



JOSEPH ZHOU
MASS POWER ELECTRONIC LTD
10TH FL, TOWER A BILLION CENTRE
1 WANG KWONG RD
KOWLOON BAY
KOWLOON HONG KONG

Date: 2015/01/07
Subscriber: 100537412
PartySite: 53609
File No: E335801
Project No: 4786665590
PD No: 15M00569
Type: R
PO Number:

Subject: **Procedure And/Or Report Material**

The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
	X1		Index Page(s)	
2014/12/31	X1	A29	Cert of Compliance	
2014/12/31	X1	A29	Add New Proc/Report Sect	

Purchase Order: ZHOU, JOSEPH (11/25/2014)

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Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

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NWT File

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Product Type	Model/Type Reference	Report Reference #	Status
Direct plug-in adapter	SFFxxxxxyyyyA1mn, SFFxxxxxyyyyU1mn where xxx = 030 - 160, 180-240 which represents the output voltage is 3.0 Vdc - 16.0 Vdc, 18.0Vdc - 24.0Vdc; yyyy = 0005 - 0300 which represents the output current is 50 mA - 3000 mA; m represents the color of enclosure; n = A-Z, 0 to 9 or blank which represents the customer code and has no affection to product safety.	E335801-A1-UL	
Switch Mode Power Supply	SDFxxxxxyyyyA1mn and SDFxxxxxyyyyA1mU series, where "xxx"= 028 to 160, indicates output voltage from 2.8Vdc to 16.0Vdc; "yyyy"= 0005-0150, indicates output current from 50mA to 1500mA; "A" indicates the USA AC plug; "m"=B, W, G, L, ect. indicates the color of enclosure; "n"=A-Z except U & 0 to 9 or blank indicates the Customer Code. See Enclosures-Miscellaneous 7-04 Model List and Model Difference for details.	E335801-A2-UL	
AC Adapter	SEFxxxxxyyyyA1mn ("xxx"= 030 to 160, indicates rated output voltage range is 3.0V to 16.0V; "yyyy"= 0005 to 0200, indicates rated output current range is 50mA to 2000mA; m= B, W, G, L, ect., indicates the color of enclosure; n= A to Z, 0 to 9, indicates the customer code). See Enclosures-Miscellaneous 7-06 Model List and Model Difference for details.	E335801-A3-UL	
AC Adapter	SCFxxxxxyyyyA1mn (xxx= 036 to 120, indicates rated output voltage range is 3.6V to 12.0V; yyyy= 0005 to 0100, indicates rated output current range 50mA to 1000mA; A indicates United States AC plug; m= B, W, G, L, etc., indicates the color of enclosure; n= A to Z, 0 to 9, indicates the customer code) See Enclosures- Miscellaneous 7-04 Model Difference and 7-05 Model List for details.	E335801-A4-UL	
AC Adapter	ECF050yyyyA1mU, ECF050yyyyU1mU (050 indicates output voltage is 5.0V; yyyy=0005-0100, indicate rated output current range from 50-1000mA, each two nearest models with 10mA distance; m=B, W, G, L, etc., indicates the color of enclosure; U indicates USB output)	E335801-A5-UL	
AC Adapter	SGFxxxxxyyyyA1mn (xxx=075 - 150 indicates rated output voltage range 7.5 - 15.0V, yyyy=0005 - 0250 indicates rated output current range 50 - 2500mA, m=B, W, G, L indicates the color of enclosure, n=A - Z & 0 - 9 indicates the Customer Code) See Enclosures- Miscellaneous 7-05 Model List for details.	E335801-A6-UL	
AC ADAPTER	EEFxxxxxyyyyA1mn (xxx=050 - 060 & 101-120	E335801-A7-UL	

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	indicates rated output voltage range 5.0 - 6.0Vdc & 10.1 - 12.0Vdc, yyyy=0005 - 0200 indicates rated output current range 50 - 2000mA, m=B, W, G, L indicates the color of enclosure, n=A-Z, 0- 9 indicates the Customer Code)		
Ac to Dc Power Supply adapter	SKFxxxxyyyX1mn (xxx=090-240; yyyy=0005-0500; m=B, W, G, L; n=A-Z or 0-9) SKFxxxxyyyY1mn (xxx=090-240; yyyy=0005-0500; m=B, W, G, L; n=A-Z or 0-9)	E335801-A8-UL	
AC Adapter	SHFxxxxyyyz1mn Series (where xxx = 030-240, indicates output voltage range 3.0-24.0 Vdc; yyyy = 0005-0400, indicates output current range 50-4000 mA; z = "A" or "U", "A" represents the fixed integral plug type for US, "U" represents the interchangeable plug type; m = "B", "W", "G" or "L", indicates the color of enclosure; n = "A" to "Z" or "1" to "9", indicates the Customer Code) See ID7-09 for the detail Model List.	E335801-A9-UL	
AC ADAPTER	FEF050yyyyA1mU (050 indicates output voltage is 5.0V; yyyy=0005-0210, indicate rated output current range from 50-2100mA, each two nearest models with 50mA distance; m=B, W, G, L, etc., indicates the color of enclosure; U indicates USB output).	E335801-A10-UL	
AC ADAPTER	EFF0600200Y1mn (m = B, W, G, L indicates the color of enclosure, n = A-Z, 0- 9 indicates the Customer Code).	E335801-A11-UL	
AC ADAPTER	EHF0800400Y1mn (m=B, W, G, L indicates the color of enclosure, n=A-Z & 0-9 indicates the Customer Code)	E335801-A12-UL	
AC Adapter	Model Series WEFxxxxyyyA1mn (where xxx=030-160; yyyy=0005-0200; A indicates the AC plug of United States ,m=B, W, G, L; n=A-Z or 0-9) xxx=030-160 indicates rated output voltage range 3,0-16,0 V d.c.; yyyy=0005-0200 indicates rated output current range 50-2000 mA; m=B, W, G, L, indicates the color of enclosure, n=A-Z or 0-9 indicates the customer code., which m, n are not affecting the safety issues. See Enclosures-Miscellaneous ID7-08 for details.	E335801-A13-UL	
AC Adapter	WCFxxxxyyyA1mn, WCFxxxxyyyA1mU, T-5DC-USB-WH (xxx=040-120; yyyy=0005-0120; A indicates the American AC Plug; m=B, W, G, L; n=A-Z or 0-9, U indicates the USB socket) See ID7-09 for the detail Model List.	E335801-A14-UL	
AC Adapter	Model Series WFF-xxxxyyyVA (where xxx=050-240 indicates rated output voltage range 5.0-24.0 V d.c. with minimum step 0.1V; yyyy=0005-0300 indicates rated output current range 50-3000 mA with minimum step 10mA; V	E335801-A15-UL	

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	indicates the vertical type; A indicates American plug) See Enclosure-Miscellaneous ID 7-01 for details.		
AC Adapter	Model WGF-xxxxxxxVA, WGF-xxxxxxxM2 Series (where xxx=090-240; yyyy=0005-0267; A indicates the AC plug of United States , 2 indicates the C8 Inlet) xxx=090-240 indicates rated output voltage range 9.00-24.0 V d.c.; yyyy=0005-0267 indicates rated output current range 50-2670 mA;	E335801-A16-UL	
Switching Power Supply	EKF240yyyyX1mn where yyyy=0005-0250, indicates rated output current range 50-2500mA; m=B, W, G, L, indicates the color of enclosure; n=A-Z or 0-9, indicates the customer code.	E335801-A17-UL	
AC Adapter	WHF-xxxxxxxVA, WHF-xxxxxxxM2, WHF-xxxxxxxMA, WHF-xxxxxxxM3, WHF-xxxxxxxT3 (xxx=090-240 indicates rated output voltage range 9.0-24.0Vdc; yyy=0005-0350 indicates rated output current range 0.05-3.50A) (See Enclosure ID7-11 and 7-12 for detail.)	E335801-A18-UL	
AC Adaptor	EEF-120yyyyVA where yyyy=0005-0090, indicates rated output current range 50-900mA	E335801-A20-UL	
Switching Power Supply	PIF-480yyyy-1KMW, PIF-480yyyy-1KMS (where yyyy=0005-0045, indicates rated output current range 50-450mA, one step 10mA)	E335801-A21-UL	
AC Adapter	PCF-xxxxxxxzU, PCF-xxxxxxxzV (xxx=050-120; yyyy=0005-0100; z=A, B, C, E, G, I, K, M, O, T) (See Enclosure ID7-05 for details.)	E335801-A22-UL	
AC Adapter	PEF-xxxxxxxVA, PEF-xxxxxxxUA (xxx=050-075, 080-120 indicates rated output voltage range 5.0-7.5 V d.c, 8.0-12.0 V d.c. respectively; yyyy=0005-0210 indicates rated output current range 50-2100 mA; A indicates the American AC Plug, U indicates the USB socket)	E335801-A23-UL	
AC Adapter	WGF-120yyyyT3 (where yyyy=0150-0200 indicates rated output current range 1500-2000mA, one step 50mA)	E335801-A24-UL	
AC Adapter	KB-01	E335801-A25-UL	
SWITCHING POWER SUPPLY	EGF080yyyyY1mn (yyyy=0150-0300, indicates rated output current range 1500-3000mA, one step 10mA; m=B, W, G, L, indicates the color of enclosure; n= A-Z or 0-9, indicates the customer code for marketing purpose)	E335801-A26-UL	
AC Adapter	EDF-xxxxxxxVA, EDF-xxxxxxxUA (xxx=050-090 indicate output voltage in volt after dividing by 10 in step of 0.1V; yyyy=0005-0150	E335801-A27-UL	

