

UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Listing
CCN:	QQGQ, QQGQ7 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	ITE POWER SUPPLY
Model:	GTX46401-WWVV-X.XZ X part can be "M" or "-" or "H" for market identification and not related to safety. WW denotes the rated output wattage designation, with a maximum value of 40. VV denotes the standard rated output voltage designation, which can be 12, 15, 19, 24. -X.X is optional deviation, subtracted from standard output voltage, which is -4.0 or blank. Z denote any six character = 0-9 or A-Z or ([] or - or blank for marketing purposes.
Rating:	I/P: 100-240Vac, 50-60Hz, 1.0A O/P: See Miscellaneous 7-01 for details.
Applicant Name and Address:	GLOBTEK (HONG KONG) LTD UNIT 1402, BENSON TOWER 74 HUNG TO RD KWUN TONG KOWLOON HONG KONG

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Nat Liu/ Amos Chen

Reviewed by: Kyle Lin

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

This equipment is a direct plug-in adapter with electrical components mounted on PWB and enclosed within plastic enclosure secured by ultrasonic welding.

Model Differences

All Models are similar to each other except for output rating, transformer, rating of Secondary components, Storage Capacitor (C1), current sense resistors (R1) and model designation. See Miscellaneous 7-01 for details.

Technical Considerations


- Equipment mobility : direct plug-in
- Connection to the mains : pluggable A
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class II (double insulated)
- Considered current rating of protective device as part of the building installation (A) : 20A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : Up to 4000 meters
- Altitude of test laboratory (m) : less than 2000 meters
- Mass of equipment (kg) : Maximum 0.24 kg
- The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: 40°C
- The means of connection to the mains supply is: Pluggable A

- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: Plug
- The product was investigated to the following additional standards: (1) The product was evaluated to be operated up to 4000 m above sea level per Annex G and the multiplication factor (1.29, linear interpolation used) of table A.2 of IEC 60664-1, Edition 2.0: 2007 was applied to determine the minimum required clearance; (2) The product was evaluated to the maximum acceptable moment, center of gravity, dimensions and weight of the product in accordance with UL 1310; (3) The blade dimension was evaluated to be complied with NEMA configurations in accordance with Wiring Devices-Dimensional Specifications, ANSI/NEMA WD6.
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: Bridging capacitor CY101 secondary circuit.
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): Secondary output.
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- LEDs provided in the product are considered low power devices: Yes

Additional Information

N/A

Markings and instructions

Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
Power rating - Class II symbol	Symbol for Class II construction  (60417-2-IEC-5172)
Fuses - Non-operator access/soldered-in fuses	Unambiguous reference to service documentation for instructions for replacement of fuses replaceable only by service personnel
Fuses - Rating	Rated current and voltage and type located on or adjacent to fuse or fuseholder.

LPS Marking (Optional)	Marked "LPS" or "Limited Power Source"
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Special Instructions to UL Representative

Inspect the transformer(s) listed in BD1.1 per AA1.1- (C). When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in BD1.1 is conducted at the component manufacturer. The test record noted above shall be submitted to the manufacturer from transformer manufacturer. The test record can be in the form of a actual test record. A stamp or sticker on the transformer or other method verifying the routine test is being completed on 100% production is also acceptable.

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
All models in this report	Transformer T1	--	Primary Pin to Secondary Pin	300 0	4242	1

Earthing Continuity Test Exemptions - This test is not required for the following models:

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Electric Strength Test Exemptions - This test is not required for the following models:

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Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:

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Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
N/A					

1.5.1	TABLE: list of critical components					Pass
Object/part or Description	Manufacturer/ trademark	type/model	technical data	Product Category CCN(s)	Required Marks of Conformity	Supplement ID
01. Enclosure and Replaceable plug holder material	SABIC INNOVATIVE PLASTICS	SE1X(GG)(f1)	Two pieces construction, secured together by ultrasonic welding, rated V-1 or better, 130 degree C min. Minimum 2.0 mm thickness. See Enclosure/Diagram ID 4-06 for dimensions	QMFZ2	UL	
02. Input Blades	--	--	Solid copper, non-grounding, non-polarized, NEMA 1-15P configuration, integrally molded on Bottom Enclosure. Spaced minimum 5.1 mm from perimeter edge of Enclosure.	--	--	
03. Fuse (FS1)	Various	Various	Listed, T2AL 250Vac	JDYX	UL	
03a. Fuse (FS1) (Alternate)	Conquer Electronics Co Ltd	MST	Rated T2AL 250Vac	JDYX2	UL	
03b. Fuse (FS1) (Alternate)	Ever Island Electric Co Ltd & Walter Electric	2010	Rated T2AL 250Vac	JDYX2	UL	
03c. Fuse (FS1) (Alternate)	COOPER BUSSMANN LLC	SS-5	Rated T2AL 250Vac	JDYX2	UL	
03d. Fuse (FS1) (Alternate)	Bel Fuse Inc	RST	Rated T2AL, 250Vac.	JDYX2	UL	
03e. Fuse (FS1) (Alternate)	DONGGUAN BETTER ELECTRONIC TECHNOLOGY CO LTD	932	Rated T2AL, 250Vac.	JDYX2	UL	
03f. Fuse (FS1) (Alternate)	HOLLYLAND CO LTD	5ET	Rated T2AL, 250Vac.	JDYX2	UL	
04. X-Capacitor (CX1)	Cheng Tung Industrial Co Ltd	CTX	Rated max 0.33 uF, min 250 V, X1 or X2 type, 110 degree C. (Compliance with IEC 60384-	FOWX2	UL	

			14, the duration of damp heat, steady state test is 21 days)			
04a. X-Capacitor (CX1) (Alternate)	Tenta Electric Industrial Co Ltd	MEX	Rated max 0.33uF, min 250 V, X1 or X2 type, 100 degree C. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
04b. X-Capacitor (CX1) (Alternate)	Ultra Tech Xiphi Enterprise Co Ltd	HQX	Rated max 0.33 uF, min 250 V, X1 or X2 type, 100 degree C. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
04c. X-Capacitor (CX1) (Alternate)	CARLI ELECTRONICS CO LTD	MPX	Rated max 0.33uF, min 250 V, X1 or X2 type, 100 degree C. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
04d. X-Capacitor (CX1) (Alternate)	JOEY ELECTRONICS (DONG GUAN) CO LTD	MPX	Rated max 0.33uF, min 250 V, X1 or X2 type, 105 degree C. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
04e. X-Capacitor (CX1) (Alternate)	XIANGTAI ELECTRONIC (SHENZHEN) CO LTD	MKP/MPX	Rated max 0.33uF, min 250 V, X1 or X2 type, 110 degree C. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
05. Bleeder Resistor (RS1, RS2)	--	--	Max. 1.5MOhm, min. 1/4W	--	--	
06. Bleeder Resistor (RS3)	--	--	Max. 510KOhm, min. 1/4W	--	--	
07. Bridge Diode (BD1)	--	--	Rated 4A, minimum 600 V.	--	--	
08. Storage Capacitor (C1) (For models GT-46401- 3012, GT-46401-3015, GT-46401-3319, GT-	--	--	Rated 400 V, max. 68uF, min. 105 degree C, provided with integral pressure relief	--	--	

46401-3024-4.0, GT-46401-3024)						
09. Storage Capacitor (C1) (For models GT-46401-3612, GT-46401-4015, GT-46401-4019, GT-46401-4024-4.0, GT-46401-4024)	--	--	Rated 400 V, max. 82uF, min. 105 degree C, provided with integral pressure relief	--	--	
10. Transistor (Q1)	--	--	Rated 6-10 A, minimum 600 V.	--	--	
11. Bridge Capacitors (CY1) (optional)	Success Electronics Co Ltd	SE, SB	Rated max. 1000pF, min. 250 Vac, 125 degree C, Y1 type. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
11a. Bridge Capacitors (CY1) (optional) (Alternate)	TDK-EPC CORPORATION	CD	Rated max. 1000pF, min. 250 Vac, 125 degree C, Y1 type. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
11b. Bridge Capacitors (CY1) (optional) (Alternate)	Walsin Technology Corp	AH	Rated max. 1000pF, min. 250 Vac, 125 degree C, Y1 type. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
11c. Bridge Capacitors (CY1) (optional) (Alternate)	Haohua Electronic Co	CT 7	Rated max. 1000pF, min. 250 Vac, 125 degree C, Y1 type. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
11e. Bridge Capacitors (CY1) (optional) (Alternate) (Alternate)	XIANGTAI ELECTRONIC (SHENZHEN) CO LTD	YOB, YOF, YOE	Rated max. 1000pF, min. 250 Vac, 125 degree C, Y1 type. (Compliance with IEC 60384-14, the duration of damp heat, steady state test is 21 days)	FOWX2	UL	
12. Optical Isolator (U1)	Lite-On Technology Corp	LTV-817	Isolation: 5000 Vac, minimum 100 degree C. DTI=0.4mm	FPQU2	UL	

			minimum.			
12a. Optical Isolators (U1) (Alternate)	Everlight Electronics Co Ltd	EL817	Isolation: 5000 Vac, minimum 110 degree C. DTI=0.4mm minimum.	FPQU2	UL	
12b. Optical Isolators (U1) (Alternate)	COSMO ELECTRONICS CORP	K1010	Isolation voltage minimum 5000 Vac, minimum 115 degree C. DTI=0.4mm minimum.	FPQU2	UL	
12c. Optical Isolators (U1) (Alternate)	BRIGHT LED ELECTRONICS CORP	BPC-817XXXXXX, BPC-817MXXXXXX, BPC-817SXXXXXX, where XXXXXX can be any alphanumeric character or blank.	Isolation voltage minimum 5000 Vac, minimum 100 degree C. DTI=0.4mm minimum.	FPQU2	UL	
12d. Optical Isolators (U1) (Alternate)	RENESAS ELECTRONICS CORPORATION	PS2561-1	Isolation voltage minimum 5000 Vac, minimum 100 degree C. DTI=0.4mm minimum.	FPQU2	UL	
13. Line filter (LF2)	--	NF00025	Open type construction. Rated 130 degree C. See Enclosure / Diagram ID 4-05 for construction details.	--	--	
13-01. Core	--	--	Ferrite, overall measured overall 8 mm by 4 mm by 4mm	--	--	
13-02. Coil	Various	Various	Rated minimum 130 degree C.	OBMW2	UL	
13-03. Tubing/Sleeving	Various	Various	Rated 200 degree C, VW-1, 600V max.	YDPU2	UL	
13-04. Triple Insulated Wire	Various	Various	Rated minimum 130 degree C	OBJT2	UL	
13-05. Varnish	Various	Various	Rated minimum 200 degree C.	OBOR2	UL	
14. Line filter (LF1)	--	NF00124	Open type construction. Rated 130 degree C. See Enclosure / Diagram ID 4-04 for construction details.	--	--	

