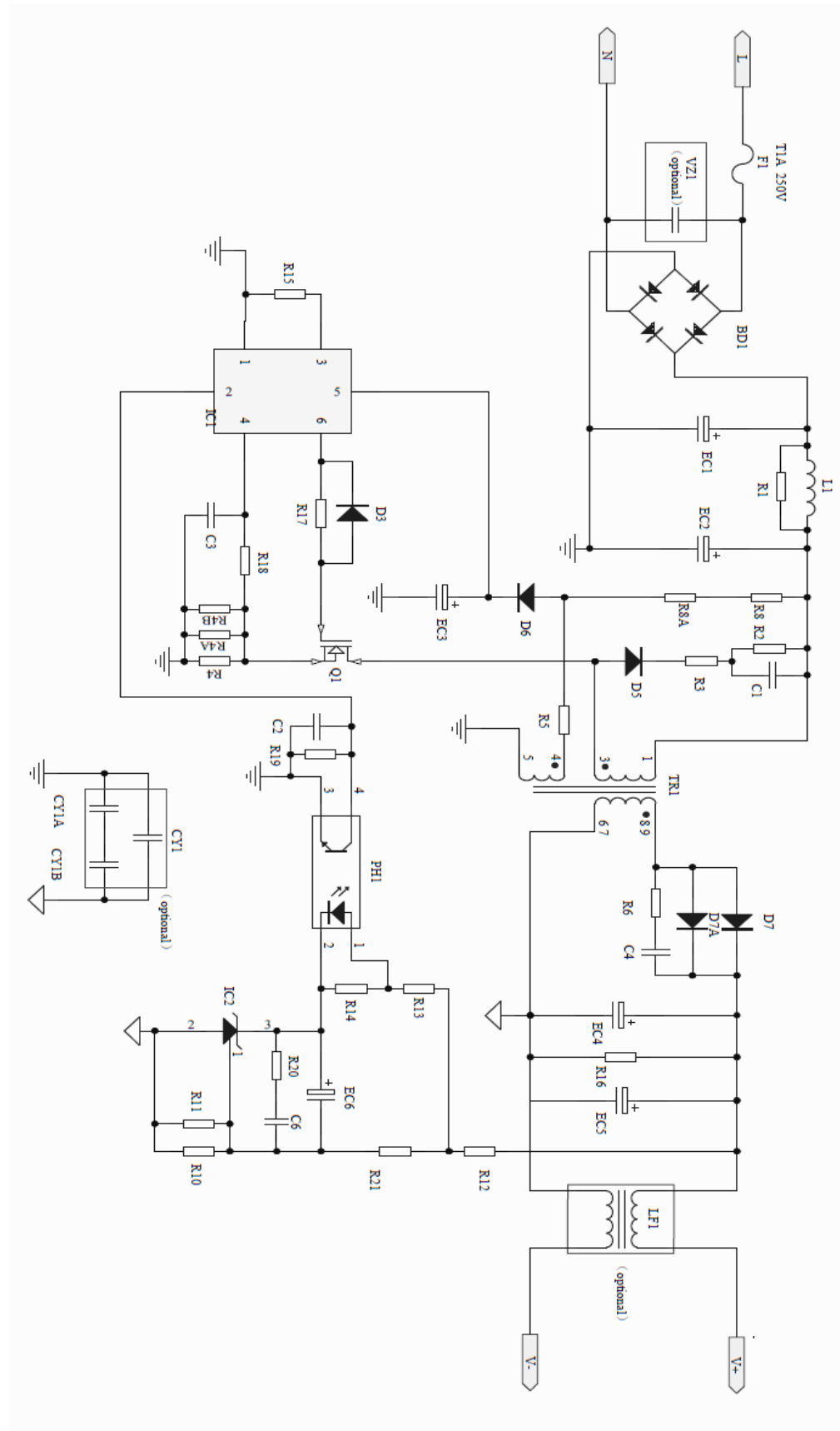
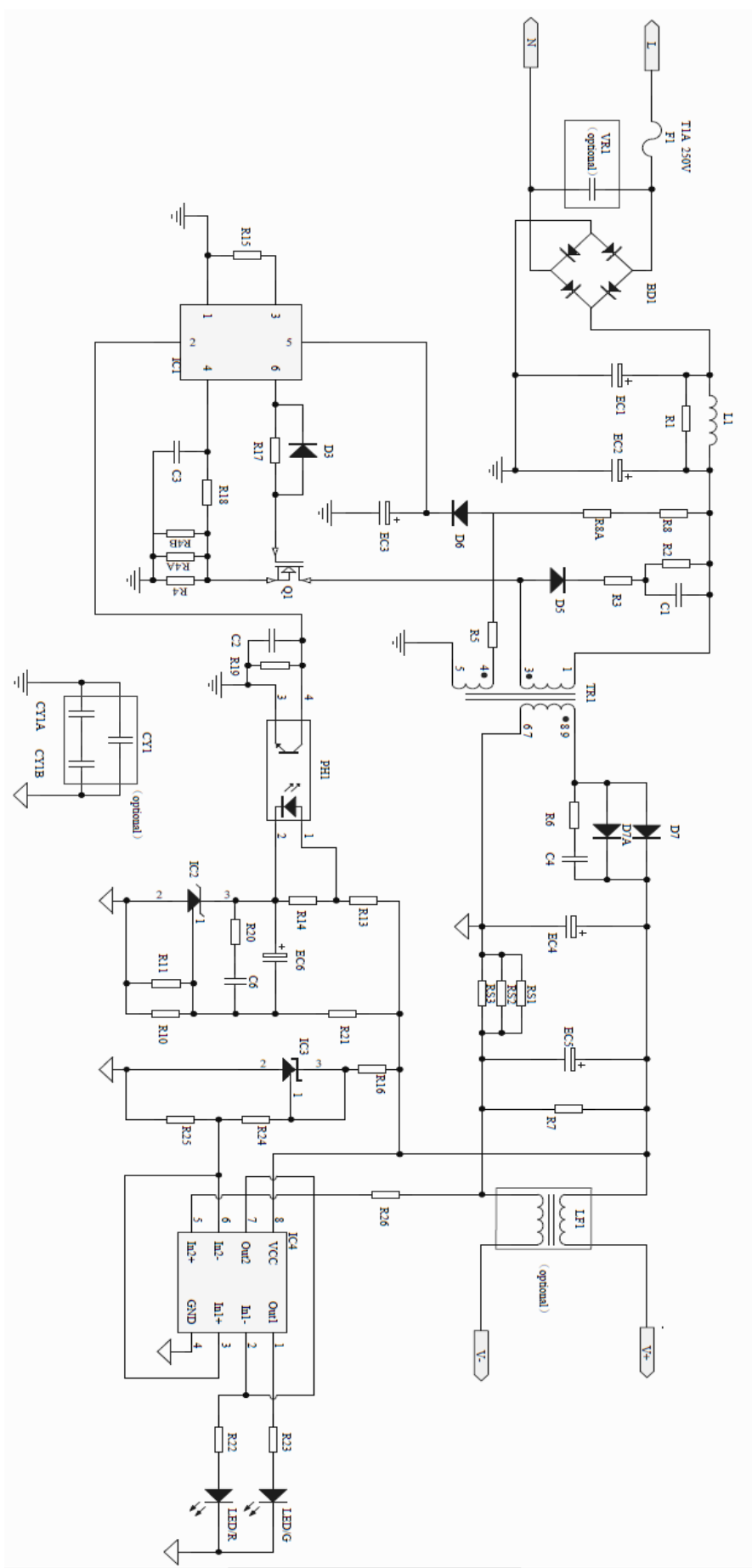
