1.0 Reference and Address			
Report Number	18040449HKG-001	Original Issued: 14-May-2018	Revised: None
Standard(s)	Class 2 Power Units [UL 1310:2011 Ed.6+R:01Feb2017] Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2#223:2015 Ed.3]		

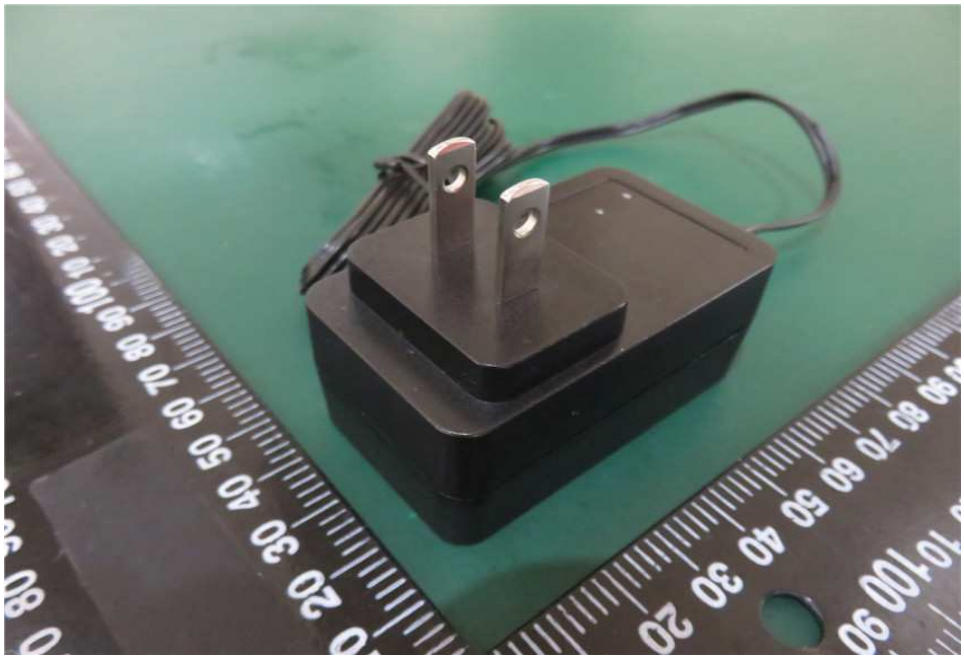
Applicant	Dongguan GaoYi Electronic Co., Ltd.	Manufacturer	**Dongguan GaoYi Electronic Co., Ltd.**
Address	West Sha Yao Road, XiSha Road ShiJie Town, Dongguan, Guangdong	Address	West Sha Yao Road, XiSha Road ShiJie Town, Dongguan, Guangdong
Country	China	Country	China
Contact	Mr. Kuo xiaoqing	Contact	Mr. Kuo xiaoqing
Phone	86-0769-86386989	Phone	86-0769-86386989
FAX	86-0769-86386339	FAX	86-0769-86386339
Email	gaoyi@gaoyipower.com	Email	gaoyi@gaoyipower.com

2.0 Product Description	
Product	Class 2 Power Supply
Brand name	R.S
Description	The product covered by this report is a Class 2 Power Supply / Battery Charger. It provided with non-polarized input blades as input connection and output connector terminated with output cord
Models	RSS1002- followed by six numbers; followed by -W2, -W2-B, -W2-U, -S, -S-U, -W2-F, -W2-E, -W2-P, -W2-D or W2-E-P; may be followed by one letter.
Model Similarity	All models are similiar except the range of output voltage, shape of enclosure, PCB layout and schematic. RSS1002-******-W2*, RSS1002-******-W2-B*, RSS1002-******-W2-U*, RSS1002-******-S*, RSS1002-******-S-U*, RSS1002-******-W2-F*, RSS1002-******-W2-E*, RSS1002-******-W2-P*, RSS1002-******-W2-D*, RSS1002-******-W2-E-P* The 1st to 3rd "*" can be replaced by three digits from 001 to 090, indicate output power range from 0.1-9W, the minimum rising step by 0.1W, eg. 001=0.1W, 090=9W The 4th to 6th "*" can be replaced by three digits from 024 to 300, indicate output voltage range from 2.4-30.0Vdc, the minimum rising step by 0.1V, eg. 024=2.4Vdc, 300=30.0Vdc. The 7th "*" can be H or blank, represent different input voltage used, H indicate input voltage range 100-120Vac, blank indicate input voltage range 100-240Vac
Ratings	Input: 100-240V AC or 100-120V AC, 50/60Hz, 0.2A Output: 2.4-30.0V DC, 0.01-1.5A
Other Ratings	NA

3.0 Product Photographs

Photo no. 1 - External view of the Class 2 Power Supply, model RSS1002-******-W2-E*

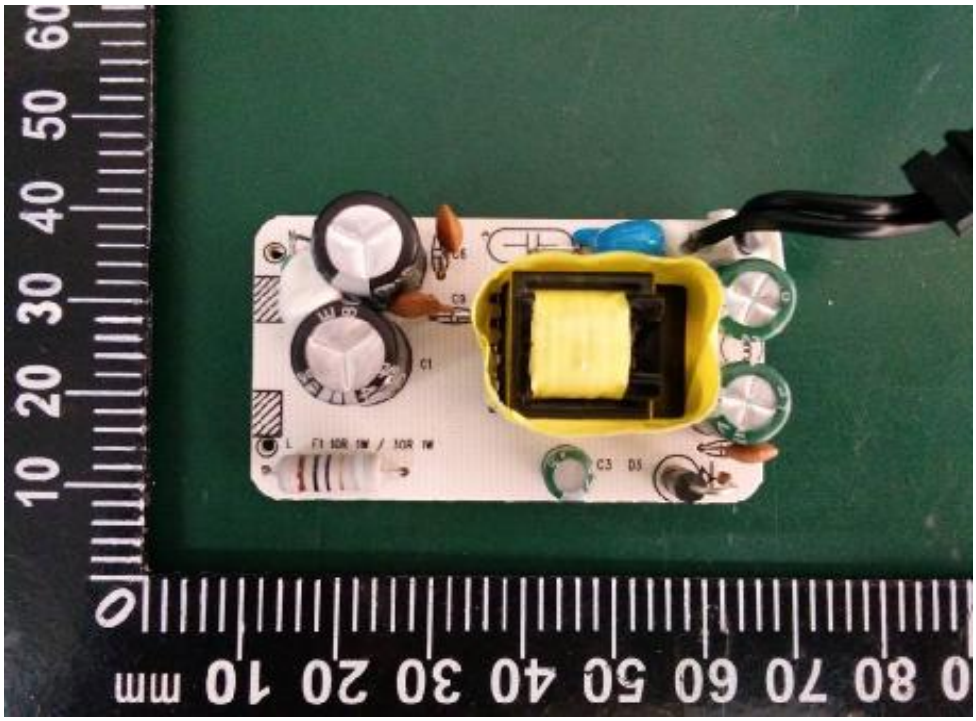
Photo no. 2 - External view of the Class 2 Power Supply, model RSS1002-******-W2-E*



3.0 Product Photographs

Photo no. 3 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2-E*

Photo no. 4 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2-E*



3.0 Product Photographs

Photo no. 5 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2-E*

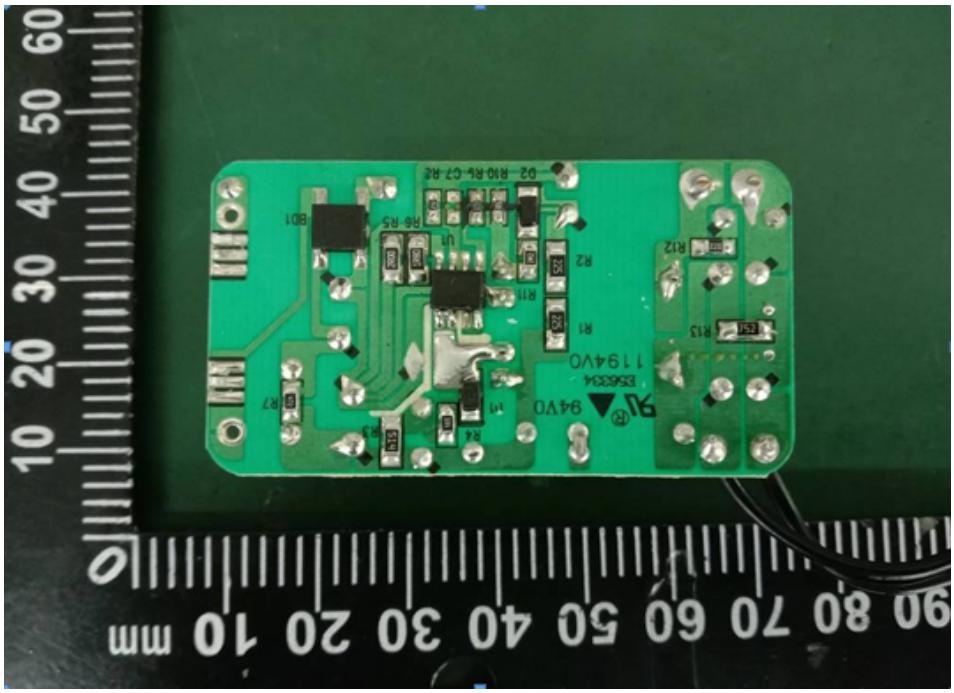
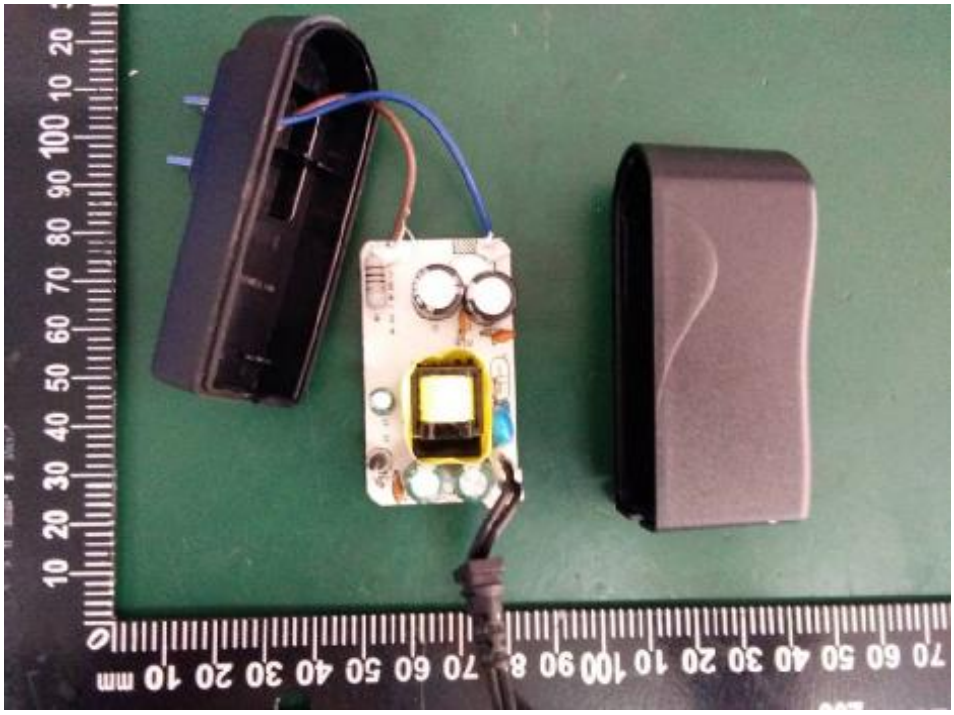


Photo no. 6 - External view of the Class 2 Power Supply, model RSS1002- ******-W2-B*

3.0 Product Photographs

Photo no. 7 - External view of the Class 2 Power Supply, model RSS1002- ******-W2-B*

Photo no. 8 - Internal view of the Class 2 Power Supply, model RSS1002- ******-W2-B*



3.0 Product Photographs

Photo no. 9 - Top PCB view of the Class 2 Power Supply, model RSS1002- ******-W2-B*

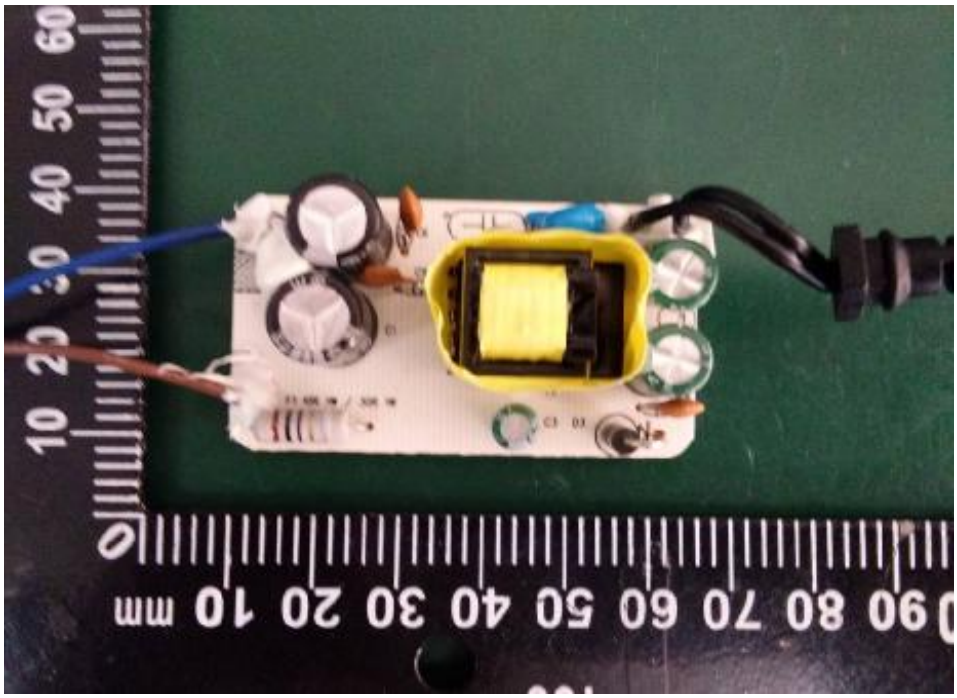
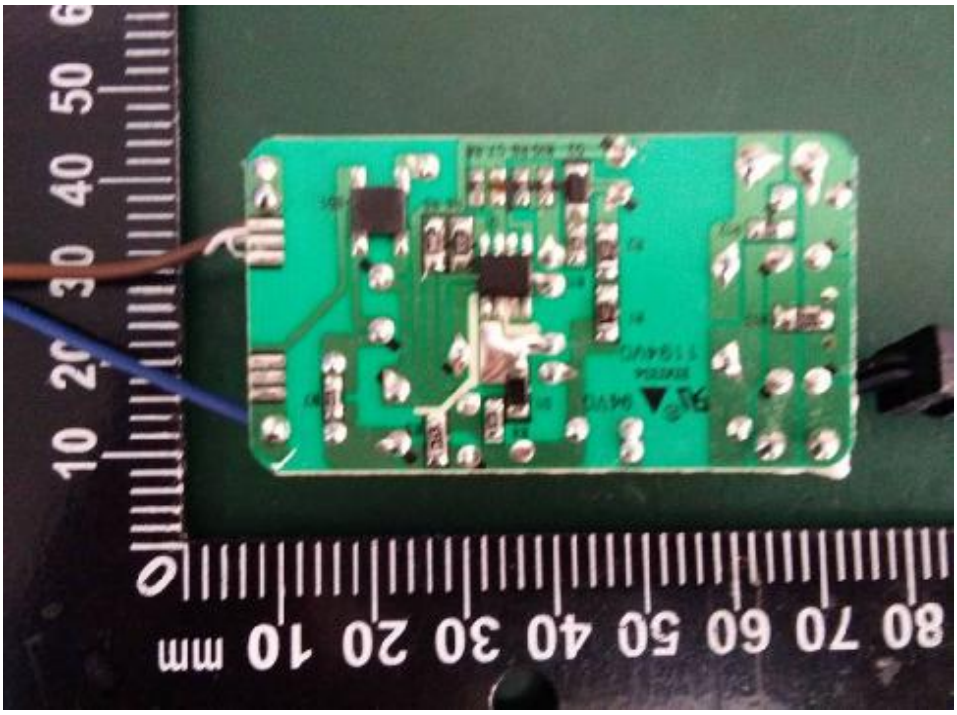


Photo no. 10 - Bottom PCB view of the Class 2 Power Supply, model RSS1002- ******-W2-B*



3.0 Product Photographs

Photo no. 11 - External view of the Class 2 Power Supply, model RSS1002-******-W2-U*

