


1.0 Reference and Address			
Report Number	180525001GZU-001	Original Issued: 5-Jul-2018	Revised: 10-Nov-2018
Standard(s)	Information Technology Equipment Safety Part 1: General Requirements >Valid without technical revision: 20Dec2020< [UL 60950-1:2007 Ed.2+R:14Oct2014] Information Technology Equipment Safety Part 1: General Requirements (R2016) >Valid without technical revision: 20Dec2020< [CSA C22.2#60950-1:2007 Ed.2+A1;A2]		
Applicant	<u>Shenzhen Theone Electronic Co., Ltd.</u>	Manufacturer	Shenzhen Theone Electronic Co., Ltd.
Address	6th Building, Zhangbei Industrial Park, Xinlian Community, Longcheng Street, LONGGANG Shenzhen 518172	Address	6th Building, Zhangbei Industrial Park, Xinlian Community, Longcheng Street, LONGGANG Shenzhen 518172
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2.0 Product Description	
Product	CHARGER
Brand name	 (The one)
Description	The products covered by this report are AC/DC CHARGER with non-detachable plug, intended for using at the overvoltage category II and pollution degree 2 circumstances, for indoor use only.
Models	TP601CA, TP601C, TP602LA, TA06A3, TP452CA, TP451C, TA07E3, TP451CA, TP302CA, TP301CA, TP301C, TP303L.
Model Similarity	All models are identical to each other except for the model name, output rating, enclosure shape base on different output port, output port and parameters of components(Such as C19, L5, L6 etc.).
Ratings	<p>TA06A3, TP601C: Input: 110-240V~, 50-60Hz, 1.3A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 3A / 20Vdc 3A; 60W Max.</p> <p>TP452CA: Input: 110-240V~, 50-60Hz, 1.3A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 2.25A / 20Vdc 2.25A, USB port: 5Vdc, 2.4A; 60W Max.</p> <p>TP601CA: Input: 110-240V~, 50-60Hz, 1.3A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 3A / 20Vdc 3A, USB port: 5Vdc, 2.4A; 60W Max.</p> <p>TP602LA: Input: 110-240V~, 50-60Hz, 1.3A max., Class II Output: Type C port (with output cord): 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 3A / 20Vdc 3A, USB port: 5Vdc, 2.4A; 60W Max.</p> <p>TP451CA: Input: 110-240V~, 50-60Hz, 1.0A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 2.25A / 20Vdc 2.25A, USB port: 5Vdc, 2.4A; 45W Max.</p> <p>TA07E3, TP451C: Input: 110-240V~, 50-60Hz, 1.0A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 2.25A / 20Vdc 2.25A; 45W Max.</p> <p>TP302CA:</p>

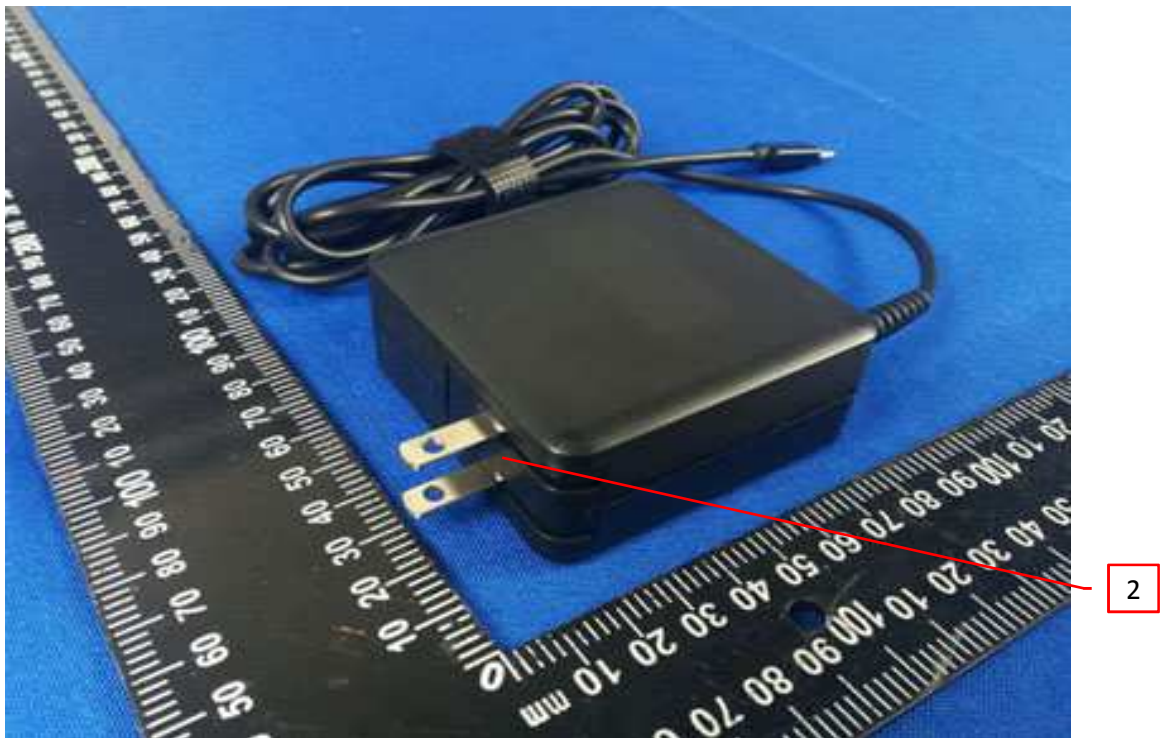
2.0 Product Description	
	<p>Input: 110-240V~, 50-60Hz, 1.0A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 2.5A / 15Vdc 2A / 19Vdc 1.5A / 20Vdc 1.5A, USB port: 5Vdc, 2.4A; 45W Max.</p> <p>TP301CA: Input: 110-240V~, 50-60Hz, 1.0A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 2.5A / 15Vdc 2A / 19Vdc 1.5A / 20Vdc 1.5A, USB port: 5Vdc, 2.4A; 30W Max.</p> <p>TP303L: Input: 110-240V~, 50-60Hz, 1.0A max., Class II Output: Type C port (with output cord): 5Vdc 3A / 9Vdc 3A / 12Vdc 2.5A / 15Vdc 2A / 19Vdc 1.5A / 20Vdc 1.5A, USB port: 5Vdc, 2.4A; 30W Max.</p> <p>TP301C: Input: 110-240V~, 50-60Hz, 1.0A max., Class II Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 2.5A / 15Vdc 2A / 19Vdc 1.5A / 20Vdc 1.5A; 30W Max.</p>
Other Ratings	NA

3.0 Product Photographs

Photo 1 - Overall view of the unit TP602LA and TP303L



Photo 2 - Overall view of the unit TP602LA and TP303L



3.0 Product Photographs

Photo 3 - Overall view of the unit TP602LA and TP303L



Photo 4 - Overall view of the unit TP602LA and TP303L

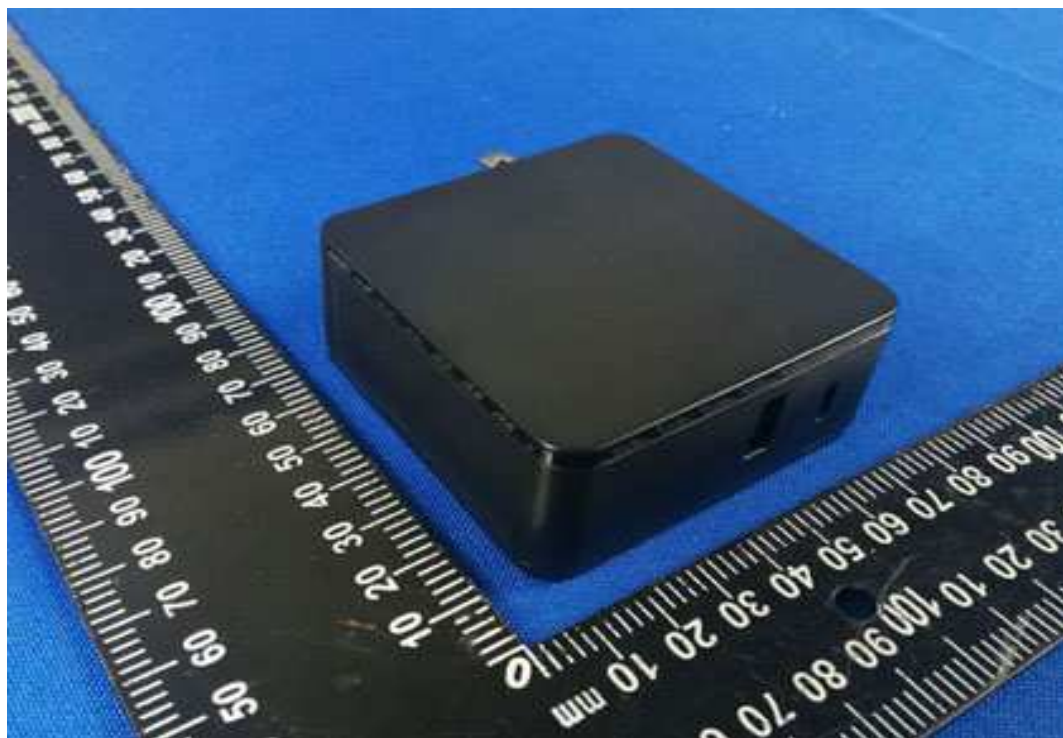


3.0 Product Photographs

Photo 5 - Overall view of the unit TP452CA, TP601CA, TP451CA, TP301CA and TP302CA



Photo 6 - Overall view of the unit TP452CA, TP601CA, TP451CA, TP301CA and TP302CA