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	indicate output current in A after dividing by 100 in step of 0.01A; V indicate Output with cord; U indicates output with USB)		
AC Adapter	NBS24JxxxxyyyHU, NBS24JxxxxyyyVU (where xxx=050-240 indicates output voltage range 5.0-24.0V with step in 0.1V; yyy=005-360 indicates output current range 50-3600mA with step 10mA.)	E335801-A28-UL	
AC Adapter	NBS12ExxxxxyyyVU; NBS12ExxxxxyyyHU; NBS12ExxxxxyyyD5 (xxx=050-075, 090-150; yyy=005-210)	E335801-A29-UL	

CERTIFICATE OF COMPLIANCE

Certificate Number 20150107-E335801
Report Reference E335801-A29-UL
Issue Date 2015-JANUARY-07

Issued to: MASS POWER ELECTRONIC LTD
10TH FL, TOWER A BILLION CENTRE
1 WANG KWONG RD, KOWLOON BAY, KOWLOON HONG KONG

This is to certify that representative samples of POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL BUSINESS EQUIPMENT, AUDIO/VIDEO APPARATUS
AC Adapter - NBS12ExxyyyVU; NBS12ExxyyyHU; NBS12ExxyyyD5
(xxx=050-075, 090-150; yyy=005-210)

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1 AND CAN/CSA C22.2 No. 60950-1-07, (Information Technology Equipment - Safety - Part 1: General Requirements)

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.



Bruce Mahrenholz, Assistant Chief Engineer, Global Inspection and Field Services
UL LLC

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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)
Complementary CCN:	AZSQ, AZSQ7 (Audio/Video Apparatus)
Product:	AC Adapter
Model:	NBS12ExxyyyVU; NBS12ExxyyyHU; NBS12ExxyyyD5 (xxx=050-075, 090-150; yyy=005-210)
Rating:	Input: 100-120 V a.c. / 200-240 V a.c. / 100-240Va.c., 50/60Hz, 0.3A Output: 5.0-7.5V or 9.0-15.0 V d.c./ 0.05-2.10A (See Enclosure ID7-01for detail.)
Applicant Name and Address:	MASS POWER ELECTRONIC LTD 10TH FL, TOWER A BILLION CENTRE 1 WANG KWONG RD KOWLOON BAY 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.

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Prepared by: Suki Kwong

Reviewed by: Patty Li

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

These adaptors are designed to supply information technology equipment or audio/video apparatus, for indoor use only and ambient temperature 45°C Max. The PWB with electronic components housed in plastic enclosure, secured by ultrasonic welding.

Model Differences

All models are identical to each other except for type designation, plug type, enclosure shape, output ratings, number of turns of secondary winding and secondary components.

The detachable mains plug is used for Model NBS12ExxxyyyD5, integral mains plug is used for Models NBS12ExxxyyyHU and NBS12ExxxyyyVU, horizontal plug type is used for models NBS12ExxxyyyHU and NBS12ExxxyyyD5, vertical plug type is used for Model NBS12ExxxyyyVU.

Configuration for D8:

With D8, output ratings: I>1.0A and P<11.5VA;

Without D8, output ratings: except for I>1.0A and P<11.5VA

See Model List at Enclosure ID7-01 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) : 20 A
- Pollution degree (PD) : PD 2
- IP protection class : IP 20

- Altitude of operation (m) : less than 5000 meters
- Altitude of test laboratory (m) : less than 500 meters
- Mass of equipment (kg) : NBS12ExxyyyHU: Approx. 0.075kg; NBS12ExxyyyVU: Approx. 0.077kg; NBS12ExxyyyD5: Approx. 0.089kg
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 45°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 class of laser product is: Class 1 (I) for indication purpose only
- The product was investigated to the following additional standards: 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: CY1 secondary
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): Output of all models
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The power supply in this equipment was: Investigated to IEC 60950-1. As part of the investigation of this product, the power supply and its test report were reviewed and found to comply with IEC 60950-1.
- LEDs provided in the product are considered low power devices: Yes, optionally provided
- The product is additionally investigated for UL 60065 and CSA C22.2 No. 60065

Additional Information


N/A

Additional Standards

The product fulfills the requirements of: The product fulfills the requirements of: UL60065, 7th Edition: 2013-07-24 and CAN/CSA-C22.2 No. 60065-03, 1st Edition, 2006-04 + A1:2006 + A2:2012

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 -	Symbol for Class II construction

Class II symbol	 (60417-2-IEC-5172)
Optional, marked with "L.P.S" or "LPS" for "Limited Power Sources".	Optional, marked with "L.P.S" or "LPS" for "Limited Power Sources".
Date of Manufacture	XXYY, XX represents last 2 digits of manufacture year and YY represents the no. of week of manufacture year
Outdoor Use Warning Marking	Important Safety Instructions shall provide with "WARNING - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture." or equivalent
Wet Location Use Warning Marking	Important Safety Instructions shall provide with "This appliance shall not be exposed to dripping or splashing and that no object filled with liquid, such as vases, shall be placed on the apparatus." Or equivalent.
Important Safety Instructions	Refer to Enclosure - Manuals ID 6-01 for details.
Disconnect Device - Mains Plug	The Mains Plug is used as the disconnect device, the disconnect device shall remain readily operable.
Fusing Resistor Rating	"8.2ohm/2W" marked on PWB for F2
Special Instructions to UL Representative	
N/A	

Production-Line Testing Requirements						
<u>Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.</u>						
Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
All models covered in this report	Transformer (T1)	--	Primary winding to secondary winding	300 0	4242	1
<u>Earthing Continuity Test Exemptions - This test is not required for the following models:</u>						
All models						
<u>Electric Strength Test Exemptions - This test is not required for the following models:</u>						
-						
<u>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:</u>						
-						
<u>Sample and Test Specifics for Follow-Up Tests at UL</u>						
Model	Component	Material	Test	Sample(s)	Test Specifics	
-	-	-	-	-	-	

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. Plastic Enclosure and Pin Holder	Sabic Innovative Plastics B V	945(GG)	Rated V-0, 120 degree C, minimum 1.5 mm thickness. Top enclosure and bottom enclosure was ultrasonically welded together. See Enclosure Miscellaneous ID 7-02, 7-03, 7-04 for dimension drawing of Models NBS12ExxyyyVU, NBS12ExxyyyHU and NBS12ExxyyyD5 respectively.	QMFZ2	UL E45329	
02. Input Blade	Interchangeable	Interchangeable	Copper or Copper Alloy, non-polarized (NEMA 1-15P configuration). Integrally melded onto Plug Holder, perimeter of face section from which Blade projection minimum 5.1 mm from any point on either blade. See Enclosure Miscellaneous ID 7-15 for details.	--	--	
03. Printed Wiring Board	Interchangeable	Interchangeable	V-0 or better, minimum 130 degree C.	ZPMV2	UL	
04. Fuse (F1) (optional)	Interchangeable	Interchangeable	T6.3A,250Vac	JDYX	UL	
04a. Fuse (F1) (optional) (Alternative)	Conquer Electronics Co Ltd	MST	T6.3A,250Vac	JDYX2	UL E82636	
04b. Fuse (F1) (optional) (Alternative)	Littelfuse Wickmann Werke	392	T6.3A,250Vac	JDYX2	UL E67006	
04c. Fuse (F1) (optional) (Alternative)	Ever Island Electric Co Ltd & Walter Electric	2010	T6.3A,250Vac	JDYX2	UL E220181	
05. Fuse Resistor (F2)	Shenzhen Kayocota	FRKNP-2WS	Rated 2.2 or 8.2 ohm, 2W	FPEW2	UL E318056	