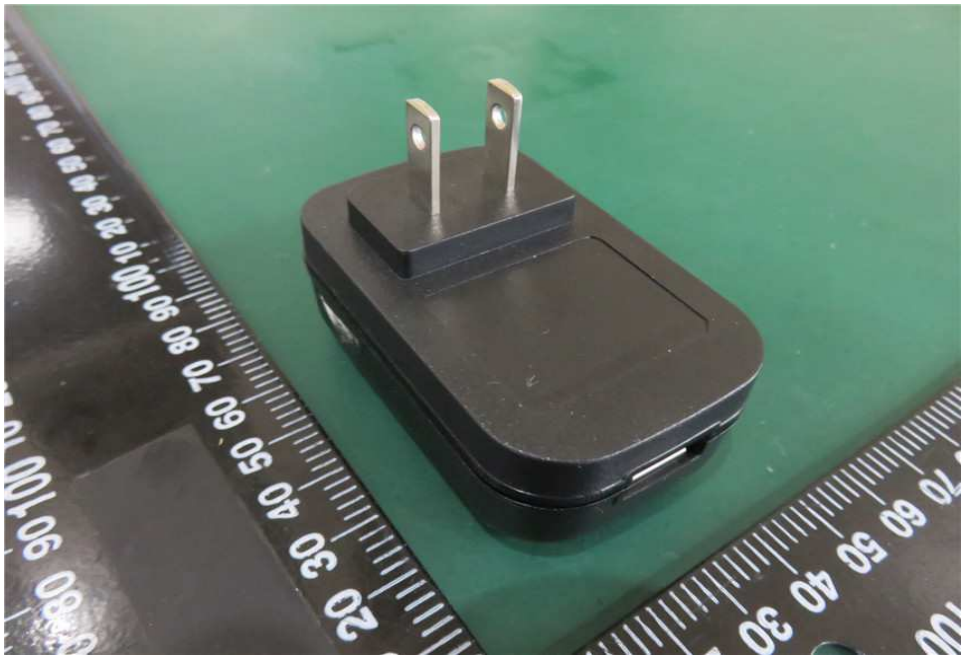
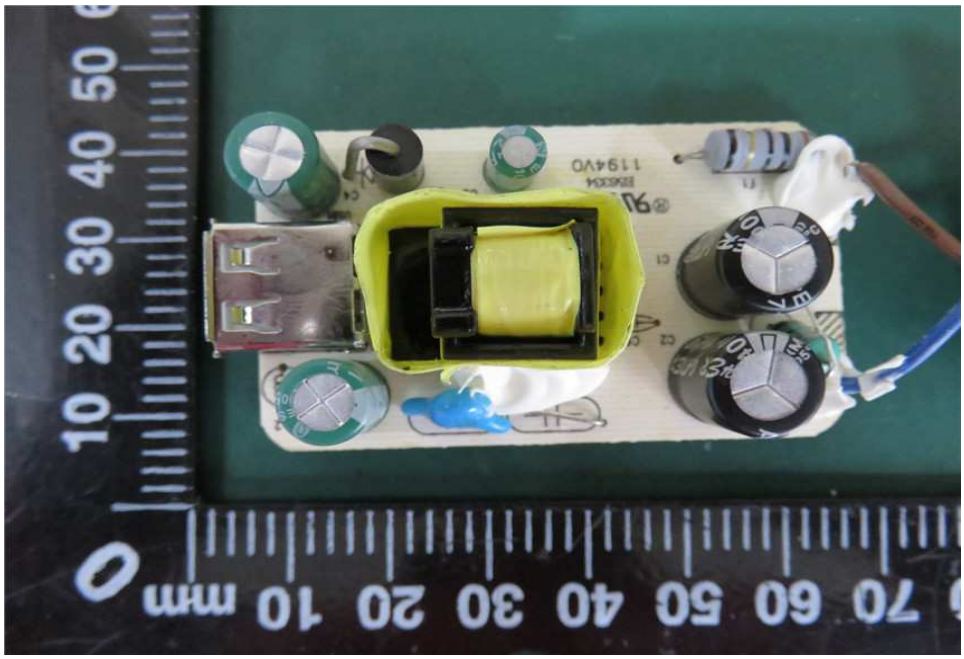


Photo no. 12 - External view of the Class 2 Power Supply, model RSS1002-******-W2-U*

3.0 Product Photographs

Photo no. 13 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2-U*

Photo no. 14 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2-U*



3.0 Product Photographs

Photo no. 15 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2-U*

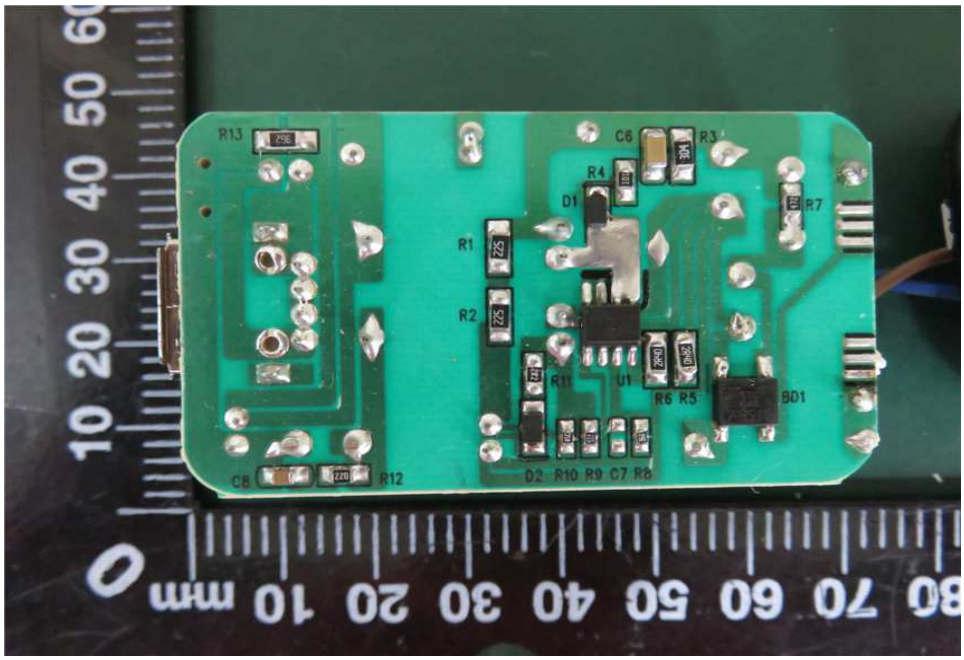


Photo no. 16 - External view of the Class 2 Power Supply, model RSS1002-******-S*

3.0 Product Photographs

Photo no. 17 - External view of the Class 2 Power Supply, model RSS1002-******-S*

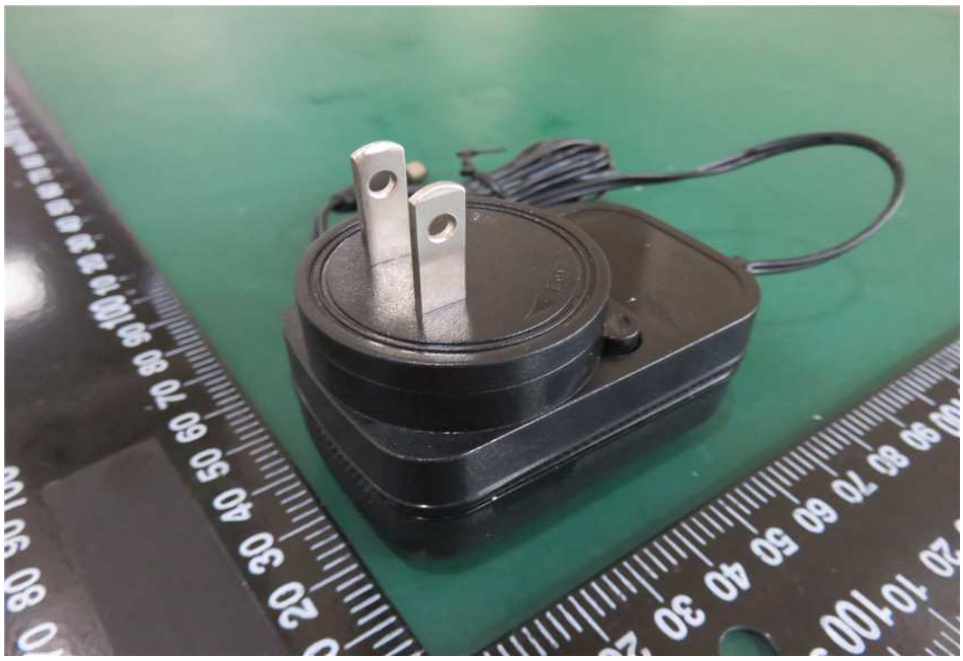


Photo no. 18 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-S*

3.0 Product Photographs

Photo no. 19 - Internal view of the Class 2 Power Supply, model RSS1002-******-S*

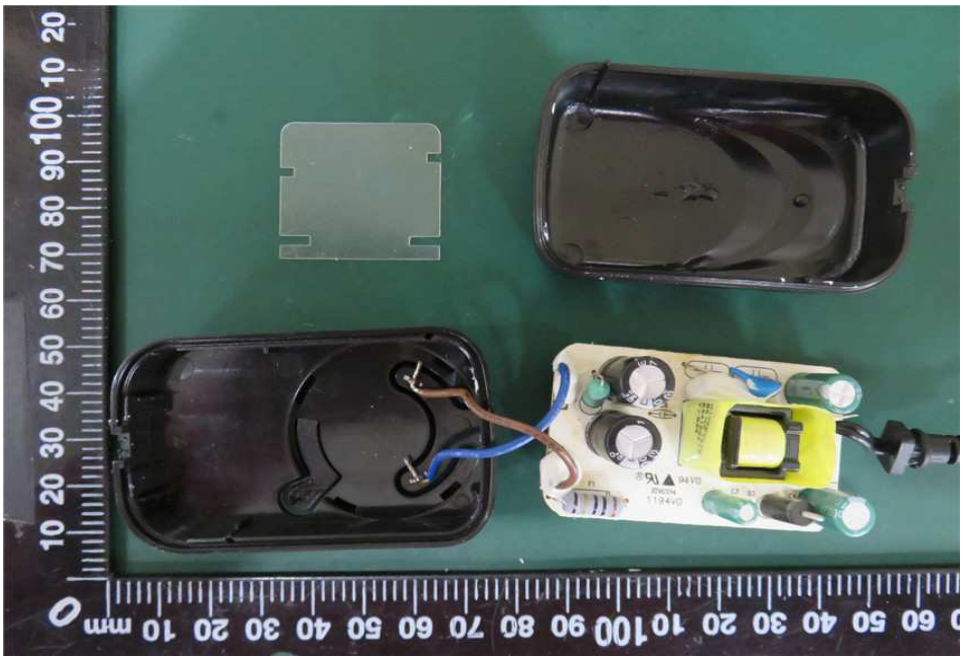
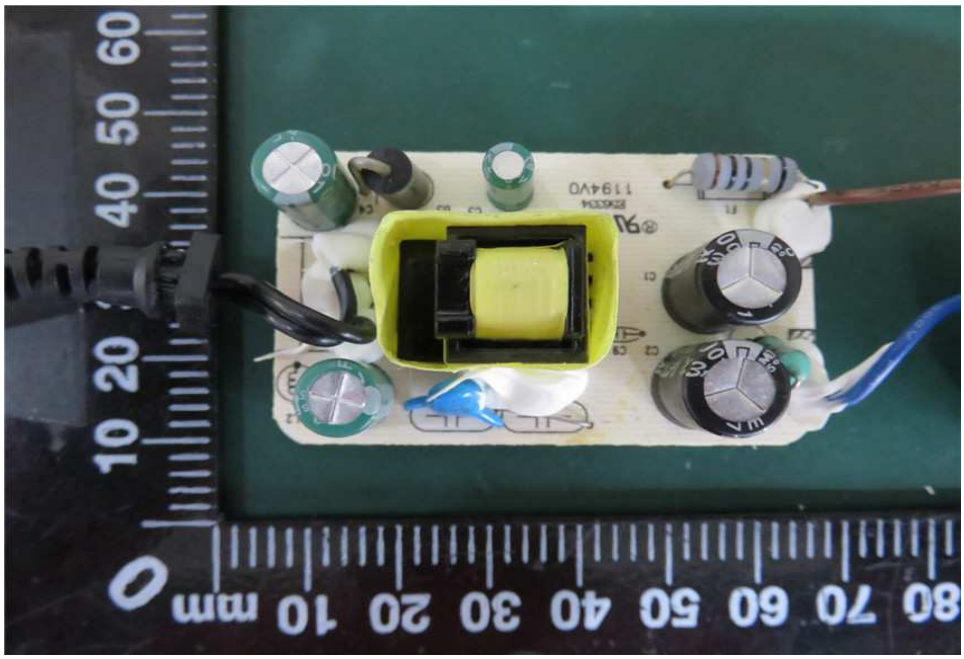


Photo no. 20 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-S*



3.0 Product Photographs

Photo no. 21 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-S*

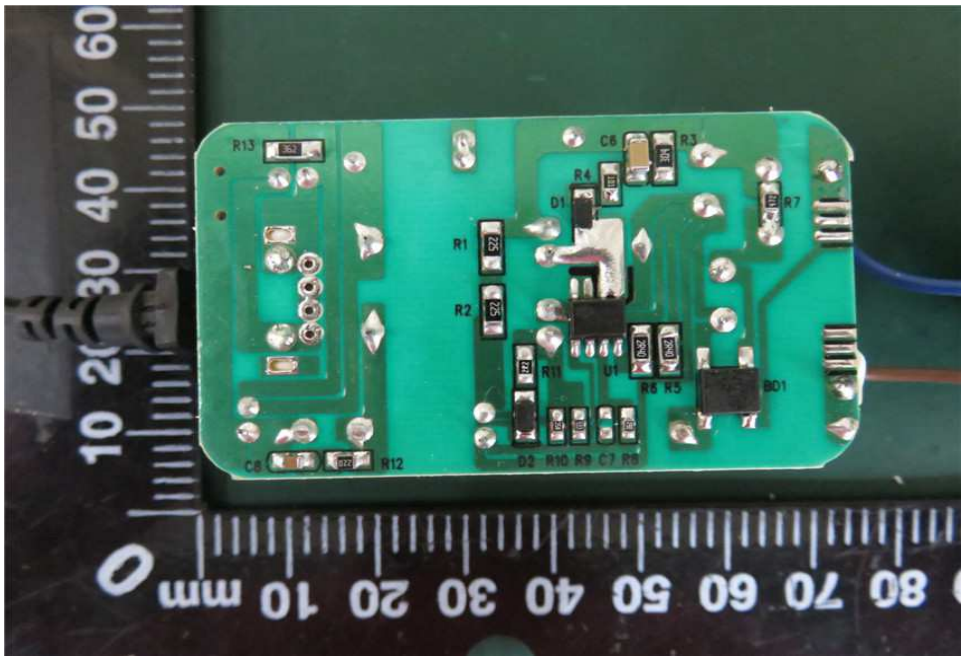


Photo no. 22 - External view of the Class 2 Power Supply, model RSS1002-******-S-U*

3.0 Product Photographs

Photo no. 23 - Internal view of the Class 2 Power Supply, model RSS1002-******-S-U*

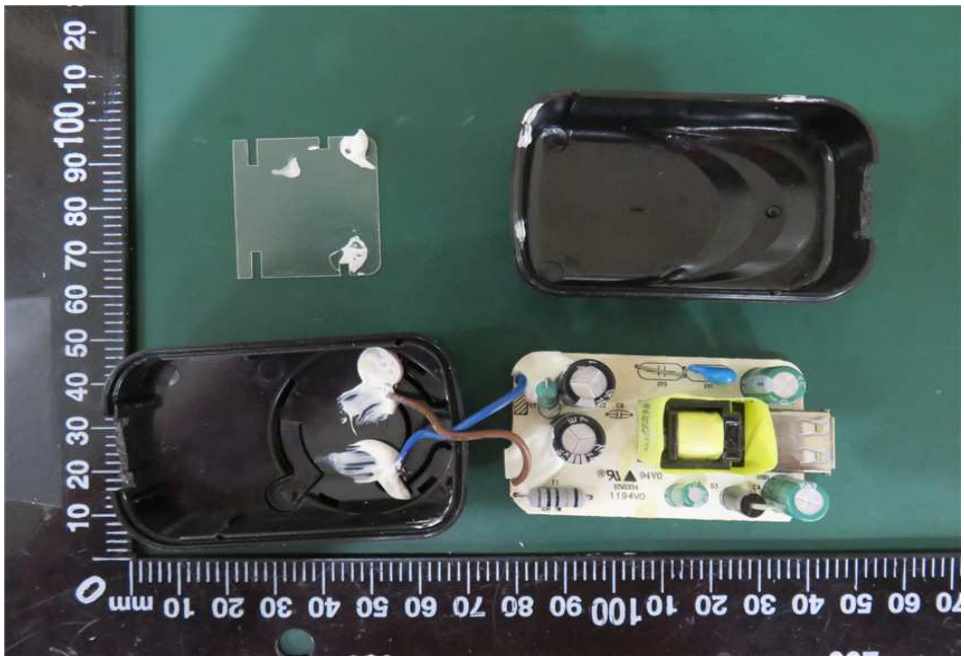
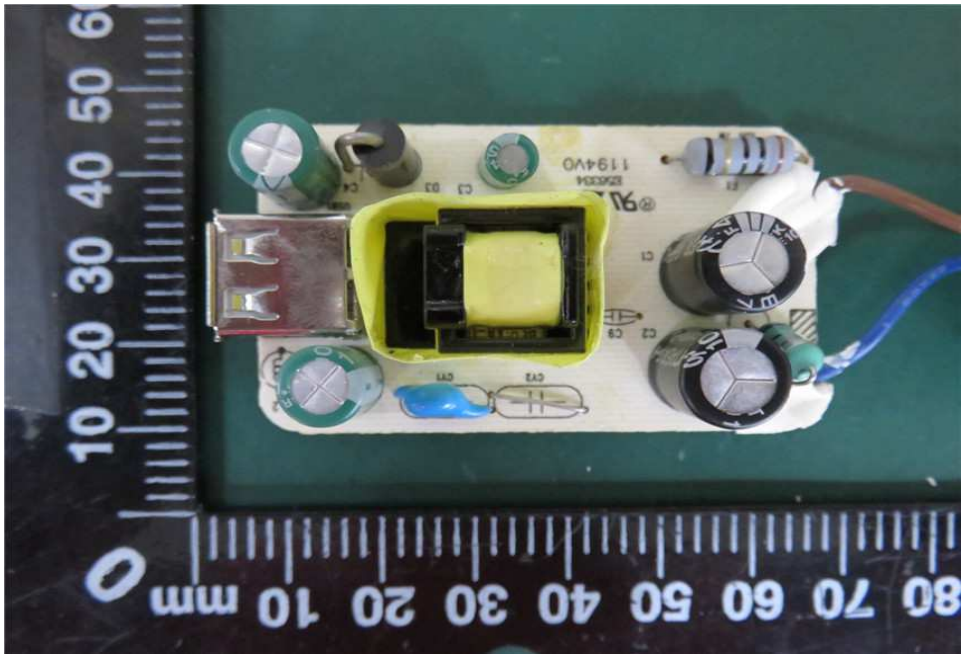