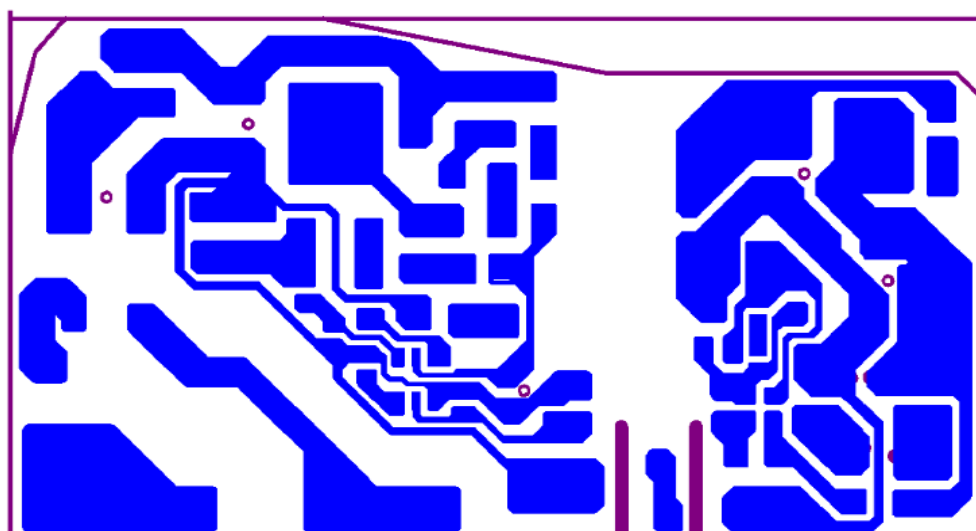