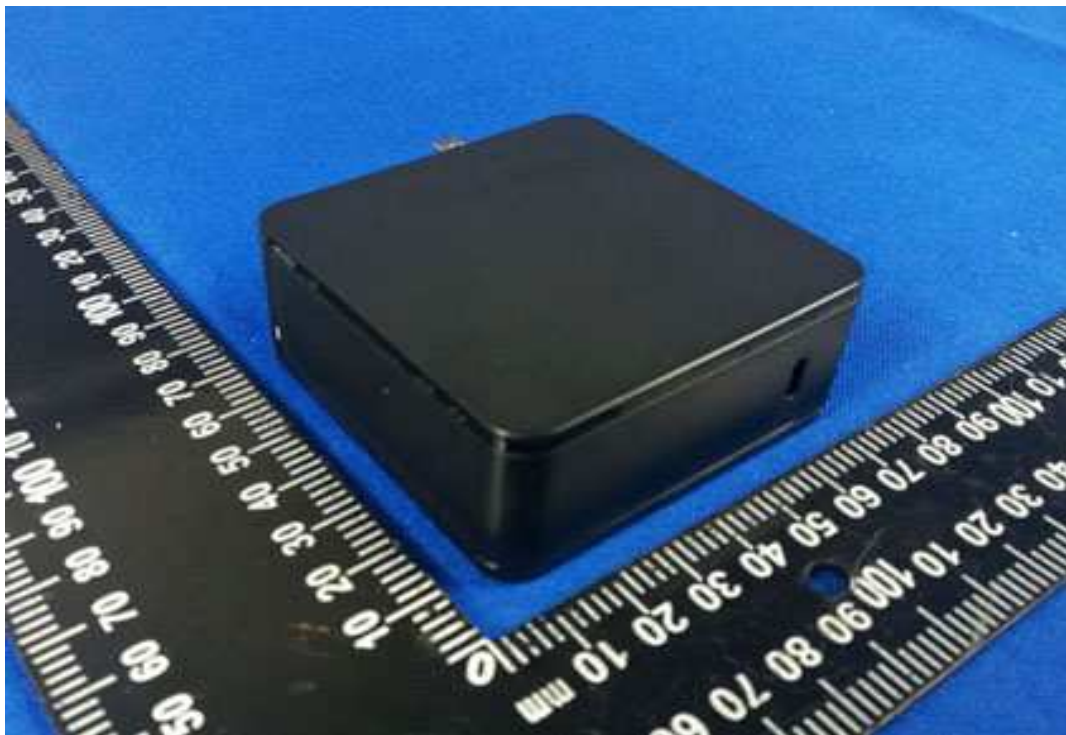


3.0 Product Photographs

Photo 7 - Overall view of the unit TP601C, TP451C, TP301C



Photo 8 - Overall view of the unit TP601C, TP451C, TP301C

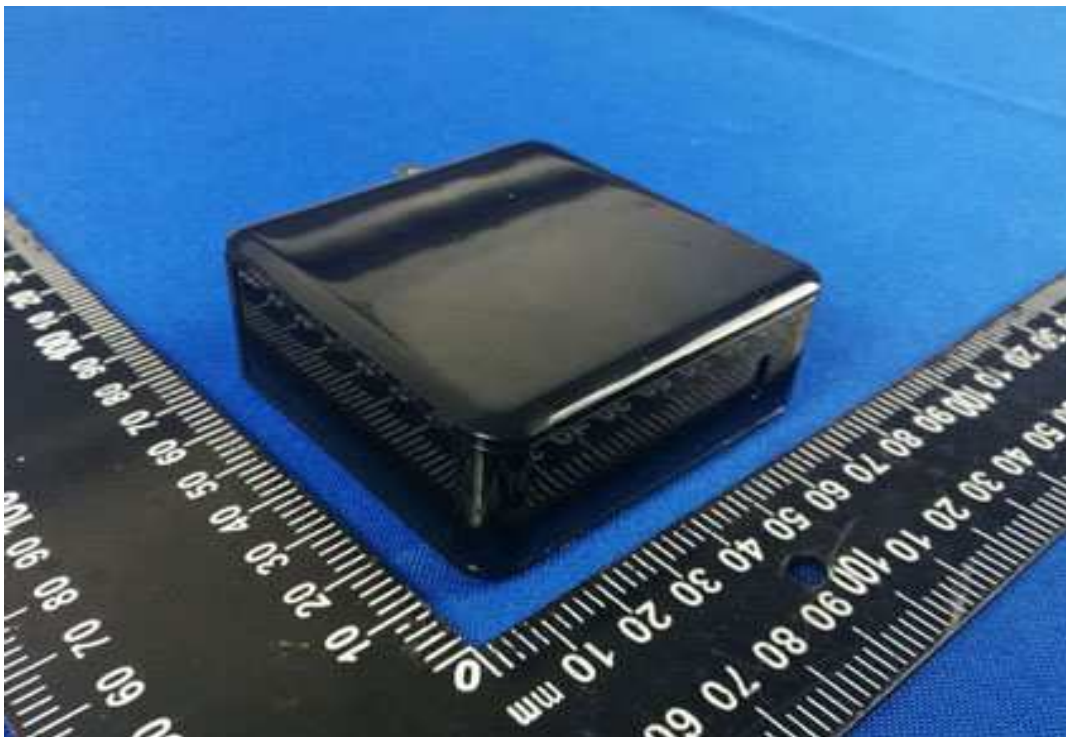


3.0 Product Photographs

Photo 9 - Overall view of the unit TA06A3 and TA07E3



Photo 10 - Overall view of the unit TA06A3 and TA07E3



3.0 Product Photographs

Photo 11 - Internal view of the unit TP602LA and TP303L



Photo 12 - Internal view of the unit TP602LA and TP303L



3.0 Product Photographs

Photo 13 - Internal view of the unit TP602LA and TP303L

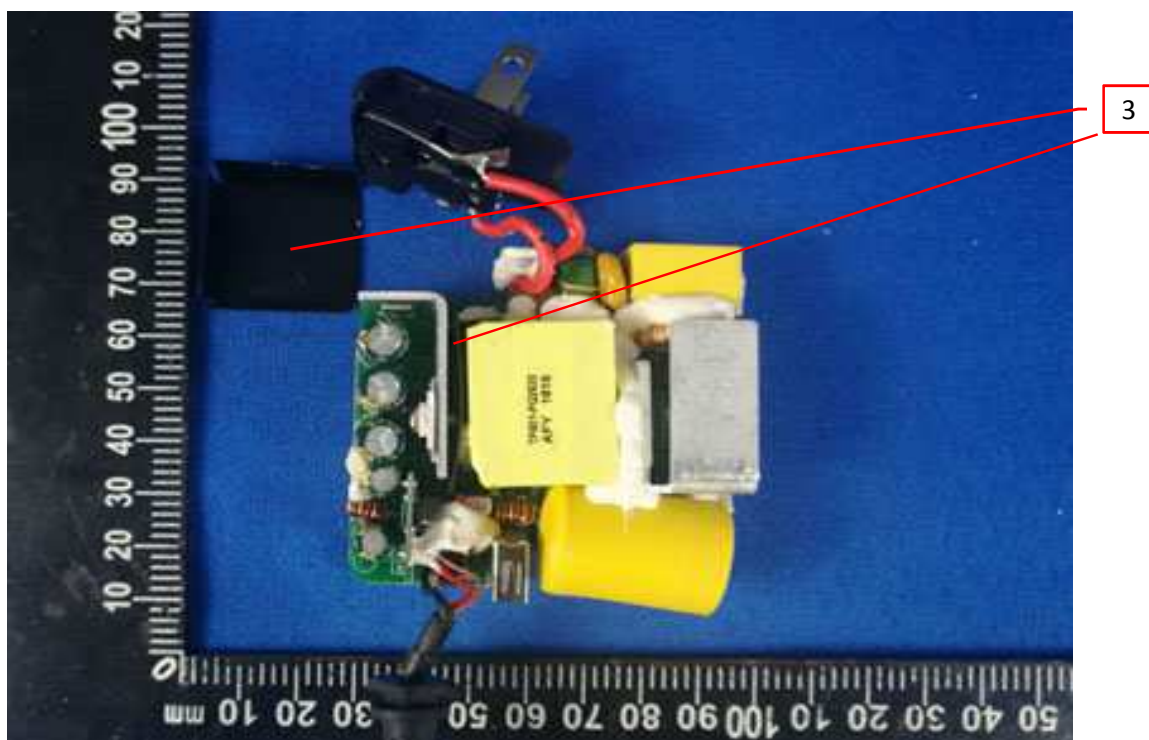
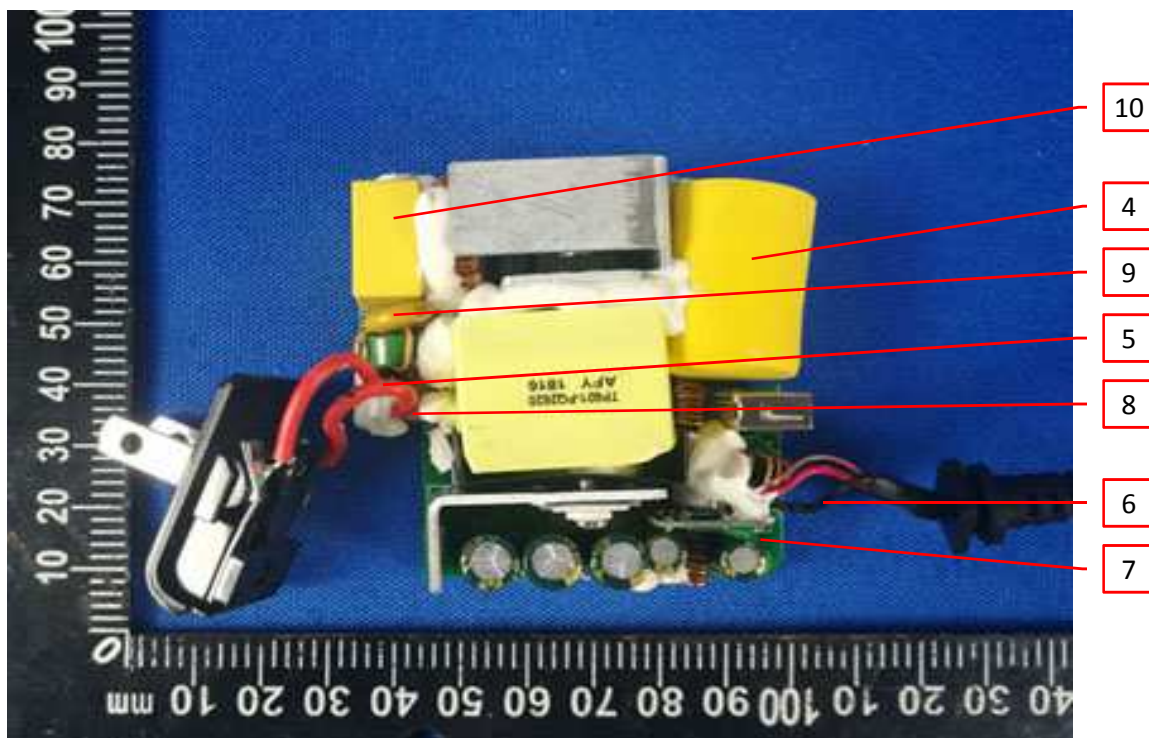