Photo no. 24 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-S-U*



3.0 Product Photographs

Photo no. 25 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-S-U*

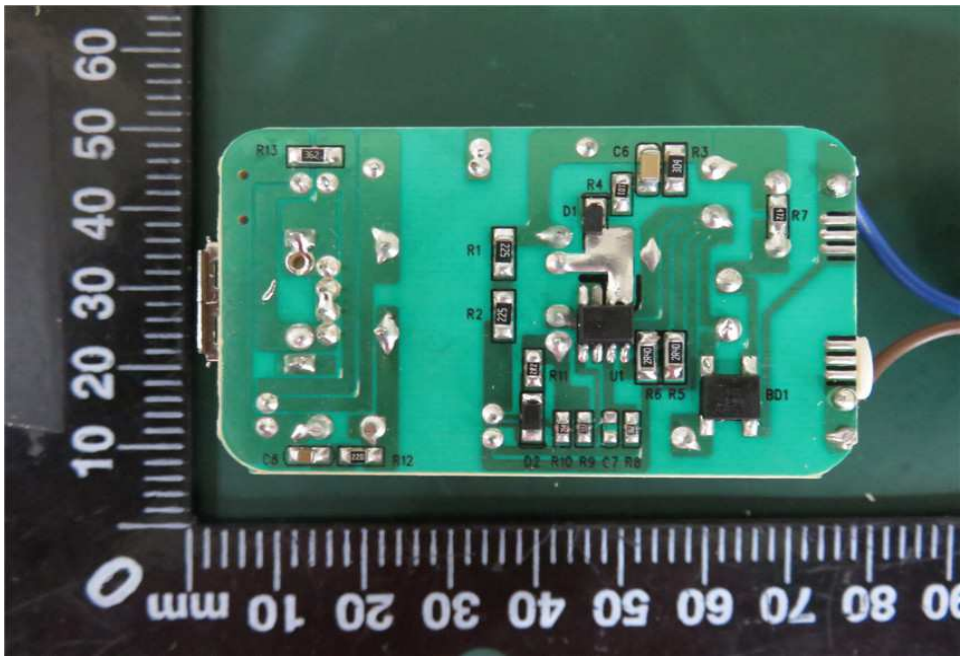
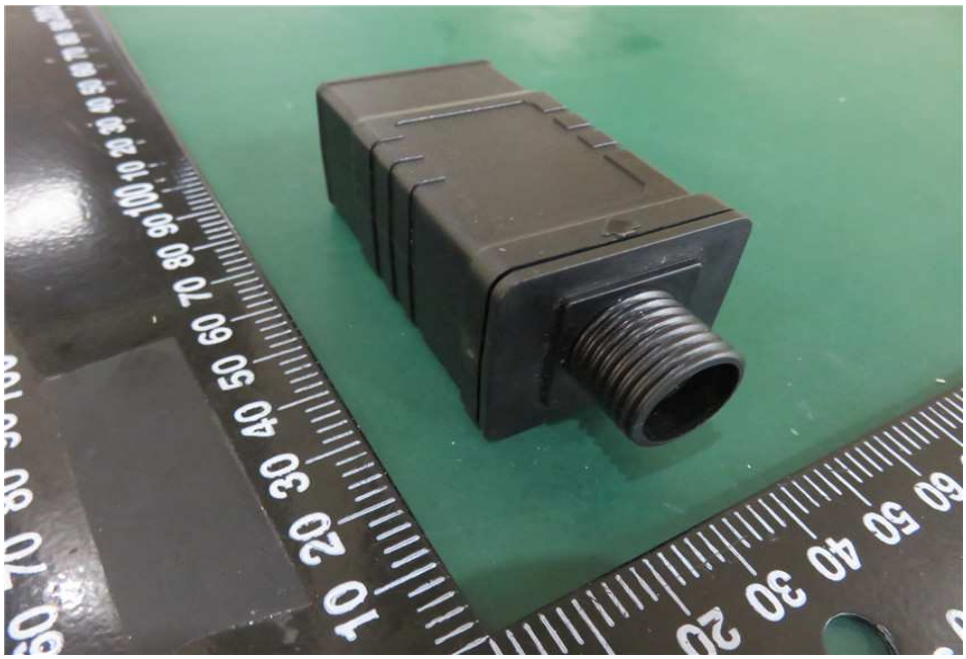


Photo no. 26 - External view of the Class 2 Power Supply, model RSS1002-******-W2-F*



3.0 Product Photographs

Photo no. 27 - External view of the Class 2 Power Supply, model RSS1002-******-W2-F*

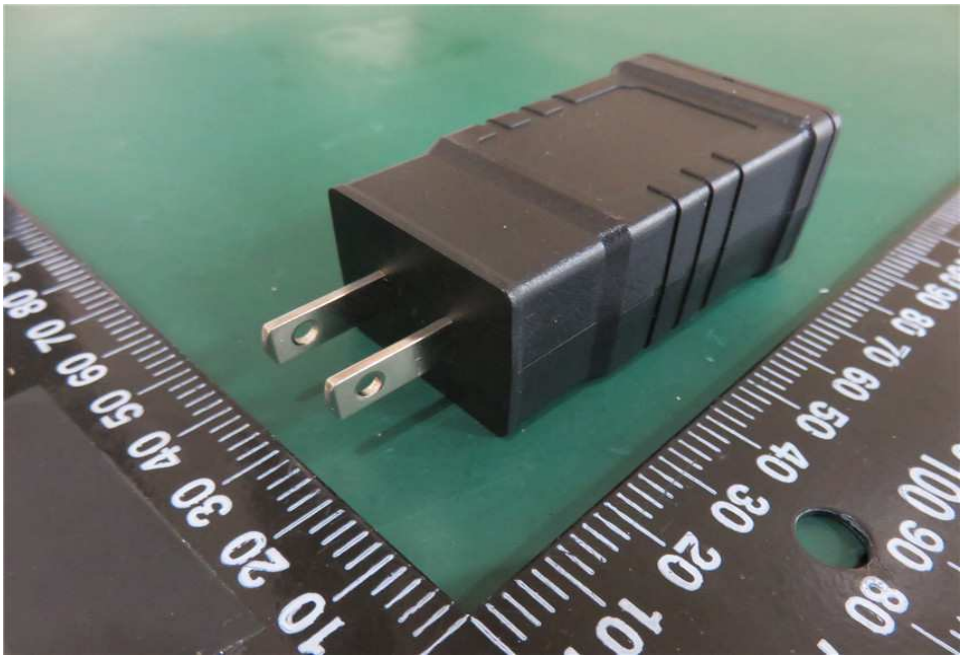
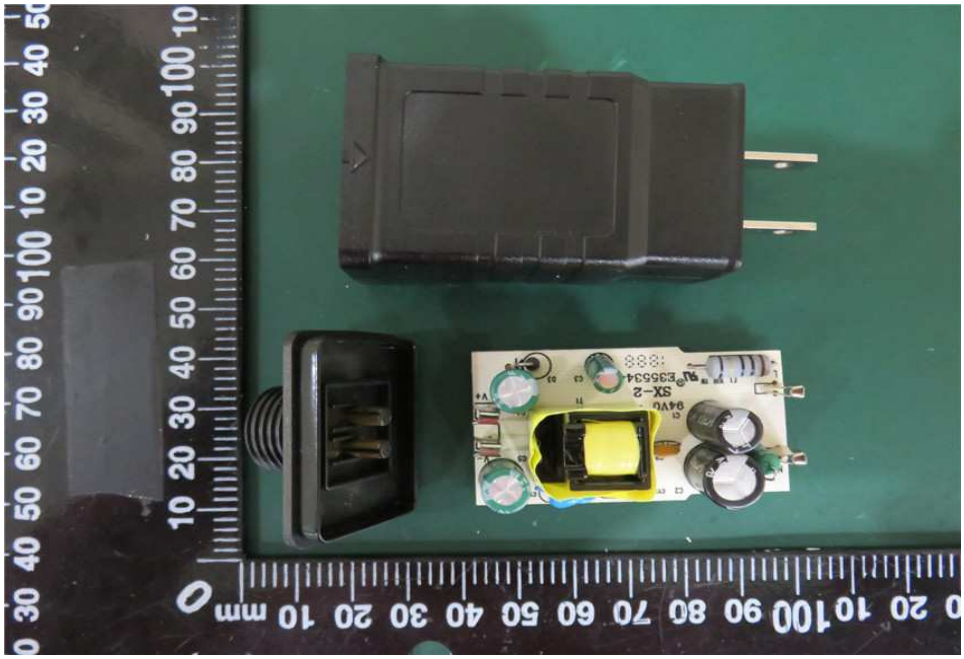


Photo no. 28 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2-F*



3.0 Product Photographs

Photo no. 29 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2-F*

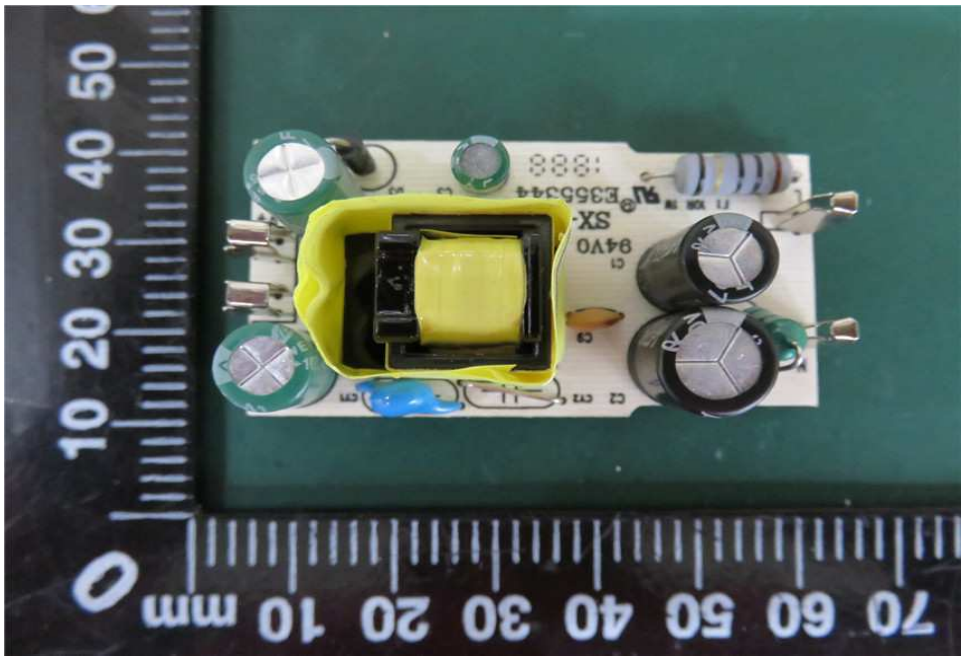
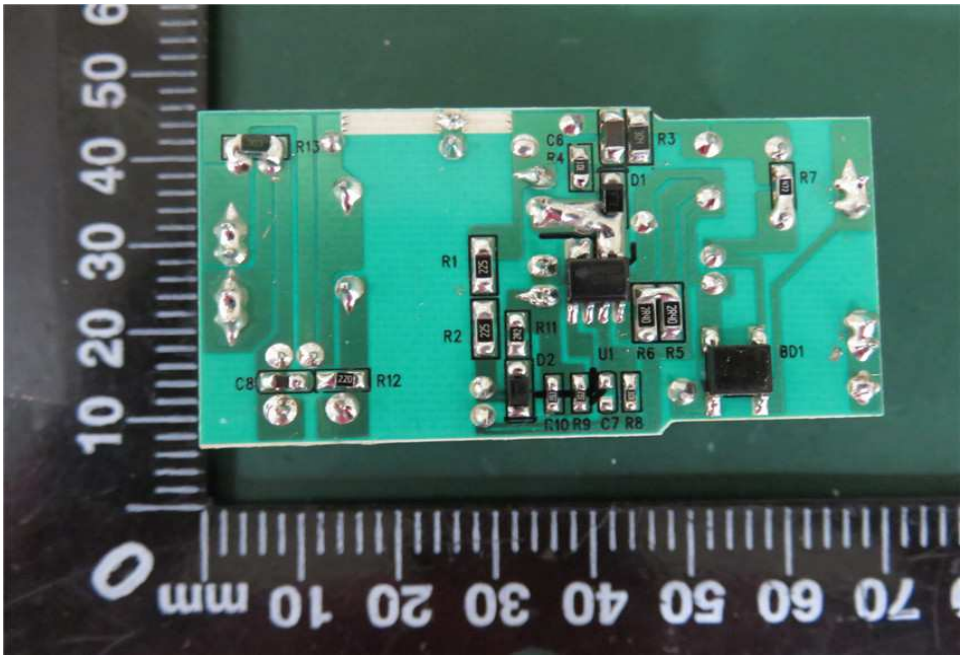


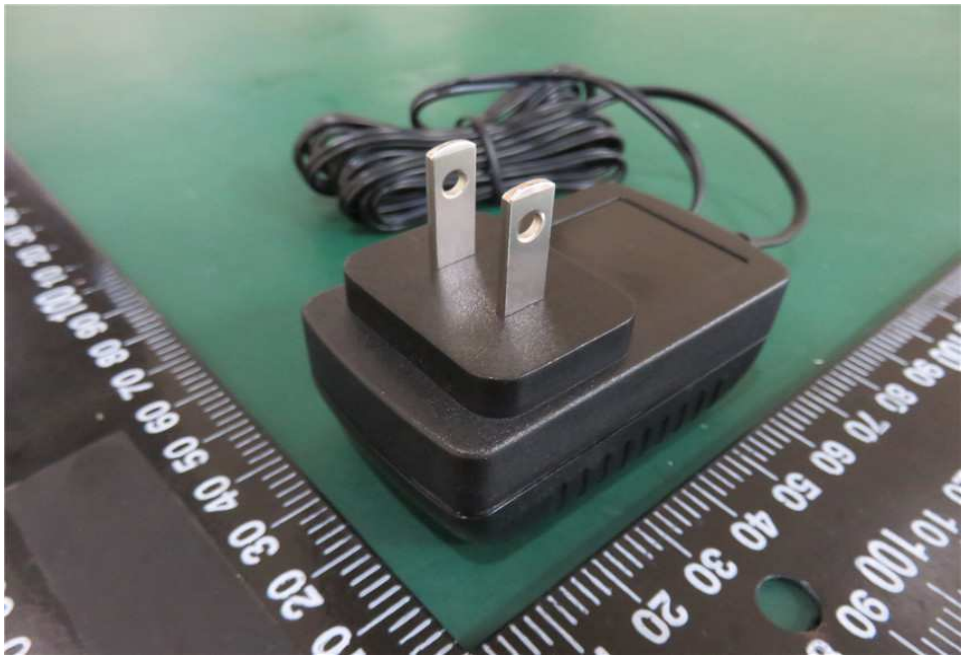
Photo no. 30 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2-F*



3.0 Product Photographs

Photo no. 31 - External view of the Class 2 Power Supply, model RSS1002-******-W2-D*

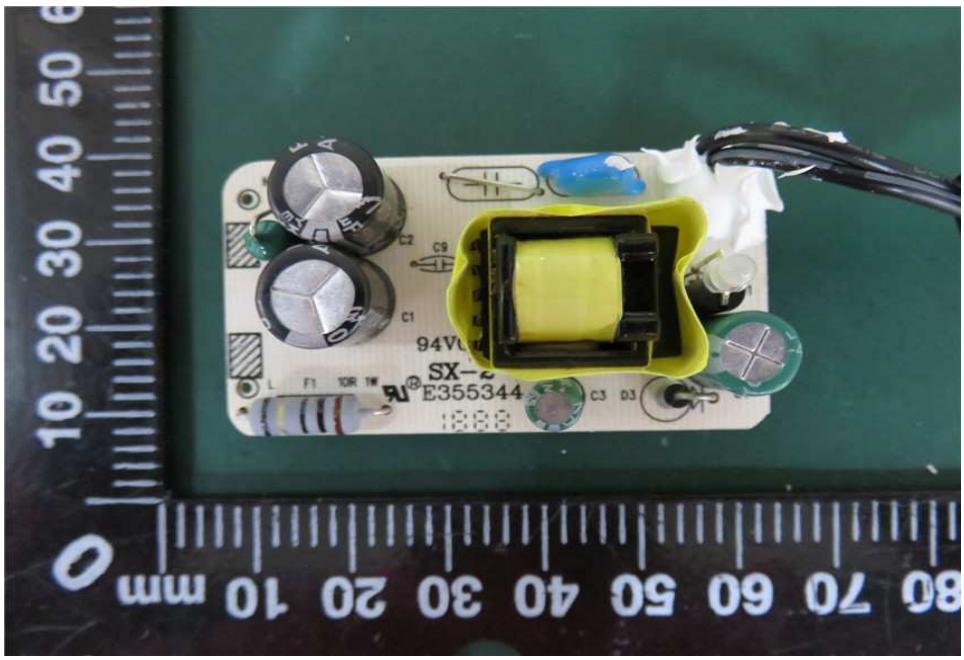
Photo no. 32 - External view of the Class 2 Power Supply, model RSS1002-******-W2-D*