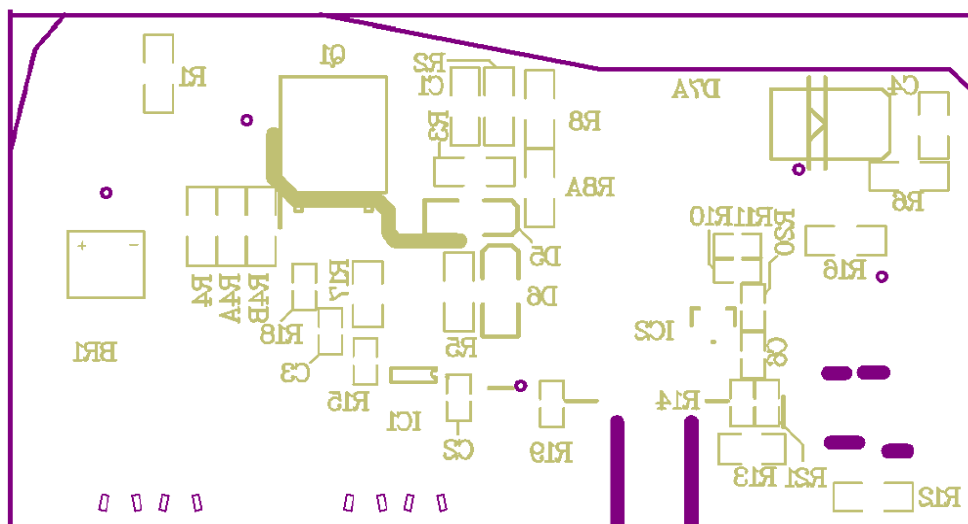
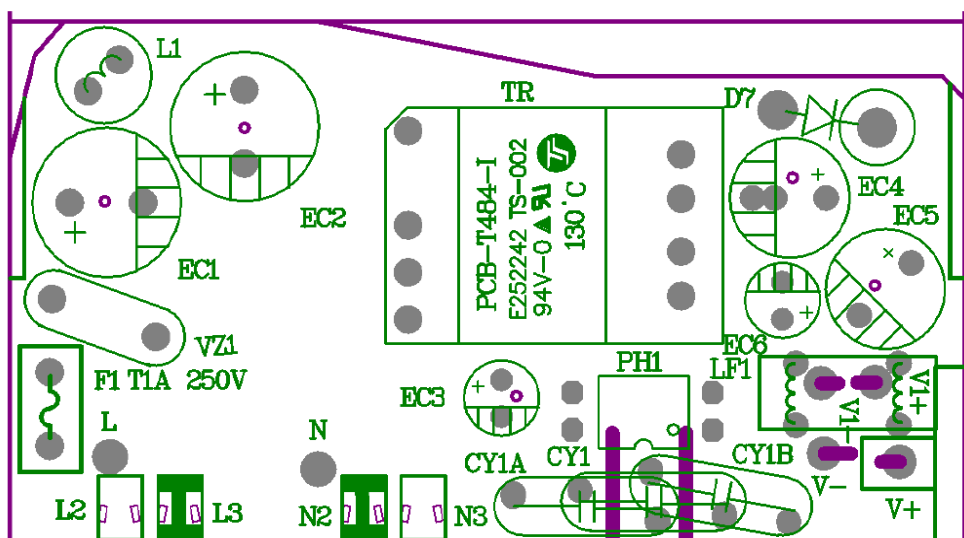