Photo 14 - PCB components view: TP602LA and TP303L



3.0 Product Photographs

Photo 15 - PCB traces view: TP602LA and TP303L

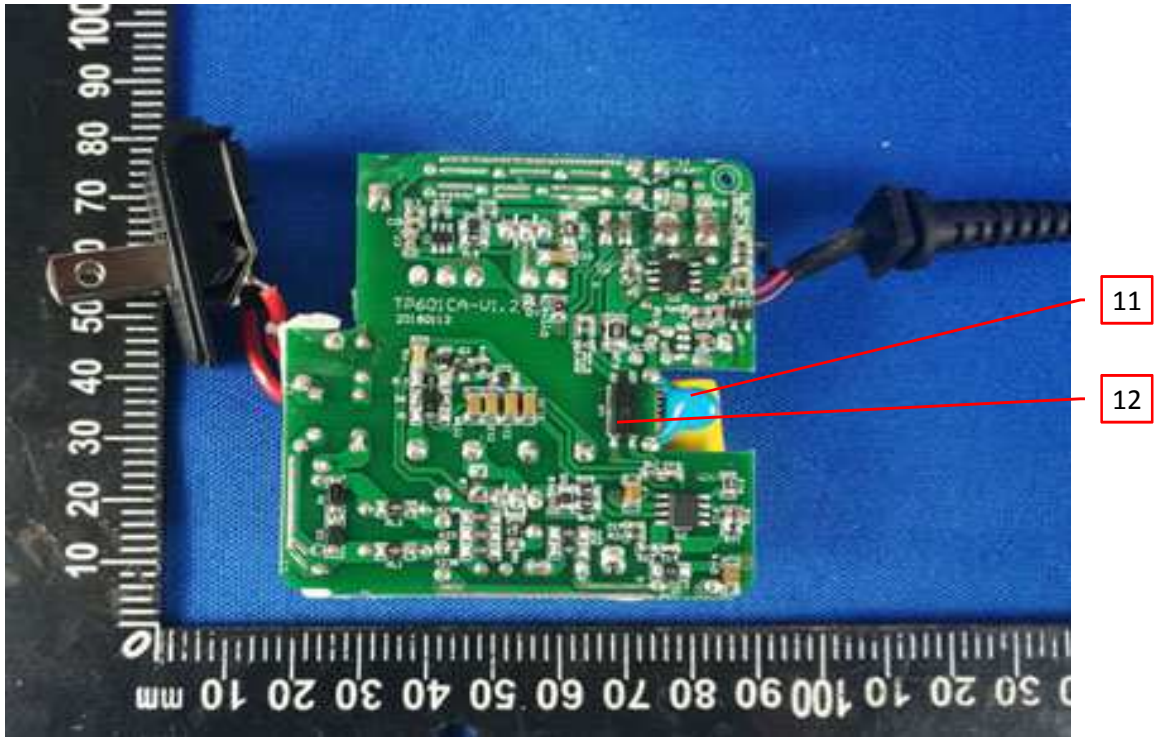
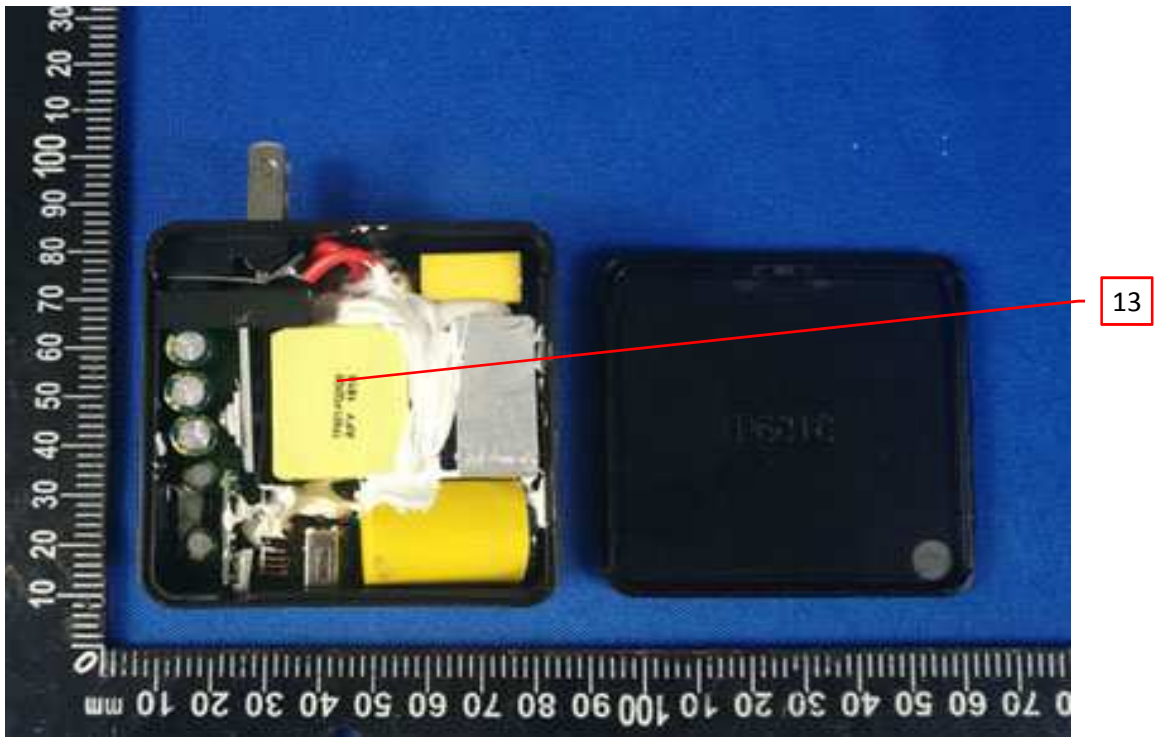


Photo 16 - Internal view of the unit TP452CA, TP601CA, TP451CA, TP301CA and TP302CA



3.0 Product Photographs

Photo 17 - Internal view of the unit TP452CA, TP601CA, TP451CA, TP301CA and TP302CA



Photo 18 - Internal view of the unit TP452CA, TP601CA, TP451CA, TP301CA and TP302CA