	Electronics Co., Ltd					
05a. Fuse Resistor (F2) (Alternate)	Shenzhen Great Electronics Co., Ltd	RXF-2W	Rated 2.2 or 8.2 ohm, 2W	FPEW2	UL E301541	
05b. Current Fuse (F2) (when fusing resistor is not used) (Alternate)	Hong Hu Bluelight Electronic Co Ltd	L3CT	T2.0A,250Vac	JDYX	UL E324232	
05c. Current Fuse (F2) (Alternate)	Shenzhen Lanson Electronics Co Ltd	3N	T2.0A,250Vac	JDYX2/8	UL E221465	
05d. Current Fuse (F2) (Alternate)	Walter Electronic Co.,Ltd	ICP	T2.0A,250Vac	JDYX/7	UL E56092	
05e. Current Fuse (F2) (Alternate)	Interchangeable	Interchangeable	T2.0A,250Vac	JDYX/7	UL	
06. Bridge Diode (D1- D4)	Interchangeable	Interchangeable	Minimum 1000V, minimum 1.0A.	--	--	
07. Electrolytic Capacitor (C1)	Interchangeable	Interchangeable	Rated 2.2-10uF, 105 degree C, provided with pressure relief function. Minimum 250 V(for 100-120V rated input voltage) Minimum 400V (for 100-240V rated input voltage)	--	--	
08. Electrolytic Capacitor (C2)	Interchangeable	Interchangeable	Rated 6.8-15uF, 105 degree C, provided with pressure relief function. Minimum 250 V(for 100-120V rated input voltage) Minimum 400V (for 100-240V rated input voltage)	--	--	
09. Inductor (LF1)	Interchangeable	Interchangeable	Rated 130 degree C. See Enclosure Diagrams ID 4- 02for details.	--	--	
09-1. Inductor (LF1) - Bobbin	Interchangeable	Interchangeable	Phenolic, Rated V-0, 150 degree C	QMFZ2	UL	
09-2 Inductor (LF1) - Insulation Tape	Interchangeable	Interchangeable	130 degree C.	OANZ2	UL	
09-3. Inductor (LF1) - Coil	Interchangeable	Interchangeable	130 degree C	OBMW2	UL	
10. Y-cap. (CY1) (optional)	Success Electronics Co Ltd	SB	Maximum 470 pF, minimum 250 Vac, minimum 125 degree	FOWX2	UL E114280	

			C. Located between primary and secondary, Class Y1 type			
10a. Y-cap. (CY1) (optional) (Alternate)	Haohua Electronic Co	CT7	Maximum 470 pF, minimum 250 Vac, minimum 125 degree C. located between primary and secondary, Class Y1 type	FOWX2	UL E233106	
10b. Y-cap. (CY1) (optional) (Alternate)	Shantou High-New Technology Developmnt Zone Songtian Enterprise Co Ltd	CD	Maximum 470 pF, minimum 250 Vac, minimum 125 degree C. located between primary and secondary, Class Y1 type	FOWX2	UL E208107	
10c. Y-cap. (CY1) (optional) (Alternate)	Guangdong South Hongming Electronic Science & Technology Co Ltd	F	Maximum 470 pF, minimum 250 Vac, minimum 125 degree C. located between primary and secondary, Class Y1 type	FOWX2	UL E154899	
10d. Y-cap. (CY1) (optional) (Alternate)	Xiangtai Electronic (Shenzhen) Co Ltd	YOB,YOF,YOE	Maximum 470 pF, minimum 250 Vac, minimum 125 degree C. located between primary and secondary, Class Y1 type	FOWX2	UL E319473	
11. Transformer (T1)	Mass Power Electronic Limited	T012 Z 0001(for output voltage 5.0-7.5V); T012 Z 0002(for output voltage 9.0-15.0V)	Class B. See supplementary Enclosure Diagrams ID 4-01 for details.	--	--	
11-1. Transformer (T1) – Insulation System	Mass Power Electronic Ltd	SBI4.2	Class B insulation system.	OBJY2/8	UL E335869	
11-2. Transformer (T1) – Core	Interchangeable	Interchangeable	Ferrite, overall size approximately 15.6 mm by 17.7 mm by 6.3 mm.	--	--	
11-3. Transformer (T1) - Primary winding	Interchangeable	Interchangeable	130 degree C	OBMW2	UL	
11-4. Transformer (T1) - Secondary Winding	Furukawa Electric Co Ltd	TEX-E	Triple insulated wire, 130 degree C.	OBJT2	UL E206440	
11-4a. Transformer (T1) - Secondary Winding	Totoku Electric Co Ltd	TIW-2X	Triple insulated wire, 130 degree C.	OBJT2	UL E166483	

(Alternate)						
11-5. Transformer (T1) – Bobbin	Sumitomo Bakelite Co Ltd	PM-9820	Phenolic, Rated V-0, 150 degree C, minimum 0.7 mm thick. Black or brown color only.	QMFZ2	UL E41429	
11-6. Transformer (T1) - Insulation Tape	Symbio Inc	35660Y*(%)	130 degree C.	OANZ2	UL E50292	
11-6a. Transformer (T1) - Insulation Tape (Alternate)	Jingjiang Yahua Pressure Sensitive Glue Co Ltd	CT	130 degree C.	OANZ2	UL E165111	
11-6b. Transformer (T1) - Insulation Tape (Alternate)	3M Company Electrical Markets Div (Emd)	1350F-1	130 degree C.	OANZ2	UL E17385	
11-7. Transformer (T1) - Varnish	John C Dolph Co	BB-346-HF	130 degree C.	OBOR2	UL E317427	
11-7a. Transformer (T1) – Varnish(Alternate)	Hitachi Chemical Co Ltd	WP-2952F-2G	130 degree C.	OBOR2	UL E72979	
11-7b. Transformer (T1) – Varnish(Alternate)	Meiden Chemical Co Ltd	880	130 degree C.	OBOR2	UL E202574	
12. Glue	Interchangeable	Interchangeable	Minimum V-2.	QMFZ2	UL	
13. Heat Shrinkable Tube (used for F2)	Interchangeable	Interchangeable	VW-1, 600V, minimum 105 degree C.	YDPU2	UL	
14. Output Cord	Interchangeable	Interchangeable	Non-detachable, minimum 80 degree C, minimum 30 V. minimum 24AWG, Maximum 3.05 m long, insulated with PVC, TFE, PTFE, FEP, neoprene or polyimide, marked VW-1. One end terminates with non-standard polarized connector, the other end hooked and soldered to PWB.	AVLV2	UL	
15. Strain Relief (used for output wire)	Interchangeable	Interchangeable	Integrally molded with output cord. Physically secured into the cutout of plastic enclosure. See Miscellaneous ID 7-06 for details.	QMFZ2	UL	

16. Primary Lead Wire	Interchangeable	Interchangeable	Rated 105 degree C, 300V, min. 24 AWG, marked VW-1 or FT-1. Hooked and soldered to PWB	AVLV2	UL	
17. Transistor (Q1)	Interchangeable	Interchangeable	Rated minimum 600V, minimum 2A	--	--	
18. Varistor (MOV1) (Optional) (MOV1 must be used with F1 simultaneously)	Thinking Electronic Industrial Co Ltd	For 100-120V input voltage: TVR10331-V TVR10391-V TVR14331-V TVR14391-V For 100-240V input voltage: TVR10471-V, TVR10561-V, TVR14471-V, TVR14561-V,	Maximum Continuous Operation Voltage rated 300V with Voltage Protection Rating 1800 Vpeak (for 100-240V input voltage) Maximum Continuous Operation Voltage rated 215V with Voltage Protection Rating 1800 Vpeak (for 100-120V input voltage). Enclosed with min. V-1	VZCA2/8	UL E314979	
18a. Varistor (MOV1) (Optional) (MOV1 must be used with F1 simultaneously) (Alternate)	Joyin Co Ltd	For 100-120V input voltage: 10S331K 10S391K 14S331K 14S391K For 100-240V input voltage: 10S471K 10S561K 14S471K 14S561K	Maximum Continuous Operation Voltage rated 300V with Voltage Protection Rating 1800 Vpeak (for 100-240V input voltage) Maximum Continuous Operation Voltage rated 210V with Voltage Protection Rating 1800 Vpeak (for 100-120V input voltage). Enclosed with min. V-1	VZCA2/8	UL E325508	
19. Opto-coupler (PC1)	Everlight Electronics Co Ltd	EL817	Insulation voltage minimum 5000 Vac, minimum 110 degree C. Distance through insulation measured 0.4 mm minimum.	FPQU2/8	UL E214129	
19a. Opto-coupler (PC1) (Alternate)	Lite-On Technology Corp	LTV817	Insulation voltage minimum 5000 Vac, minimum 115	FPQU2/8	UL E113898	