Illustration 1a - Circuit diagram for model IVPxxxx-yyyD



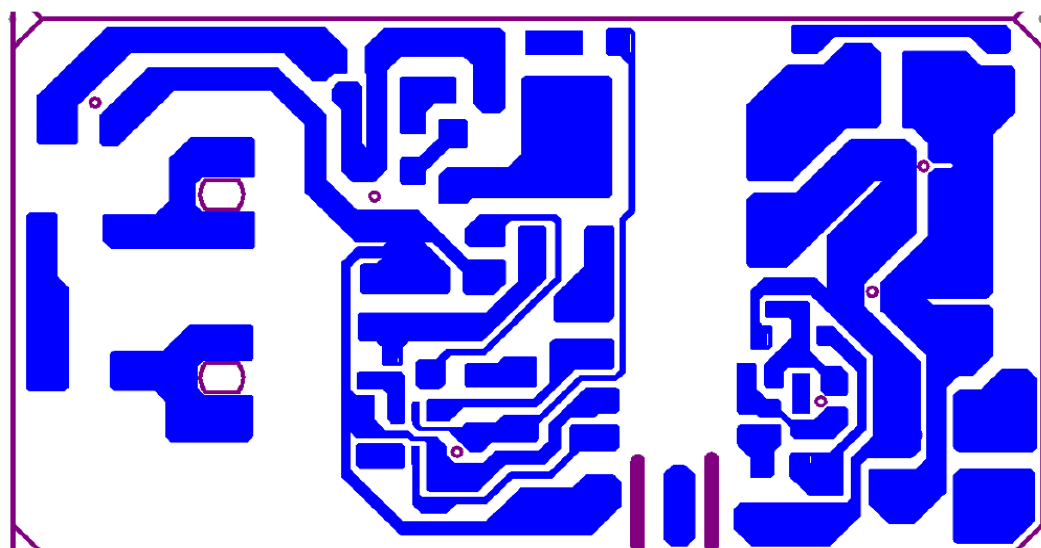
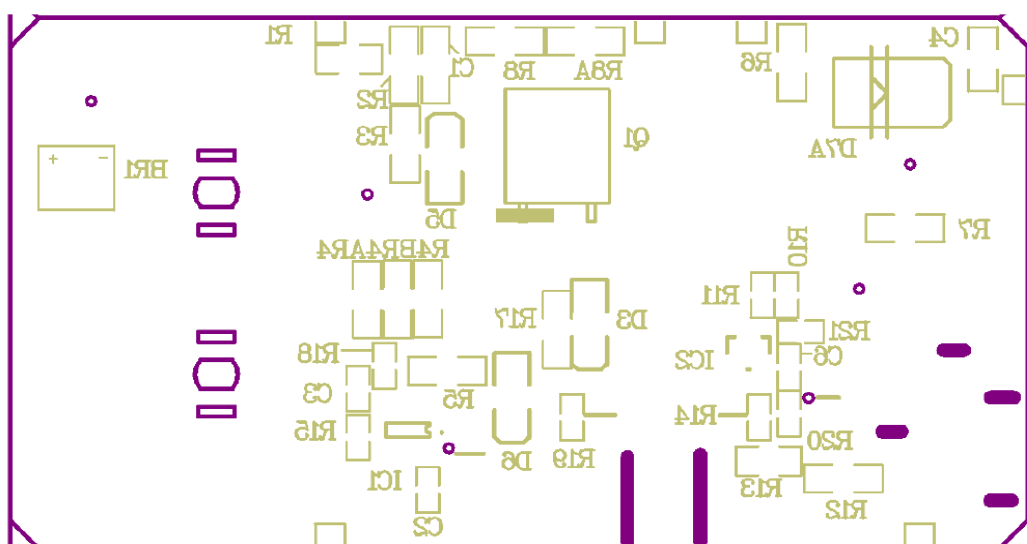
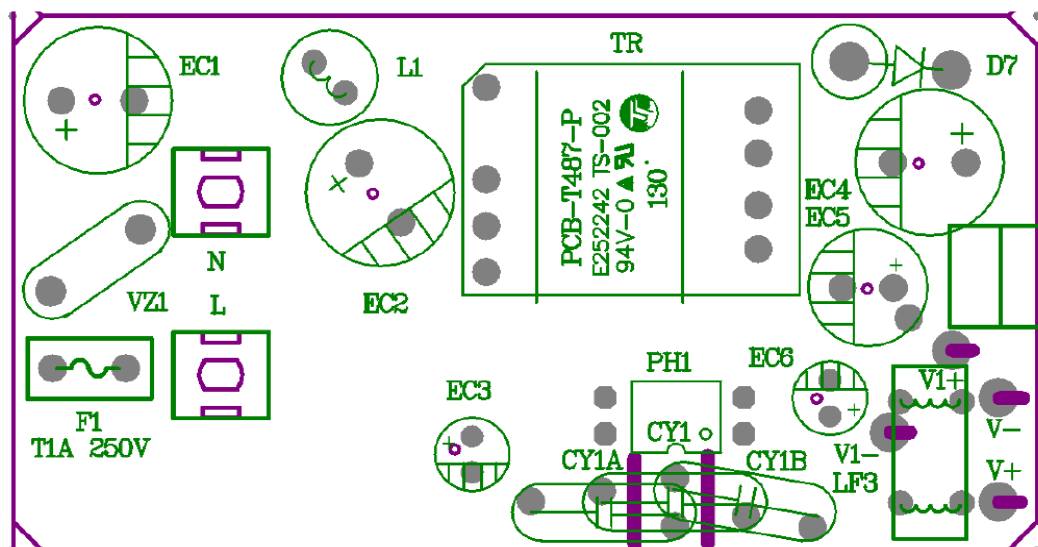
7.0 Illustrations