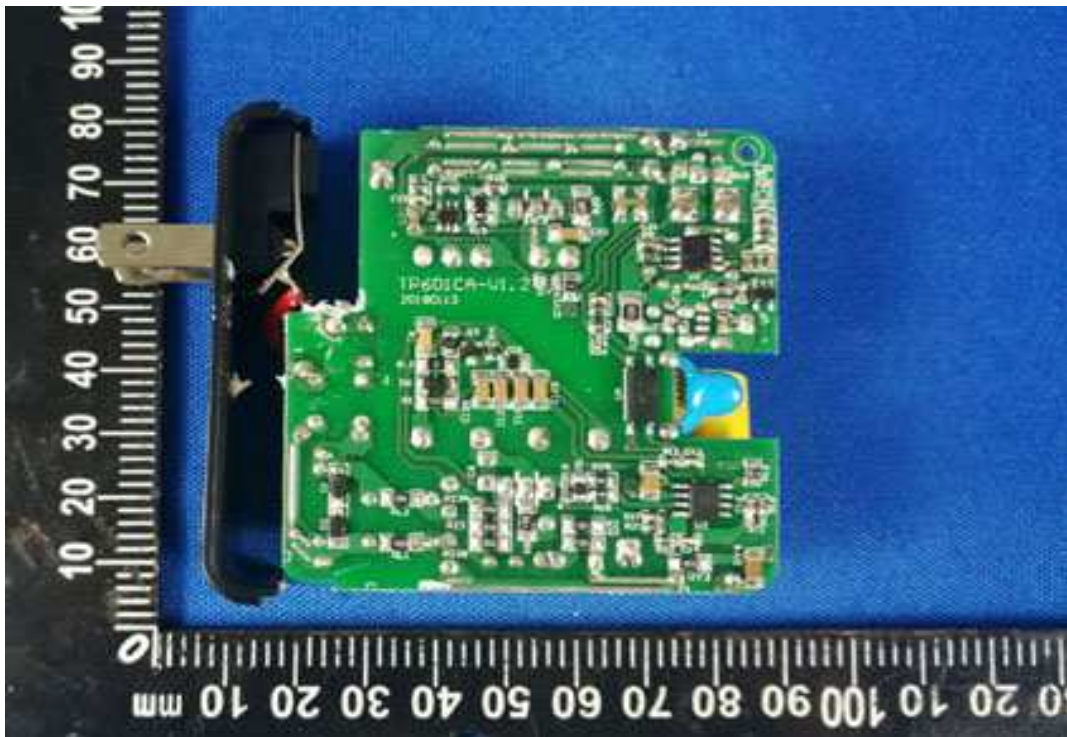


3.0 Product Photographs

Photo 19 - PCB components view: TP452CA, TP601CA, TP451CA, TP301CA and TP302CA



Photo 20 - PCB traces view: TP452CA, TP601CA, TP451CA, TP301CA and TP302CA



3.0 Product Photographs

Photo 21 - Internal view of the unit TP601C, TP451C, TP301C



Photo 22 - Internal view of the unit TP601C, TP451C, TP301C

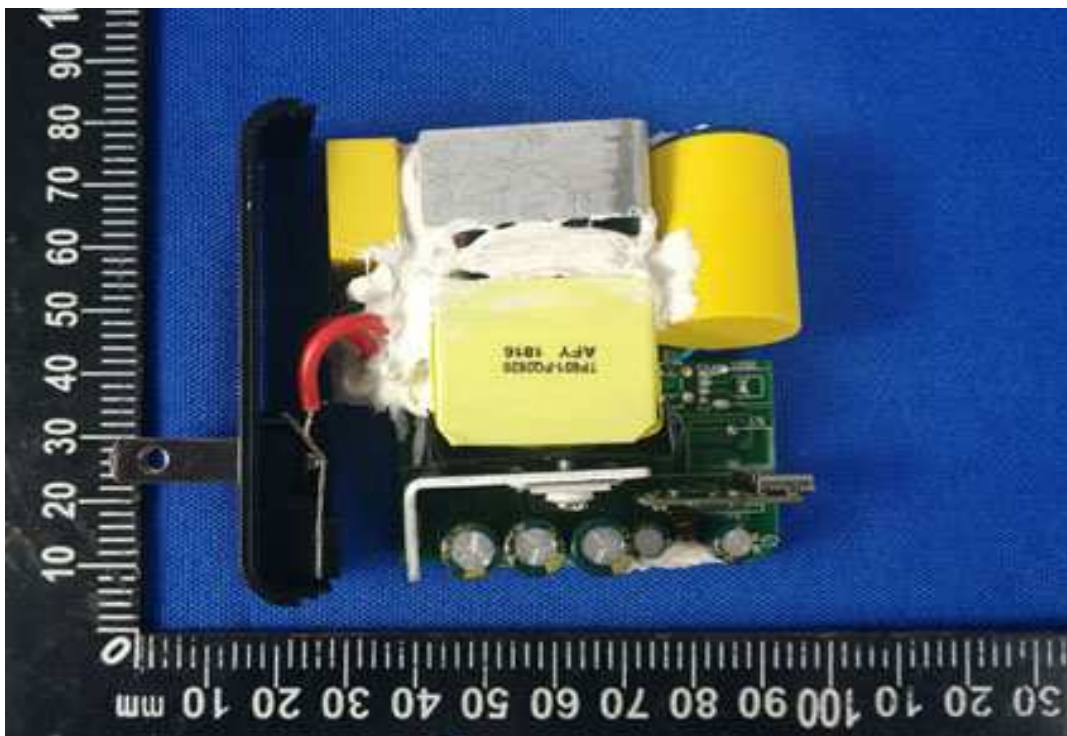


3.0 Product Photographs

Photo 23 - Internal view of the unit TP601C, TP451C, TP301C



Photo 24 - PCB components view: TP601C, TP451C, TP301C



3.0 Product Photographs

Photo 25 - PCB traces view: TP601C, TP451C, TP301C

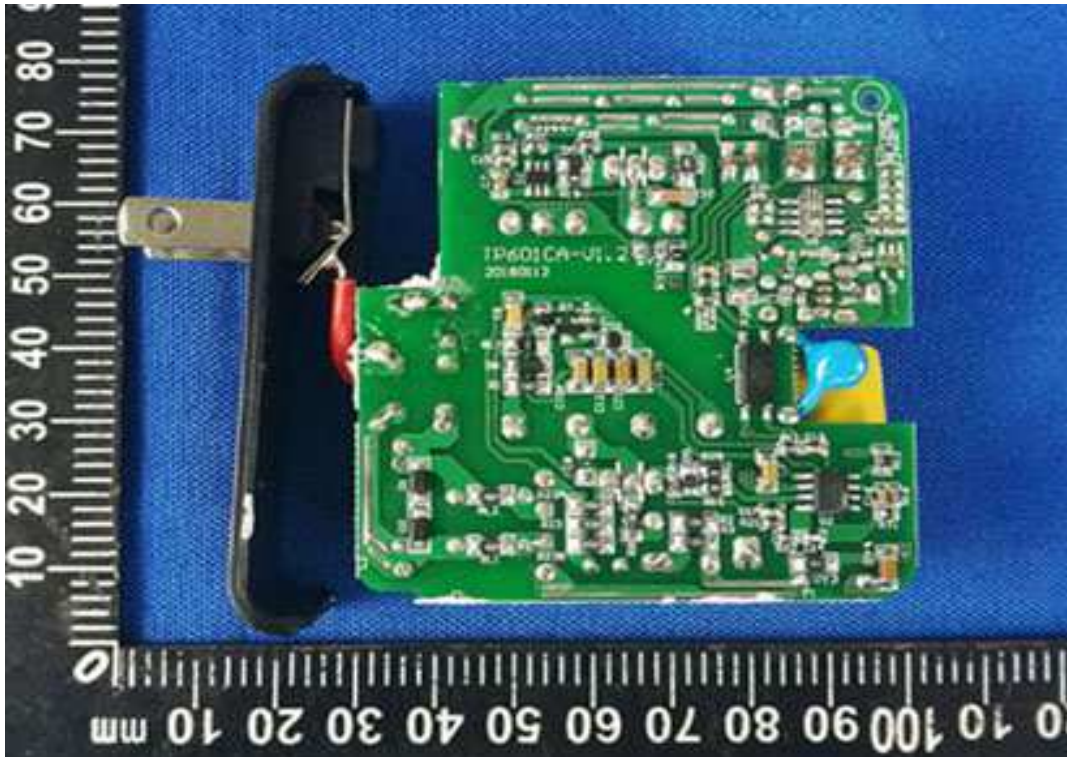


Photo 26 - Internal view of the unit TA06A3 and TA07E3



3.0 Product Photographs

Photo 27 - Internal view of the unit TA06A3 and TA07E3



Photo 28 - Internal view of the unit TA06A3 and TA07E3



3.0 Product Photographs

Photo 29 - PCB components view: TA06A3 and TA07E3

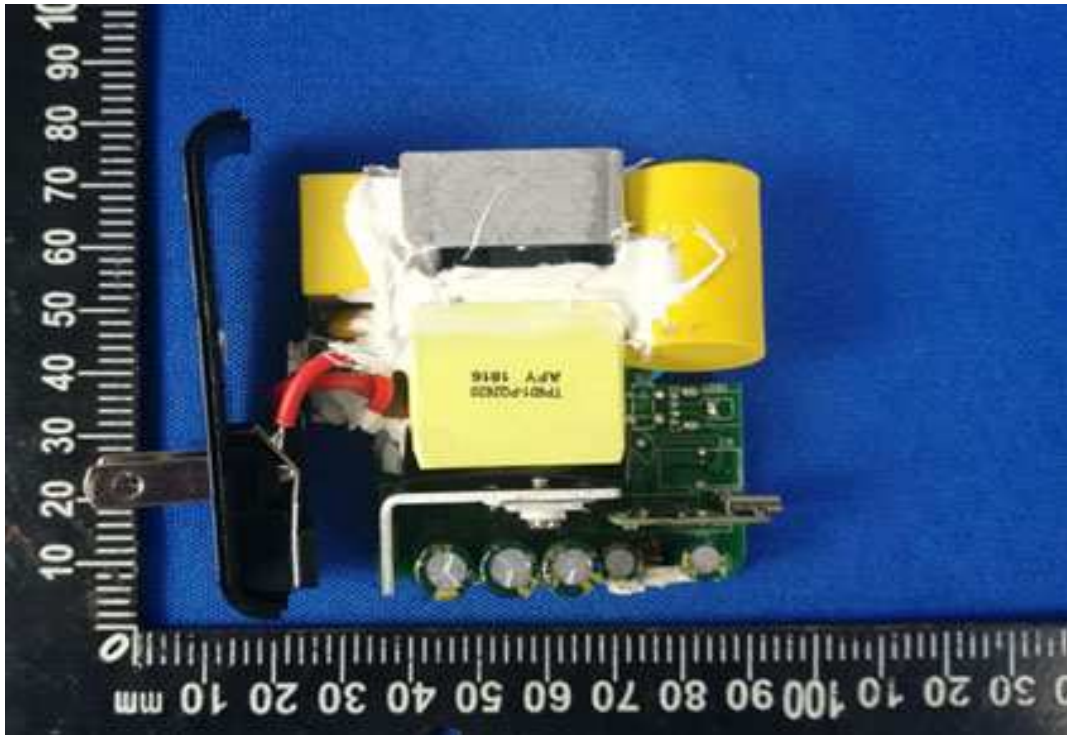
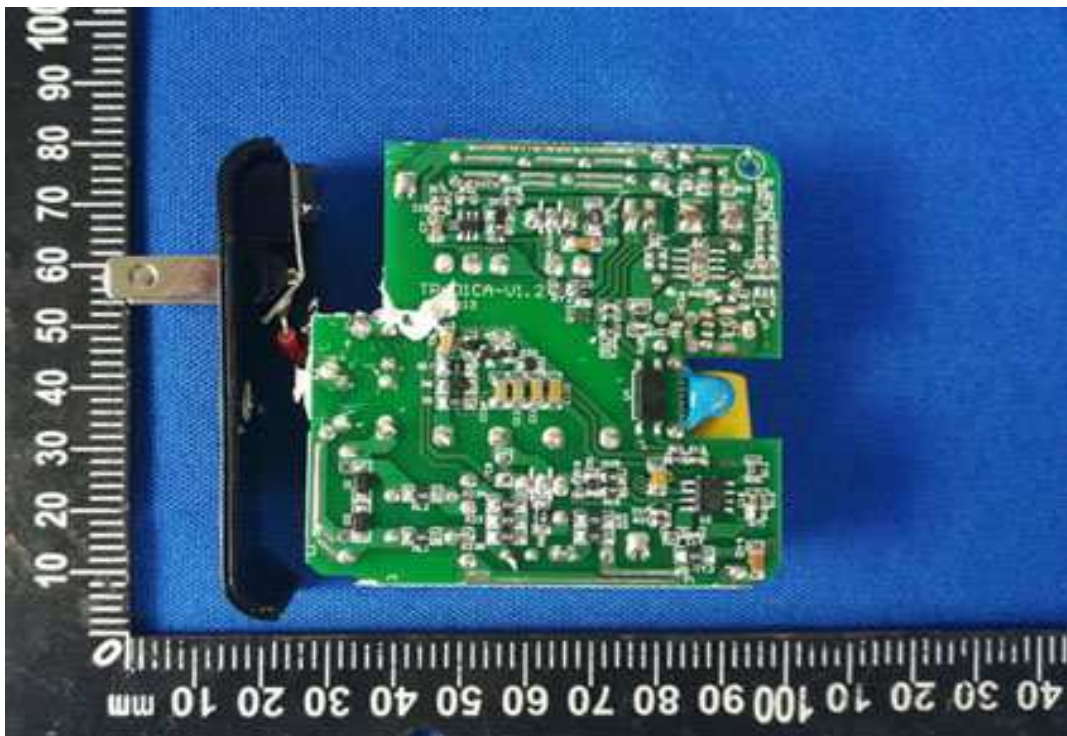


Photo 30 - PCB traces view: TA06A3 and TA07E3



3.0 Product Photographs

Photo 31 - Transformer view

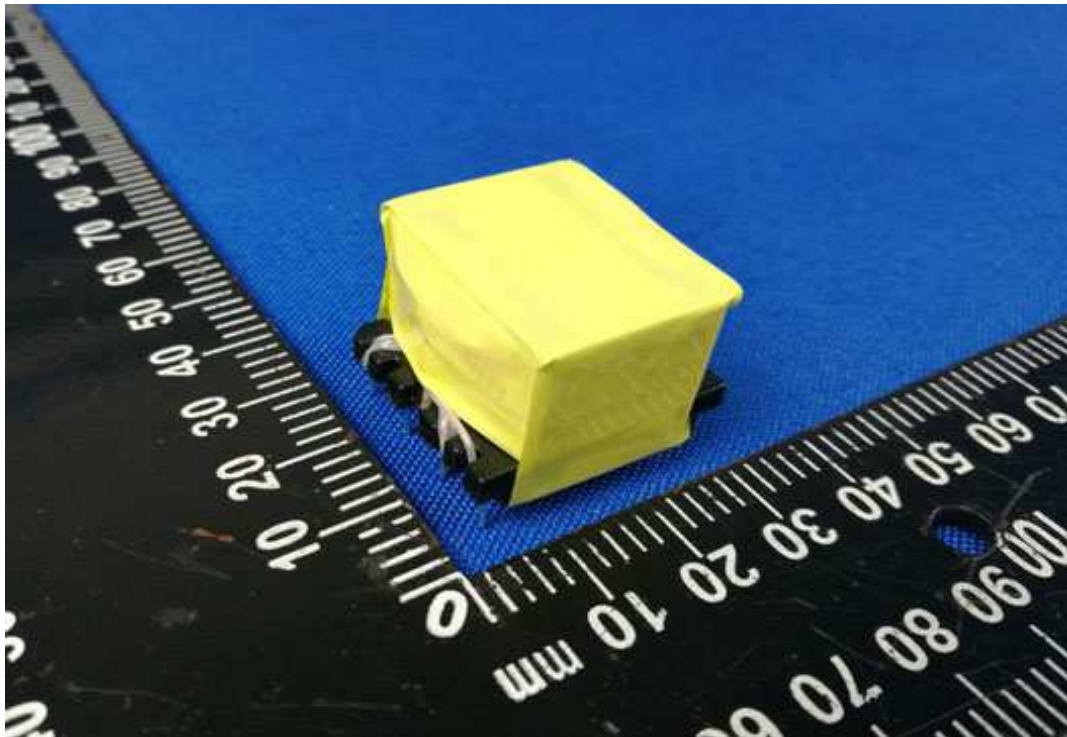
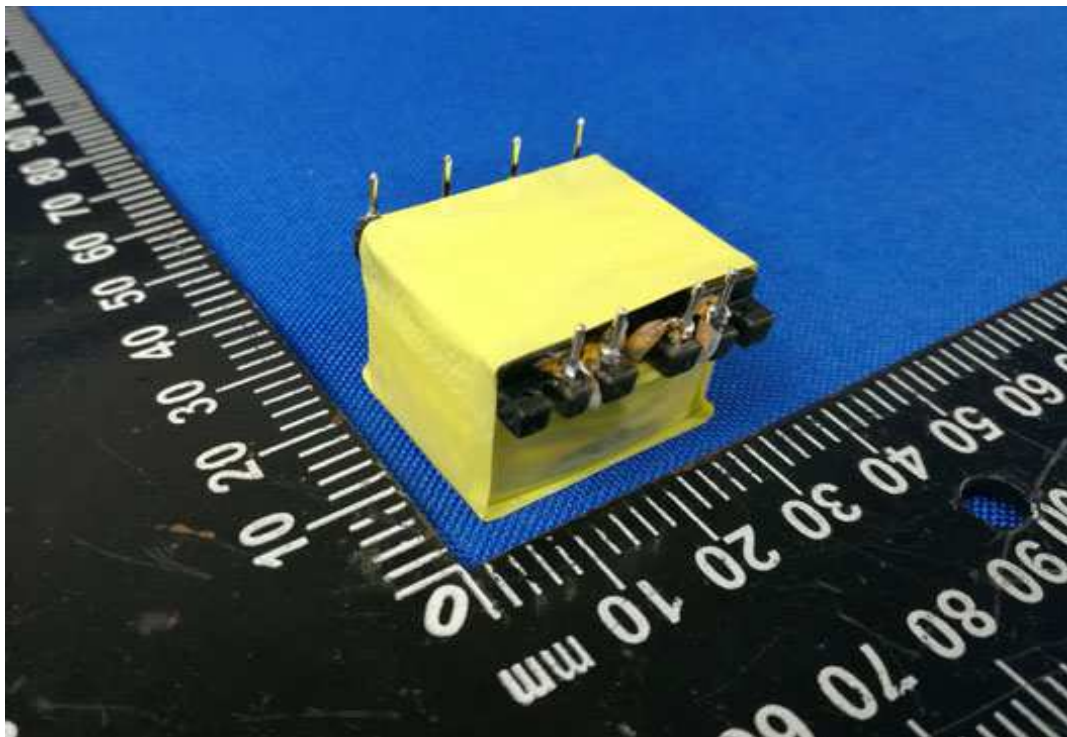