14-01. Core	--	--	Ferrite, overall measured overall 16 mm by 12mm by 8mm.	--	--	
14-02. Coil	Various	Various	Rated minimum 130 degree C.	OBMW2	UL	
14-03. PWB	Various	Various	V-2 or better, minimum 130 degree C.	ZPMV2	UL	
14-04. Varnish	Various	Various	Rated minimum 200 degree C.	OBOR2	UL	
14-05. Insulation Tape (Alternate)	Various	Various	Rated minimum 130 degree C.	OANZ2	UL	
15. Transformer (T1) (for GT-46401-3612, GT-46401-4015, GT-46401-3012, GT-46401-3015)		XF00936	Class B, See Enclosure / Diagram ID 4-01 for construction details.	--	--	
15-a. Transformer (T1) (for GT-46401-4019, GT-46401-4024-4.0, GT-46401-3024-4.0, GT-46401-3319)		XF00945	Class B, See Enclosure / Diagram ID 4-02 for construction details.	--	--	
15-b. Transformer (T1) (for GT-46401-4024, GT-46401-3024)		XF00946	Class B, See Enclosure / Diagram ID 4-03 for construction details.	--	--	
15-01. Insulation system for Transformer (T1)		130-1	Insulation system Class B (130 degree C, adapted form GREAT LEOFロン INDUSTRIAL CO LTD, Type GH-130)	OBJY2	UL	
15-02. Core	--	--	RM10 Type, Ferrite, dimension 30mm by 20 mm by 9.2mm	--	--	
15-03. Coil	Various	Various	130 degree C	OBMW2	UL	
15-04. Bobbin	Chang Chun Plastics Co., Ltd.	T375J	V-0, 150degree C, Phenolic, thickness 0.8mm minimum	QMFZ2	UL	
15-04a. Bobbin (Alternate)	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150degree C, Phenolic, thickness 0.71mm minimum	QMFZ2	UL	
15-05. Tubing/Sleeving	Great Holding Industrial Co. Ltd.	TFL, TFS, TFT	Rated 200 degree C, VW-1, 600V max.	YDPU2	UL	
15-06. Triple Insulated Wire	Great Leoflon Industrial Co. Ltd.	TRW(B)	130 degree C	OBJT2	UL	

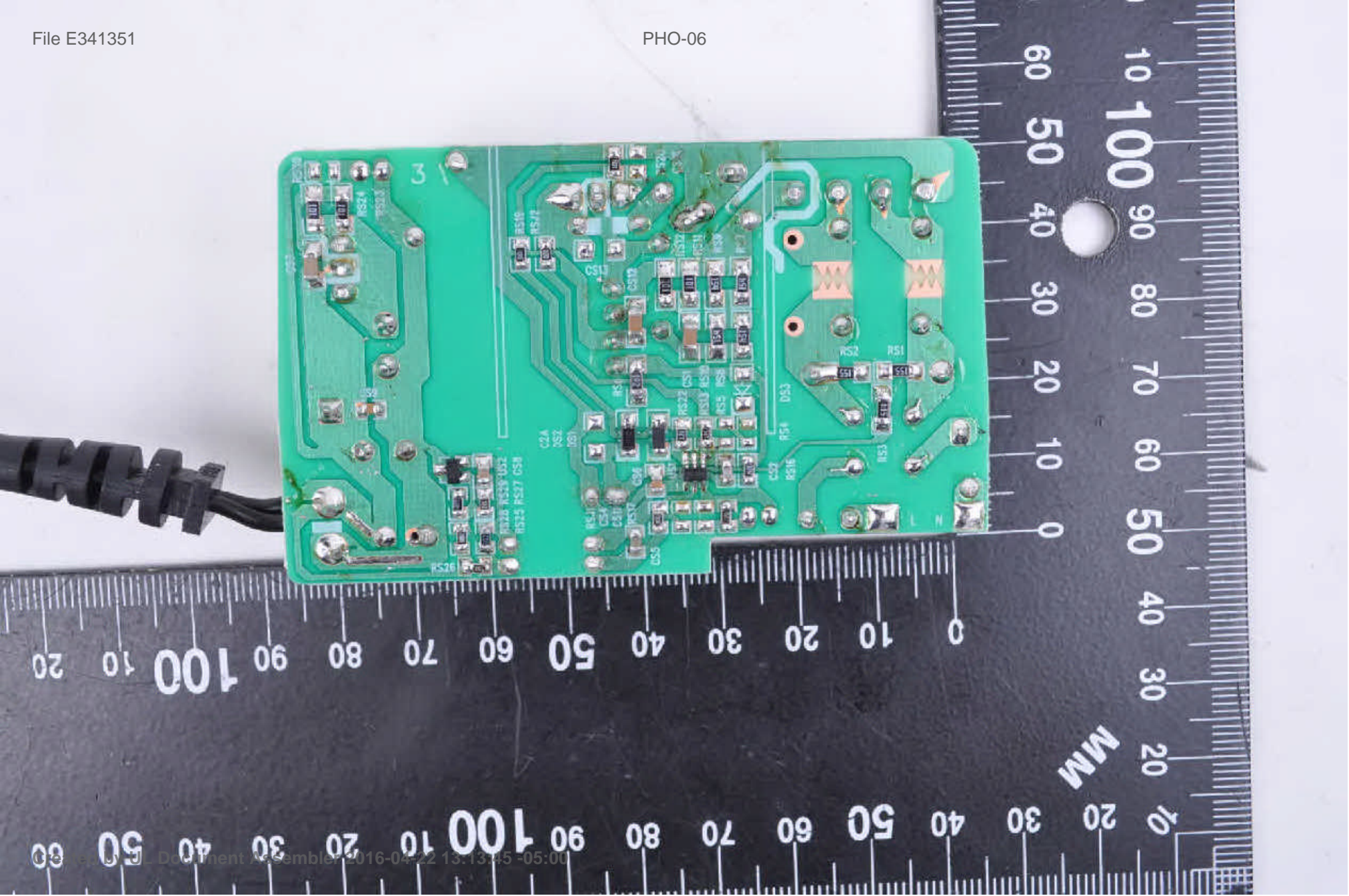
15-07. Varnish	John C. Dolph Co.	BC-346A	Rated minimum 200 degree C.	OBOR2	UL	
15-07a. Varnish (Alternate)	Elantas Electrical Insulation Elantas Pdg Inc	V1630FS	Rated minimum 130 degree C.	OBOR2	UL	
15-08. Insulation Tape	3M Company	1350F-(#)	130 degree C.	OANZ2	UL	
15-08a. Insulation Tape (Alternate)	3M Company	1350T-1	130 degree C.	OANZ2	UL	
15-08b. Insulation Tape (Alternate)	BONDTEC PACIFIC CO LTD	370S	130 degree C.	OANZ2	UL	
16. Strain Relief Of Output Cord	Various	Various	PVC bushing integrally molded on output cord. See Enclosure - Diagrams 4-07 for dimensions details.	QMFZ2	UL	
17. Output Cable	Various	Various	Rated Minimum 30 V, Minimum 80 degree C, Maximum 3.05 m long, marked VW-1 or FT-1. Terminates with a polarized connector outside enclosure.	AVLV2	UL	
18. PWB	Various	Various	V-0 or better, minimum 105 degree C.	ZPMV2	UL	
19. Label	Various	Various	Minimum 70 degree C. if maximum surface temperature not specified.	PGDQ2, PGJI2	UL	
20. Heat Sink (HS1) (Consideration as Primary)	--	--	Aluminum, minimum 2.0 mm thick. See Enclosure 4-09 for detailed dimensions.	--	--	
21. Heat Sink (HS2) (Consideration as Secondary)	--	--	Aluminum, minimum 2.0 mm thick. See Enclosure 4-10 for detailed dimensions.	--	--	
22. Current sense resistor (R1) (For models GT-46401- 3012, GT-46401-3015, GT-46401-3319, GT- 46401-3024-4.0, GT-	--	--	0.3 ohm, 2W.	--	--	

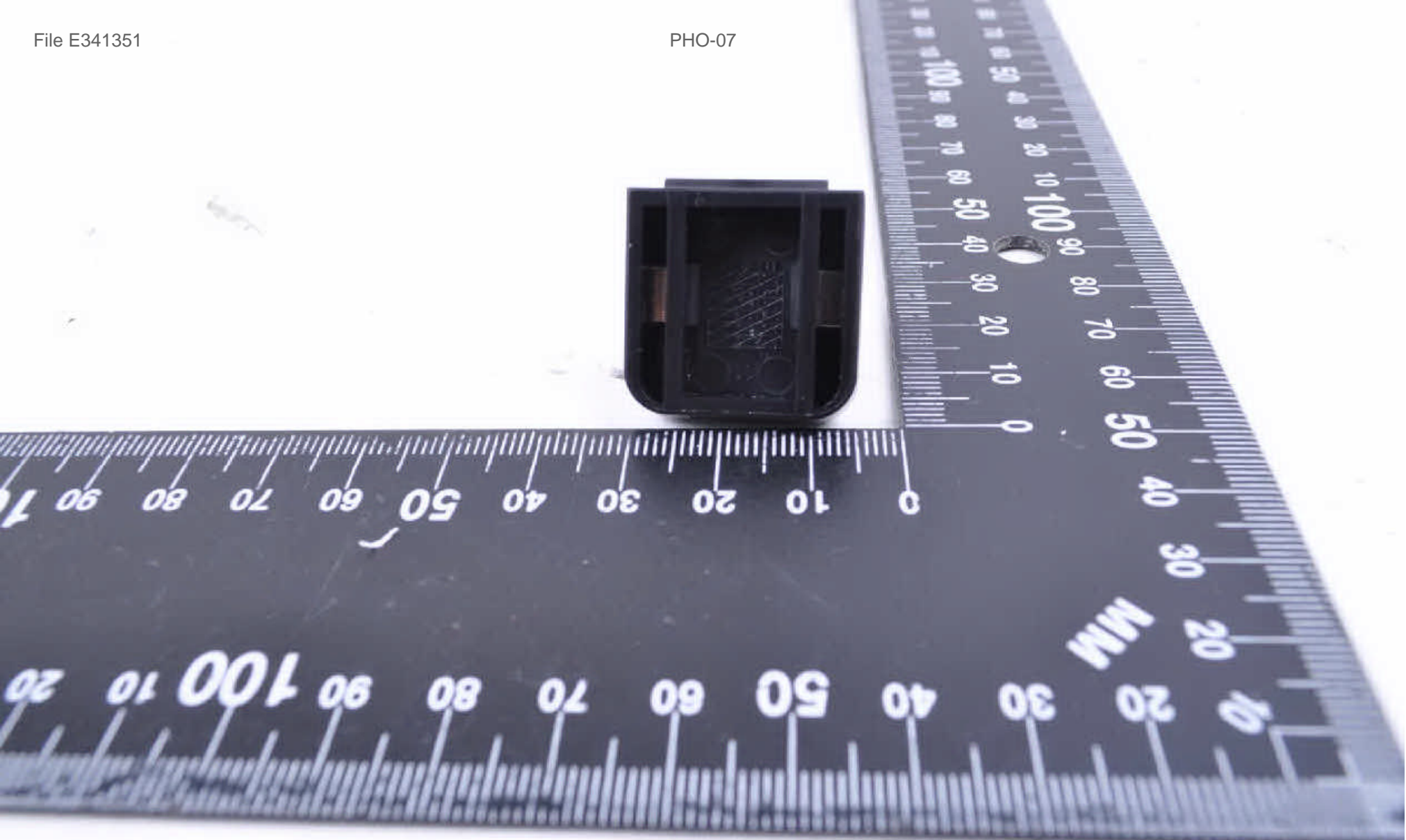
46401-3024)						
22a. Current sense resistor (R1) (For models GT-46401-3012, GT-46401-3015, GT-46401-3319, GT-46401-3024-4.0, GT-46401-3024)	--	--	0.33 ohm, 2W.	--	--	
22b. Current sense resistor ((R1) (For models GT-46401-3612, GT-46401-4015, GT-46401-4019, GT-46401-4024-4.0, GT-46401-4024)	--	--	0.27 ohm, 2W.	--	--	
23. Internal Plastic Material	Various	Various	Rated V-2 minimum.	QMFZ2	UL	

Enclosures

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Photographs	3-01	Overall view-1
Photographs	3-02	Overall view-2
Photographs	3-03	Overall view-3
Photographs	3-04	Internal view
Photographs	3-05	PWB top view
Photographs	3-06	PWB bottom view
Photographs	3-07	Plug holder
Diagrams	4-01	Transformer T1 Specification (for Model GT-46401-3612, GT-46401-4015, GT-46401-3012, GT-46401-3015)
Diagrams	4-02	Transformer T1 Specification (for Models GT-46401-4019, GT-46401-3319)
Diagrams	4-03	Transformer T1 Specification (for Model GT-46401-4024, GT-46401-3024)
Diagrams	4-04	Line filter (LF1)
Diagrams	4-05	Line filter (LF2)
Diagrams	4-06	Enclosure dimensions
Diagrams	4-07	Strain Relief Means dimensions
Diagrams	4-08	Plug dimensions
Diagrams	4-09	Heat Sink (HS1) dimensions
Diagrams	4-10	Heat Sink (HS2) dimensions
Schematics + PWB	5-01	Main Board PWB Layout
Miscellaneous	7-01	Model Difference