Illustration 2 - PCB layout formodel IVPxxxx-yyyy



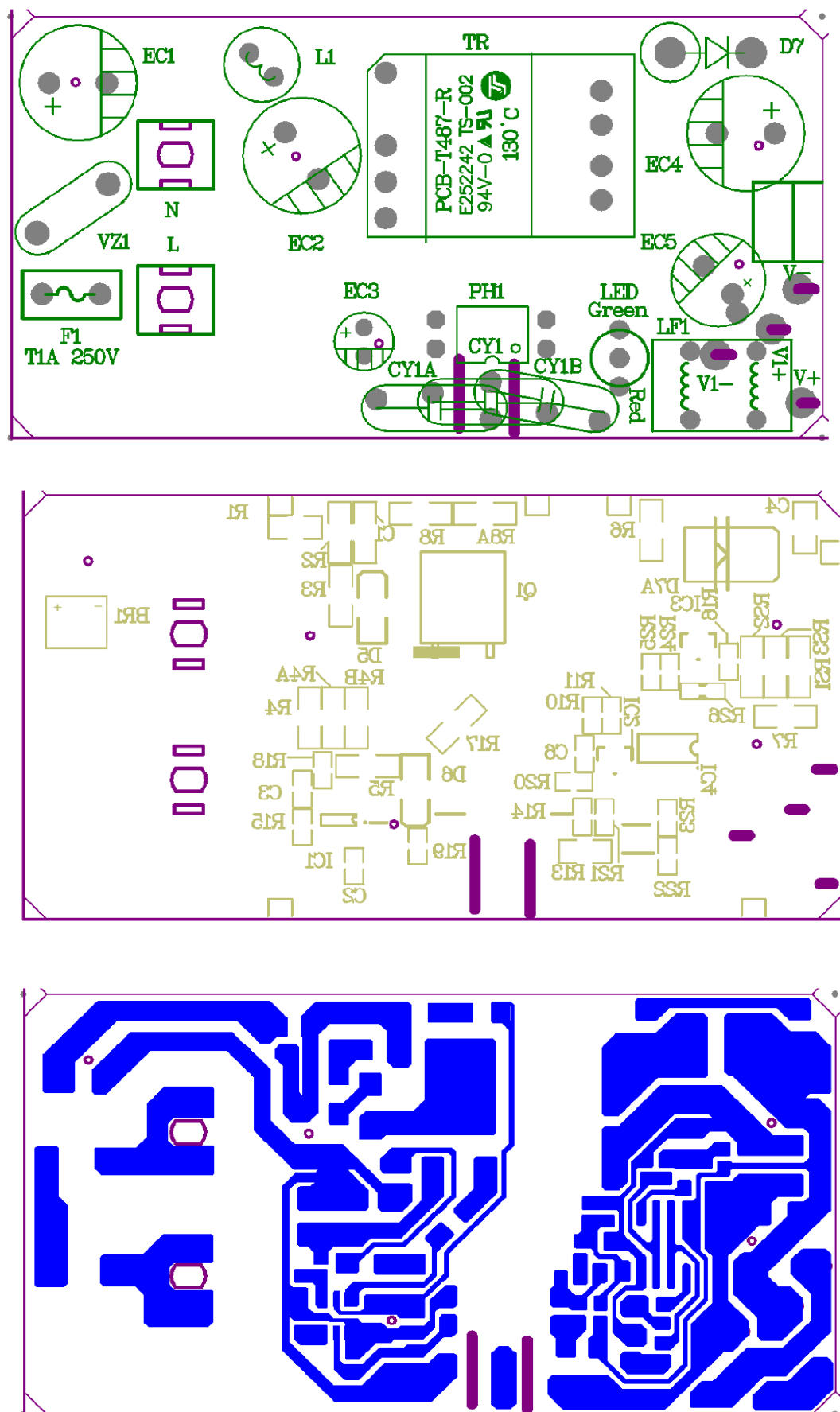
7.0 Illustrations

Illustration 2a - PCB layout formodel IVPxxxx-yyyyW