3.0 Product Photographs

Photo no. 33 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2-D*

Photo no. 34 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2-D*



3.0 Product Photographs

Photo no. 35 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2-D*

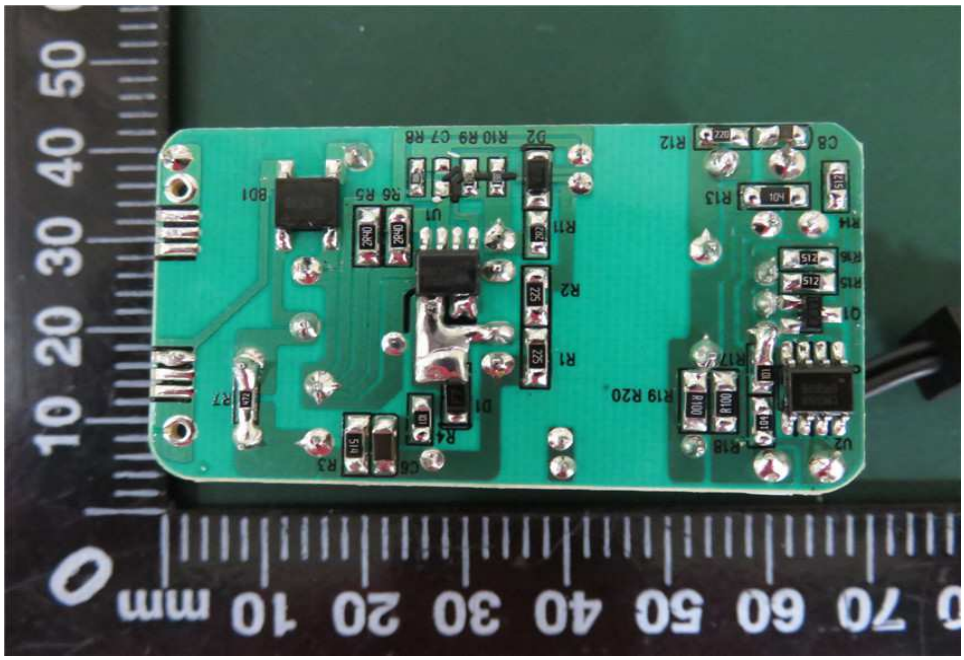


Photo no. 36 - External view of the Class 2 Power Supply, model RSS1002-******-W2-P*

3.0 Product Photographs

Photo no. 37 - External view of the Class 2 Power Supply, model RSS1002-******-W2-P*

Photo no. 38 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2-P*

3.0 Product Photographs

Photo no. 39 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2-P*

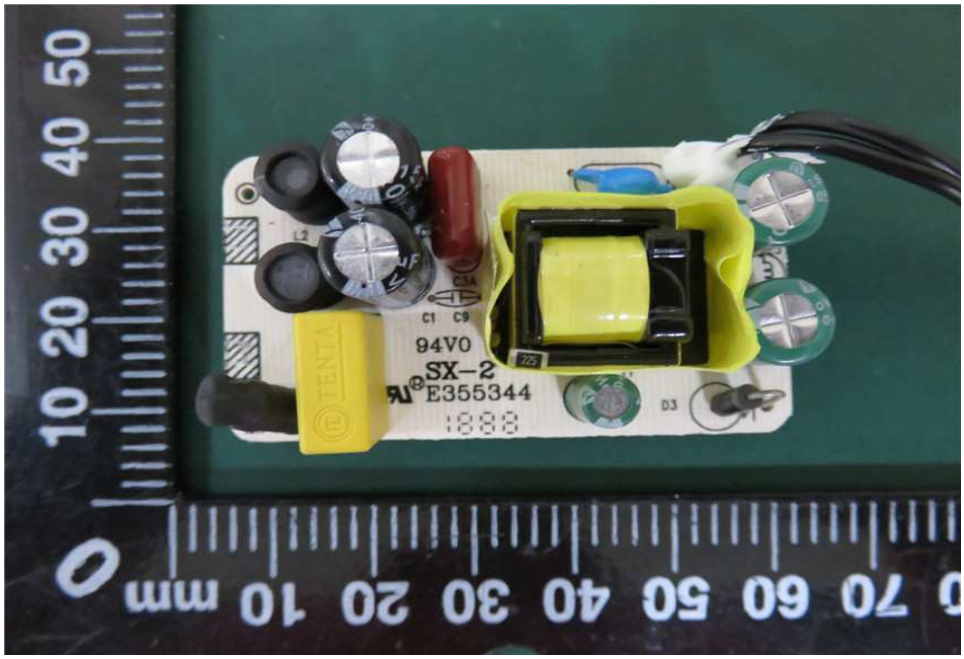
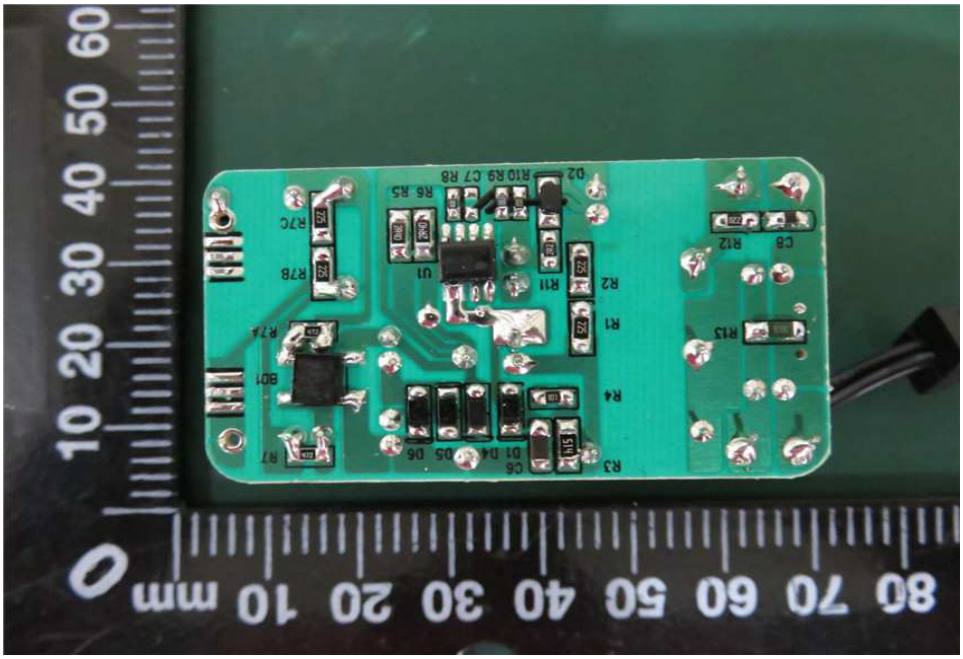


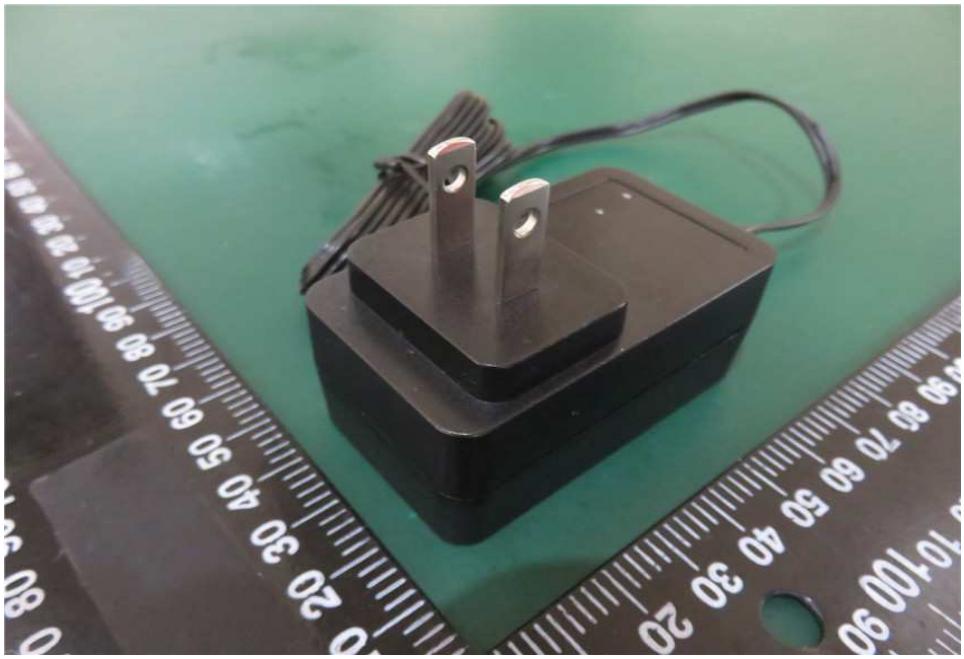
Photo no. 40 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2-P*



3.0 Product Photographs

Photo no. 41 - External view of the Class 2 Power Supply, model RSS1002-******-W2-E-P*

Photo no. 42 - External view of the Class 2 Power Supply, model RSS1002-******-W2-E-P*



3.0 Product Photographs

Photo no. 43 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2-E-P*

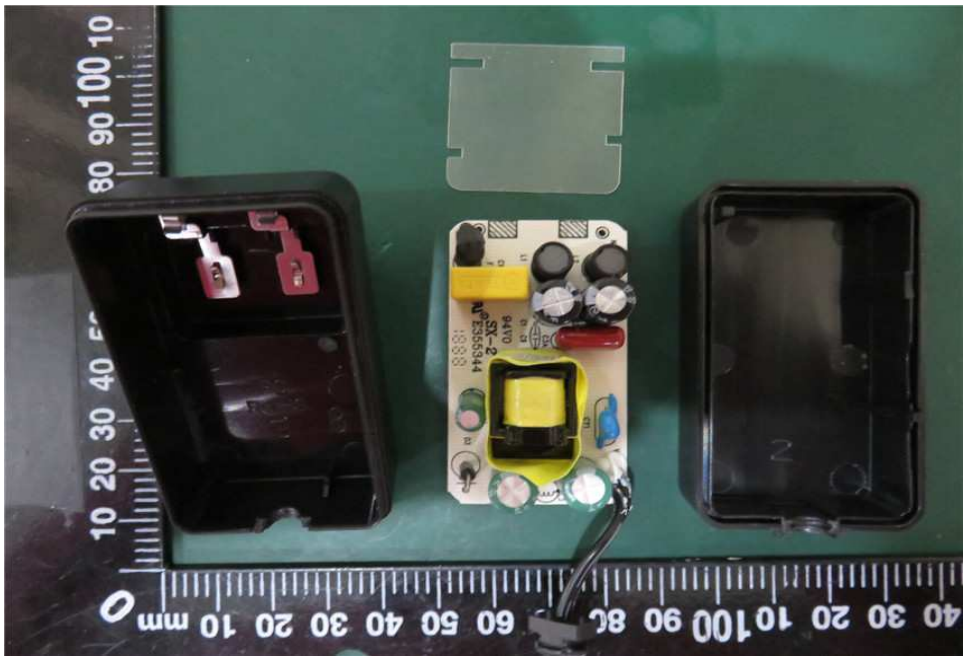
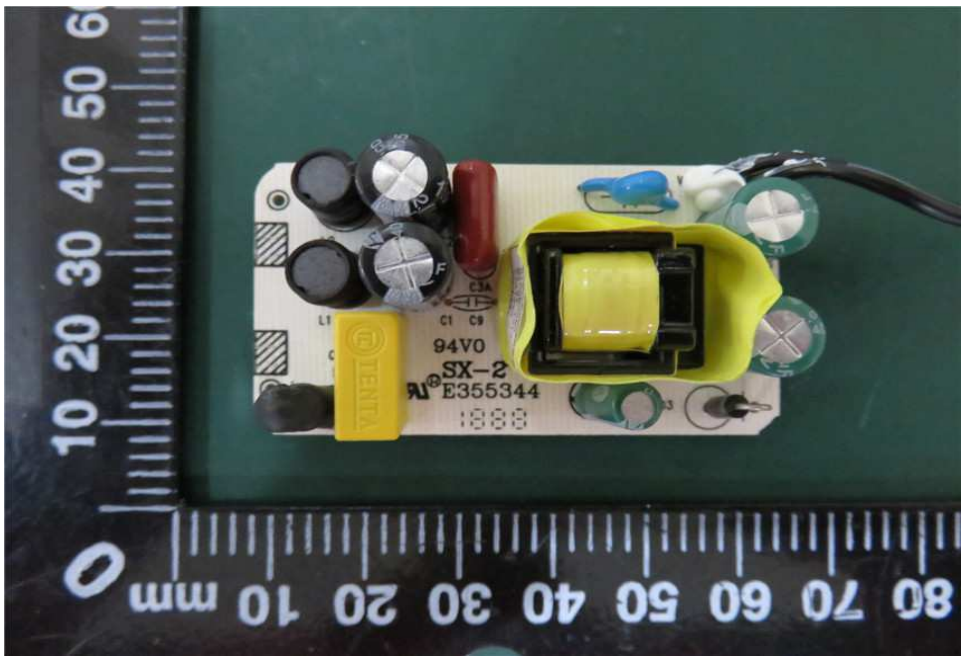


Photo no. 44 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2-E-P*



3.0 Product Photographs

Photo no. 45 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2-E-P*

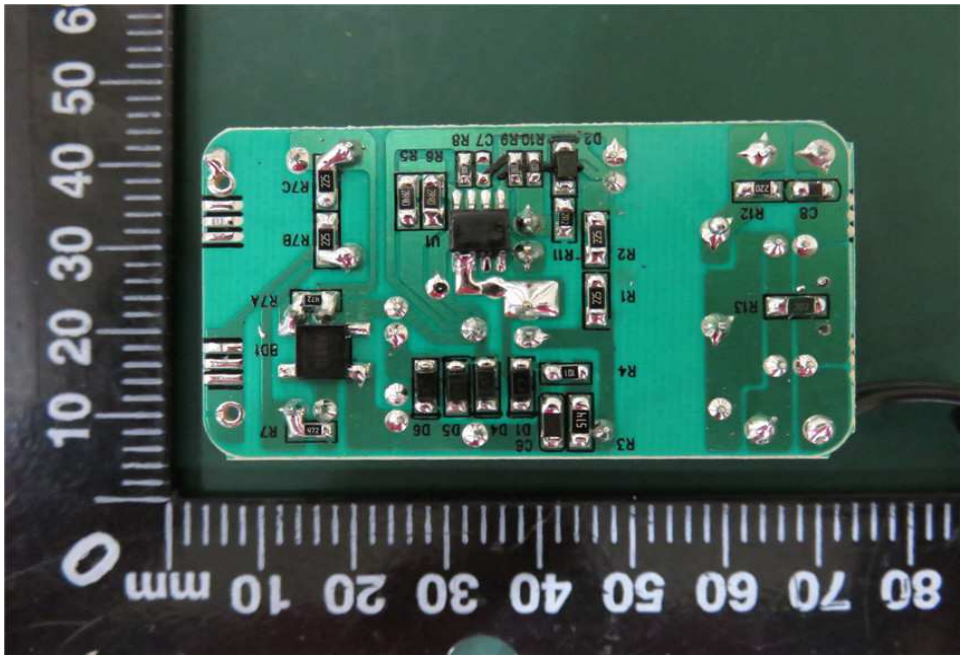


Photo no. 46 - External view of the Class 2 Power Supply, model RSS1002-******-W2*

3.0 Product Photographs

Photo no. 47 - External view of the Class 2 Power Supply, model RSS1002-******-W2*

Photo no. 48 - External view of the Class 2 Power Supply, model RSS1002-******-W2*

3.0 Product Photographs

Photo no. 49 - External view of the Class 2 Power Supply, model RSS1002-******-W2*

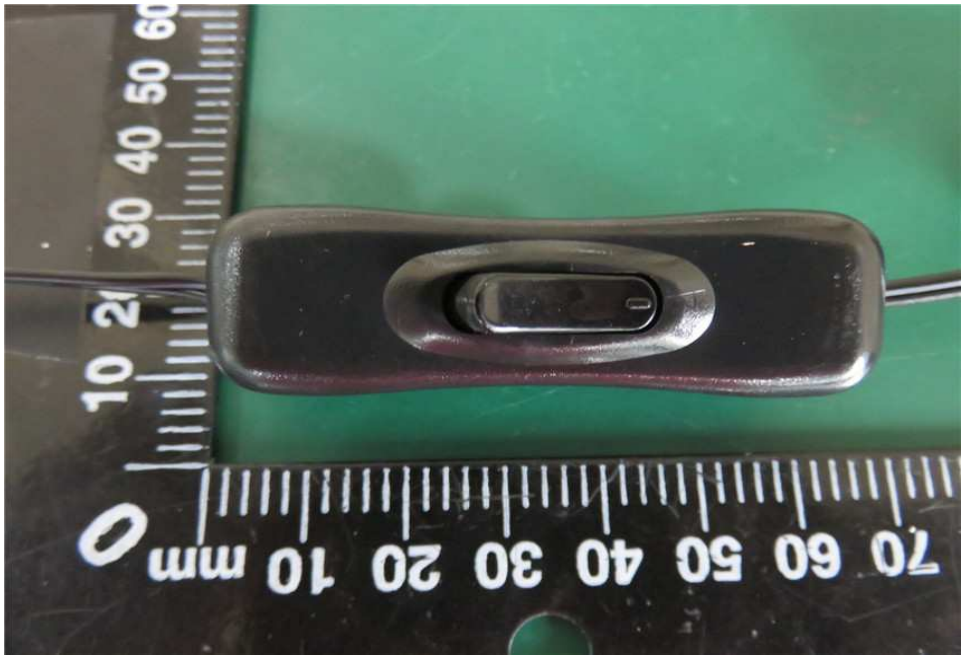


Photo no. 50 - Internal view of the Class 2 Power Supply, model RSS1002-******-W2*

3.0 Product Photographs

Photo no. 51 - Top PCB view of the Class 2 Power Supply, model RSS1002-******-W2*