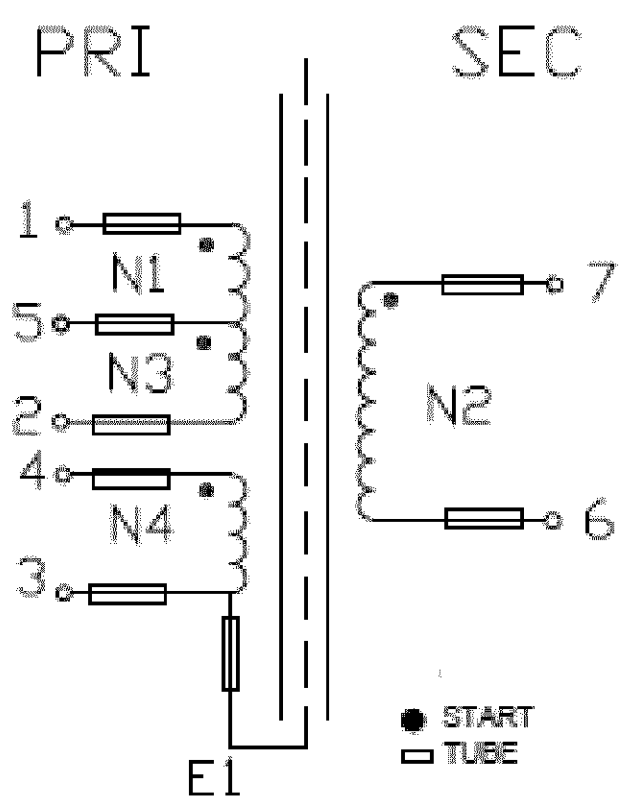




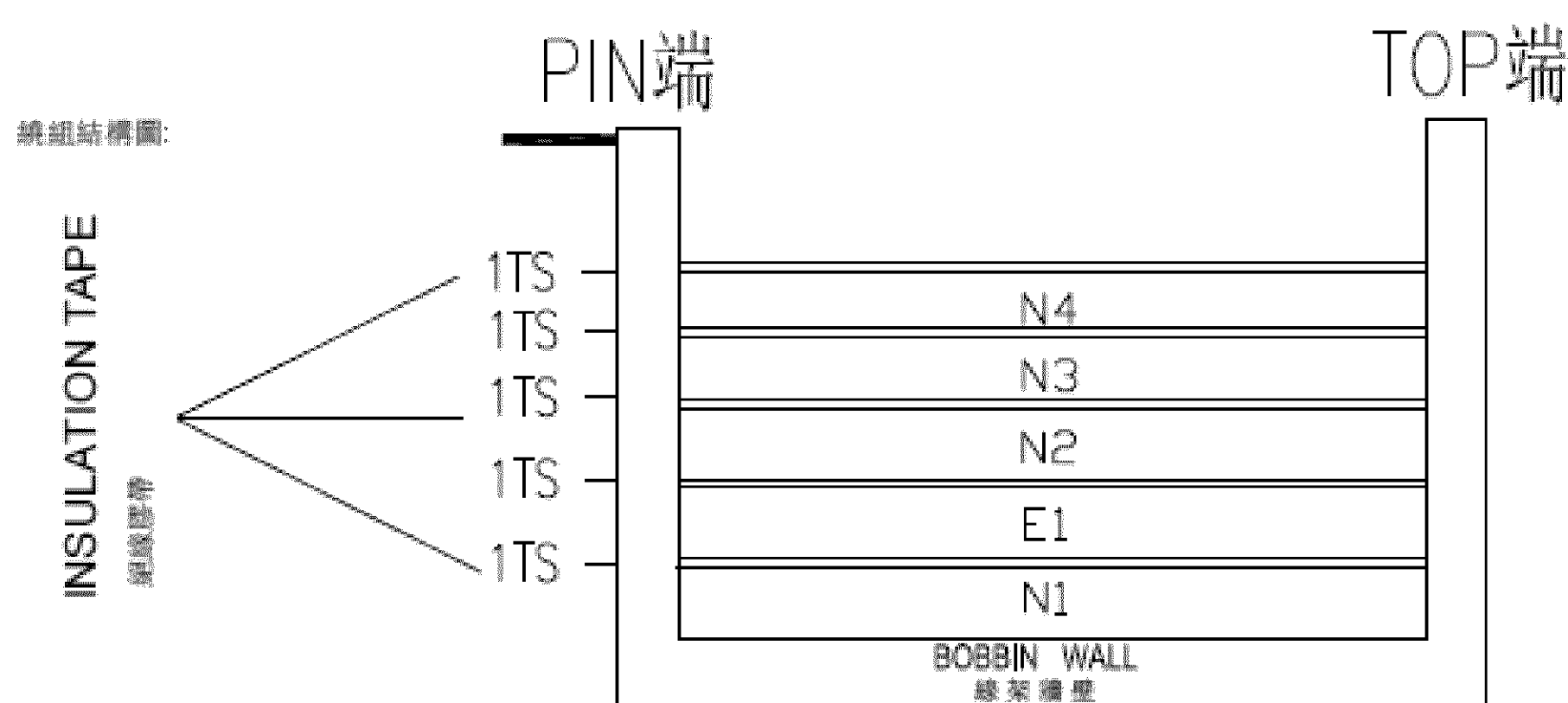


SPECIFICATION

SCHEMATIC:



WINDING CONSTRUCTION:



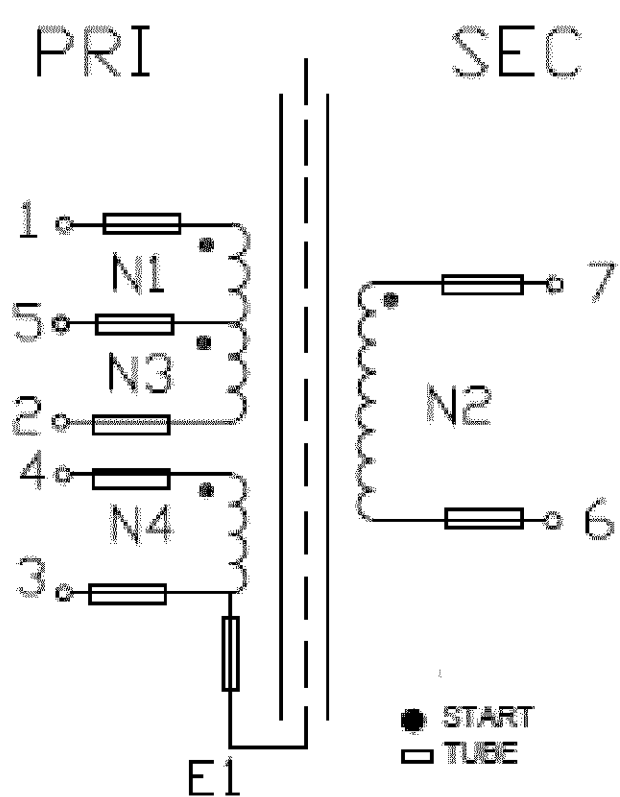
4. WINDING TABLE

WINDING 繞組	始端		終端		WIRE 銅線線徑 2UEW	WDG. TURNS 卷繞圈數	槽牆膠帶規格		鐵氟龍套管		線頭線尾膠帶 (mm)		TAP 膠帶 (0.025*11mm)	REMARK 備註
	PIN	位置	PIN	位置			S	F	規格用量 (0.025*7mm)	規格用量 (0.025*11mm)				
N1	1		5		0.30mm*2P	29Ts			#23	#23			1Ts	密繞2層, 加 層間膠帶
E1	3				0.025mm*8mmCU	0.9Ts			#28				1Ts	層中繞
N2	7		6		TRW(B)0.9mm*1P	7Ts			#17	#17			1Ts	密繞
N3	5		2		0.30mm*2P	20Ts			#23	#23			1Ts	密繞2層, 加 層間膠帶
N4	4		3		0.30mm*1P	9Ts			#28	#28			1Ts	層中密繞

DESCRIPTION	TRANSFORMER	Customer P/N	XF00936	DATE	2015/5/21
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SPECIFICATION

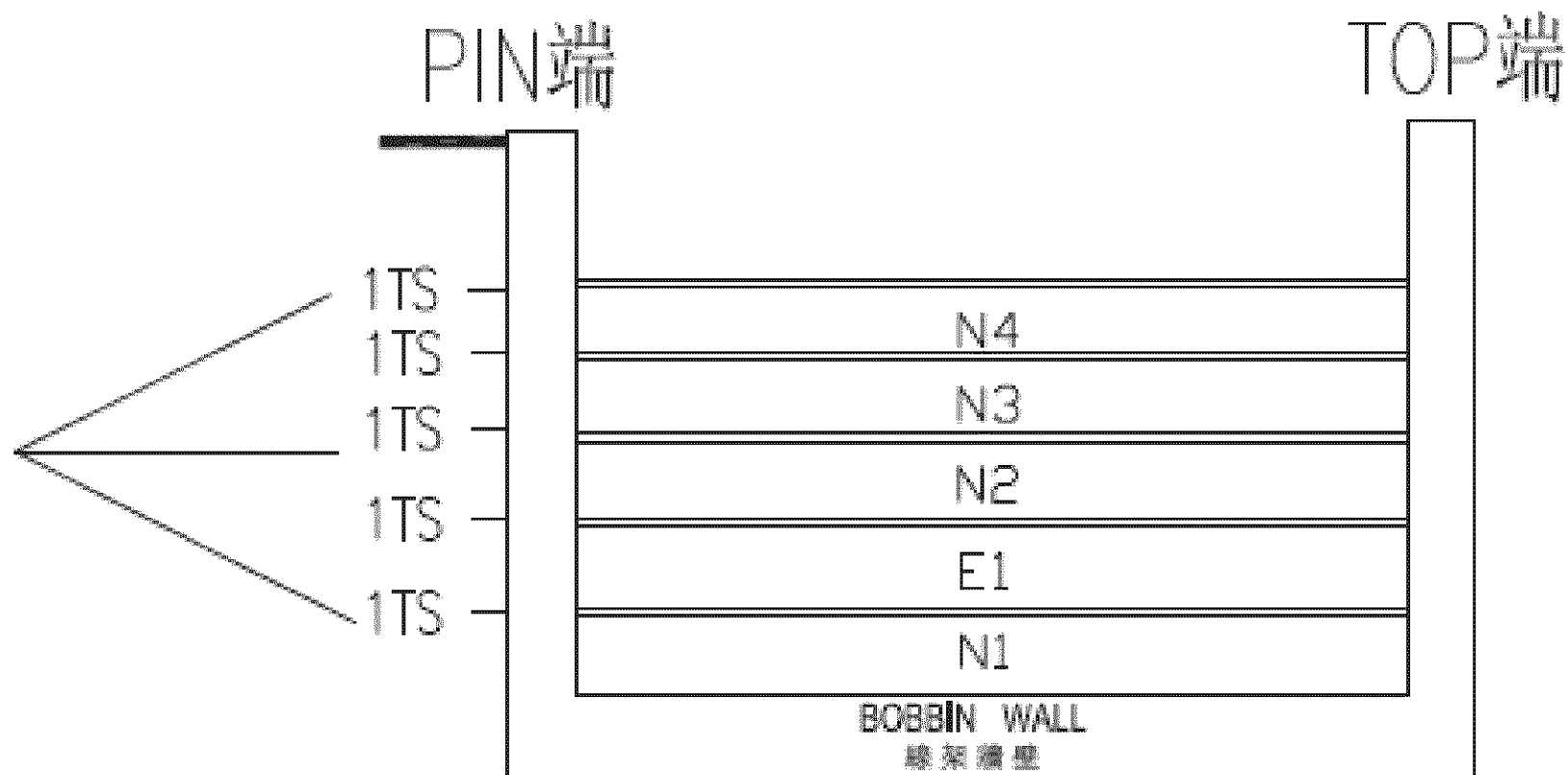
SCHEMATIC:



WINDING CONSTRUCTION:

繞組結構圖:

INSULATION TAPE
絕緣膠帶



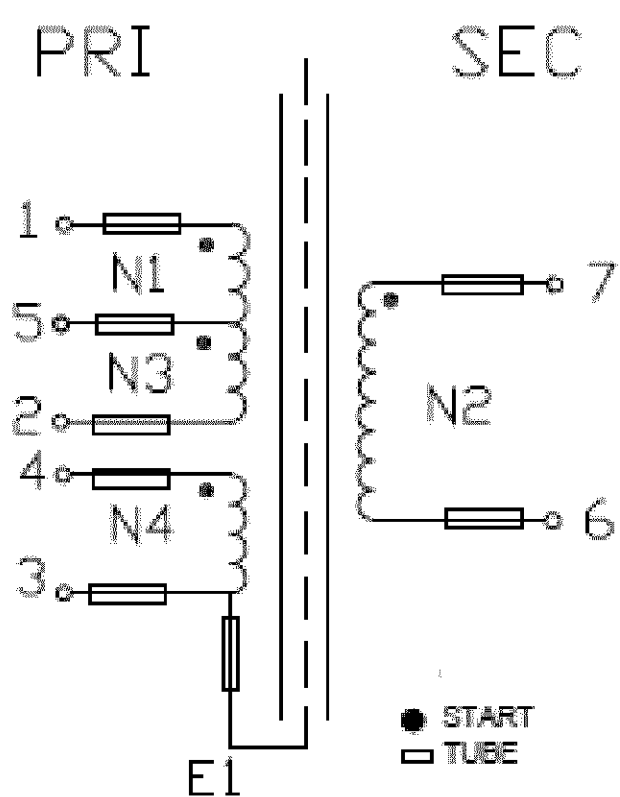
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WINDING 繞組	始端		終端		WIRE 銅線線徑 2UEW	WDG. TURNS 卷繞圈數	槽牆膠帶規格		鐵氟龍套管		線頭線尾膠帶 (mm)		TAPES 膠帶 (0.025*11mm)	REMARK 備註
	PIN	位置	PIN	位置			S	F	規格用量 (0.025*7mm)					
N1	1		5		0.30mm*2P	29Ts			#23	#23			1Ts	密繞2層, 加 層間膠帶
E1	3				0.025mm*8mmCU	0.9Ts			#28				1Ts	居中繞
N2	7		6		TRW(B)0.8mm*1P	9Ts			#18	#18			1Ts	密繞
N3	5		2		0.30mm*2P	20Ts			#23	#23			1Ts	密繞2層, 加 層間膠帶
N4	4		3		0.30mm*1P	9Ts			#28	#28			1Ts	居中密繞

DESCRIPTION	TRANSFORMER	Customer P/N	XF00945	DATE	2015/5/21
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SPECIFICATION

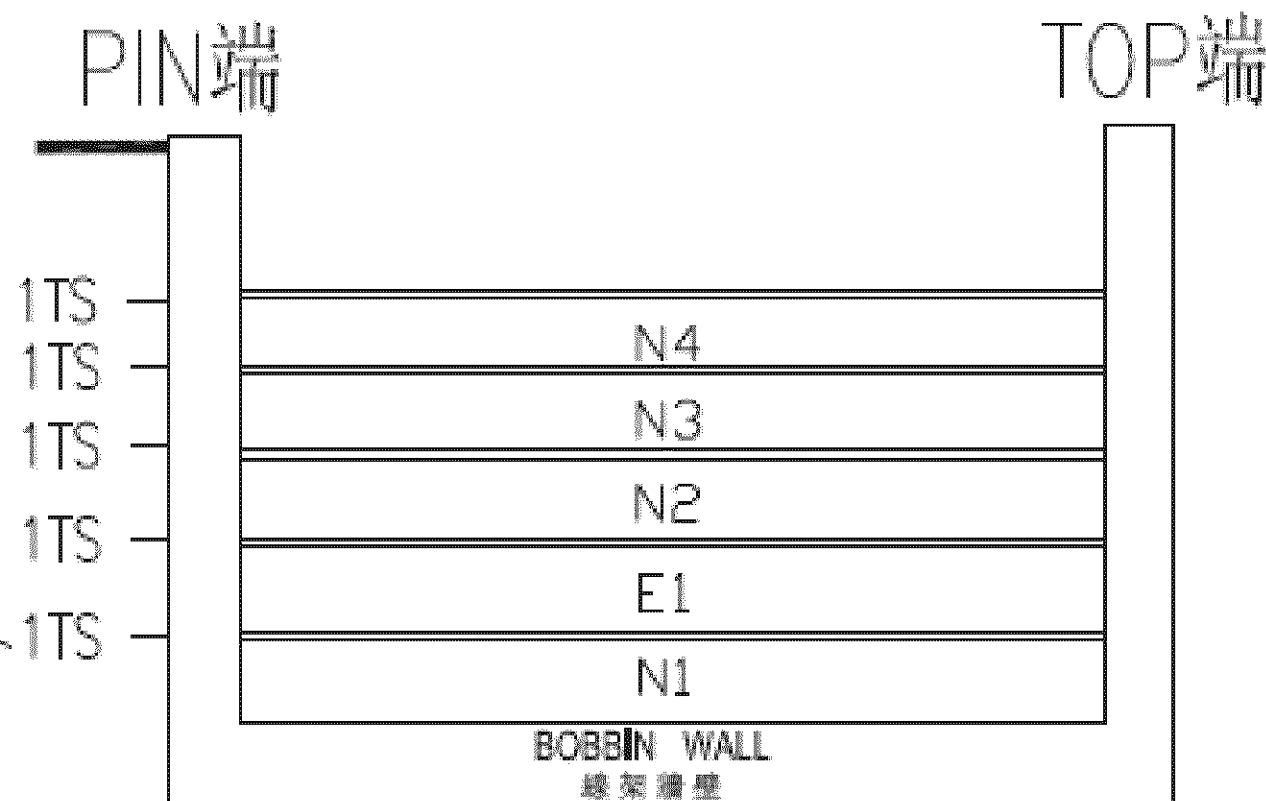
SCHEMATIC:



WINDING CONSTRUCTION:

繞組結構圖:

INSULATION TAPE
絕緣膠帶



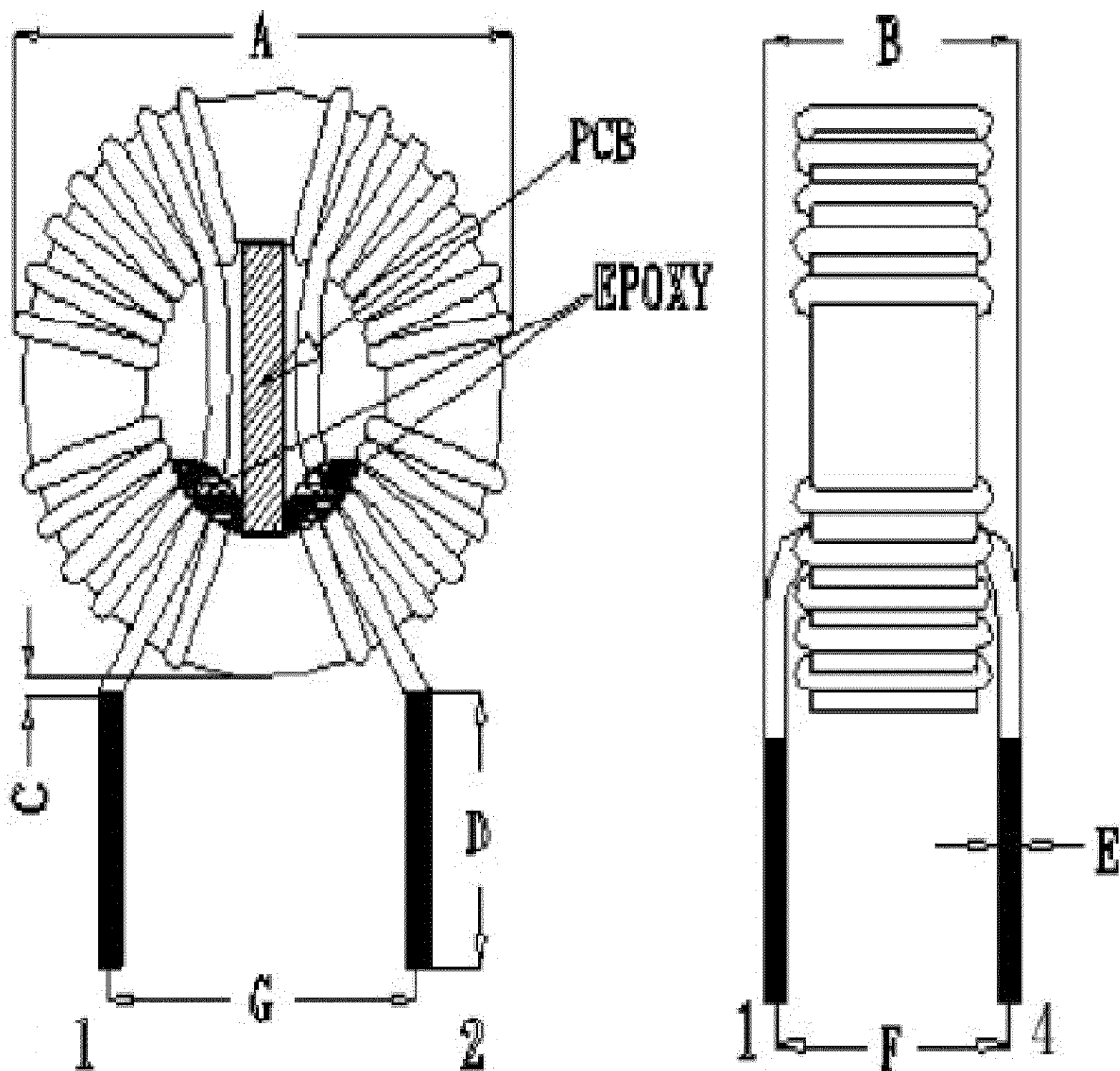
4. WINDING TABLE

WINDING 繞組	始端		終端		WIRE 銅線線徑 2UEW	WDG. TURNS 卷繞圈數	槽牆膠帶規格		鐵氟龍套管		線頭線尾膠帶 (mm)		TAPES 膠帶 (0.025*11mm)	REMARK 備註
	PIN	位置	PIN	位置			S	F	規格用量 (0.025*7mm)	規格用量 (0.025*11mm)				
N1	1		5		0.30mm*2P	29Ts			#23	#23			1Ts	密繞3層, 加 層間膠帶
E1	3				0.025mm*8mmCU	0.9Ts			#28				1Ts	層中繞
N2	7		6		TRW(B) 0.65mm*1P	10Ts			#19	#19			1Ts	密繞
N3	5		2		0.30mm*2P	20Ts			#23	#23			1Ts	密繞3層, 加 層間膠帶
N4	4		3		0.30mm*1P	9Ts			#28	#28			1Ts	層中密繞

DESCRIPTION	TRANSFORMER	Customer P/N	XF00946	DATE	2015/5/21
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SPECIFICATION