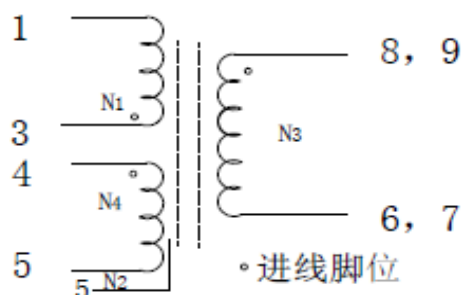
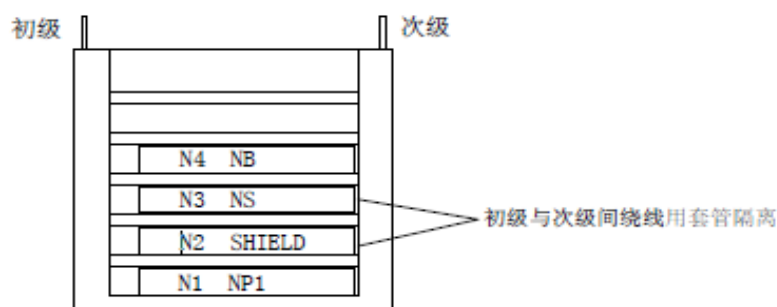
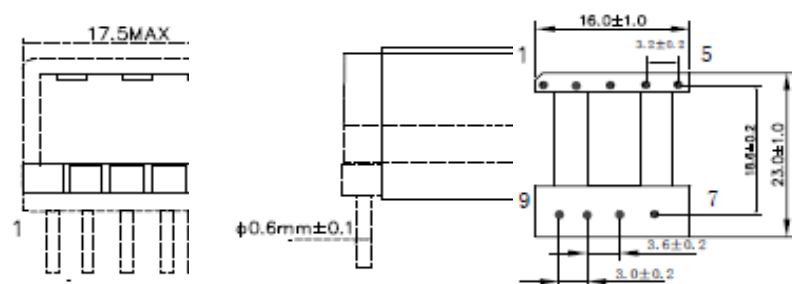
7.0 Illustrations