			degree C. Distance through insulation measured 0.4 mm minimum.			
19b. Opto-coupler (PC1) (Alternate)	Cosmo Electronics Corp	KP1010	Insulation voltage minimum 5000 Vac, minimum 100 degree C. Distance through insulation measured 0.4 mm minimum.	FPQU2/8	UL E169586	
20. Current Limit Resistors (R13, R13A)	Interchangeable	Interchangeable	Minimum 1.6Ohm, 1/4W.	--	--	
21. Insulation Sheet used between Plug Holder and PCB	Sabic Innovative Plastics Us L L C	FR700(GG)	PC, 130°C, V-0, min. thickness 0.4mm. See Enclosure Miscellaneous ID 7-07, 7-08, 7-09 for dimension drawing of Models NBS12ExxyyyVU, NBS12ExxyyyHU and NBS12ExxyyyD5 respectively.	QMFZ2	UL E121562	
22. Marking Label	Interchangeable	Interchangeable	Rated minimum 75 degree C, suitable to its application surface.	PGDQ2/8 or PGJI2/8	UL	

Enclosures

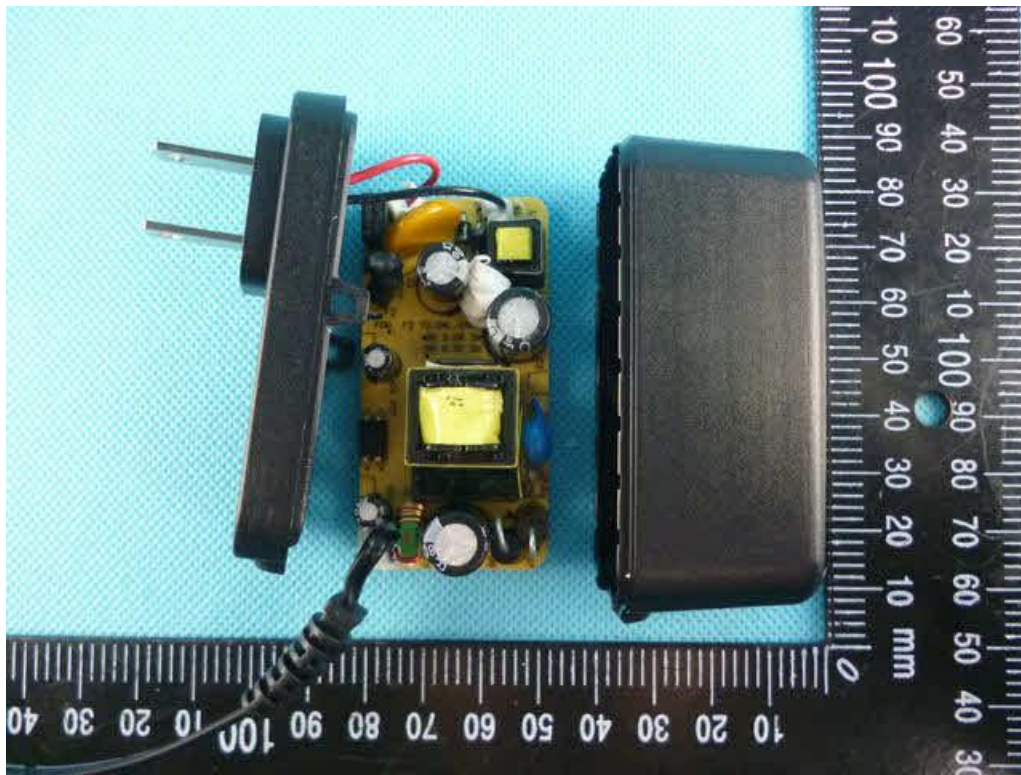
<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Photographs	3-01	General View 1 of Model NBS12ExxyyyVU
Photographs	3-02	General View 2 of Model NBS12ExxyyyVU
Photographs	3-03	General View 3 of Model NBS12ExxyyyVU
Photographs	3-04	Internal View 1 of Model NBS12ExxyyyVU
Photographs	3-05	Internal View 2 of Model NBS12ExxyyyVU
Photographs	3-06	PCB Component View of Model NBS12ExxyyyVU
Photographs	3-07	PCB Trace View of Model NBS12ExxyyyVU
Photographs	3-08	Top Enclosure without V design of Model NBS12ExxyyyVU (with or without LED hole)
Photographs	3-09	Top Enclosure with V design of Model NBS12ExxyyyVU (with or without LED hole)
Photographs	3-10	General View 1 of Model NBS12ExxyyyHU
Photographs	3-11	General View 2 of Model NBS12ExxyyyHU
Photographs	3-12	General View 3 of Model NBS12ExxyyyHU
Photographs	3-13	General View 4 of Model NBS12ExxyyyHU
Photographs	3-14	Internal View 1 of Model NBS12ExxyyyHU
Photographs	3-15	Internal View 2 of Model NBS12ExxyyyHU
Photographs	3-16	Internal View 3 of Model NBS12ExxyyyHU
Photographs	3-17	PCB Component View of Model NBS12ExxyyyHU
Photographs	3-18	PCB Trace View of Model NBS12ExxyyyHU
Photographs	3-19	Top Enclosure of Model NBS12ExxyyyHU (with or without V design, with or without LED hole)
Photographs	3-20	General View 1 of Model NBS12ExxyyyD5
Photographs	3-21	General View 2 of Model NBS12ExxyyyD5
Photographs	3-22	General View 3 of Model NBS12ExxyyyD5
Photographs	3-23	General View 4 of Model NBS12ExxyyyD5
Photographs	3-24	General View 5 of Model NBS12ExxyyyD5
Photographs	3-25	Internal View 1 of Model NBS12ExxyyyD5
Photographs	3-26	Internal View 2 of Model NBS12ExxyyyD5
Photographs	3-27	Internal View 3 of Model NBS12ExxyyyD5
Diagrams	4-01	Specification of Transformer (T1)
Diagrams	4-02	Specification of Inductor (LF1)
Schematics + PWB	5-01	PCB Component and Trace Layout
Schematics + PWB	5-02	Circuit Diagram
Manuals	6-01	User Manual

Miscellaneous	7-01	Model List
Miscellaneous	7-02	Enclosure Drawing of Model NBS12ExxyyyVU
Miscellaneous	7-03	Enclosure Drawing of Model NBS12ExxyyyHU
Miscellaneous	7-04	Enclosure Drawing of Model NBS12ExxyyyD5
Miscellaneous	7-05	Plug Drawing of Model NBS12ExxyyyD5
Miscellaneous	7-06	Drawing of Strain Relief (used for output wire)
Miscellaneous	7-07	Insulation Sheet used between Plug Holder and PCB of Model NBS12ExxyyyVU
Miscellaneous	7-08	Insulation Sheet used between Plug Holder and PCB of Model NBS12ExxyyyHU
Miscellaneous	7-09	Insulation Sheet used between Plug Holder and PCB of Model NBS12ExxyyyD5
Miscellaneous	7-10	Label Artwork of Model NBS12ExxyyyVU (Input 100-120V, Output 12V, 1A)
Miscellaneous	7-11	Label Artwork of Model NBS12ExxyyyVU (Input 100-240V, Output 12V, 1A)
Miscellaneous	7-12	Label Artwork of Model NBS12ExxyyyHU (Input 100-120V, Output 12V, 1A)
Miscellaneous	7-13	Label Artwork of Model NBS12ExxyyyHU (Input 100-240V, Output 12V, 1A)
Miscellaneous	7-14	Label Artwork of Model NBS12ExxyyyD5 (Input 100-240V, Output 12V, 1A)
Miscellaneous	7-15	Blade Drawing