Photo 32 - Transformer view

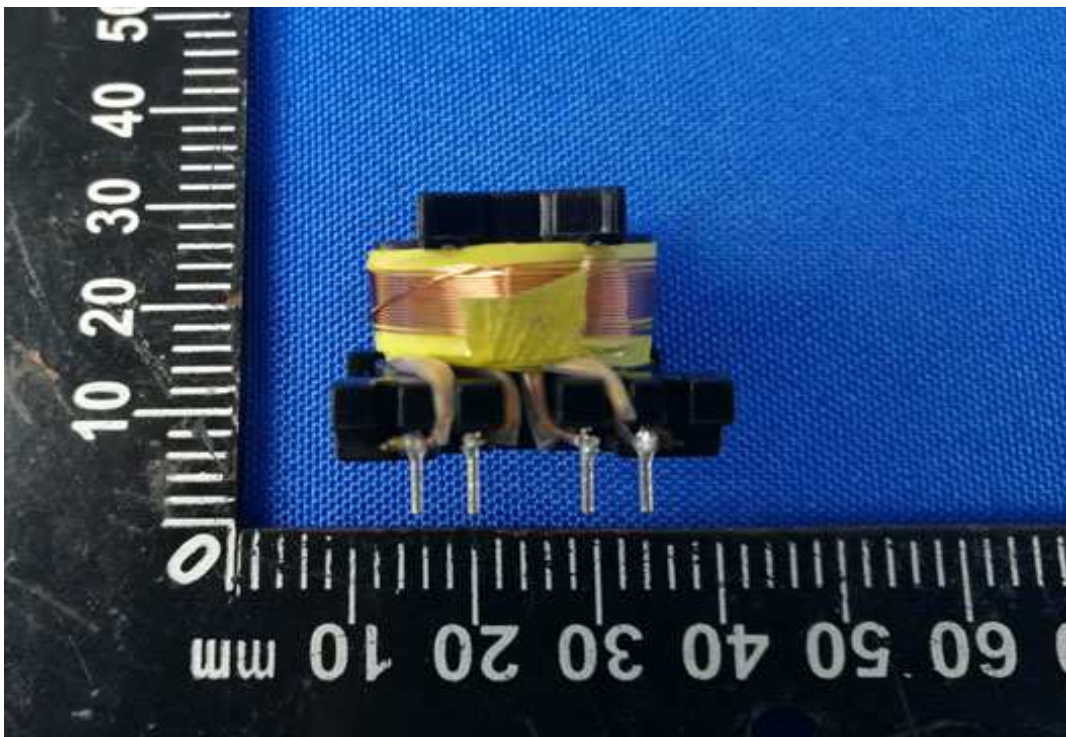


3.0 Product Photographs

Photo 33 - Transformer view



Photo 34 - Transformer view



3.0 Product Photographs

Photo 35 - Transformer view

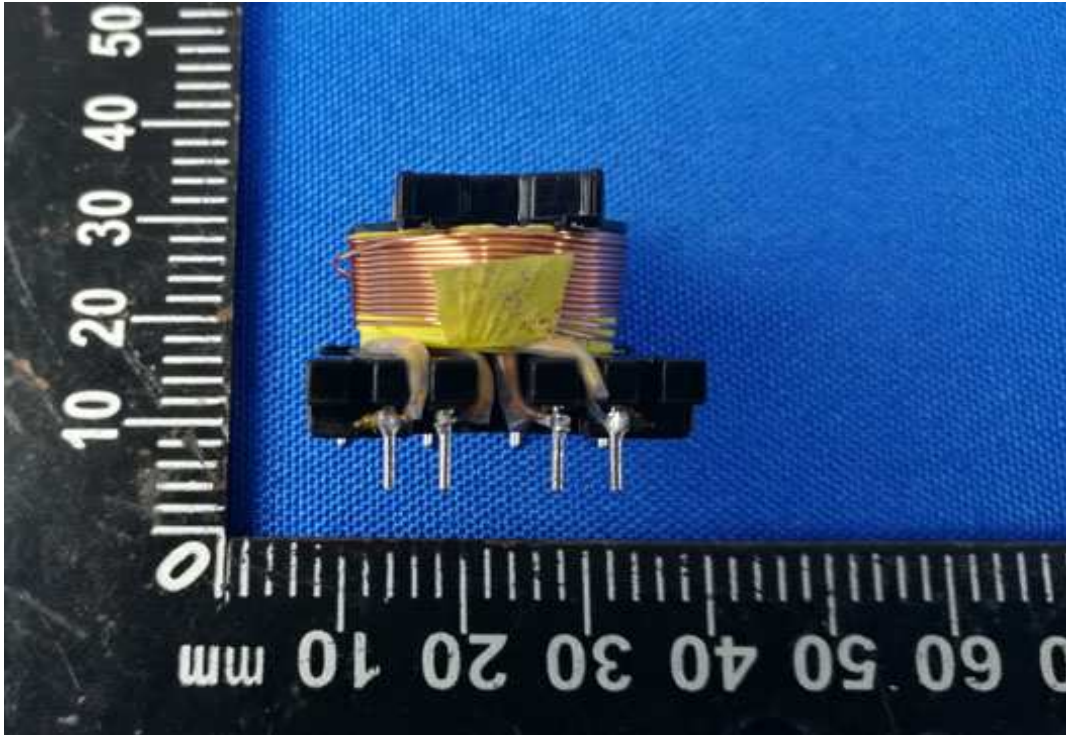
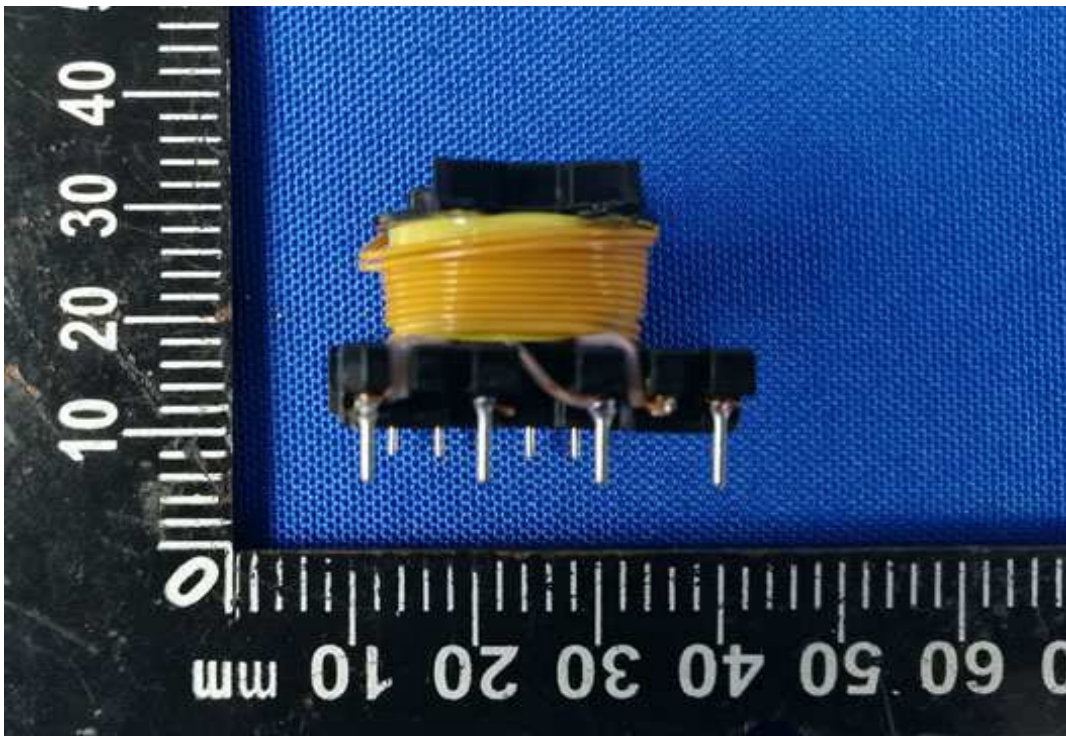
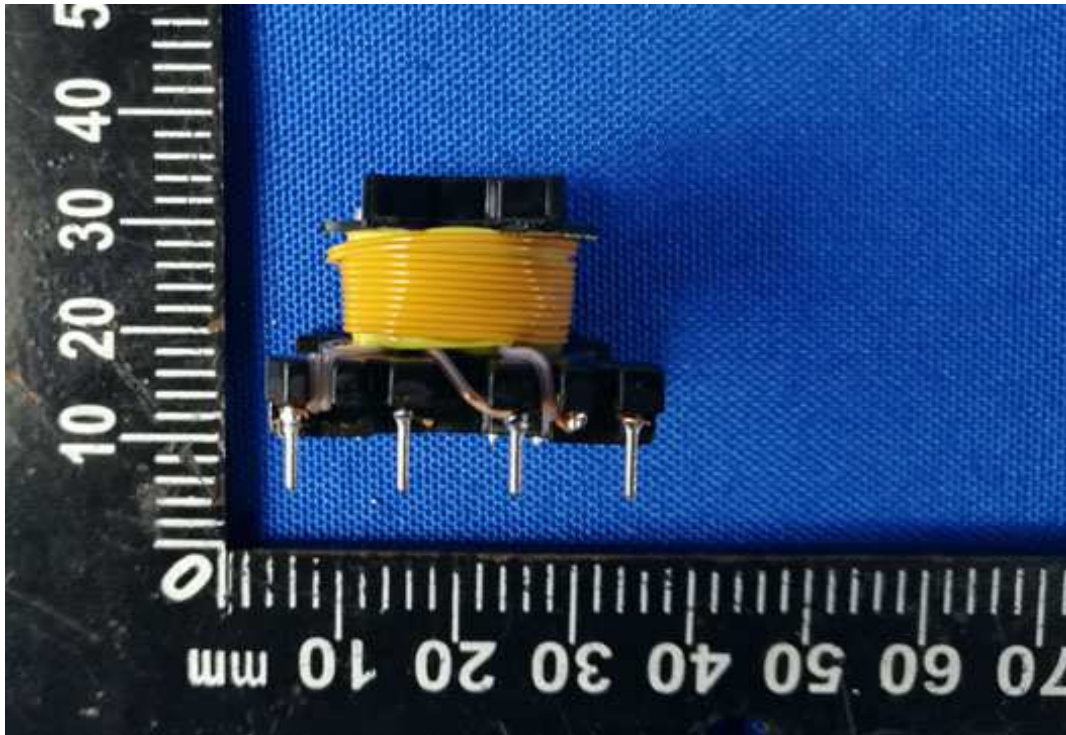