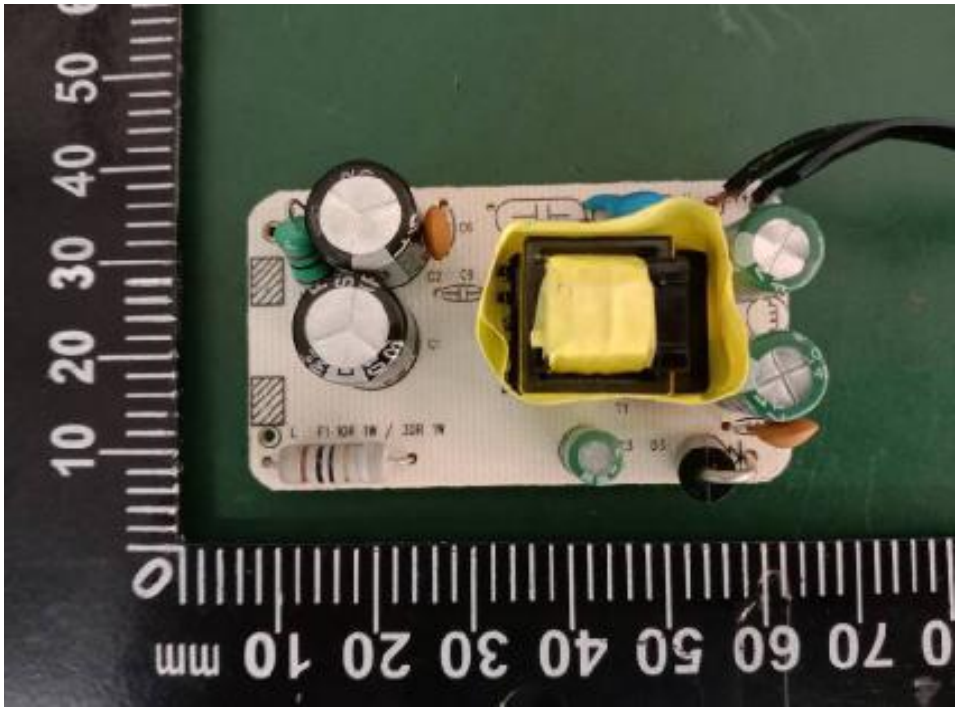
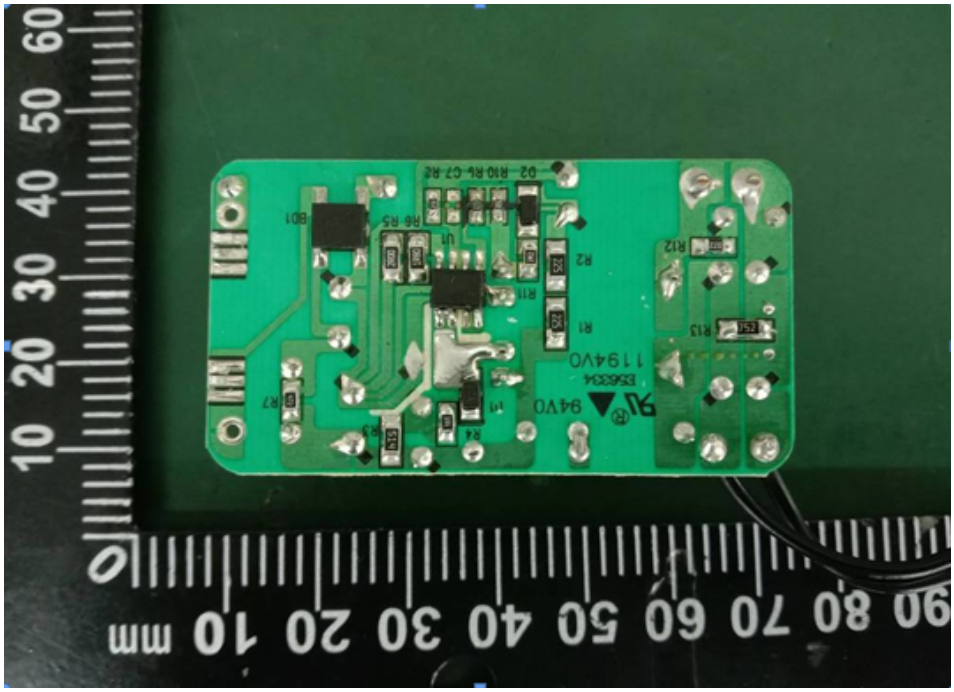


Photo no. 52 - Bottom PCB view of the Class 2 Power Supply, model RSS1002-******-W2*



3.0 Product Photographs

Photo no. 53 - Top view of the transformer

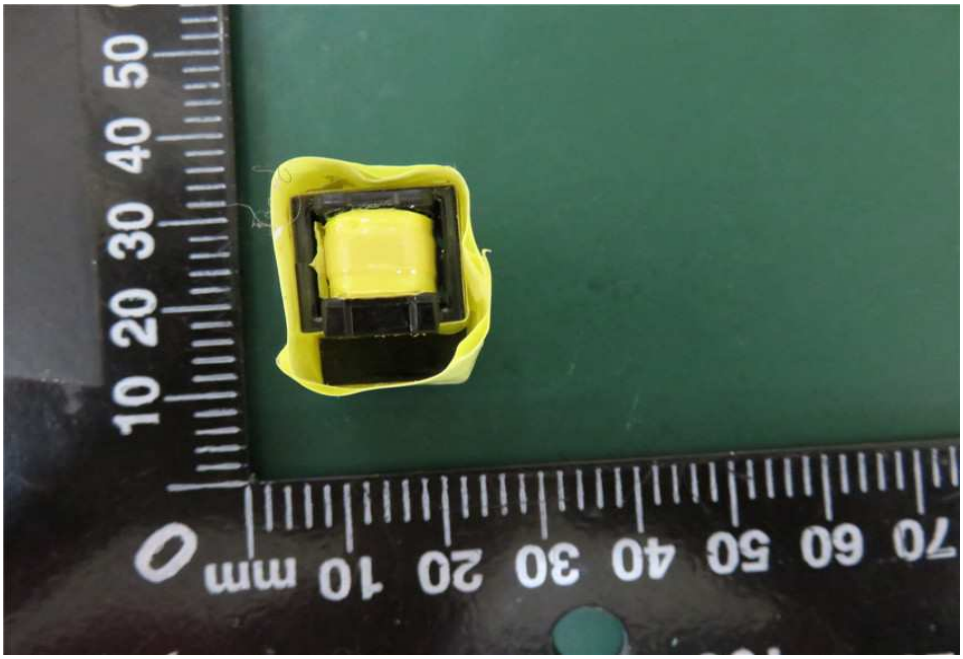
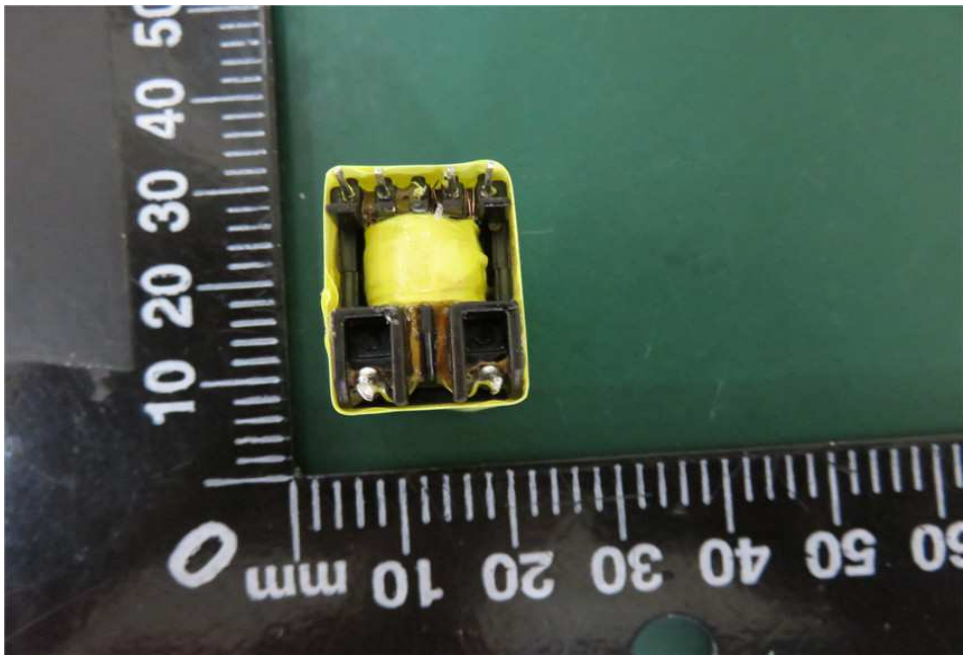


Photo no. 54 - Bottom view of the transformer



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	Plug Pin	Various	Various	2 copper blades, polarized or non-polarized type. Any point on either blade located at least 5.1mm to perimeter of the face section from which the blades project.	NR
1	2	Enclosure	SABIC INNOVATIVE PLASTICS US L L C	3412ECR(f1) (GG)	PC, rated V-0, 125°C, HAI=1, HWI=3, Min. thickness 1.5mm	UR
			SABIC INNOVATIVE PLASTICS US L L C	SE1X(GG)(f1)	PC, rated V-1, 105°C, HAI=0, HWI=0, Min. thickness 1.5mm	UR
2	3	ETL and cETL Certification Mark and Cautionary Marking (not shown)	Canning Printing Co., Ltd.	1M MAT CH PET	Rated 80°C, printed on the label adhered on the enclosure include the ETL/cETL certification mark, brand name, model, electrical rating and date code. (See Illustrations 5 for details)	cURus
			Various	Various	Laser etching on the enclosure.	NR
3	4	Mylar sheet (between L/N pin and PCB)	Guang Zhou Pink Sun Enterprises Co., Ltd.	PS-A	V-0, 150°C, min. thickness 0.2mm.	cURus
				PS-BG		
				PS-CG		
5	5	PCB	Guangzhou Shengxin Electronic Co., Ltd.	SX-1	Rated V-0, 130°C	UR
				SX-2	Rated V-0, 130°C	UR
			Various	Various	Rated V-0, 130°C	UR
39	6	Fusible Fuse (F1)	SHENZHEN JINGHE ELECTRONICS CO., LTD.	FRKNP-1W	10 ohm, 1W	cURus
			FONG YA ELECTRONIC (DONGGUAN) CO., LTD.	WFR Series	10 ohm, 1W	cURus
			Dongguan Hongda Electronic Technology Co Ltd.	RXF	10 ohm, 1W	cURus
39	6a	- Heat shrinkable tube	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR	Rated VW-1, 125°C, 600V	cURus
				RSFR-H		

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]
39	7	X-Capacitor (CX1)	Tenta Electric Industrial Co., Ltd.	MEX	Max. 0.1uF, min.250V AC, min.100°C, X2 type. (For model RSS1002-******-W2-P* and RSS1002-******-W2-E-P*)	cURus
			Dain Electronics Co., Ltd.	MPX	Max. 0.1uF, min.250V AC, min.100°C, X2 type	cURus
			SHENZHEN SURONG CAPACITORS CO LTD	MPX	Max. 0.1uF, min.250V AC, min.100°C, X2 type	cURus
				MKP	Max. 0.1uF, min.250V AC, min.100°C, X2 type	cURus
			Yuon Yu Electronics Co., Ltd.	MPX Series	Max. 0.1uF, min.250V AC, min.100°C, X2 type	cURus
9	8	Line choke (L1)	DONGGUAN DE HUI ELECTRONIC CO-LTD	Al0410-102K	Min. 1.0mH, 130°C, Soldering on PCB directly. (See Illustrations 8 for details)	NR
9	8a	-Magnet wire (not shown)	Guangdong Jinyan Electrotechnics Joint Stock Co Ltd	xUEW	Polyurethane, rated 130°C, used as winding.	UR
				QA-x/130		
			Various	Various	Polyurethane, Min.130°C	UR
39	9	Line choke (L1,L2)	DONG GUAN SONG SHUN ELECTRONICS TECHNOLOGY CO.,LTD	6*8mm	Min. 0.8mH, 130°C, Soldering on PCB directly. (For RSS1002-******-W2-P* and RSS1002-******-W2-E-P*) (See Illustrations 9 for details)	NR
39	9a	-Magnet wire (not shown)	Guangdong Jinyan Electrotechnics Joint Stock Co Ltd	xUEW	Polyurethane, rated 130°C, used as winding.	UR
				QA-x/130	Polyurethane, rated 130°C	UR
			Various	Various	Polyurethane, Min.130°C	UR
39	9b	- Heat shrinkable tube	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR	Rated VW-1, 125°C, 600V	cURus
				RSFR-H	Rated VW-1, 125°C, 600V	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]
9	10	Y-Capacitor (CY1) (optional)	GUANGDONG SOUTH HONGMING ELECTRONIC SCIENCE & TECHNOLOGY CO LTD	F	Max. 1000pF, 125°C, min. 250 Vac, Y1 type	cURus
			JYH CHUNG ELECTRONICS CO LTD	JD	Max. 1000pF, 125°C, min. 250 Vac, Y1 type	cURus
			Jya-Nay Co., Ltd	JN	Max. 1000pF, 125°C, min. 250 Vac, Y1 type	cURus
			Jyh Hsu (Jec) Electronics Ltd	JD Series	Max. 1000pF, 125°C, min. 250 Vac, Y1 type	cURus
			Dongguan QinHong (QNR) Electronic Technology Co., LTD	CT7	Max. 1000pF, 125°C, min. 250 Vac, Y1 type	cURus
			DONGGUAN CIGU ELECTRONIC TECHNOLOGY CO LTD	CD	Max. 1000pF, 125°C, min. 250 Vac, Y1 type	cURus
1	11	Output lead wire	XINYA ELECTRONIC CO LTD	2464	VW-1, Min 300V, Min 80°C, 24AWG min., min. 1.8m length	UR
				2468		
			Various	Various	VW-1,Min 300V, Min 80°C, 24AWG min., min. 1.8m length	UR
8	12	Input wire	SHINESTATE INTERNATIONAL LTD	1007	VW-1, min. 80°C, min. 24AWG, min. 300V. (For model RSS1002- ******-W2-B*, RSS1002-******-W2-U*, RSS1002-******-S*, RSS1002-******-S-U*)	UR
				1015		UR
			Various	Various	VW-1, min. 80°C, min. 24AWG, min. 300V.	UR
9	13	Transformer (T1)	HUIZHOU YONGJIN ELECTRIC CO LTD	G105B0330	Soldering on PCB directly and consist of the following components. (See Illustrations 2-2a for details)	NR
				G105B0550		
			SHENZHEN XINSIDA SCIENCE& TECHNOLOGY CO LTD	X105B1060A0		
				X105B1080A0		
9	13a	Bobbin (not shown)	CHANG CHUN PLASTICS CO LTD	T375J	Phenolic Molding Compound (PMC), rated V-0, 150°C, HWI=1, HAI=0, Min. thickness 0.75mm	UR
			SUMITOMO BAKELITE CO LTD	PM-9820	Phenolic (PF), rated V-0, 150℃, HWI=1, HAI=2, Min. thickness 0.51mm	UR
			HITACHI CHEMICAL CO LTD	CP-J-8800	Phenolic (PF), rated V-0, 150℃, HWI=0, HAI=0, Min. thickness 0.51mm	UR

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]
9	13b	Insulation tape (not shown)	Chang Shu Liang Yi Tape Industry Co Ltd	LY-19-02-15 (c)(d)	Polyester PET film tape, rated 130°C, with flame retardant	UR
			P LEO & CO LTD	1P801	PET insulating tapes, rated 130°C, with flame retardant	UR
			3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1 (b)	Polyester film insulating tapes with acrylic adhesive, rated 130°C, with flame retardant	UR
9	13c	Magnet wire (not shown)	SHANTOU SHENGANG ELECTRICAL INDUSTRIAL CO LTD	UEW/155	Polyurethane, rated 155°C, used as primary winding.	UR
			Various	Various	Polyurethane, Min.130°C	UR
9	13d	Triple insulation wire (not shown)	FURUKAWA ELECTRIC CO LTD	TEX-E	Rated 1410Vpeak, 130°C, used as secondary winding.	UR
9	13e	Varnish (not shown)	ELANTAS ELECTRICAL INSULATION ELANTAS PDG INC	468-2 (d)	Rated 130°C	UR
9	14	Electrolytic Capacitor (C1, C2)	Various	Various	2.2-33uF, min. 400V, 105°C	NR
			Various	Various	Rated 2.2-33µF, Min. 200V, 105°C (For model RSS1002-******-W2-P* and RSS1002-******-W2-E-P*)	NR
10	15	Bridge diode (DB1)	Various	Various	Min. 0.2A ,Min.600V	NR
10	16	PWM IC (U1)	Various	Various	Min. 0.2A ,Min.600V	NR
40	17	Bleeder Resistor (R7B,R7C)	Various	Various	2.2Mohm, min. 1/4W. (use for model RSS1002-******-W2-P* and RSS1002-******-W2-E-P*)	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.