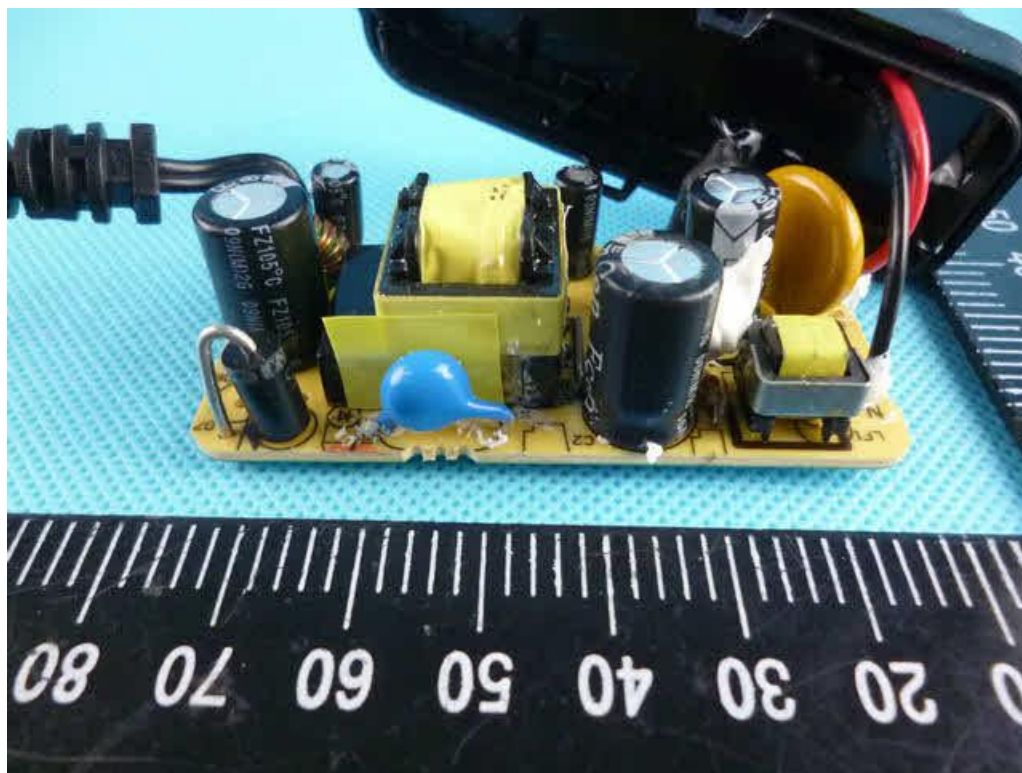


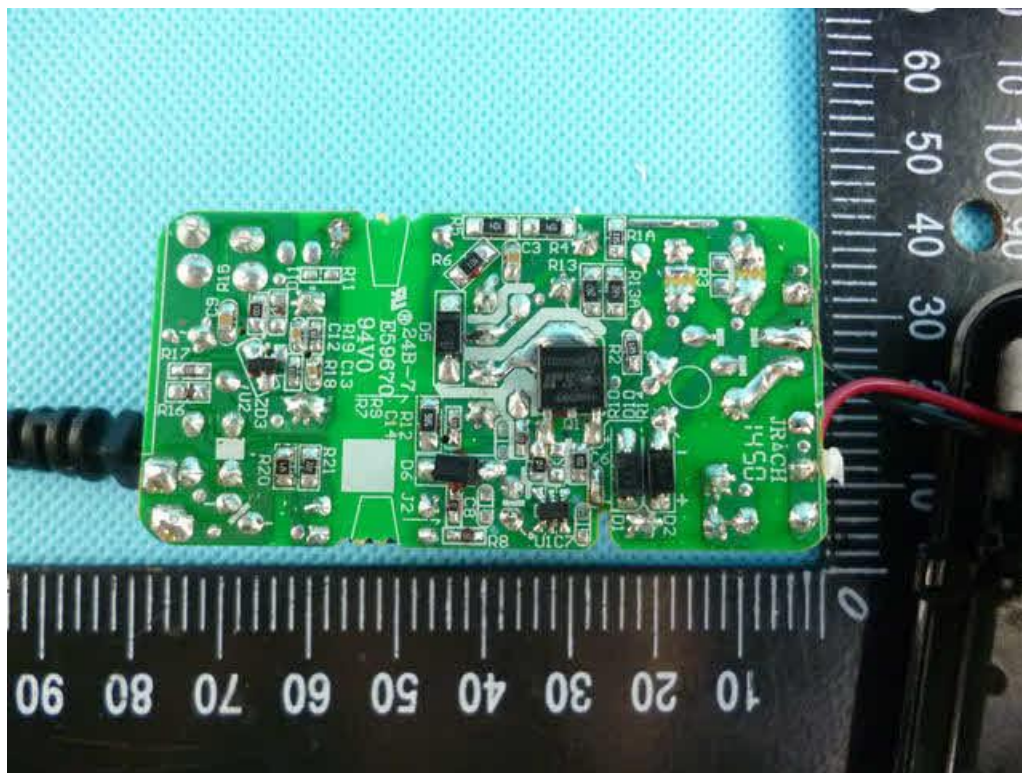




















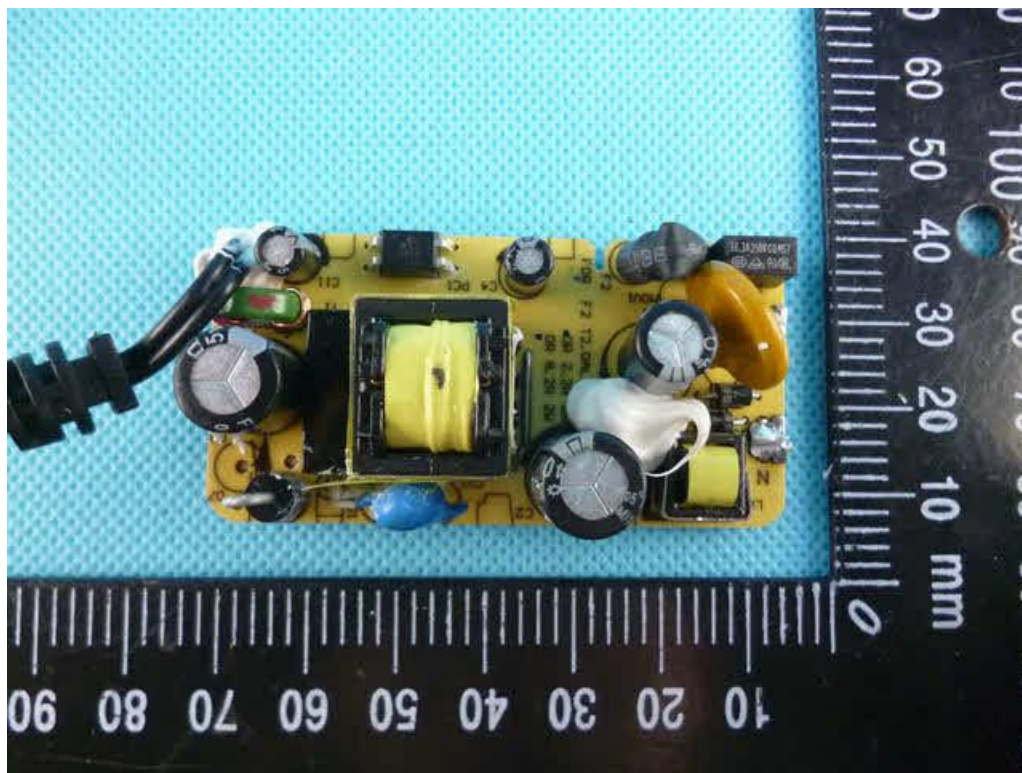


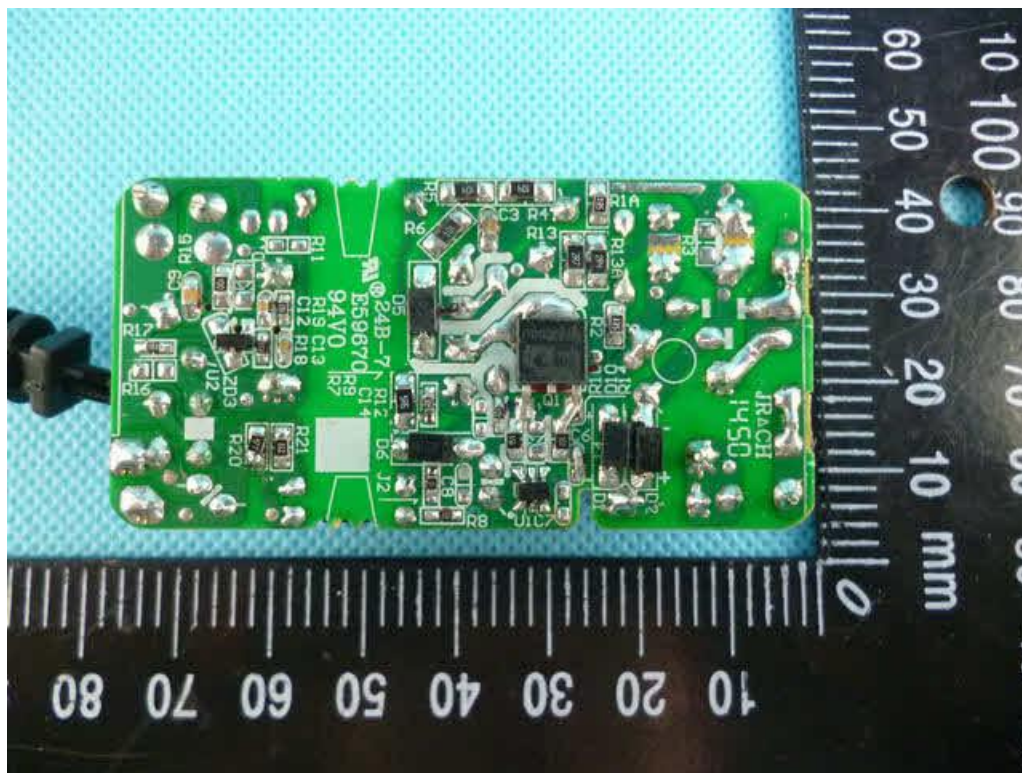


















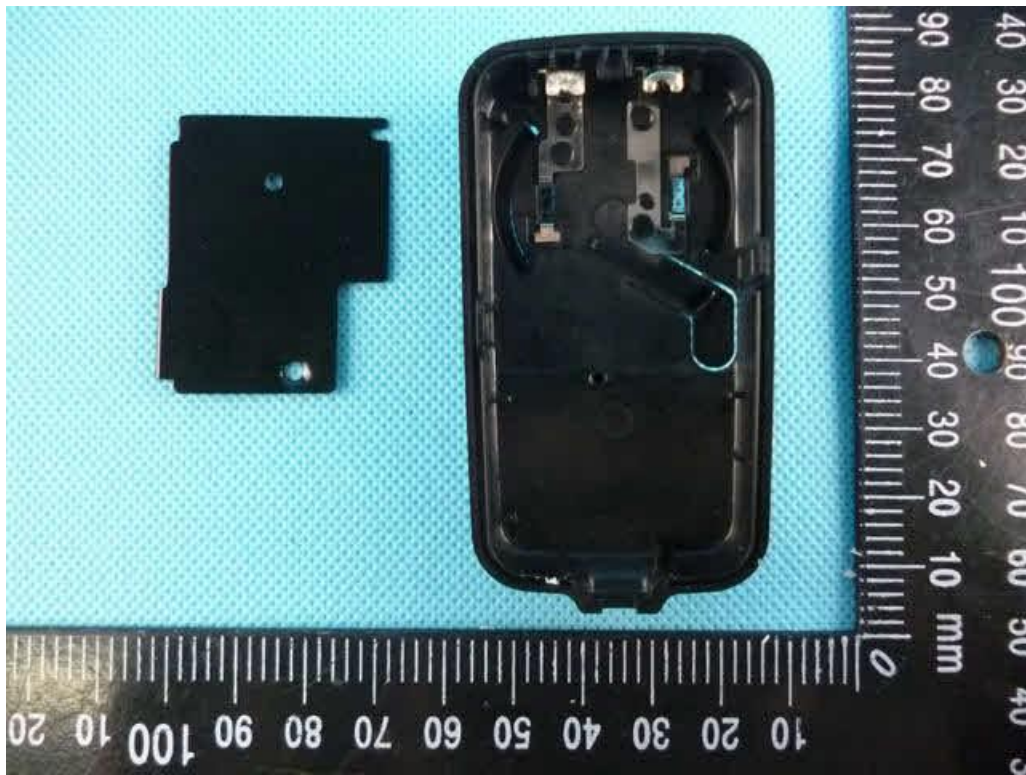