Photo 36 - Transformer view



3.0 Product Photographs

Photo 37 - 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	SUMITOMO BAKELITE CO LTD	AV-Lite DP 901	V-0, 130°C, min. 2.0 mm thickness	cURus
2	2	Plug holder	SUMITOMO BAKELITE CO LTD	AV-Lite DP 901	V-0, 130°C	cURus
12, 13	3	Insulation sheet	SHENZHEN XING FU CHENG APPLIED MATERIALS CO LTD	XFCPC-EFR9922R	Min. 0.4 mm thickness, rated V-0, 125°C (between AC plug portion and secondary heat-sink)	cURus
			SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DX10A	Min. 0.4 mm thickness, rated V-0, 125°C (between AC plug portion and secondary heat-sink)	cURus
			SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DX10A1	Min. 0.4 mm thickness, rated V-0, 125°C (between AC plug portion and secondary heat-sink)	cURus
14	4	Heat-shrinkable tubing	DONGJUE SILICONE (NANJING) CO LTD	NE-Z150	Min. 0.4 mm thickness, rated V-0, 150°C (wrapping primary C1)	cURus
14	5	Primary lead wire	DONGGUAN CHENG XING ELECTRONIC CO LTD	1015	VW-1, min. 22AWG, min. 105°C, min. 300V	cURus
			DONGGUAN ZHIHE ELECTRICAL CABLE TECH CO	1015	VW-1, min. 22AWG, min. 105°C, min. 300V	cURus
			KAIBO WIRE & CABLE MFG CO LTD	1015	VW-1, min. 22AWG, min. 105°C, min. 300V	cURus
			PACIFIC ELECTRIC WIRE & CABLE CO LTD	1015	VW-1, min. 22AWG, min. 105°C, min. 300V	cURus
14	6	Output cord	KAIBO WIRE & CABLE MFG CO LTD	2464	VW-1, 80°C, 300V, min. 20AWG	cURus
				2468		cURus
				1185		cURus
			PACIFIC ELECTRIC WIRE & CABLE CO LTD	2464	VW-1, 80°C, 300V, min. 20AWG	cURus
				2468		cURus
				1185		cURus
			SHENZHEN BENDA ELECTRICIAN MATERIAL CO LTD	2464	VW-1, 80°C, 300V, min. 20AWG	cURus
				2468		cURus
				1185		cURus
			Various	2464	VW-1, min. 80°C, min. 300V, min. 20AWG	cURus
				2468		cURus
				1185		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
14	7	PCB	KINGBOARD LAMINATES HOLDINGS LTD	KB-6150	V-0, 130°C	UR
			DONGGUAN ZHIHAN ELECTRONIC CO LTD	ZH-M	V-0, 130°C	UR
			GOLDENMAX INTERNATIONAL TECHNOLOGY (ZHUHAI) LTD	GF432	V-0, 130°C	UR
			Various	Various	V-0, 130°C	UR
14	8	Current fuse (F1)	SHENZHEN LANSON ELECTRONICS CO LTD	3K	T3.15AL, 250 V	cURus
				SMT	T3.15AL, 250 V	cURus
			LITTELFUSE WICKMANN WERKE	392 +, &	T3.15AL, 250 V	cURus
			DONGGUAN CHEVRON ELECTRONIC TECHNOLOGY CO LTD	SET	T3.15AL, 250 V	cURus
			Various	Various	T3.15AL, 250 V	cURus
14	9	Varistor (MOV1) (optional)	THINKING ELECTRONIC INDUSTRIAL CO LTD	TVR10471-V	Min. 300VAC, min. 105°C, min. V-0 coating	cURus
				TVR10471-B		
			HONGZHI ENTERPRISES LTD	HEL10D471K (@)	Min. 300VAC, min. 105°C, min. V-0 coating	cURus
		DONG GUAN CITY JIANKUN ELECTRONICS TECHNOLOGY CO LTD	10D471K	Min. 300VAC, min. 85°C, min. V-0 coating	cURus	
14	10	X-capacitor (CX1)	HUIZHOU YUXINYUAN ELECTRONICS CO LTD	MKP	Max. 0.68uF, min. 275V AC, min. 110°C, X2 type	cURus
			SHANTOU HIGH- NEW TECHNOLOGY DEVELOPMNT ZONE SONGTIAN ENTERPRISE CO LTD	MPX	Max. 0.68uF, min. 275V AC, min. 110°C, X2 type	cURus
			GUANGDONG JURCC ELECTRONICS CO LTD	MPX	Max. 0.68uF, min. 275V AC, min. 110°C, X2 type	cURus
	MKP #	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
			DONGGUAN WEIQING ELECTRONIC CO LTD	MPX	Max. 0.68uF, min. 275V AC, min. 110°C, X2 type	cURus
15	11	Y-capacitor (CY1)	JYA-NAY CO LTD	JN	Max. 1000pF, min. 250V AC, 125°C , Y1 type	cURus
			SHANTOU HIGH-NEW TECHNOLOGY DEVELOPMNT ZONE SONGTIAN ENTERPRISE CO LTD	CD	Max. 1000pF, min. 250V AC, 125°C , Y1 type	cURus
			DONG GUAN CITY JIANKUN ELECTRONICS TECHNOLOGY CO LTD	JT	Max. 1000pF, min. 250V AC, 125°C , Y1 type	cURus
			GUANGZHOU YES ELECTRONIC TECHNOLOGY CO LTD	AR	Max. 1000pF, min. 250V AC, 125°C , Y1 type	cURus
15	12	Optocoupler (U4)	EVERLIGHT ELECTRONICS CO LTD	EL101XH%	Double protection optical isolators, providing 5000 vac isolation	cURus
			LITE-ON TECHNOLOGY CORP	LTV-10XX	Double protection optical isolators having an isolation voltage of 5000 V ac	cURus
16	13	Transformer (T1)	SHENZHEN ANFUYUAN TECHNOLOGY CO LTD	TP601-PQ2620	Class B, Rainforced, see Illustrations 4 for details	NR
			SHENZHEN MINGDAFA TECHNOLOGY CO LTD		Class B, Rainforced, see Illustrations 4 for details	NR
			SHENZHEN ZHANMAO TECHNOLOGY CO LTD		Class B, Rainforced, see Illustrations 4 for details	NR
16	13a	Insulation system for T1 (not show)	SHENZHEN MINGDAFA ELECTRONICS CO LTD	MDF-B	Class B	UR

NOTES:

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.

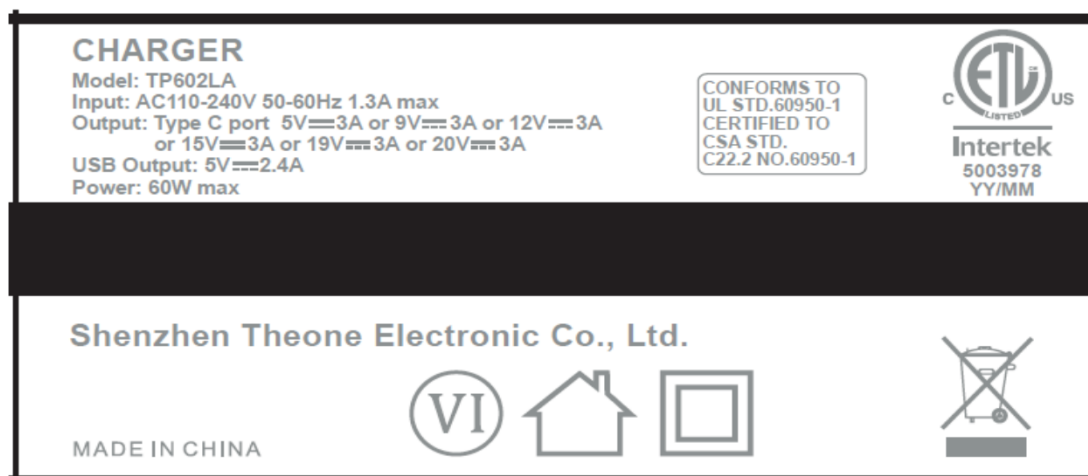
Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

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, 2.0/2.5 mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity, between line or neutral and earthing; 4.0/5.0 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits and 4.6/6.0 mm minimum between transformer primary winding & core and secondary parts.
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 it is double insulated.
6. Polarized Connection - This product is provided with a non-polarized power supply connection.
7. 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.
8. Schematics - Refer to Illustration No 2, 2a. or schematics requiring verification during Field Representative Inspection Audits schematics.
9. Markings - See Illustration No.1 - Marking
10. Cautionary Markings - See Illustration No.1 - Marking
11. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. See Illustration No. 5, The use manual in French must provide when the unit sell to Canada.

7.0 Illustrations

Illustration 1 - Marking (representative)

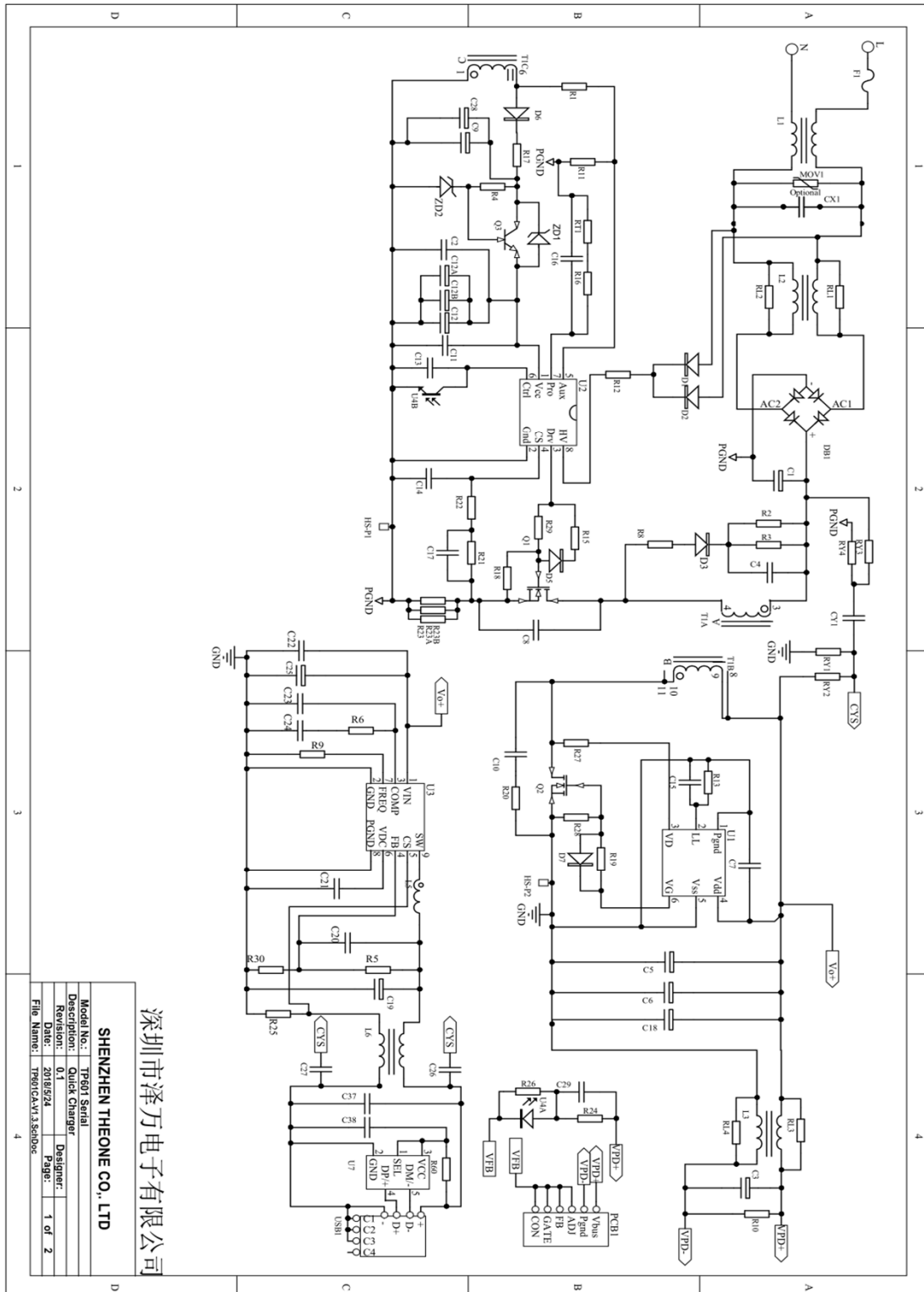


Note:

1. The above markings are the minimum requirements required by the safety standard. For the final production samples, the additional markings which do not give rise to misunderstanding may be added.
2. The other models (refer to 2.0) have the same labels except the model number and rating.
3. Date code "YYMM" is printed on the label, "YY" denote year, "MM" denote month (for example 1801 means the first month of 2018 year).
4. Brand name is printed on the product.

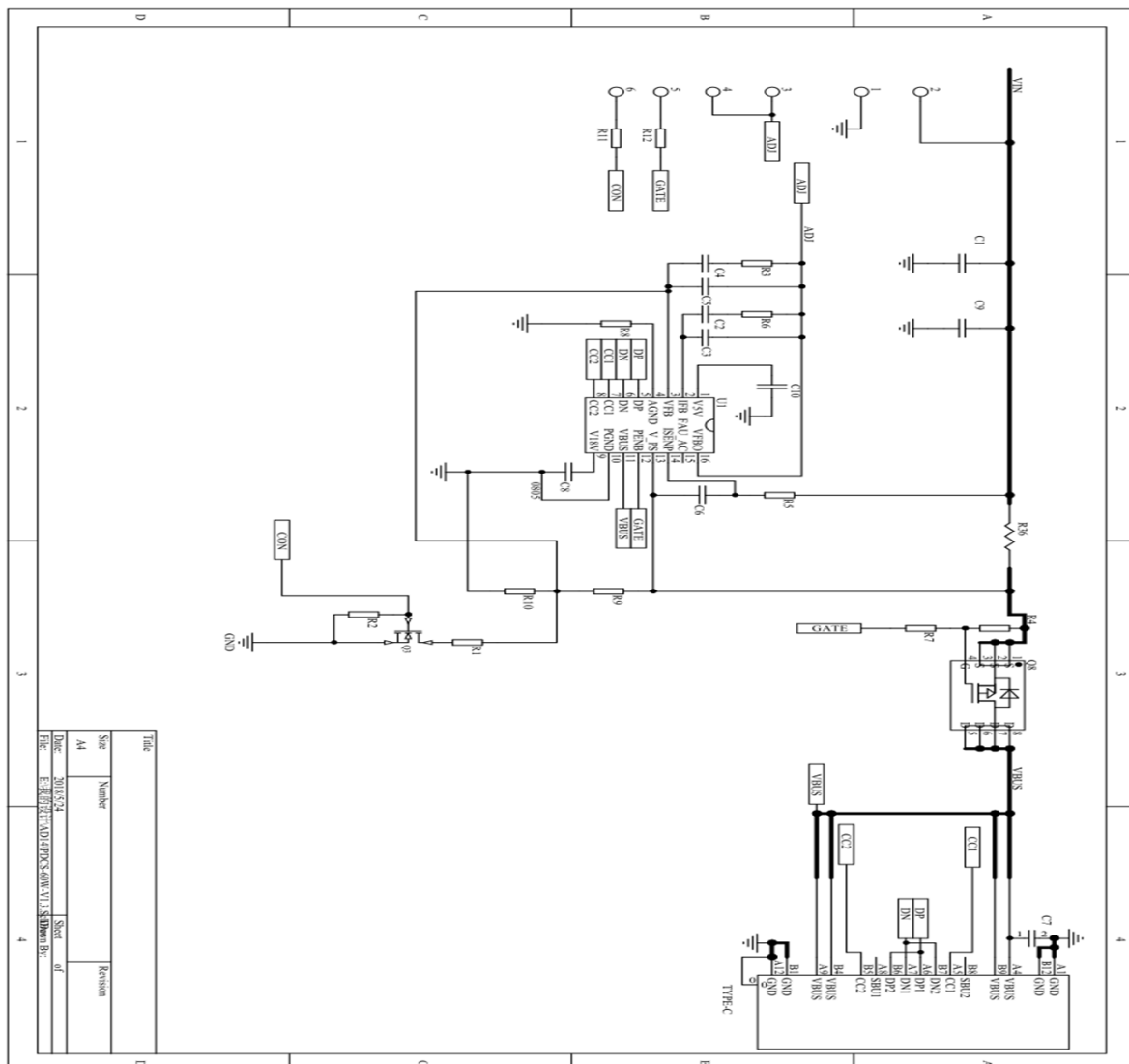
7.0 Illustrations

Illustration 2 - Circuit diagram



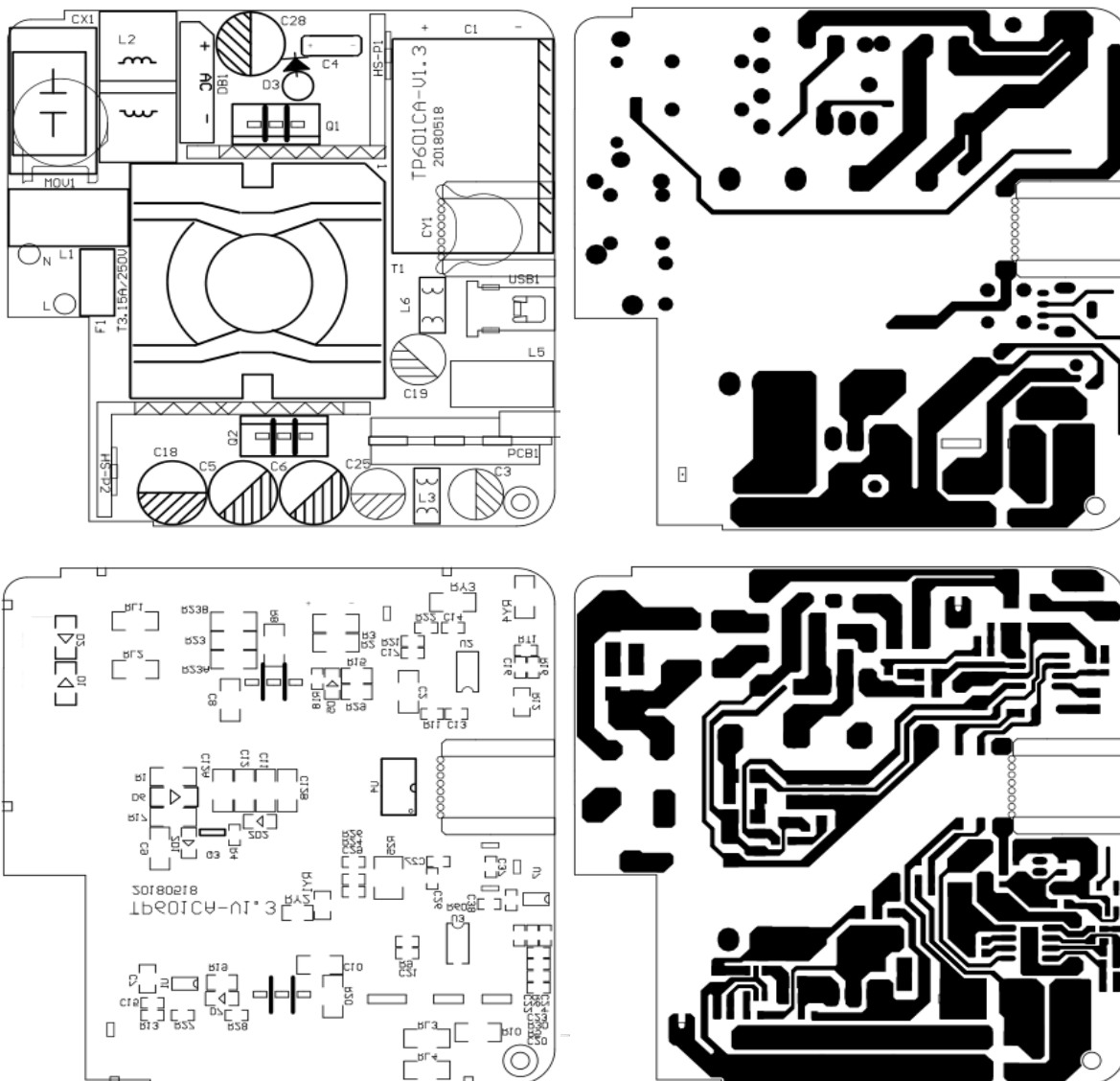
7.0 Illustrations

Illustration 2a- Circuit diagram(For PCB1)