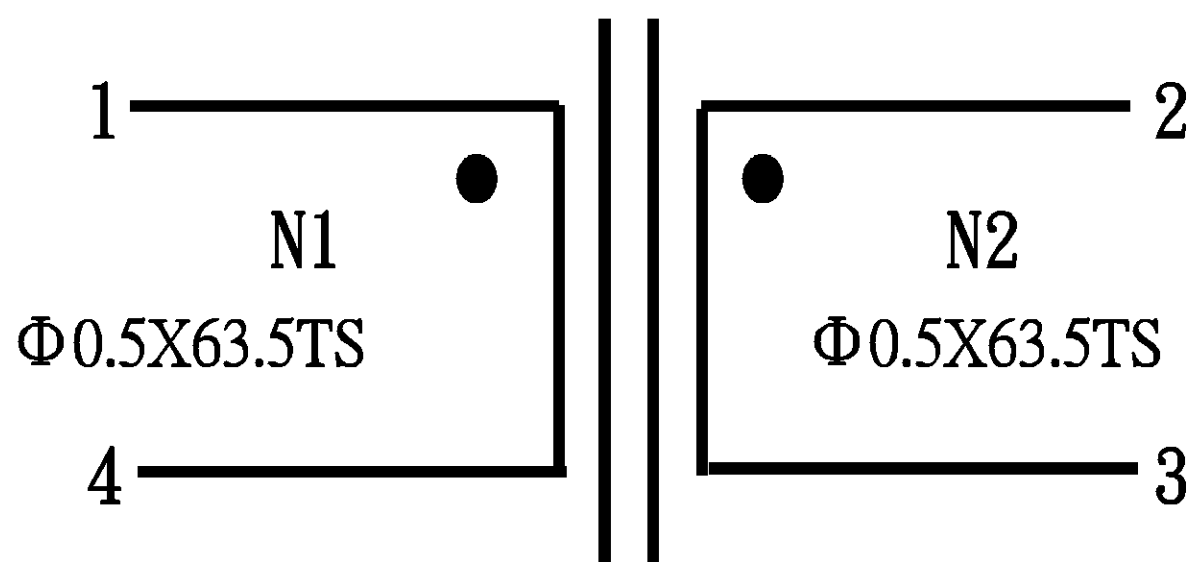
1. OUTLINE DIMENSION: (UNIT: mm)



A	21.5 Max
B	14.0 Max
C	1.0 Max
D	3.2 ±0.5
E	0.5 ±0.1
F	11.0 ±0.5
G	9.5 ±0.5

NOTE:

- 1) 各部分尺寸請參照外觀圖.
- 2) 繞線須平整, 銅線不可打結, 破皮.
- 3) 產品需含浸



- 1) 繞線須平整, 銅線不可打結、破皮.
- 2) 產品繞組間需用1.5mmPCB板隔開.
- 3) 產品進出線及PCB板須點膠固定.
- 4) 產品需含浸.

● START

3. ELECTRICAL CHARACTERISTIC: (電器特性)

1) TEST CONDITION: TEMPERATURE AT 25°C

INDUCTANCE: L(1-4): 13.0 mH Min(at 10Khz, 0.25V). 2.6mΩ MAX.

INDUCTANCE: L(2-3): 13.0 mH Min(at 10Khz, 0.25V). 2.6mΩ MAX.

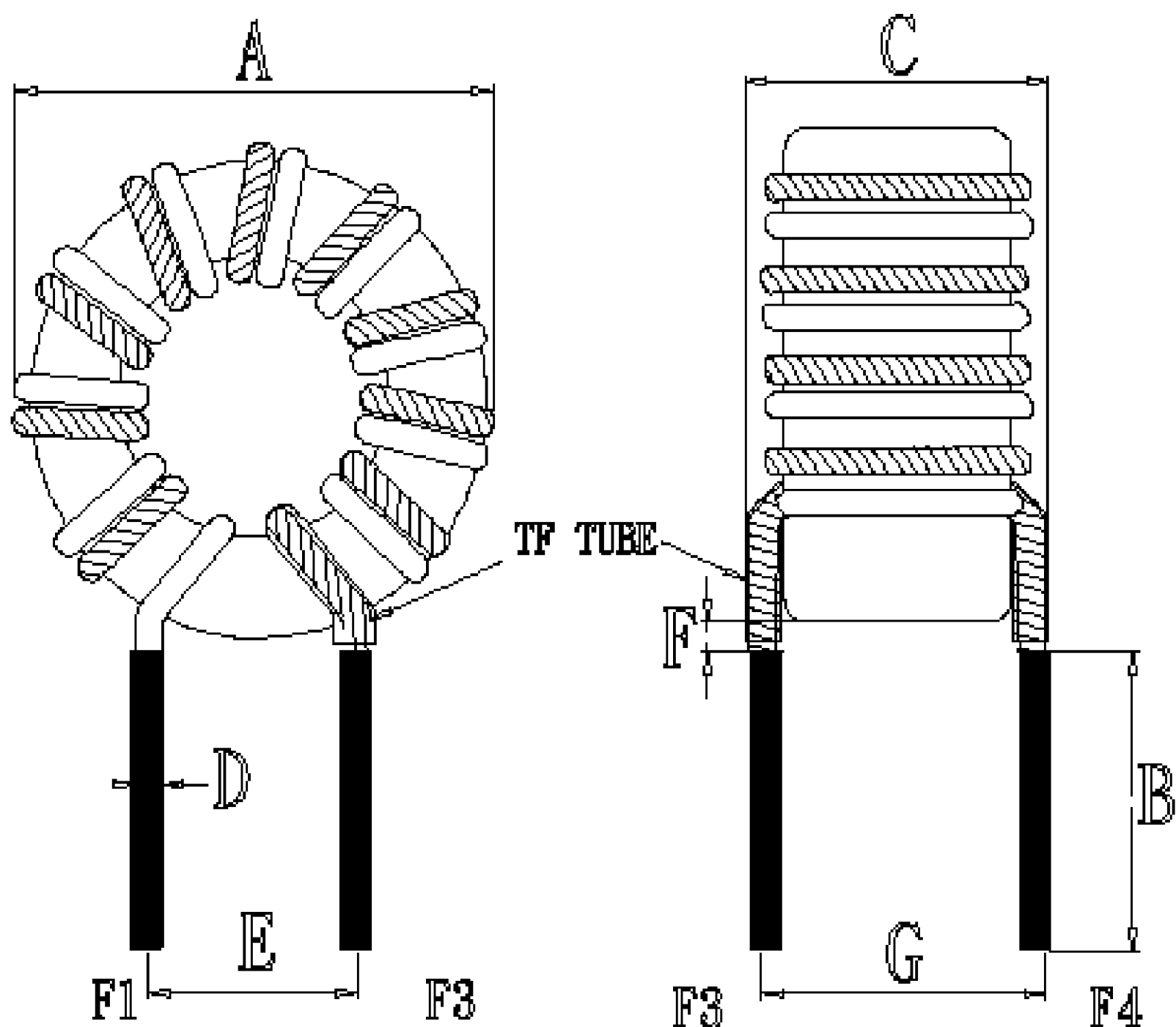


DESCRIPTION	CHOKE	Customer P/N	NF00124	DATE	2015/6/11
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RDS041.0307

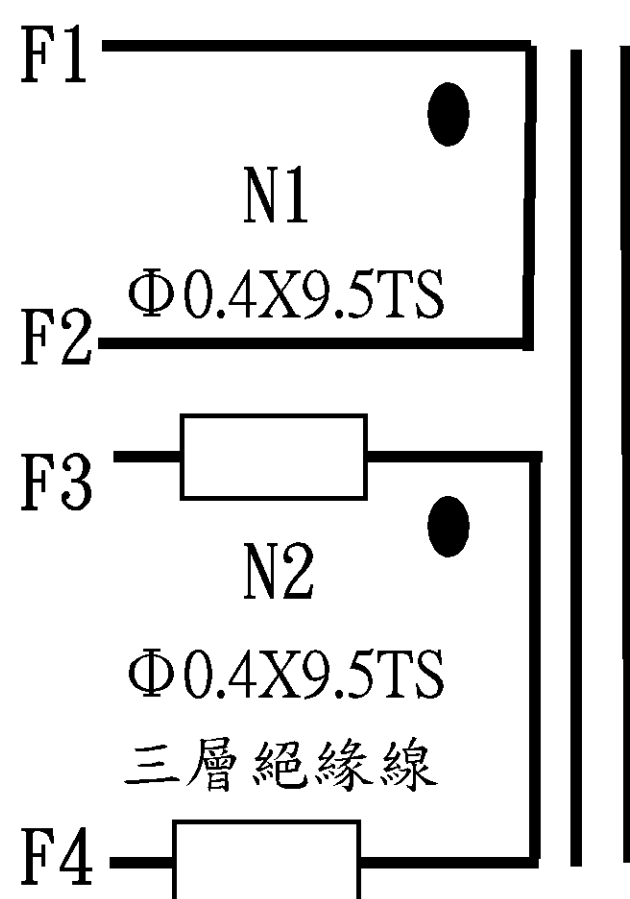
SPECIFICATION

1. OUTLINE DIMENSION: (UNIT: mm)



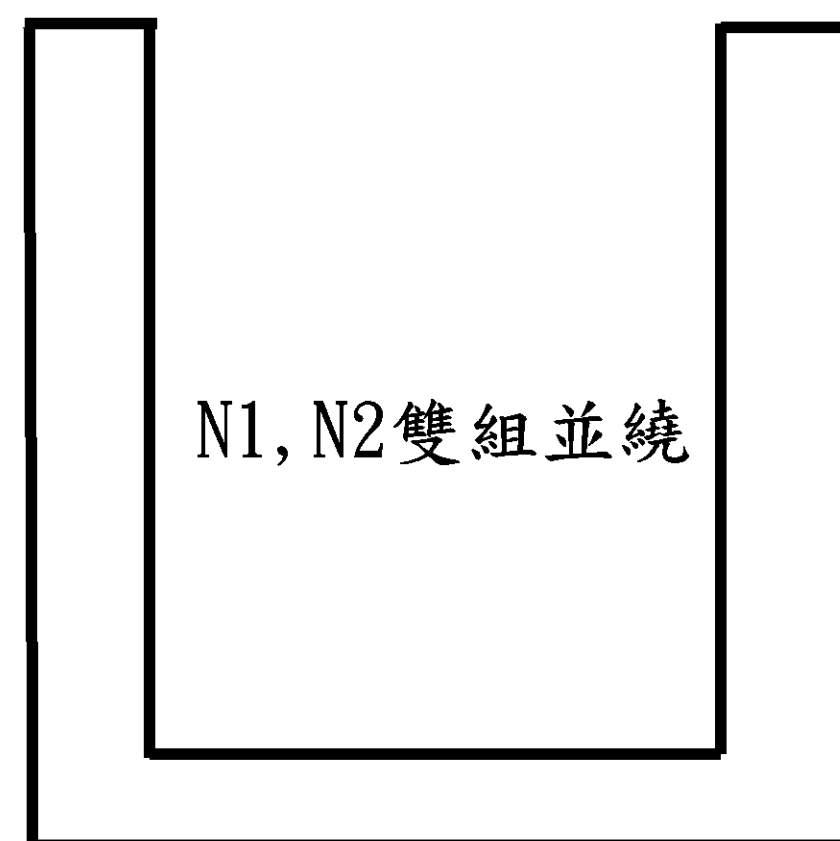
A	13.0 Max
B	15.0 ±2.0
C	9.0 Max
D	0.4 ±0.1
E	3.5 ±0.5
F	1.2 Max
G	6.0 ±0.5

2. SCHEMATIC:



NOTE:

1. 圈數以外圈計算.
2. 繞線須平整, 銅線漆包膜不可破損或脫落
3. 產品須含浸.
4. N2使用三層絕緣線, 須先脫皮再鍍錫, 且進出線須穿TF TUBE.



3. ELECTRICAL CHARACTERISTIC: (電器特性)

1) TEST CONDITION: TEMPERATURE AT 25°C

INDUCTANCE: L(F1-F2): 88.0 uH Min(at 10Khz, 0.25V), DCR 32.7mΩ Max.