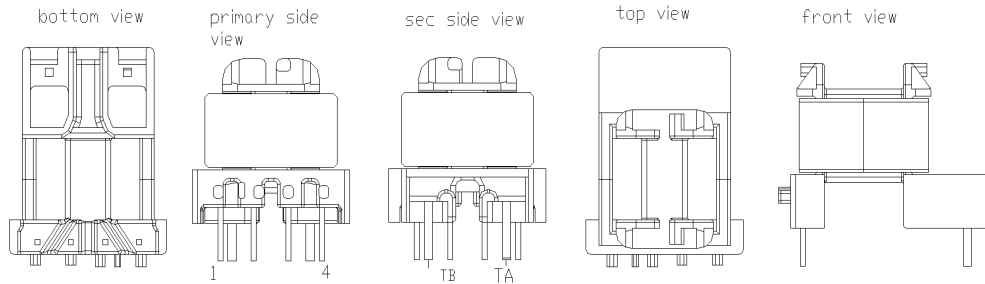






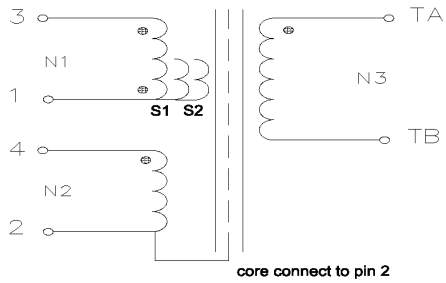
	Item	Transformer
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1. Outlook Drawing (Unit: mm)



2. Schematic:

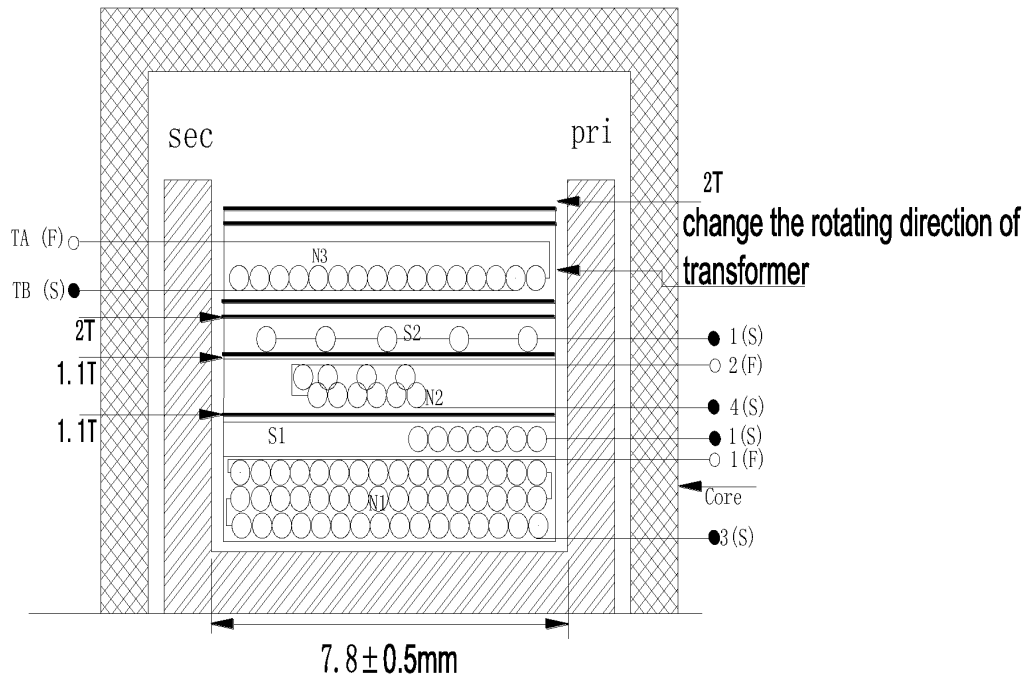
e. SCHE MATIC.