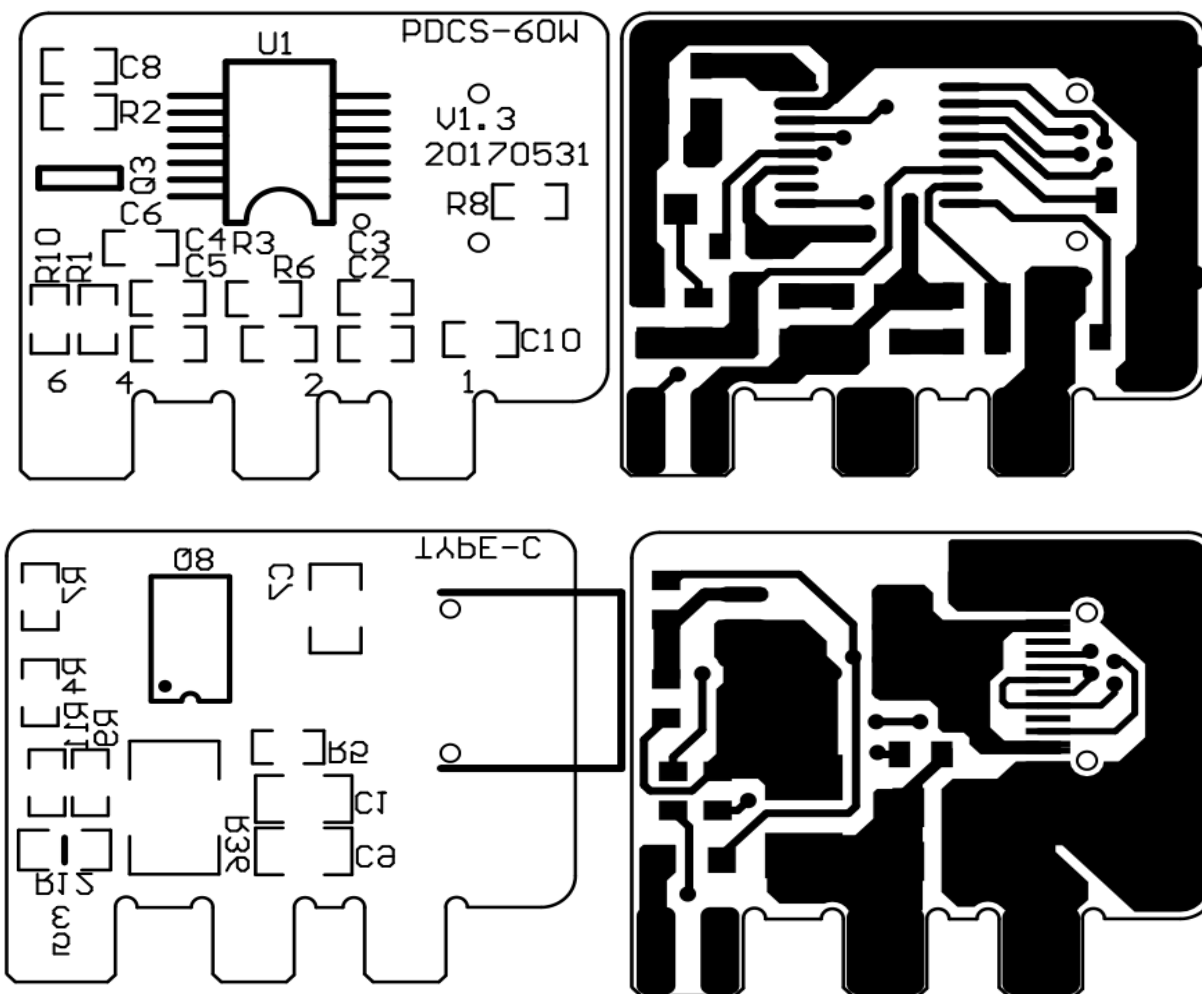
7.0 Illustrations

Illustration 3 - PCB layout



7.0 Illustrations

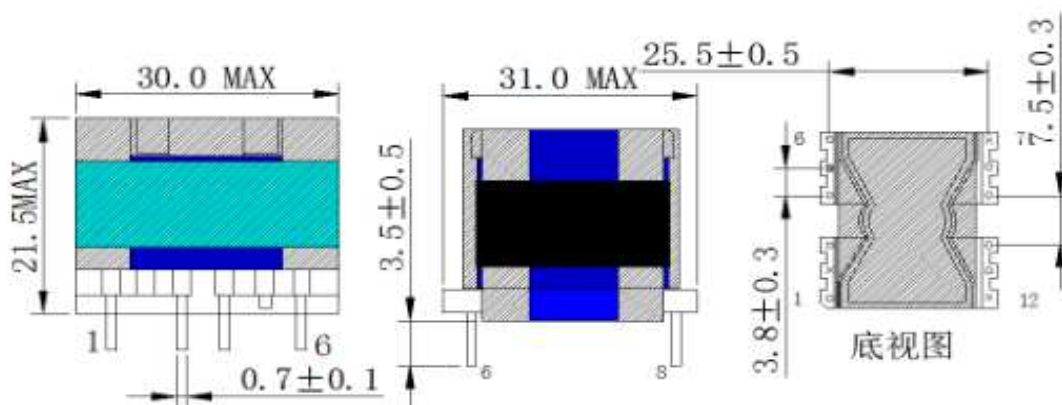
Illustration 3a - PCB layout(For PCB1)



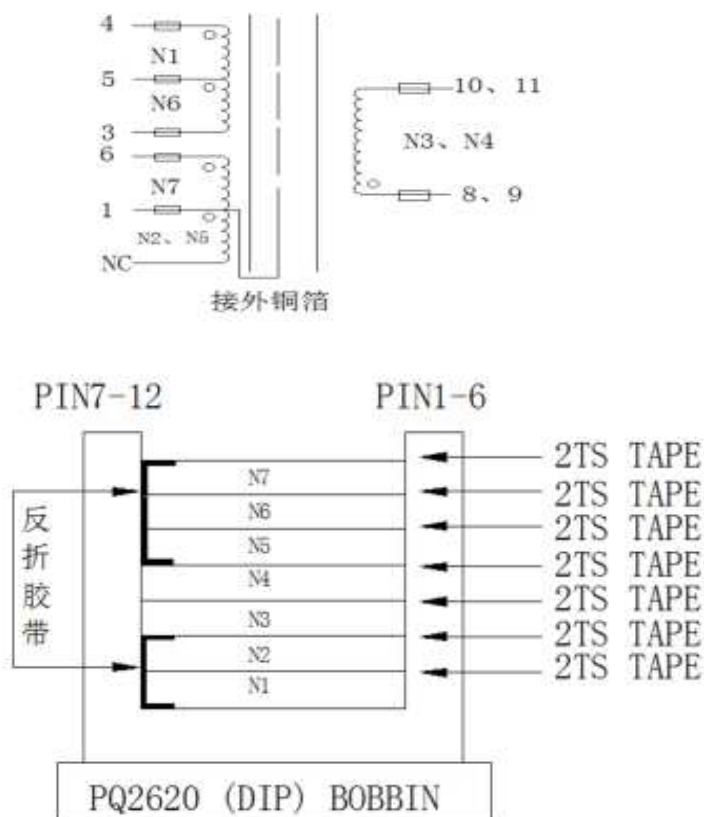
7.0 Illustrations

Illustration 4 - transformer spec

1. External view of Transformer (T1)



2. Construction / winding diagram of transformer (T1)



NO	TERMINAL		WIRE	TURNS	INSULATION		
	S	F			MATERIAL	T/W	T/S
N1	4	5	Φ0.45mm*1P (2U) 密绕	19T	PE TAPE	0.025*10.0mm(YEL)	2
N2	1	NC	Φ0.025*7*60mm (背胶铜箔引线带套管)	1.1T	PE TAPE	0.025*10.0mm(YEL)	2
N3	9	10	Φ0.45mm*2P (TEX-E) 密绕	6T	PE TAPE	0.025*10.0mm(YEL)	2
N4	8	11	Φ0.45mm*2P (TEX-E) 密绕	6T	PE TAPE	0.025*10.0mm(YEL)	2
N5	1	NC	Φ0.025*7*70mm (背胶铜箔引线带套管)	1.1T	PE TAPE	0.025*10.0mm(YEL)	2
N6	5	3	Φ0.45mm*1P (2U) 密绕	15T	PE TAPE	0.025*10.0mm(YEL)	2
N7	6	1	Φ0.25mm*1P (2U) 居中密绕	18T	PE TAPE	0.025*10.0mm(YEL)	2

7.0 Illustrations

Illustration 5 - User manual (representative)

INSTRUCTION MANUAL

CHARGER

Model:TA602LA

Input: 110-240V~, 50-60Hz, 1.3A max., Class II

Output: Type C port: 5Vdc 3A / 9Vdc 3A / 12Vdc 3A / 15Vdc 3A / 19Vdc 3A / 20Vdc 3A,
USB port: 5Vdc, 2.4A; 60W Max.

To comply with the published safety standards, the following must be observed when using this switching power supply.

1. For information technology equipment and office equipment use only.
2. The output power taken from the supply must not exceed the rating given on the adaptor.
3. The adaptor is not intended to be repaired by service personnel in case of failure or component defect (unit can be thrown away).
4. The connector of this transformer cannot be replaced;

If the connector is damaged, the transformer should be scrapped.

5. The disconnection from line voltage is made by pulling the mains plug or appliance inlet.
6. The socket-outlet shall be installed near the equipment and shall be easily accessible.
7. The product CONFORMS TO UL STD. 60950-1 and CERTIFIED TO CSA STD. C22.2 NO. 60950-1.
8. The max ambient temperature should not exceed 25°C.

Manufacturer: Shenzhen Theone Electronic Co., Ltd.

Address: 6th Building, Zhangbei Industrial Park, Xinlian Community, Longcheng Street, LONGGANG
Shenzhen 518172, China


8.0 Test Summary				
Evaluation Period	25-May-2018 to 4-Jul-2018		Project No.	180525001GZU
Sample Rec. Date	25-May-2018	Condition	Prototype	Sample ID. S180525001-001~020
Test Location	GuangZhou ITL Co. Ltd 1-2 floor, South Block, Building A2, No.3 Keyan road, Science city, Guangzhou Guangdong, China			
Test Procedure	Witnessed Manufacturer Testing (WMT) - Level 2			
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	Information Technology Equipment Safety Part 1: General Requirements >Valid without technical revision: 01Jan2022< [UL 60950-1:2007 Ed.2 +R:14Oct2014] Information Technology Equipment Safety Part 1: General Requirements (R2016) >Valid without technical revision: 01Jan2022< [CSA C22.2#60950-1:2007 Ed.2+A1;A2] Clause			
Input Test	1.6.2			
Marking Durability Test	1.7.11			
Finger Test	2.1.1.1 b			
Pin Test	2.1.1.1 c			
Energy Hazards Test	2.1.1.5			
Stored Discharge on Capacitors Test	2.1.1.7			
Voltage under Normal Conditions Test	2.2.2			
Voltage under Fault Conditions Test	2.2.3			
Limited Current Circuits Test	2.4			
Limited Power Sources Test	2.5			
Humidity Condition Test	2.9.2			
Determination of Working Voltage Test	2.10.2			
Clearances and Creepage Distances Measurement	2.10.3 & 2.10.4			
Solid Insulation Measurement	2.10.5.1 & 2.10.5.2			
Mechanical Strength – 10 N Force Test	4.2.2			
Mechanical Strength – 250 N Force Test	4.2.4			
Mechanical Strength – Drop Test	4.2.6			
Mechanical Strength – Stress Relief Test	4.2.7			
Strain on Socket-Outlet Test	4.3.6			
Normal Operating Test	4.5.2			
Ball Pressure Test	4.5.5			
Touch Current Test	5.1			
Electric Strength Test	5.2			
Abnormal Operations and Fault Conditions Test	5.3			

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:	Kady Qin	Reviewed by:	Spark He
Title:	Engineer	Title:	Technical Team Leader
Signature:	<i>Signature on file</i>	Signature:	<i>Signature on file</i>

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	Shenzhen Theone Electronic Co., Ltd.
Address	6th Building, Zhangbei Industrial Park, Xinlian Community, Longcheng Street, LONGGANG Shenzhen 518172
Country	China
Product	CHARGER

MULTIPLE LISTEE 1	Intracom Asisa Co., Ltd
Address	4F., No. 77, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan
Country	China
Brand Name	 (Manhattan)

ASSOCIATED MANUFACTURER	Shenzhen Theone Electronic Co., Ltd.
Address	6th Building, Zhangbei Industrial Park, Xinlian Community, Longcheng Street, LONGGANG Shenzhen 518172
Country	China

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS
180214, 180221	TP601CA
180238, 180245	TP602LA
180054, 180146	TP451CA

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 issue 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.

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.

Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation

Ship the samples to:
Intertek Testing Services Shenzhen Limited Guangzhou Branch
ETL Component Evaluation Center
Block E, No. 7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City
CETDD Guangzhou, 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.	3000 Vac	60s
	or	
Between mains input to output terminal/enclosure with metal foil	3600 Vac	1s