Illustration 2b - PCB layout formodel IVPxxxx-yyyyD



7.0 Illustrations

Illustration 3 - transformer winding construction

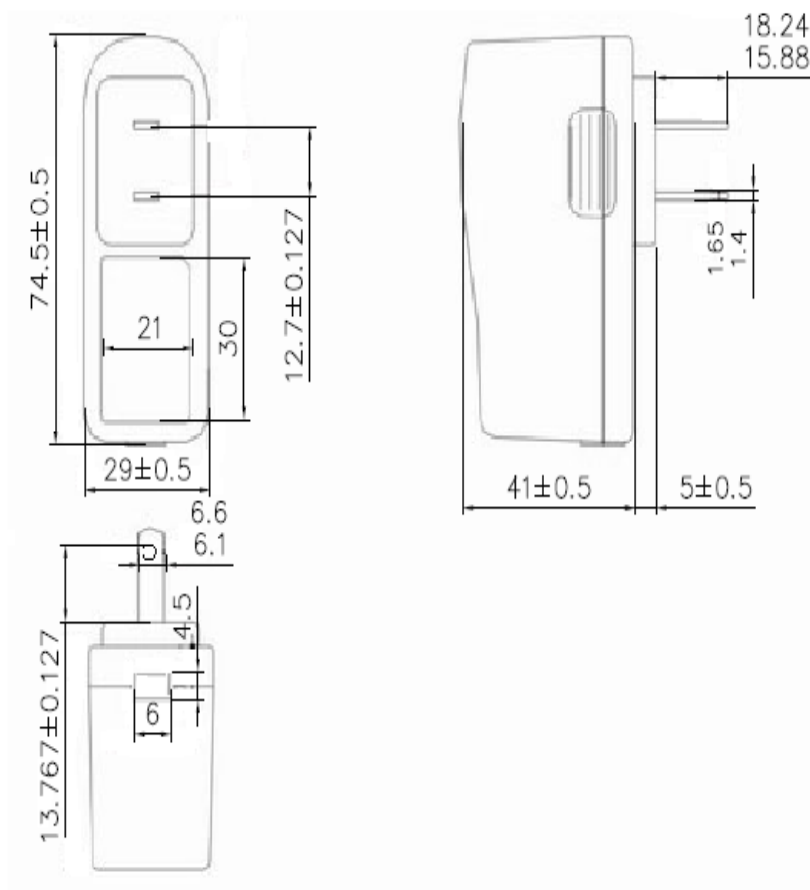
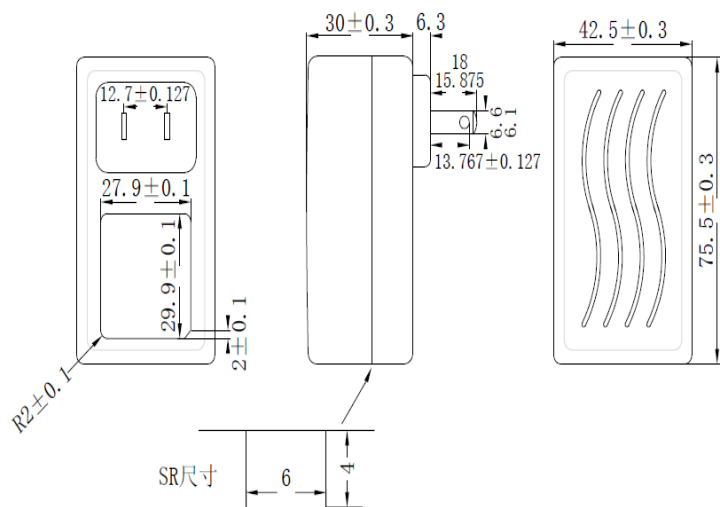


绕线顺序	序列	进线脚-出线脚	线径	匝数	层数
	N1	3 → 1, 外包3层绝缘胶带	2UEW $\phi 0.3$	73TS	1
	N2	5 → 空, 外包3层绝缘胶带	2UEW $\phi 0.23$	8TS	1
	N3	8 → 7, 外包3层胶带	备注	备注	备注
	N4	4 → 5, 外包3层绝缘胶带	2UEW $\phi 0.23$	12TS	1

型号	0201-0520	0201-0519	
适用产品规格	5-11.9V	12-30.0V	
TIWW-B线径	$\phi 0.45 \times 2$	$\phi 0.55$	
绕制圈数	6T (1层)	10T (1层)	