3. Section Drawing:

Revisions: 1.0	DATE:2014-9-23		File No.:	
Design:	Check:	Safety Engineer:	Approve:	Page: 1 OF 3

	Item	Transformer
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4. Winding Specification:
T012 Z 0001 000A 5V-7.5V

Revisions: 1.0	DATE:2014-9-23	File No.:	
Design:	Check:	Safety Engineer:	Approve: Page: 2 OF 3

			Item	Transformer		
Item	Terminal		Wire	Turns	Insulation Tape	
	Start	Final			Turns	MATERIAL
N1	3	1	Magnet Wire $\Phi 0.22\text{mm}$	100ts		POLYESTER TAPE T:0.025mm W:8.1mm
S1	1	/	Magnet Wire $\Phi 0.22\text{mm}$	1.5 - 30.5ts	1.1	
N2	4	2	Magnet Wire $\Phi 0.22\text{mm}$	19 ts	1.1	POLYESTER TAPE T:0.025mm W:8.1mm
S2	1	/	Magnet Wire $\Phi 0.22\text{mm}$	0 - 30.5ts	2	POLYESTER TAPE T:0.025mm W:8.1mm
N3	TB	TA	Triple Wire $\Phi 0.7\text{mm}^*1\text{Ts}$	7ts	2	POLYESTER TAPE T:0.025mm W:8.1mm

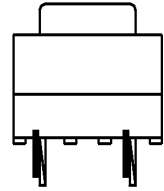
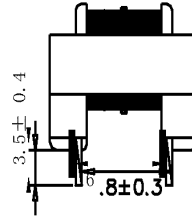
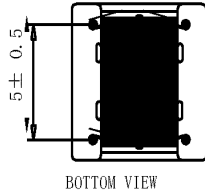
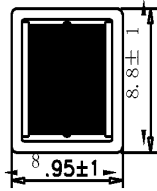
T012 Z 0002 000A 9V-15V

Item	Terminal		Wire	Turns	Insulation Tape	
	Start	Final			Turns	MATERIAL
N1	3	1	Magnet Wire $\Phi 0.22\text{mm}$	100ts		POLYESTER TAPE T:0.025mm W:8.1mm
S1	1	/	Magnet Wire $\Phi 0.22\text{mm}$	1.5 - 30.5ts	1.1	
N2	4	2	Magnet Wire $\Phi 0.22\text{mm}$	19ts	1.1	POLYESTER TAPE T:0.025mm W:8.1mm
S2	1	/	Magnet Wire $\Phi 0.22\text{mm}$	0 - 30.5ts	2	POLYESTER TAPE T:0.025mm W:8.1mm
N3	TB	TA	Triple Wire $\Phi 0.4\text{mm}^*1\text{Ts}$	16ts	2	POLYESTER TAPE T:0.025mm W:8.1mm

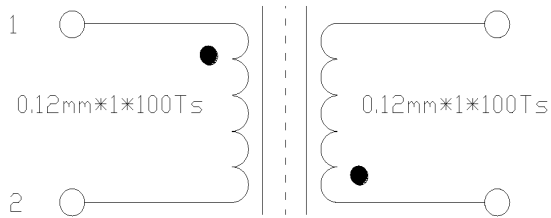
Revisions: 1.0	DATE:2014-9-23	File No.:	
Design:	Check:	Safety Engineer:	Approve: Page: 3 OF 3

	Item	Inductor
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1. Outlook Drawing (Unit: mm)



2. Schematic:



3. Electrical Character:

3.1 Inductance: L1: 15mH min. L2: 15mH min.

3.2 DCR,(25°C): R1:3.5 ohm max. R2: 3.5 ohm max.

3.3 Dielectric Strength: 5mA, 2S, 1000Vac

3.4 Insulation Resistance: 500V, 100M ohm

Revisions:1.1	DATE: 2014-5-13	PRODUCT NO. :	File No.:
Design:	Check:	Safety Engineer:	Approve: Page: 1 OF 2

	Item	Inductor

4. Winding

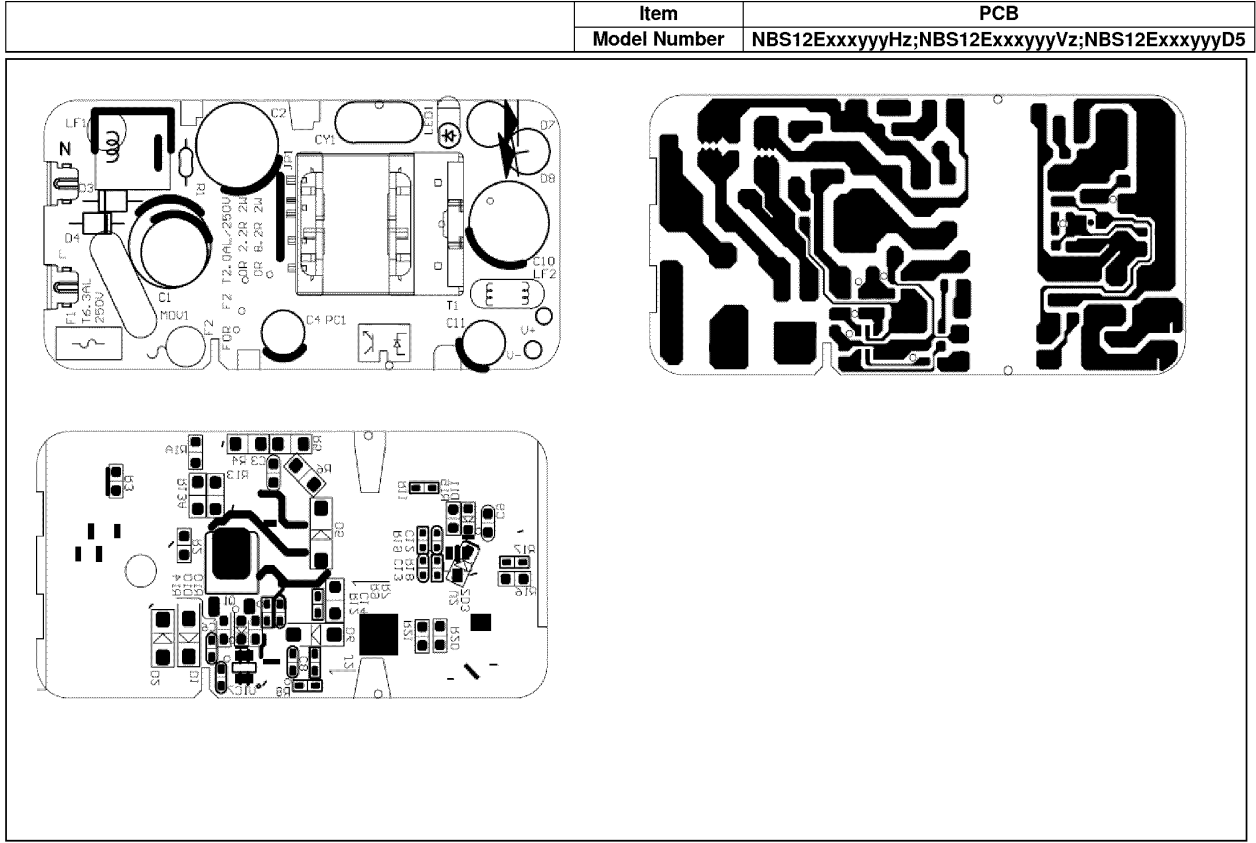
Item	Wire	Turns	Turns	Insulation Tape
1-2	Magnet WireΦ0.12mm	100Ts	2	POLYESTER TAPE T:0.025mm W:5mm
4-2	Magnet WireΦ0.12mm	100Ts		