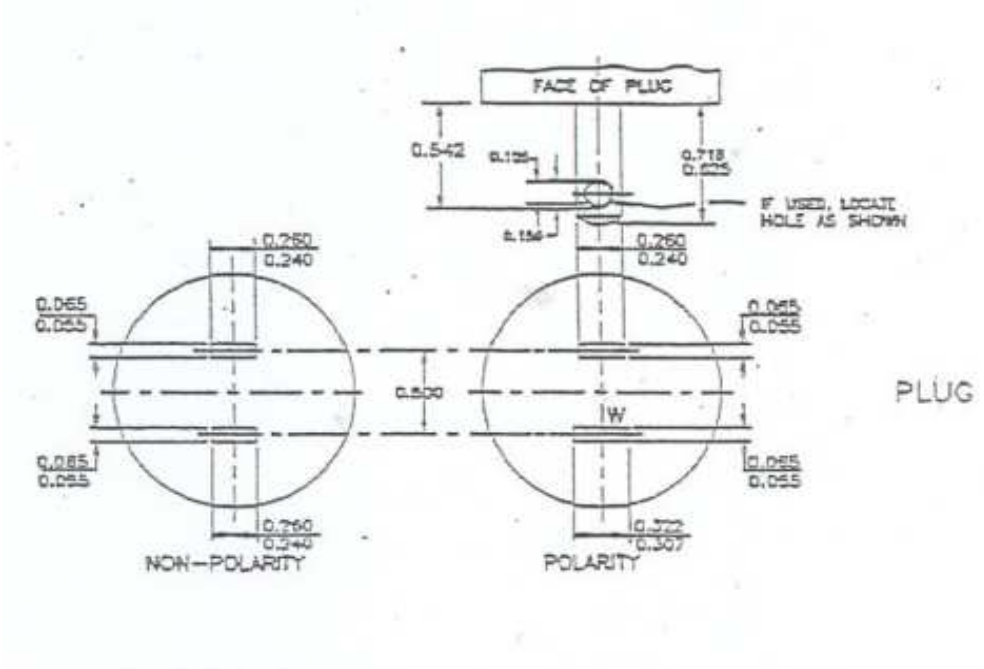
Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

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 - Between primary winding and secondary winding of the transformer, between primary and secondary circuit, between core and secondary circuit or secondary winding, between primary circuit or core and accessible part, between live part of different polarity, minimum 4.8mm spacing is maintained through air and minimum 4.8mm over surface of insulating material.
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 not required to be grounded.
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 3-3b for schematics requiring verification during Field Representative Inspection Audits.
8. Markings - The product is marked on label as described in item no. 3 of Section 4.0 as follows: ETL/cETL certification mark, brand name, model, electrical rating. Refer to Illustrations 5.
9. Cautionary Markings - Refer to Illustration 5
10. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. Refer to Illustration 6-6a.

7.0 Illustrations

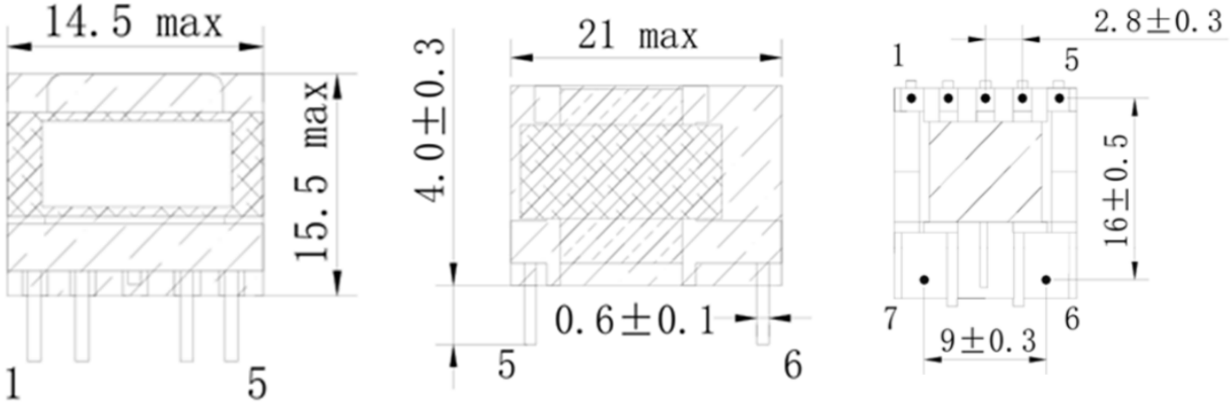
Illustration 1 - Plug pin



7.0 Illustrations

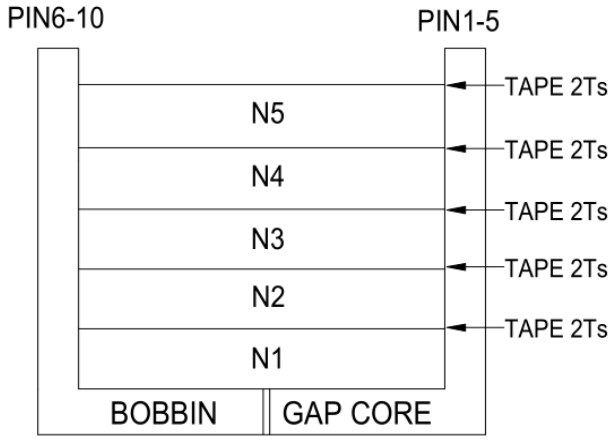
Illustration 2 - Transformer (T1) construction

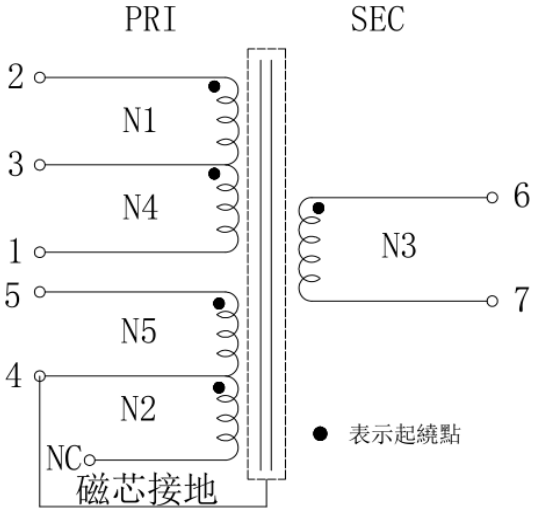
Model: G105B0330, G105B0550, X105B1060A0, X105B1080A0



Winding construction

Schematic





7.0 Illustrations

Illustration 2a - Transformer (T1) construction (Cont'd)

model: G105B0330, X105B1060A0

绕组	开始-结束	线径*股数	圈数	胶带层次
N1	2--3	2UEW Φ0.16mm*1P	84 TS	2 TS* 8.0mm
N2	4--NC	2UEW Φ0.16mm*1P	32 TS	2 TS* 8.0mm
N3	6--7	TIW-B Φ0.65mm*1P	7 TS	2 TS* 8.0mm
N4	3--1	2UEW Φ0.16mm*1P	36 TS	2 TS* 8.0mm
N5	5--4	2UEW Φ0.16mm*1P	20 TS	2 TS* 8.0mm

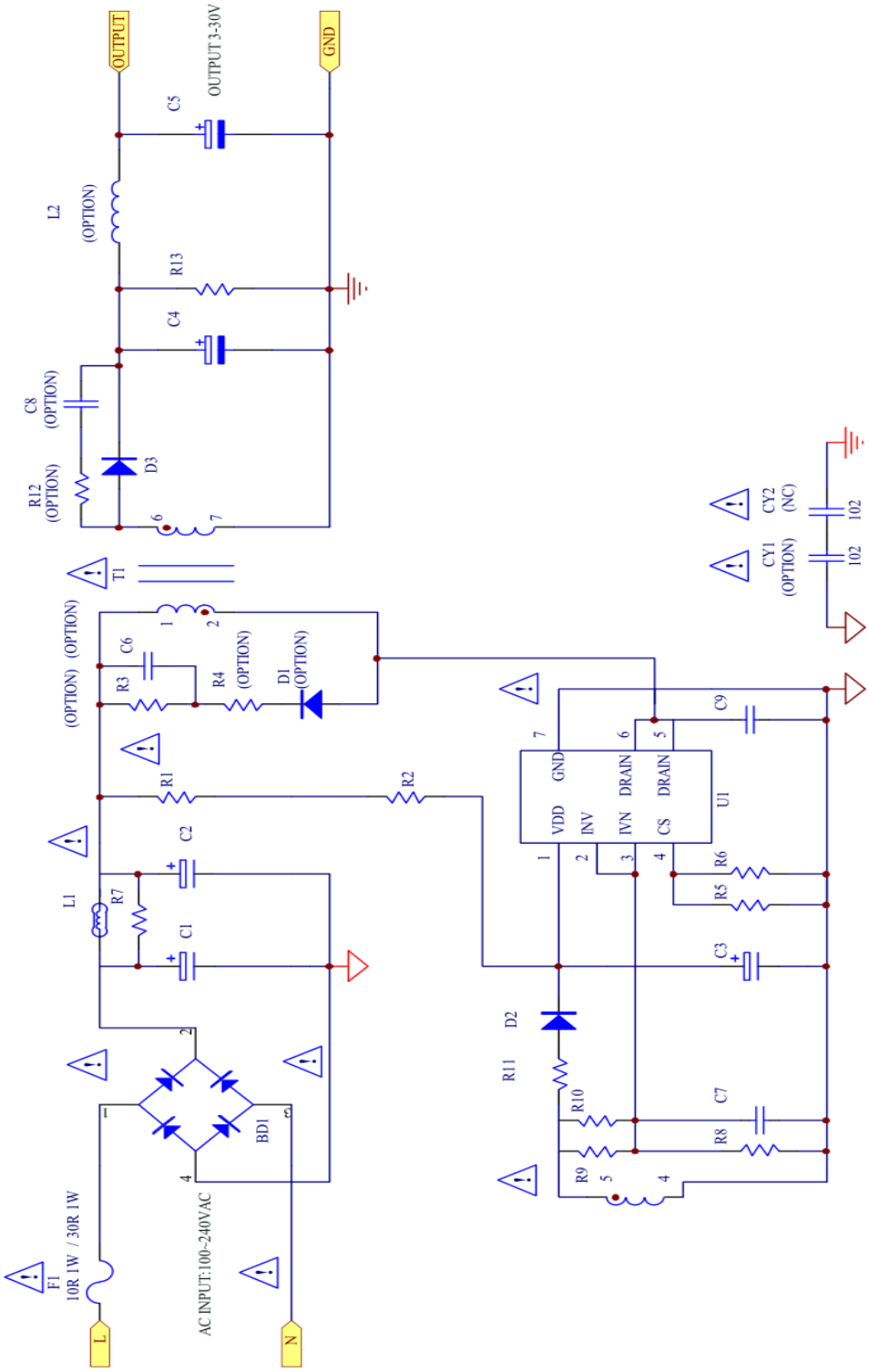
model: G105B0550, X105B1080A0

绕组	开始-结束	线径*股数	圈数	胶带层次
N1	2--3	2UEW Φ0.16mm*1P	84 TS	2 TS* 8.0mm
N2	4--NC	2UEW Φ0.16mm*1P	32 TS	2 TS* 8.0mm
N3	6--7	TIW-B Φ0.30mm*1P	28 TS	2 TS* 8.0mm
N4	3--1	2UEW Φ0.16mm*1P	36 TS	2 TS* 8.0mm
N5	5--4	2UEW Φ0.16mm*1P	16 TS	2 TS* 8.0mm

7.0 Illustrations

Illustration 3 - Circuit diagram

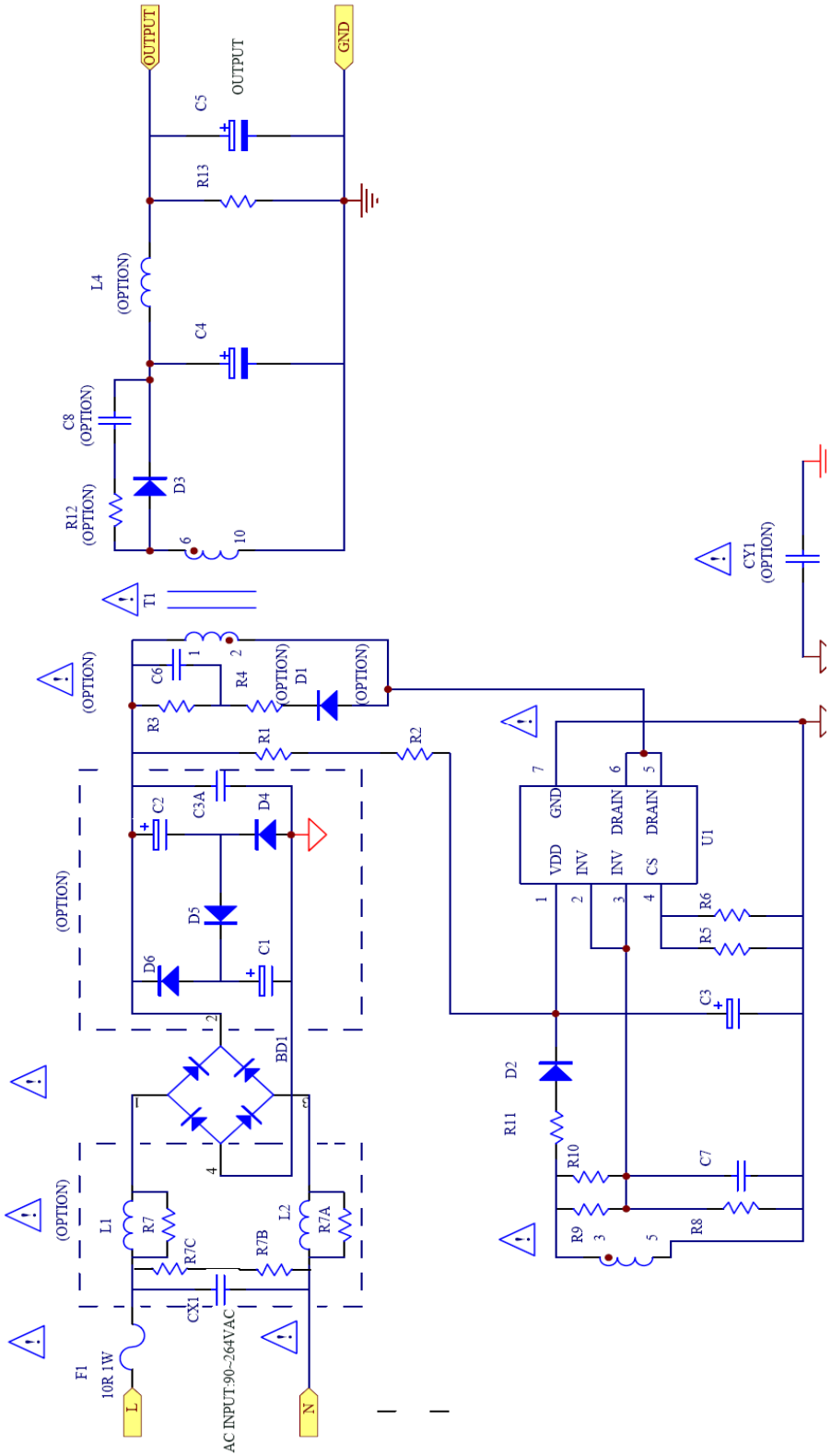
Schematic (A) For model: RSS1002-******-W2*, RSS1002-******-W2-U*, RSS1002-******-W2-B*, RSS1002-******-S*,RSS1002-******-S-U*, RSS1002-******-W2-F*, RSS1002-******-W2-E*



7.0 Illustrations

Illustration 3a - Circuit diagram (Cont'd)

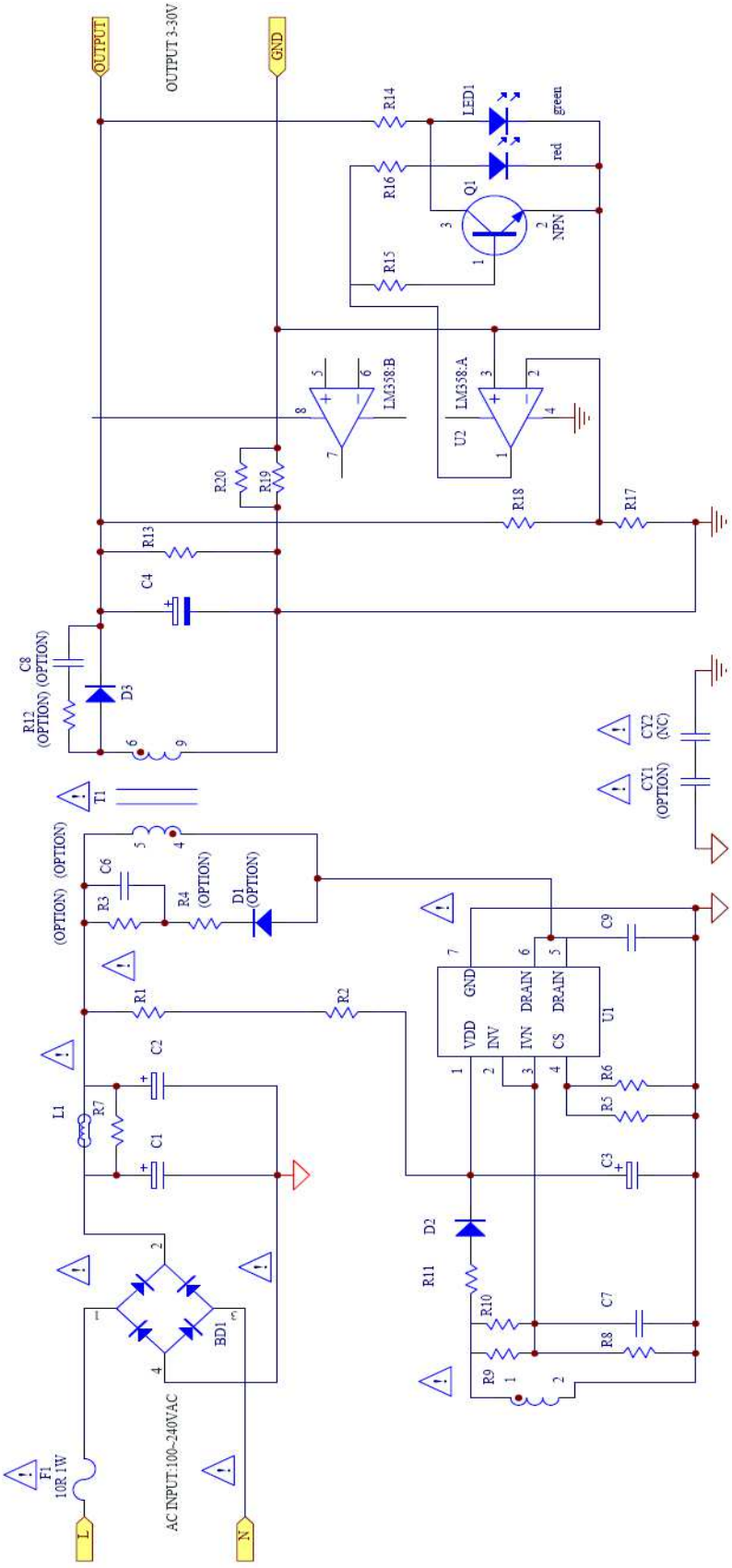
Schematic (B) For model: RSS1002-******-W2-P*, RSS1002-******-W2-E-P*