INDUCTANCE: L(F3-F4): 88.0 uH Min(at 10Khz, 0.25V), DCR 32.7mΩ Max.

2) HI-POT TEST:

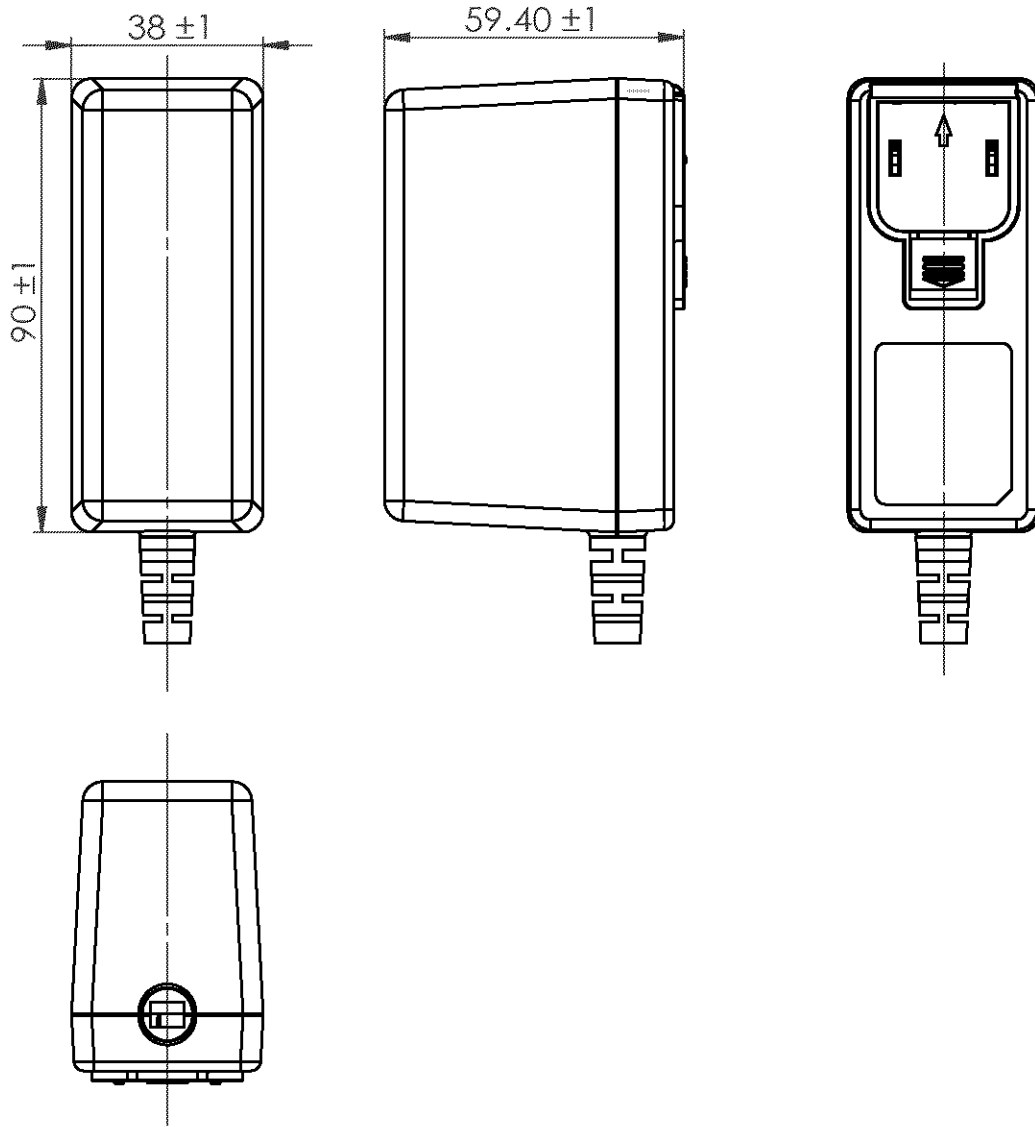
COIL. TO COIL. ----- AC 0.5KV/(50/60Hz)/5mA/60sec

COIL. TO CORE. ----- AC 0.5KV/(50/60Hz)/5mA/60sec

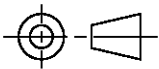
DESCRIPTION	CHOKE	Customer P/N	NF00025	DATE	2008/1/23
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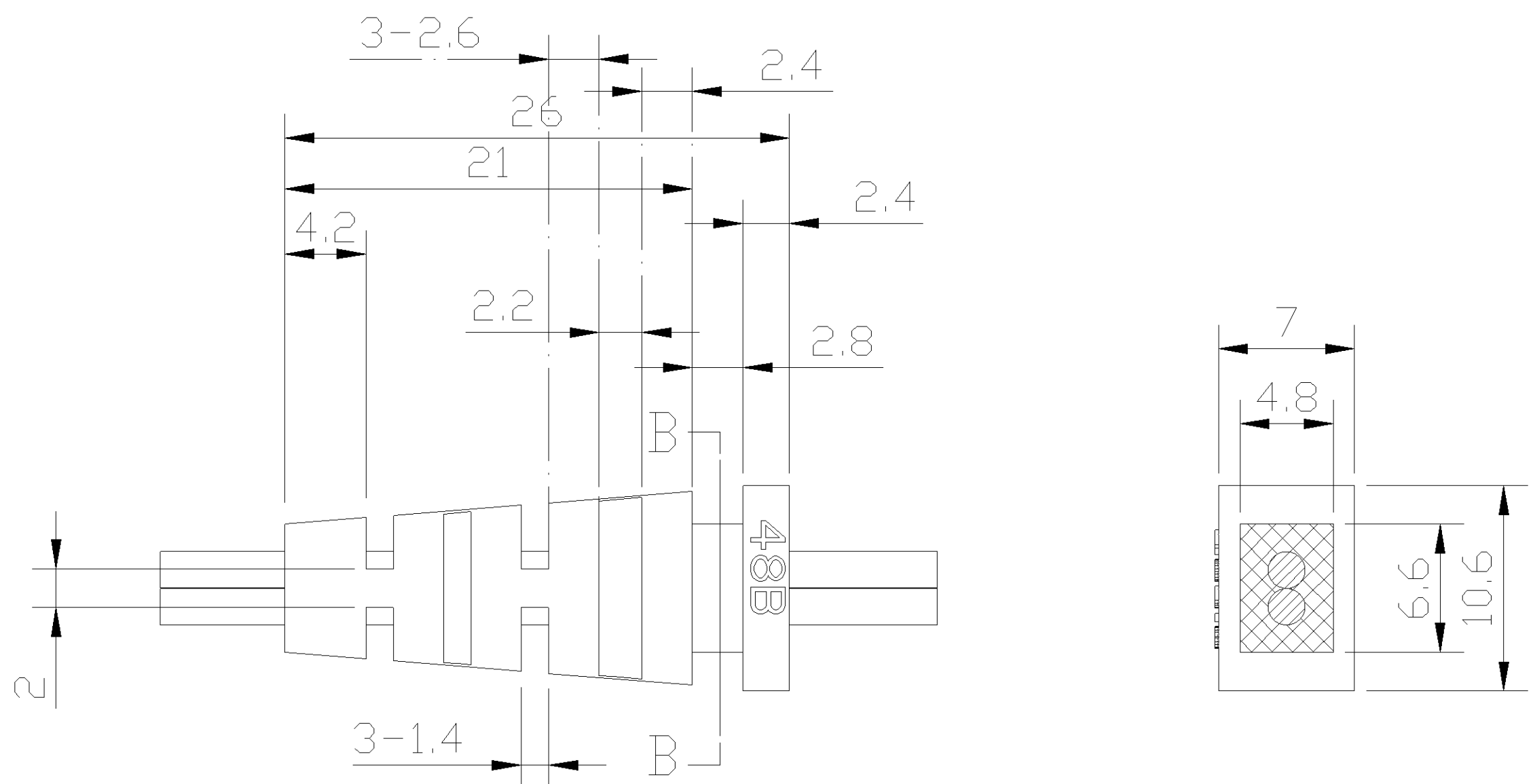
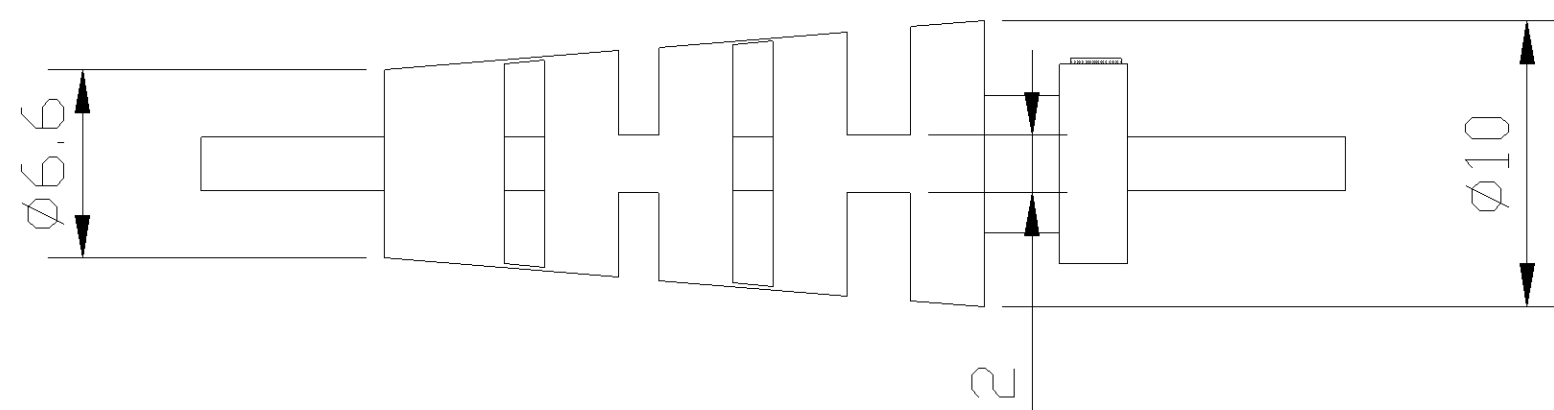
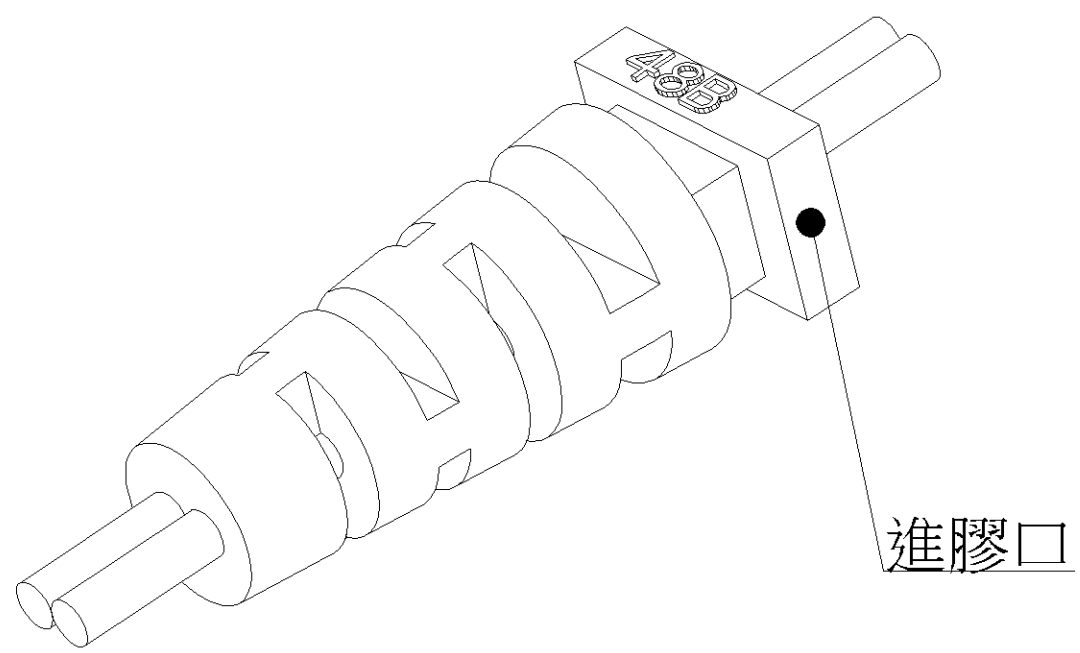
RDS041.0307