7.0 Illustrations

Illustration 4 - Drawing (UNIT:MM)



8.0 Test Summary					
Evaluation Period	9-Jun-2021 to 18-Jun-2021			Project No.	210609111GZU
Sample Rec. Date	9-Jun-2021	Condition	Prototype	Sample ID.	S210609111-001~ 010
Test Location	Dongguan Lepont Testing Service Co.,Ltd. Section 102, Building 11, No.7 Houjie Science And Technology Avenue, Houjie Town, Dongguan, Guangdong, P. R. China				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					
Test Description	[UL 1310:2018 Ed.7+R:16Aug2019]/ Clause		[CSA C22.2#223:2015 Ed.3]/ Clause	[UL 746C:2018 Ed.7]/ Clause	
Leakage Current Test	26		6.6	--	
Leakage Current Test and Dielectric Voltage Withstand Test After Humidity Exposure	27		--	--	
Maximum Output Voltage Test / Open-Circuit Secondary Voltage	28		6.3.1	--	
Maximum Input Test / Rated Input	29		6.3.2	--	
Output Current and Power Test /	30		6.3.4	--	
Full-Load Output Current Test / Rated Output	32		6.3.3	--	
Normal Temperature Test / Temperature (Normal)	33		6.4	--	
Dielectric Voltage Withstand Test / Dielectric Strength	34		65		
Abnormal Test – Output Loading	39.2		--	--	
Secondary Circuit Protection	--		6.7	--	
Abnormal Operation Test – Transformer Burnout	39.4		--	--	
Abnormal Operation Test – Component Breakdown / Abnormal	39.7		6.8	--	
Abnormal Operation Test – Printed Wiring Board	39.8		--	--	
Tests on Insulating Materials	40		6.14	--	
Strain Relief Test	41		6.10	--	
Push-Back Relief Test	42		--	--	
Direct Plug-In Blade Secureness Test / Blade retention	43		6.10	--	
Direct Plug-In Security of Input Contacts Test / Securement of removable, folding, or retractable blades	44		6.13	--	
Impact on Direct Plug-In Units / Drop and Impact	46.2		6.9	--	
Rod Pressure on Direct Plug-In Units /	46.4		6.15	--	
Resistance to Crushing on Direct Plug-In Units	46.5		--	--	
Normal input test	50.2		--	--	
Mold Stress-Relief Distortion Test	--		--	29	
Strain Relief Test After Mold Stress-Relief Distortion	--		--	31	

8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	Randy Guo	Reviewed by:	Gerry Wu
Title:	Project Engineer	Title:	Assistant Manager
Signature:		Signature:	

9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

BASIC LISTEE	Xiamen Innov Electronics Tech. Co., Ltd.
Address	1F/3F-5F, Bldg 5, No. 943, Tonglong 2nd Rd, Torch Hi-Tech Industrial Zone, Xiang'an, XIAMEN, Fujian
Country	China
Product	Class 2 Power Supply

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issued by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

For Canadian standards, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

If all standards on the ATM have the same standard title, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "A/V ICTE".

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.

Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.

Managing CEC Location:

Intertek Testing Services Shenzhen Limited Guangzhou Branch

ETL Component Evaluation Center

Room 02, &101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2,
Caipin Road, Science City

GETDD Guangzhou, Guangdong, China

Attn: Ms. Joey Kuang

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

Dielectric Voltage Withstand Test

11.1 Dielectric Voltage Withstand Test

Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:

- 1 - a voltmeter in the primary circuit;
- 2 - a selector switch marked to indicate the test potential; or
- 3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

Products Requiring Dielectric Voltage Withstand Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
All products covered by this Report.	1000 Vac	60s
	or	
	1200 Vdc	1s
<u>Product - One sample from each shipment of Section 4.0 item 11, 12:</u>	<u>Test Voltage</u>	<u>Test Time</u>
Between primary circuit and secondary output	3000Vac	60s
Between secondary circuit and core	3000Vac	60s

The following changes are in compliance with the declaration of Section 8.1:

ED 16.3.15 (5-Jun-2021) Mandatory