7.0 Illustrations

Illustration 3b - Circuit diagram (Cont'd)

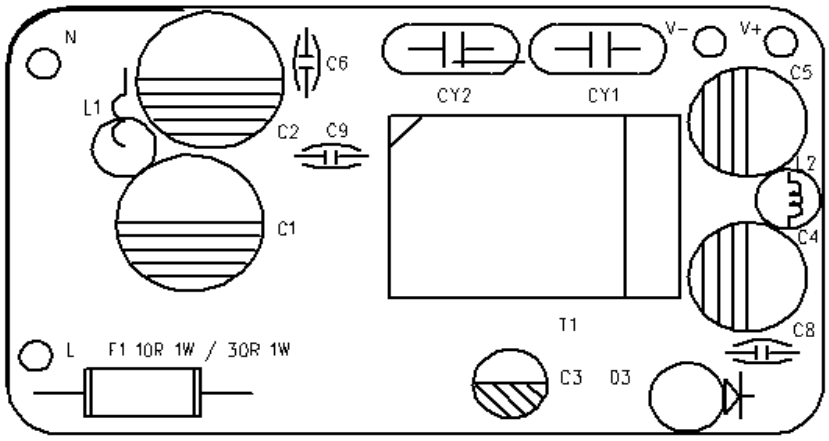
Schematic (C) For model: RSS1002-******-W2-D*

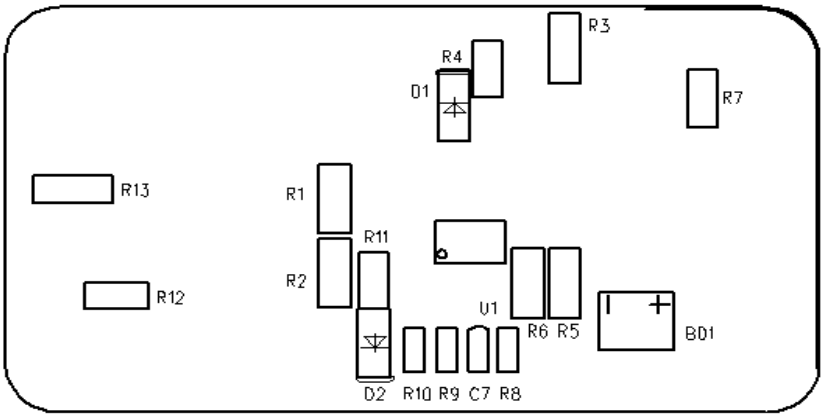


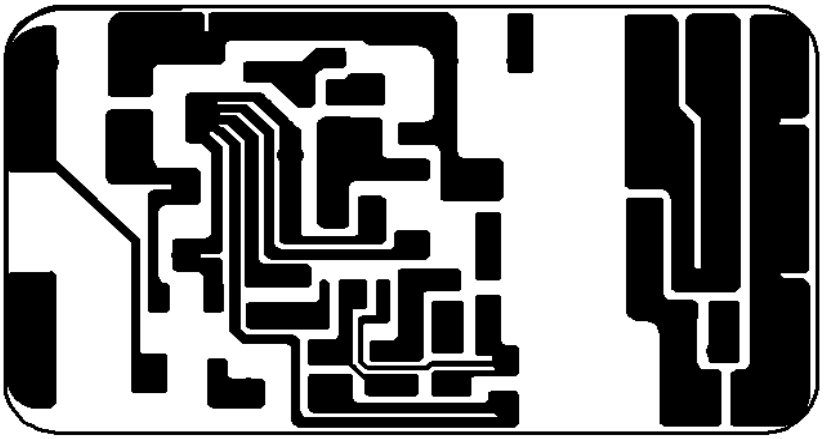
7.0 Illustrations

Illustration 4 - PCB layout

PCB (1) For model: RSS1002-******-W2*, RSS1002- ******-W2-B*, RSS1002-******-W2-E*



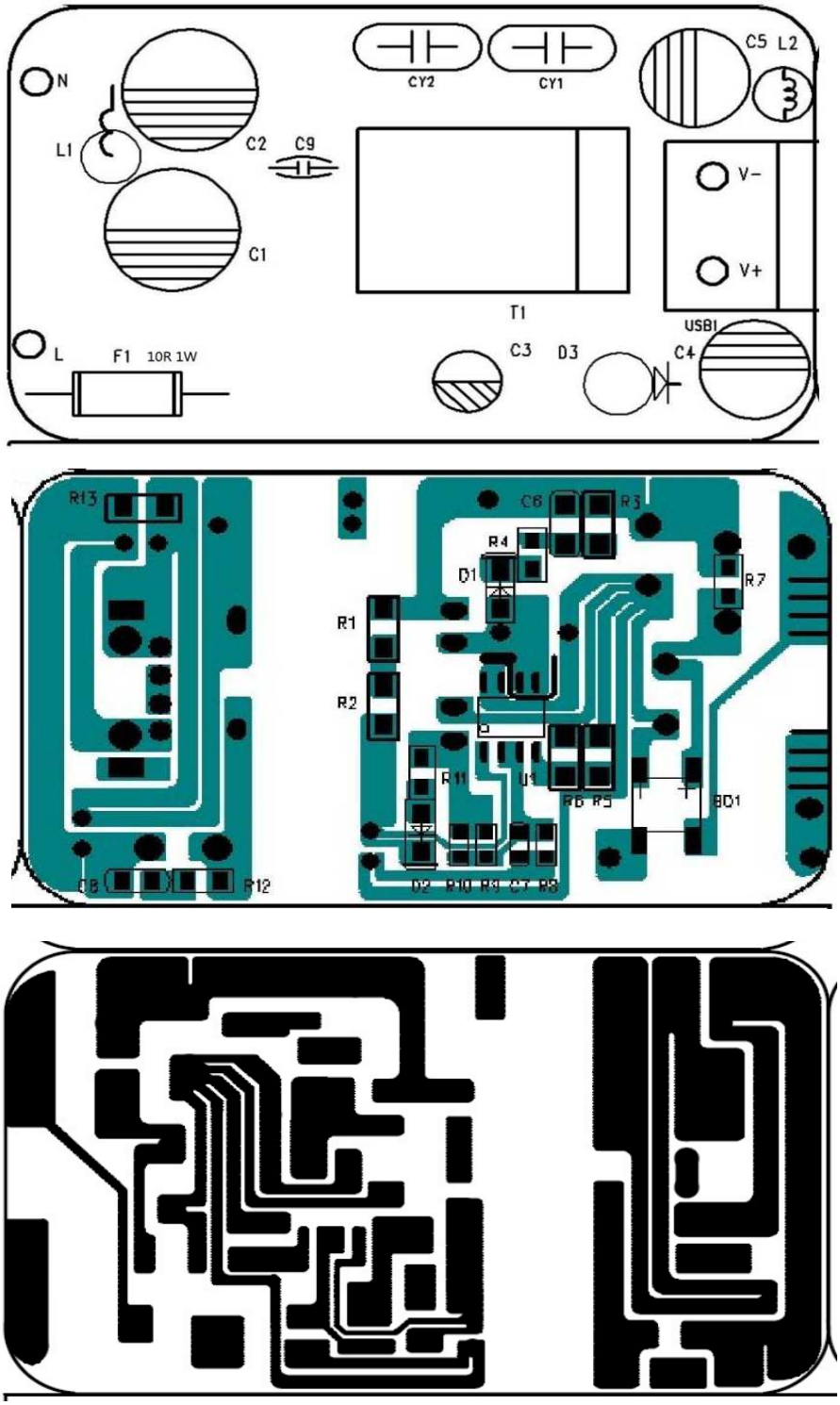




7.0 Illustrations

Illustration 4a - PCB layout (Cont'd)

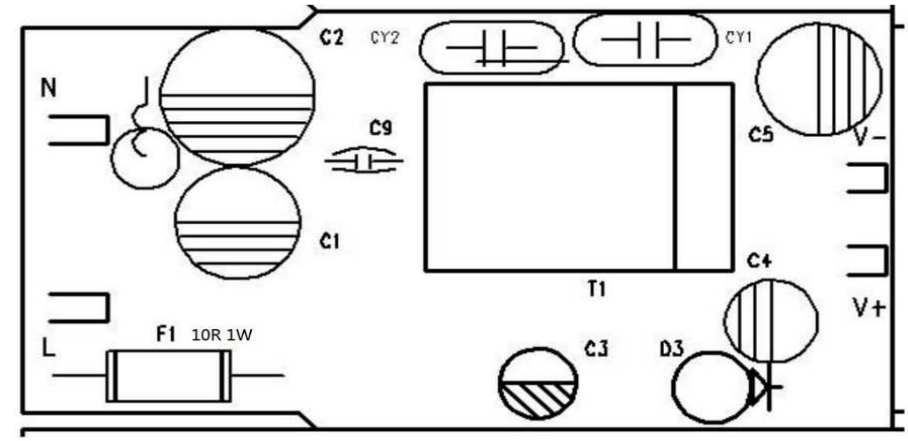
PCB (2) For model: RSS1002-******-W2-U*, RSS1002-******-S*, RSS1002-******-S-U*

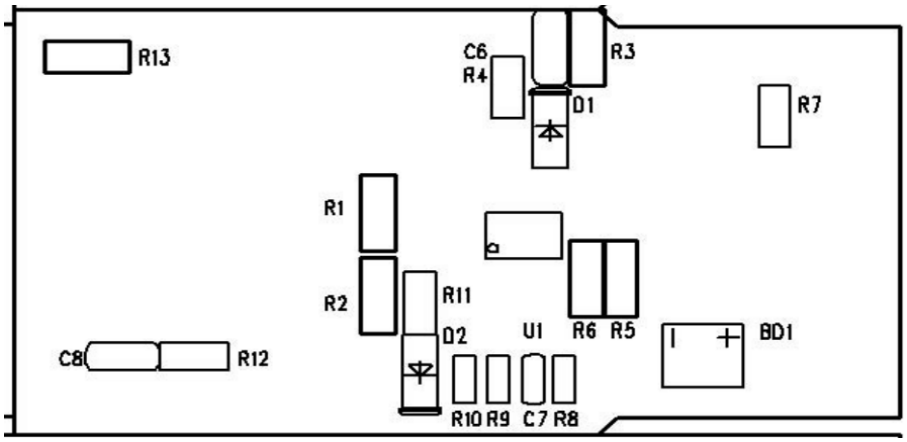


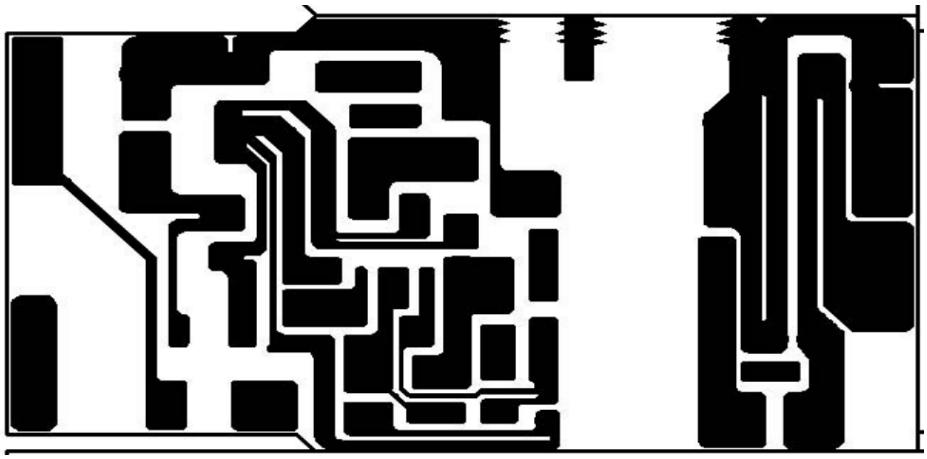
7.0 Illustrations

Illustration 4b - PCB layout (Cont'd)

PCB (3) For model: RSS1002-******-W2-F*



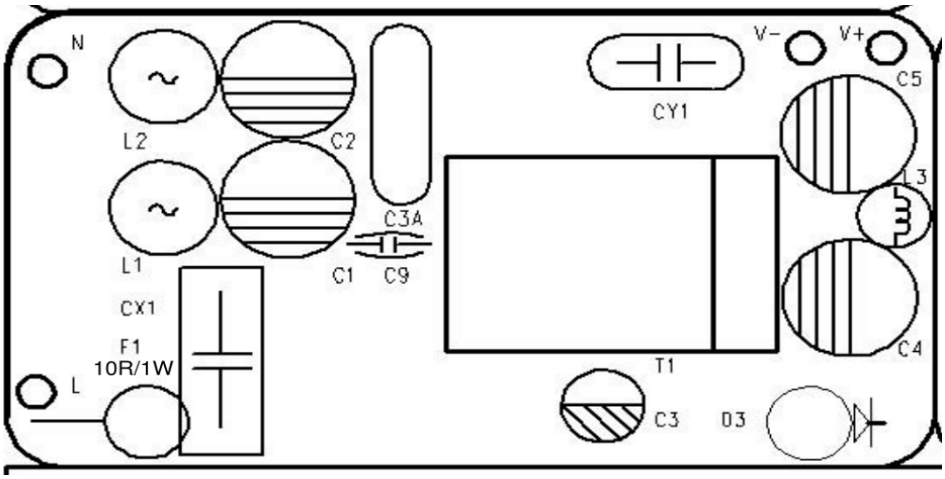


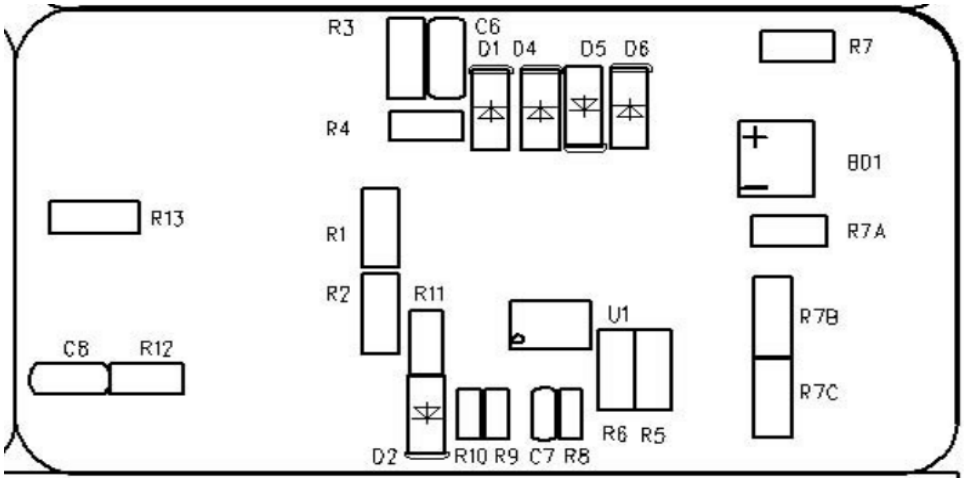


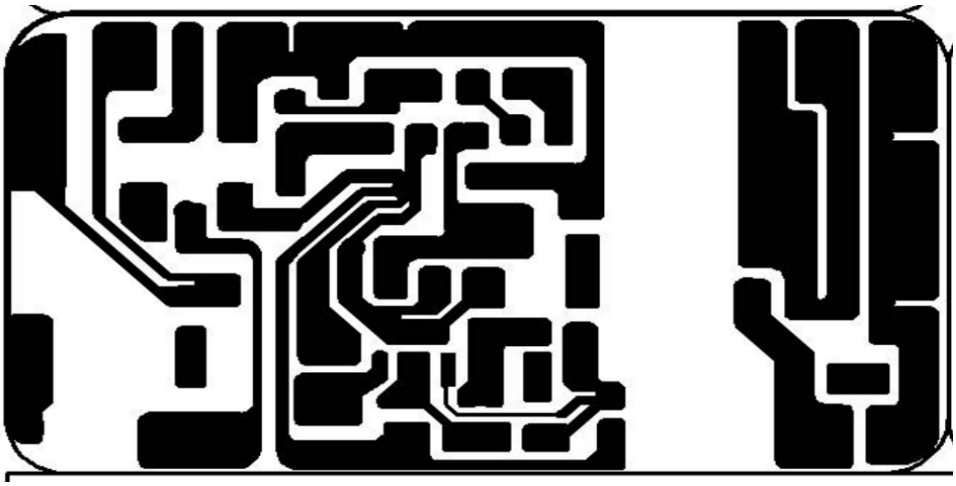
7.0 Illustrations

Illustration 4c - PCB layout (Cont'd)