Att.2



TOLERANCE				
>0.5~<0.3	3.0~<6.0	6.0~<30	30~<120	120~<400
±0.05	±0.1	±0.15	±0.2	±0.3

DESIGNED	CHECKED	APPROVED		TITL	
				UNITS	OUTDRAWING
SPF	LBM	LNB	mm	DRAWING No.	DATE
			SCALE	401115-001	15.02.10
			1:1	DRAWING NAME	REVISION
				401100-401115	01



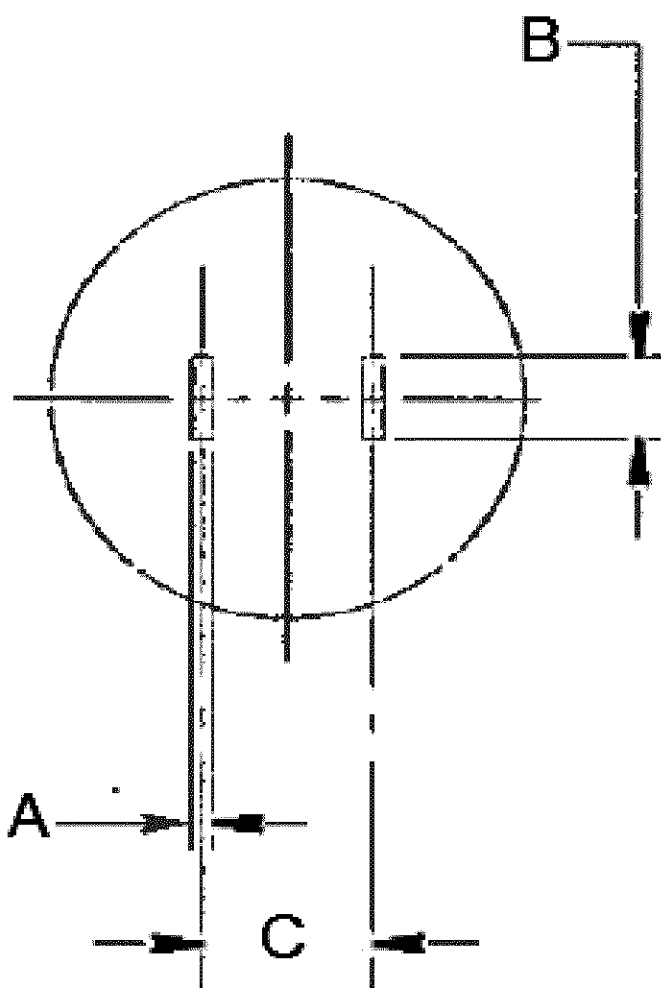
線材OD: $\varnothing 1.5 \times 3.0$; $\varnothing 1.7 \times 3.4$;
 $\varnothing 1.8 \times 3.6$; $\varnothing 1.9 \times 3.8$

未標示圓角R0.2mm

模具要求刻字

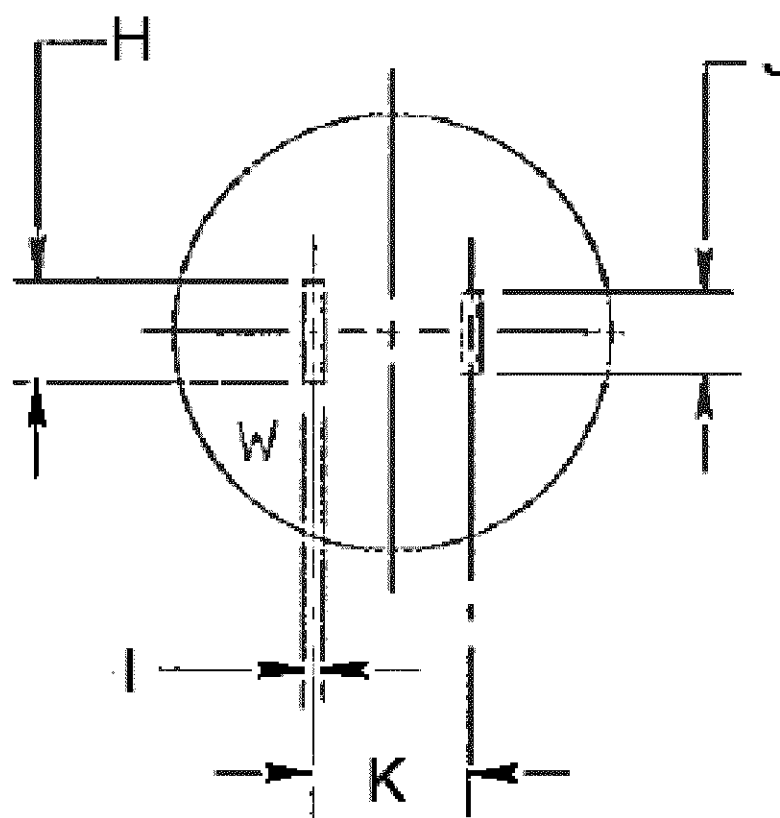
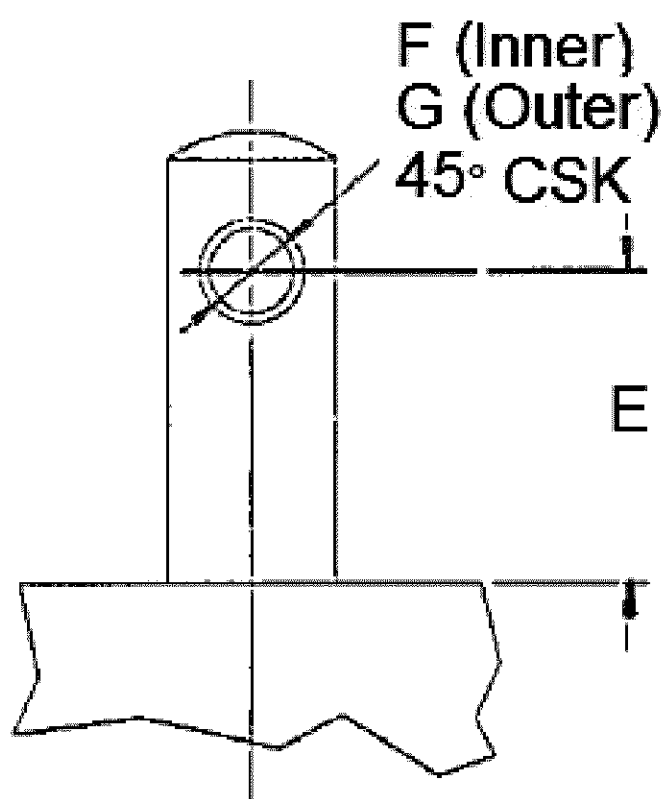
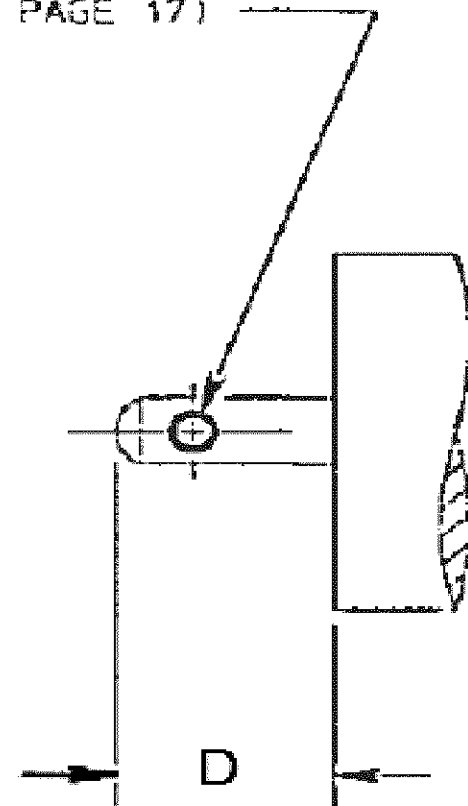
TOLERANCE				
>0.5~<3.0	3.0~<6.0	6.0~<30	30~<120	120~<400
±0.1	±0.15	±0.2	±0.3	±0.4

DESIGNED	CHECKED	APPROVED		TITLE	SR	DATE
<i>lily.cai</i>	<i>liu min</i>	<i>zhu rg</i>		UNITS mm	DRAWING No.	R48B
SCALE				DRAWING NAME	48B	REVISION 01



NON-POLARIZED PLUG

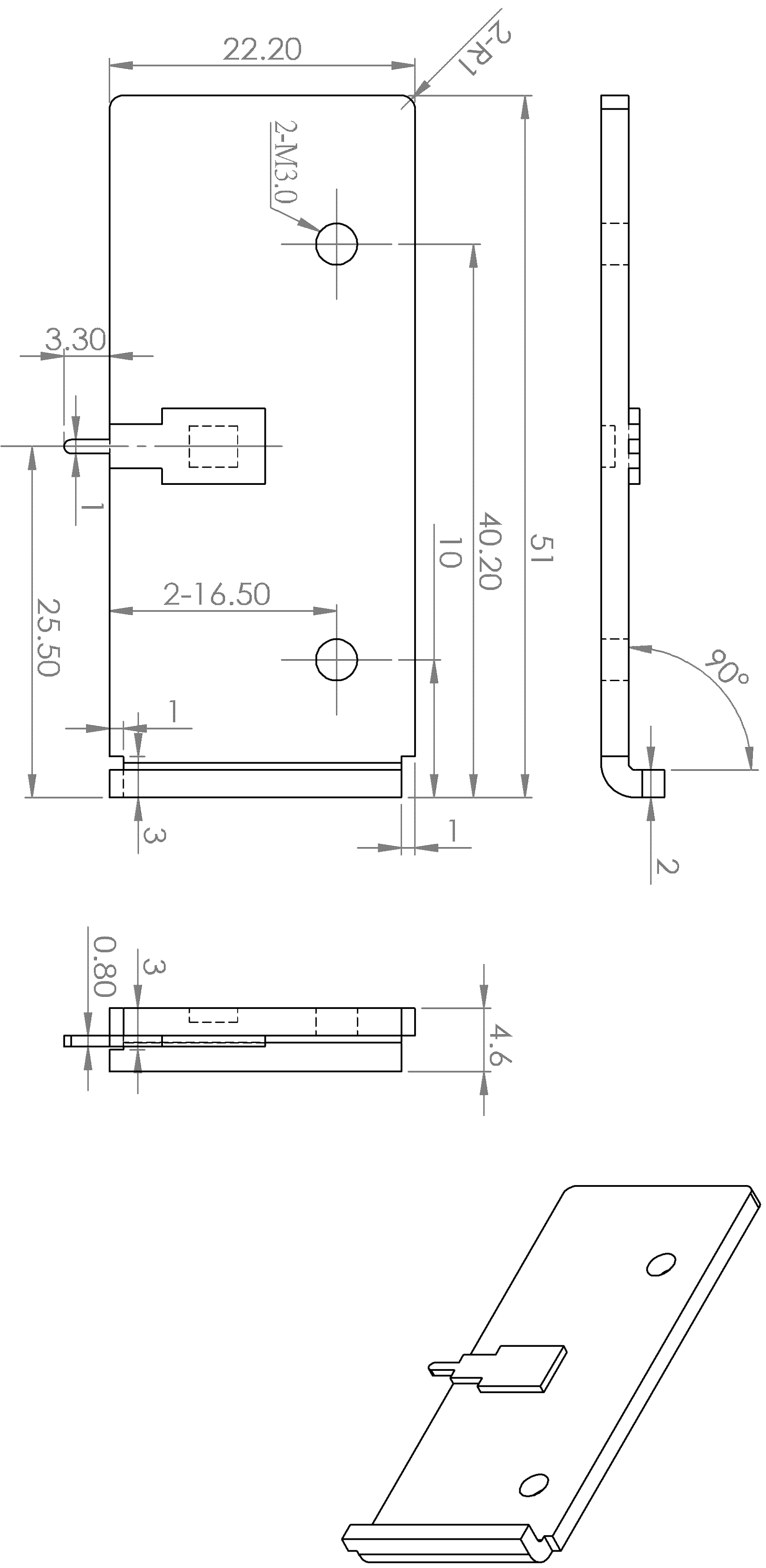
HOLE ON 2 (TWO) BLADES
(SEE LOCATION NO. 1, PAGE 17)