PCB (4) For model: RSS1002-******-W2-P*, RSS1002-******-W2-E-P*



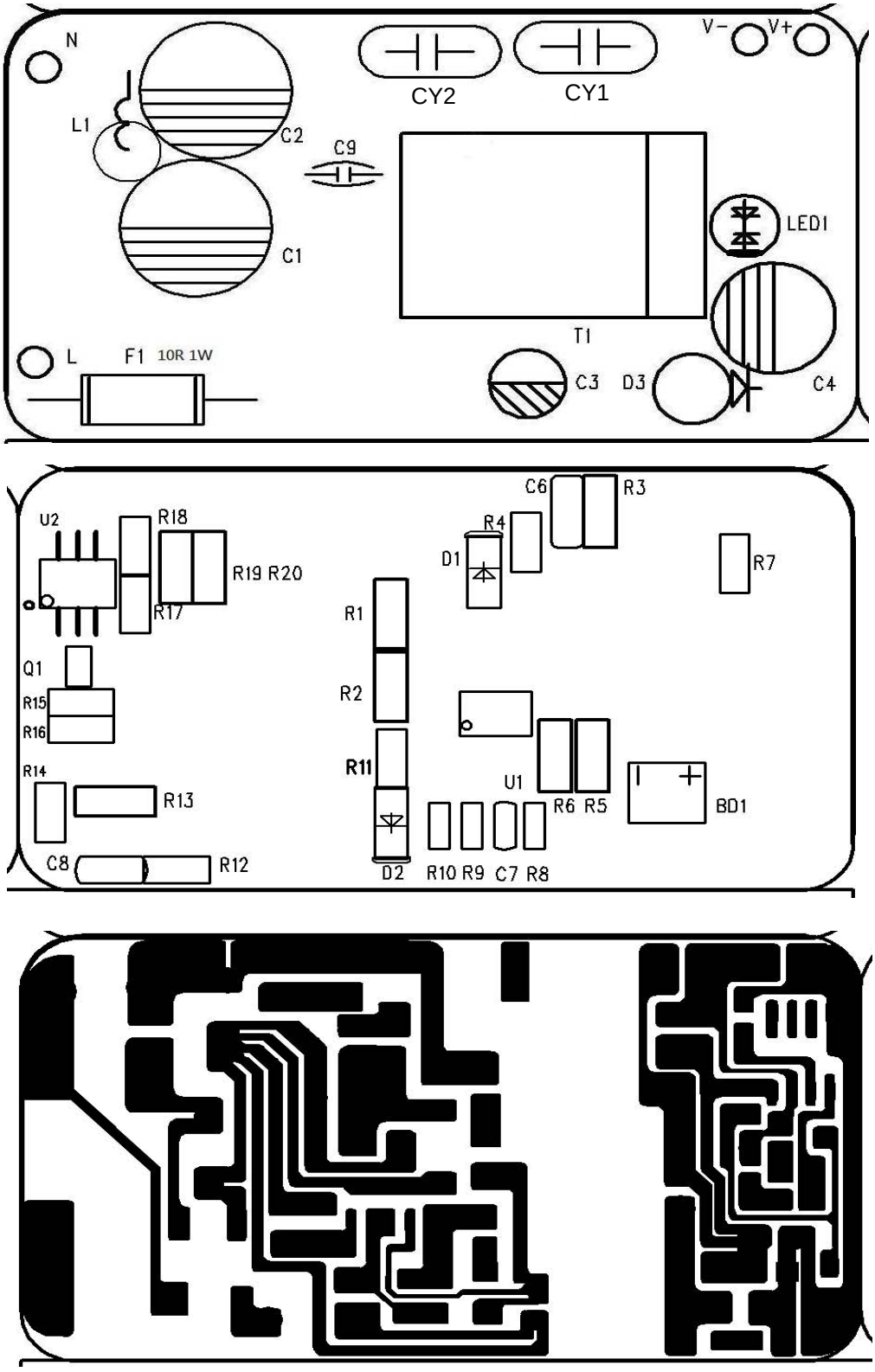




7.0 Illustrations

Illustration 4d - PCB layout (Cont'd)

PCB (5) For model: RSS1002-******-W2-D*



7.0 Illustrations

Illustration 5 - Marking

The following information was printed on label adhered or laser etching or craved on the enclosure

Control number: 5001285

Remarks:

- The above copy of marking plate as an example for the series. All the other models will have the same marking plate except the different of model number and output rating only.
- The above markings are the minimum requirements required by the safety standard. For the final productions samples, the additional markings which do not give rise to misunderstanding may be added.
- The letters "CAUTION" and "ATTENTION" in letters not less than 3.2mm high. The remaining letters shall not less than 1.6 mm high.
- The ETL logo shall not be less than 8 mm in width and 8 mm in height, the “US” and “C” shall not be less than 2 mm in height, the “CM” shall not be less than 1mm in height.
- The "Intertek" shall not be less than 3 mm in height.
- The ETL Control Number "5001285" shall not be less than 2 mm in height.
- Date code format: "YYWW", First "YY" means years, Second "WW" means month.

7.0 Illustrations

Illustration 6 - Instruction manual (English)

User manual

Class 2 Power Supply

Model: RSS1002-******-W2*, RSS1002-******-W2-U*, RSS1002-******-W2-B*, RSS1002-******-S*, RSS1002-******-S-U*, RSS1002-******-W2-F*, RSS1002-******-W2-D*, RSS1002-******-W2-E*, RSS1002-******-W2-P*, RSS1002-******-W2-E-P*

(The 1st to 3rd "*" can be replaced by three digits from 001 to 090, indicate output power range form 0.1-9W, the minimum rising step by 0.1W, eg. 001=0.1W, 090=9W
The 4th to 6th "*" can be replaced by three digits from 024 to 300, indicate output voltage range form 2.4-30.0Vdc, the minimum rising step by 0.1V, eg. 024=2.4Vdc, 300=30.0Vdc.
The 7th "*" can be H or blank, represent different input voltage used, H indicate input voltage 100-120Vac, blank indicate input voltage 100-240Vac)

Input: 100-240V~, 50/60Hz, 0.2A or 100-120V~, 50/60Hz, 0.2A
Output: 2.4-30.0Vdc, 0.01-1.5A

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

Note:

IMPORTANT SAFETY INSTRUCTIONS-SAVE THESE INSTRUCTIONS and DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FORLLOW THESE INSTRUCTIONS.

1. The Power supply is certified according to the relevant safety standards UL1310, CSA C22.2
2. The output power taken from the supply must not exceed the rating given on the adaptor.
3. The switching power supply is not Intended to be repaired by service personnel in case of failure or component defect (unit can be thrown away).
4. The equipment disconnect device is considered to be appliance Plug.
5. This power unit is intended to be correctly orientated in a vertical or floor mount position.
6. 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.

- The letters "IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS" and "DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS"" in letter of 1/8 inch (3.18 mm) high or in a readily visible contrasting text.

7.0 Illustrations

Illustration 6a - Instruction manual (French)

Bedienungsanleitung

Classe 2 Alimentation

Modell: RSS1002-******-W2*, RSS1002-******-W2-U*, RSS1002-******-W2-B*, RSS1002-******-S*, RSS1002-******-S-U*, RSS1002-******-W2-F*, RSS1002-******-W2-D*, RSS1002-******-W2-E*, RSS1002-******-W2-P*, RSS1002-******-W2-E-P*

(Le 1er au 3ème "*" peut être remplacé par trois chiffres de 001 à 090, indiquer la plage de puissance de sortie de 0,1 à 9 W, le pas minimum de 0,1 W, par ex. 001 = 0.1W, 090 = 9W
Les 4ème à 6ème "*" peuvent être remplacés par trois chiffres de 024 à 300, indiquer la plage de tension de sortie de 2.4 à 30Vac, le pas minimum de 0,1 V, par ex. 024 = 2.4 Vcc, 300 = 30.0 Vcc.
Le 7ème "*" peut être H ou vide, représentent différentes tensions d'entrée utilisées, H indique la tension d'entrée 100-120Vac, vide indique la tension d'entrée 100-240Vac)

Eingang: 100-240V~, 50/60Hz, 0.2A or 100-120V~, 50/60Hz, 0.2A

Ausgang: 2.4-30.0Vdc, 0.01-1.5A

Pour se conformer aux normes de sécurité publiées, les conditions suivantes doivent être observées lors de l'utilisation de cette alimentation de commutation.

Notez :

CONSIGNES DE SÉCURITÉ IMPORTANTES – sauvent (économisent) CES INSTRUCTIONS et DANGER - POUR RÉDUIRE LE RISQUE DU FEU OU LA DÉCHARGE ÉLECTRIQUE, SOIGNEUSEMENT FORLLOW CES INSTRUCTIONS.

1 L'alimentation est certifié selon la normes de sécurité UL1310, CSA C22.2 pertinente.
2 La puissance de sortie prise de l'alimentation ne doit pas dépasser l'indice sur l'adaptateur.
3 L'alimentation à découpage n'est pas conçu pour être réparé par le personnel de service en cas de panne ou défaut de composant (unité peut être jeté).
4 Dispositif équipement de déconnexion est considéré comme fiche de l'appareil.
5 Cette unité de puissance est destiné à être correctement orienté dans une position verticale ou monter.
6 Pour le raccordement à une alimentation pas aux Etats-Unis, utilisez un adaptateur de fiche accessoire de configuration correcte pour la prise de pouvoir, si nécessaire.

7.0 Illustrations

Illustration 7 - Model list

Class 2 power supply
Model: RSS1002-******-W2*, RSS1002-******-W2-U*, RSS1002-******-W2-B*, RSS1002-******-S*, RSS1002-******-S-U*, RSS1002-******-W2-F*, RSS1002-******-W2-D*, RSS1002-******-W2-E*, RSS1002-******-W2-P*, RSS1002-******-W2-E-P* ('*' are variables, see below tables for details)
Input: 100-240V~, 50/60Hz, 0.2A or 100-120V~, 50/60Hz, 0.2A
Output: 2.4-30.0Vdc, 0.01-1.5A

Table A :	**Definition of Variables**	
1st to 3rd	001-090	Represent output power from 0.1-9.0W, minimum step by 0.1W. eg:001=0.1W, 090=9W
4th to 6th	024-300	Represent output voltage from 2.4V-30.0V, minimum step by 0.1V. eg:024=2.4Vdc, 300=30.0Vdc
7th	H or blank	Represent different input voltage used. H indicate input voltage 100-120Vac, blank indicate input voltage 100-240Vac

Table B: model list

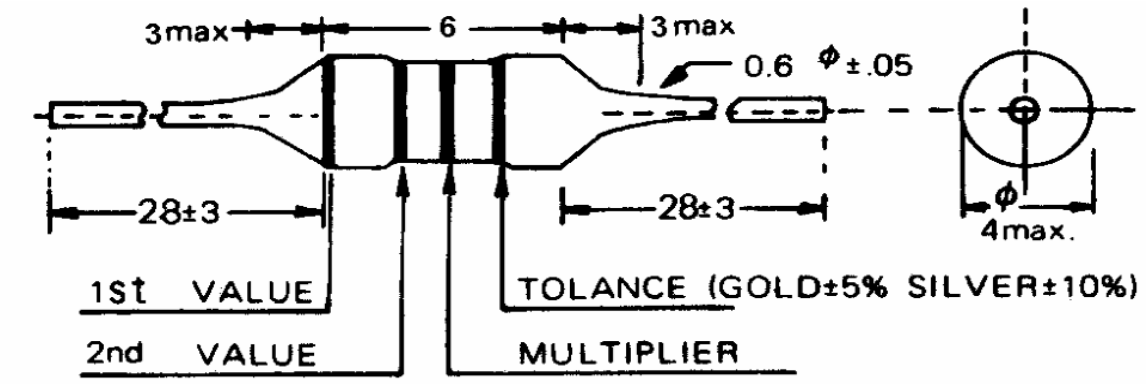
Model	Input	Voltage (Vdc)	Current (A)	Max. Output Power (W)	Transformer (T1)
RSS1002-******-W2*, RSS1002-******-W2-U*, RSS1002-******-W2-B*, RSS1002-******-S*, RSS1002-******-S-U*, RSS1002-******-W2-F*, RSS1002-******-W2-D*, RSS1002-******-W2-E*, RSS1002-******-W2-P*, RSS1002-******-W2-E-P*	100-240V~, 50/60Hz, 0.2A or 100-120V~, 50/60Hz, 0.2A	2.4V-6.0V	0.01A-1.5A	7.5W	G105B0330 X105B0330
		6.1V-16.0V	0.01A-1.25A	9W	
		16.1V-30.0V	0.01A-0.56A	9W	G105B0550 X105B0550

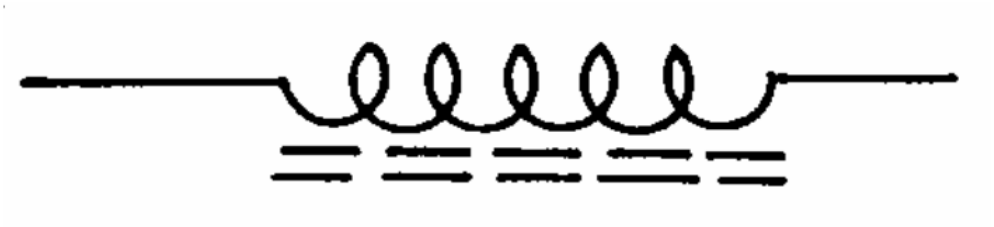
Note:
For the output voltage, the rise step is 0.1V. For the output current, the rise step is 0.01A.

Model different			
Model	Case	Schematic	PCB
RSS1002-******-W2*	Horizontal case 1	A	1
RSS1002- ******-W2-B*	Vertical case	A	1
RSS1002-******-W2-U*	Horizontal case 2 for USB output	A	2
RSS1002-******-S*	Detachable plug horizontal case	A	2
RSS1002-******-S-U*	Detachable plug horizontal case for USB output	A	2
RSS1002-******-W2-F*	Horizontal case 3	A	3
RSS1002-******-W2-E*	Horizontal case 4	A	1
RSS1002-******-W2-P*	Horizontal case 1	B	4
RSS1002-******-W2-E-P*	Horizontal case 4	B	4
RSS1002-******-W2-D*	Horizontal case 1 with LED	C	5

7.0 Illustrations

Illustration 8 - Choke line (L1)

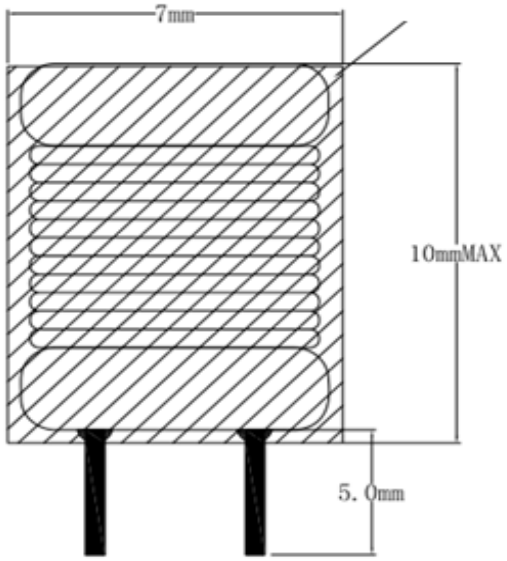


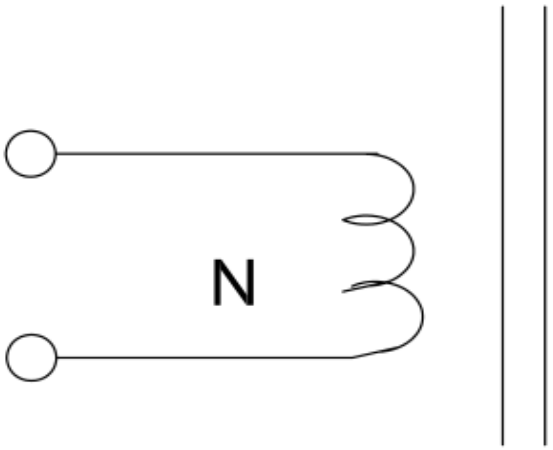


Poles	**N1**
Wire	**Φ 0.06mm (2uew)**
Turns	**270Ts**

7.0 Illustrations

Illustration 9 - Choke line (L1, L2)





TURNS	200Ts(REF)
WIRE SIZE(2UEW)	Ø0.15x1p
CORE FORM	Ø6X8.0

8.0 Test Summary

Evaluation Period	10-Apr-18 to 10-May-18			Project No.	HK18040449
Sample Rec. Date	03-May-18	Condition	Prototype	Sample ID.	#1
Test Location	Intertek Testing Services Hong Kong Ltd.				
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 1310:2011 Ed.6+R:01Feb2017 Clause	CSA C22.2#223:2015 Ed.3 Clause	UL 746C, 6th Edition, rev. June 23, 2015 Clause
Leakage Current test	26	6.6	--
Leakage Current Test and Dielectric Voltage Withstand Test After Humidity Exposure	27	--	--
Maximum Output Voltage Test	28	--	--
Maximum Input Test	29	--	--
Output Current and Power Test	30	--	--
Full-Load Output Current Test	32	--	--
Normal Temperature Test	33	6.4	--
Dielectric Voltage Withstand test	34	6.5	--
Abnormal Tests	39	6.8	--
Tests on Insulating Materials	40	6.14	--
Strain Relief Test	41	--	--
Push Relief Test	42	--	--
Abuse Tests	46	--	--
Rating	--	6.3	--
Secondary Circuit Protection	--	6.7	--
Drop and Impact	--	6.9	--
Strain Relief and Blade Retention	--	6.10	--
Securment of Components	--	6.12	--
Strain Relief Test after Mold Stress Relief Distortion Test	--	--	31
Mold Stress Relief Distortion Test	--	--	61

Remark:
- The USB output of this appliance met the voltage requirements of USB specification.

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:	Vincent Wan	Reviewed by:	Lam Chi Ho
Title:	Engineer	Title:	Manager
Signature:	Vincent Digitally signed by Vincent Wan Location: Intertek Testing Services HK LTD.	Signature:	Digitally signed by Lam Chi Ho Location: Intertek Testing Services HK LTD.

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	Dongguan GaoYi Electronic Co., Ltd.
Address	West Sha Yao Road, XiSha Road ShiJie Town, Dongguan, Guangdong
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 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 Hong Kong Limited
ETL Component Evaluation Center
Unit H, 3/F., Garment Centre, 576 Castle Peak Road
Kowloon, Hong Kong
Attn: Sample Room
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, contractors, 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:

Product	Test Voltage	Test Time
All products covered by this Report.	1200V	1 s
(Input and Output, Input and accessible Surface, Primary winding and secondary winding)	or	
	1000V	60 s

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
				None