POLARIZED PLUG

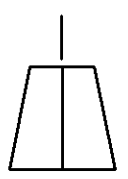
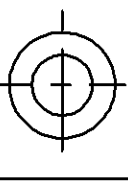
TABLE: North American plug dimension according to NEMA 1-15P				Verdict
Location	Dimensions (mm)	Measurement (mm)	Limit (mm)	--
A, I	Thickness of live pin	1.50	1.524 ^{±0.127} (1.397 - 1.651)	P
B, J	Width of live pin	6.30	6.096 – 6.604	P
C, K	Distance between two live pins (center)	1.270	12.70 ^{±0.127} (12.573 - 12.827)	P
D	Length of live pins	17.20	15.875 – 18.237	P
E	Distance between hole center and plug face (if hole used)	12.10	11.786 ^{±0.381} (11.405 - 12.167)	P
F	Inner diameter of hole (if hole used)	3.050	3.175 ^{±0.127} (3.048 - 3.302)	P
G	Outer diameter of hole (if hole used)	4.0	3.962 ^{±0.127} (3.835 - 4.089)	P
H	Width of wider live pin	--	7.798 – 8.179	N/A

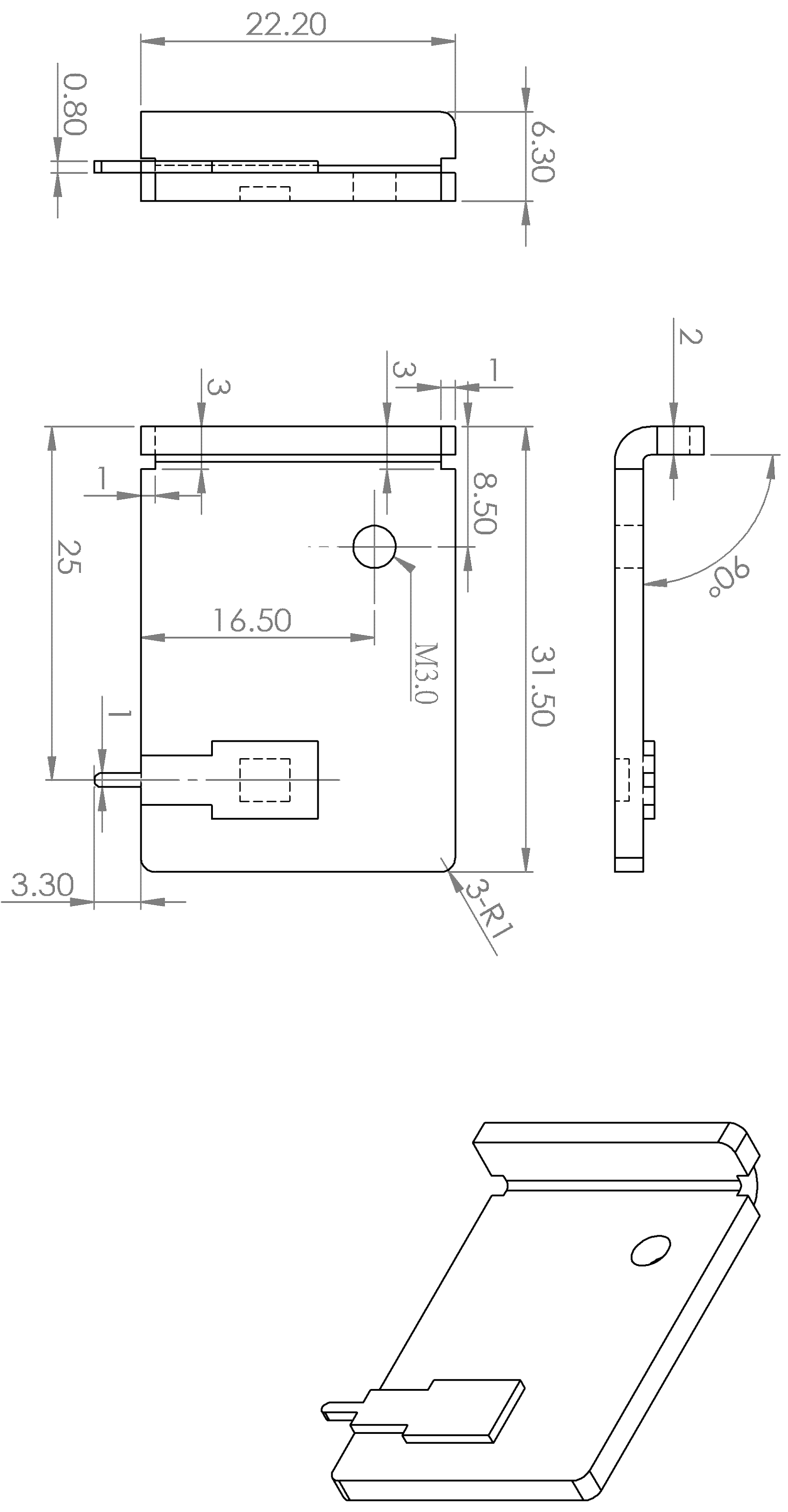
Note: P= Pass; F=Fail; N/A= Not Applicable.



- 注意事項：
 1. 材質：鋁
 2. 產品表面：不能有毛邊；
 3. 未注公差按公差表執行。
 4. 打樣數量：15pcs

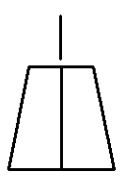
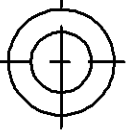
TOLERANCE				
>0.5~<3.0	3.0~<6.0	6.0~<30	30~<120	120~<400
±0.05	±0.1	±0.15	±0.2	±0.3

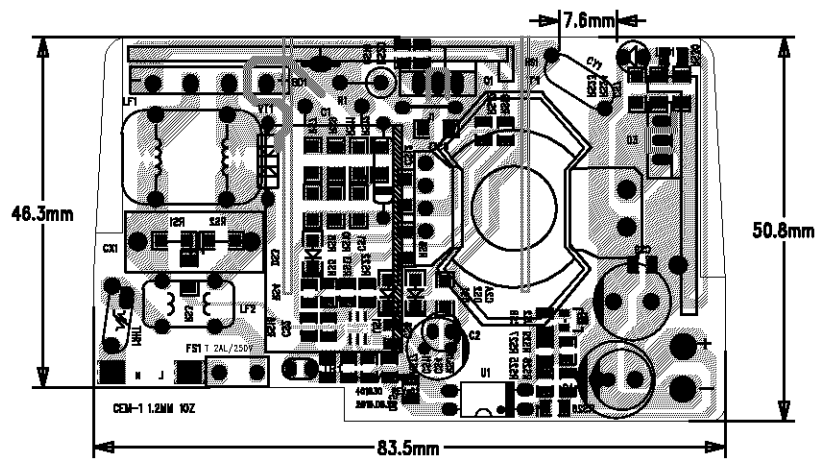
DESIGNED	CHECKED	APPROVED	 	TITLE	散熱片
SPF	LBM	LNB		DRAWING No.	
SCALE			UNITS	mm	DRAWING No.
1:1			1:1	H02-401830-001	DATE
DRAWING NAME			401830	REVISION	2015.03.30
					01

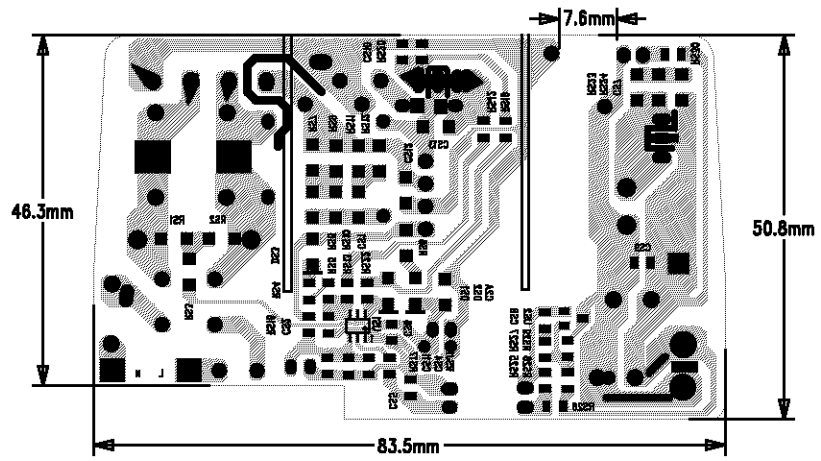


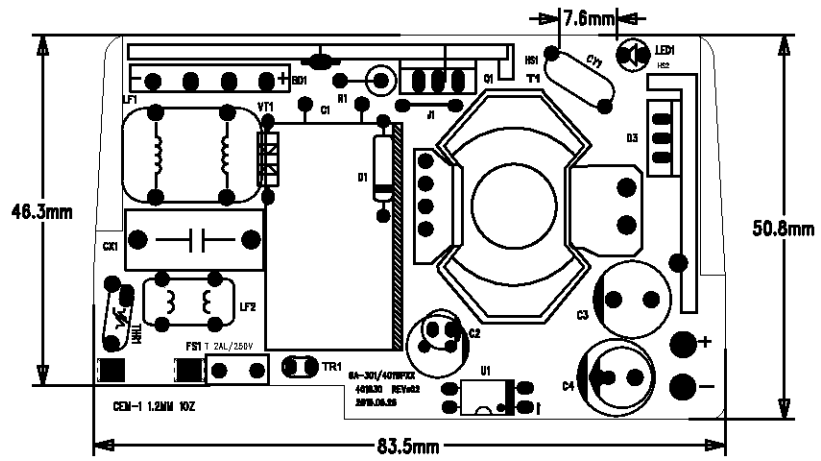
- 注意事項：
 1.材質：鋁
 2.產品表面：不能有毛邊
 3.未注公差按公差表執行
 4.打樣數量：6PCS

TOLERANCE					
>0.5~<3.0	3.0~<6.0	6.0~<30	30~<120	120~<400	
±0.05	±0.1	±0.15	±0.2	±0.3	

DESIGNED		CHECKED		APPROVED		 		TITLE	
						UNITS		散熱片	
SPF		LBM		LNB		mm		DRAWING No.	
						SCALE		H02-401830-002	
						1:1		DATE	
								15.06.08	
						DRAWING NAME		REVISION	
						401830		01	







GT model name	Output voltage	Output current	Max.W	Transformer
GT-46401-3612	12V	3.0A	36W	XF00936
GT-46401-4015	15V	2.66A	40W	
GT-46401-4019	19V	2.1A	40W	XF00945
GT-46401-4024-4.0	20V	2.0A	40W	
GT-46401-4024	24V	1.66A	40W	XF00946
GT-46401-3012	12V	2.5A	30W	XF00936
GT-46401-3015	15V	2.0A	30W	
GT-46401-3319	19V	1.73A	33W	XF00945
GT-46401-3024-4.0	20V	1.5A	30W	
GT-46401-3024	24V	1.25A	30W	XF00946

Test Record No. 1

Tests on Models GTX46401-WVVV-X.XZ are not required due to copy file