注意：包磁芯用 5mm 的胶带包两圈或用铁夹。

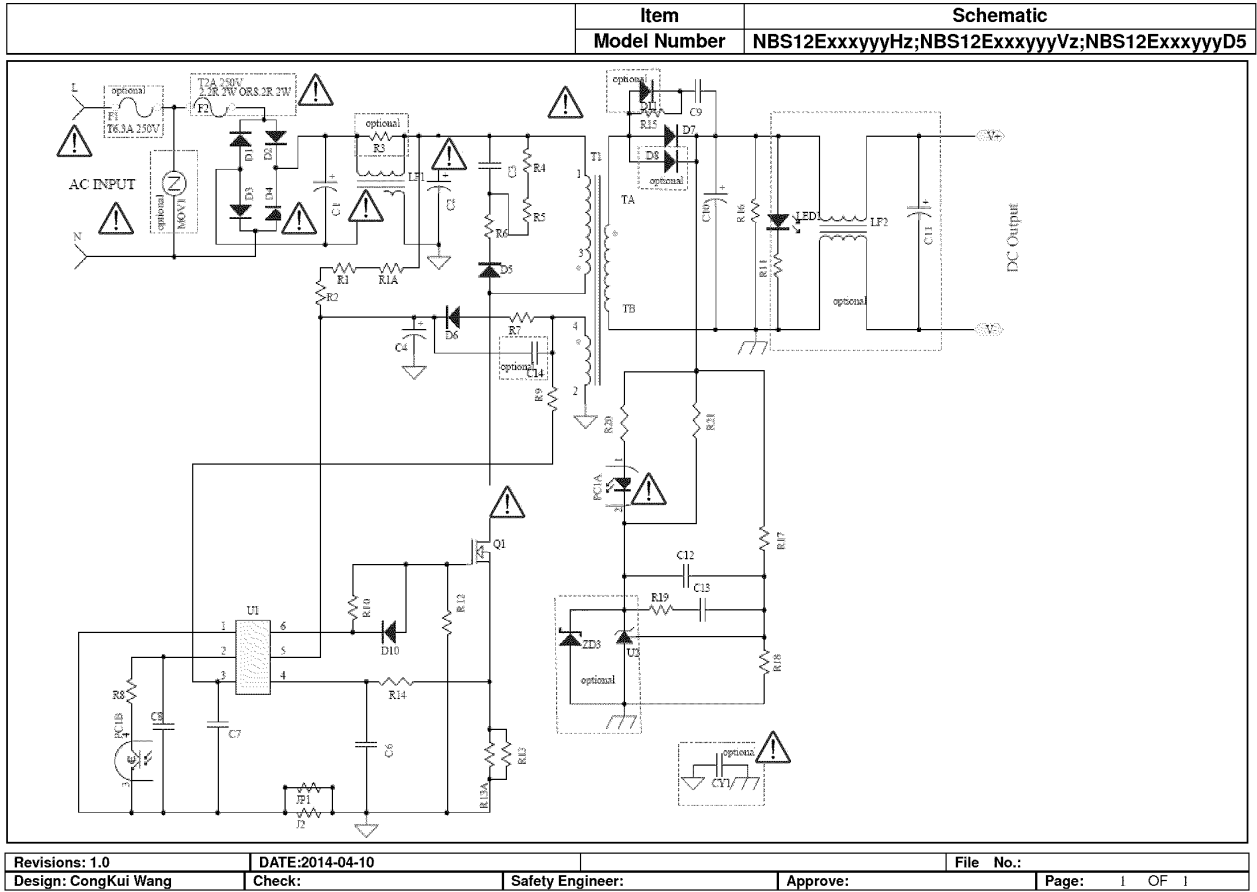
5. Part List:

Material	Supplier	Model Number	Specification	Certificate
Bobbin	Chang Chun	PM9820	94V-0,150°C	UL E54705
Magnet Wire	Feng Ching Metal Corp	*UEW	130°C	E172395
Ferrite Core	Various	/	/	/
CLIP	Various	/	/	/

Revisions:1.1	DATE: 2014-5-13	PRODUCT NO. :	File No.:
Design:	Check:	Safety Engineer:	Approve: Page: 2 OF 2



Revisions: 1.0	DATE:2014-04-10		File No.:
Design: CongKui Wang	Check:	Safety Engineer:	Approve:
			Page: 1 OF 1



Instruction Sheet

Please read the instruction sheet carefully before use

1. Technical data

Model: NBS12ExxxxxVz; NBS12ExxxxxHz; NBS12ExxxxxD5 (xxx=050-075, 090-150; yyy=005-210; z= A, B, C, E, I, K, O, R, S, T, U indicates the type of AC Plug)


Rated input voltage: 100-240V~, 100-120V~, 200-240V~




Rated input current: 0.3A

Rated input frequency:50/60Hz

Rated output: 5.0-7.5V or 9.0-15.0 V d.c./0.05-2.10A

2. Warning

- 1) Read these instructions.
 - 2) Keep these instructions.
 - 3) Heed all warnings.
 - 4) Follow all instructions.
 - 5) Do not use this apparatus near water.
 - 6) Clean only with dry cloth.
 - 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
 - 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
 - 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
 - 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
 - 11) Only use attachments/accessories specified by the manufacturer.
 - 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		This symbol indicates that this product incorporates double insulation between hazardous mains voltage and user accessible parts. When servicing use only identical replacement parts.	
Caution: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.			
	This symbol indicates important instructions accompanying the product.		This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

WARNING To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. The apparatus must not be exposed to dripping or splashing. Objects filled with liquids, such as vases or drinking glasses, must never be placed on the apparatus.

Shenzhen Mass Power Electronic Limited

437#, Hedong Village, Hengkeng Community, Guanlan Street, Bao'an District, Shenzhen, P. R. China

Tel:++86+755 29453196

Fax:++86+755 29453195

Model list:

Model No.	Rated output voltage (V d.c.)	Rated output current (mA)
NBS12E050yyyHz NBS12E050yyyVz NBS12E050yyyD5 (050-2100)	5.0	50-2100
NBS12E051yyyHz NBS12E051yyyVz NBS12E051yyyD5 (050-2060)	5.1	50-2060
NBS12E052yyyHz NBS12E052yyyVz NBS12E052yyyD5 (050-2100)	5.2	50-2100
NBS12E053yyyHz NBS12E053yyyVz NBS12E053yyyD5 (050-2060)	5.3	50-2060
NBS12E054yyyHz NBS12E054yyyVz NBS12E054yyyD5 (050-2020)	5.4	50-2020
NBS12E055yyyHz NBS12E055yyyVz NBS12E055yyyD5 (050-1980)	5.5	50-1980
NBS12E056yyyHz NBS12E056yyyVz NBS12E056yyyD5 (050-1950)	5.6	50-1950
NBS12E057yyyHz NBS12E057yyyVz NBS12E057yyyD5 (050-1910)	5.7	50-1910
NBS12E058yyyHz NBS12E058yyyVz NBS12E058yyyD5 (050-1880)	5.8	50-1880
NBS12E059yyyHz NBS12E059yyyVz NBS12E059yyyD5 (050-1850)	5.9	50-1850

NBS12E060yyyHz NBS12E060yyyVz NBS12E060yyyD5 (050-1880)	6.0	50-1880
NBS12E061yyyHz NBS12E061yyyVz NBS12E061yyyD5 (050-1850)	6.1	50-1850
NBS12E062yyyHz NBS12E062yyyVz NBS12E062yyyD5 (050-1820)	6.2	50-1820
NBS12E063yyyHz NBS12E063yyyVz NBS12E063yyyD5 (050-1790)	6.3	50-1790
NBS12E064yyyHz NBS12E064yyyVz NBS12E064yyyD5 (050-1770)	6.4	50-1770
NBS12E065yyyHz NBS12E065yyyVz NBS12E065yyyD5 (050-1740)	6.5	50-1740
NBS12E066yyyHz NBS12E066yyyVz NBS12E066yyyD5 (050-1710)	6.6	50-1710
NBS12E067yyyHz NBS12E067yyyVz NBS12E067yyyD5 (050-1690)	6.7	50-1690
NBS12E068yyyHz NBS12E068yyyVz NBS12E068yyyD5 (050-1660)	6.8	50-1660
NBS12E069yyyHz NBS12E069yyyVz NBS12E069yyyD5 (050-1640)	6.9	50-1640
NBS12E070yyyHz NBS12E070yyyVz NBS12E070yyyD5 (050-1610)	7.0	50-1610

NBS12E071yyyHz NBS12E071yyyVz NBS12E071yyyD5 (050-1590)	7.1	50-1590
NBS12E072yyyHz NBS12E072yyyVz NBS12E072yyyD5 (050-1570)	7.2	50-1570
NBS12E073yyyHz NBS12E073yyyVz NBS12E073yyyD5 (050-1550)	7.3	50-1550
NBS12E074yyyHz NBS12E074yyyVz NBS12E074yyyD5 (050-1530)	7.4	50-1530
NBS12E075yyyHz NBS12E075yyyVz NBS12E075yyyD5 (050-1510)	7.5	50-1510
NBS12E090yyyHz NBS12E090yyyVz NBS12E090yyyD5 (050-1280)	9.0	50-1280
NBS12E091yyyHz NBS12E091yyyVz NBS12E091yyyD5 (050-1260)	9.1	50-1260
NBS12E092yyyHz NBS12E092yyyVz NBS12E092yyyD5 (050-1250)	9.2	50-1250
NBS12E093yyyHz NBS12E093yyyVz NBS12E093yyyD5 (050-1240)	9.3	50-1240
NBS12E094yyyHz NBS12E094yyyVz NBS12E094yyyD5 (050-1220)	9.4	50-1220
NBS12E095yyyHz NBS12E095yyyVz NBS12E095yyyD5 (050-1210)	9.5	50-1210

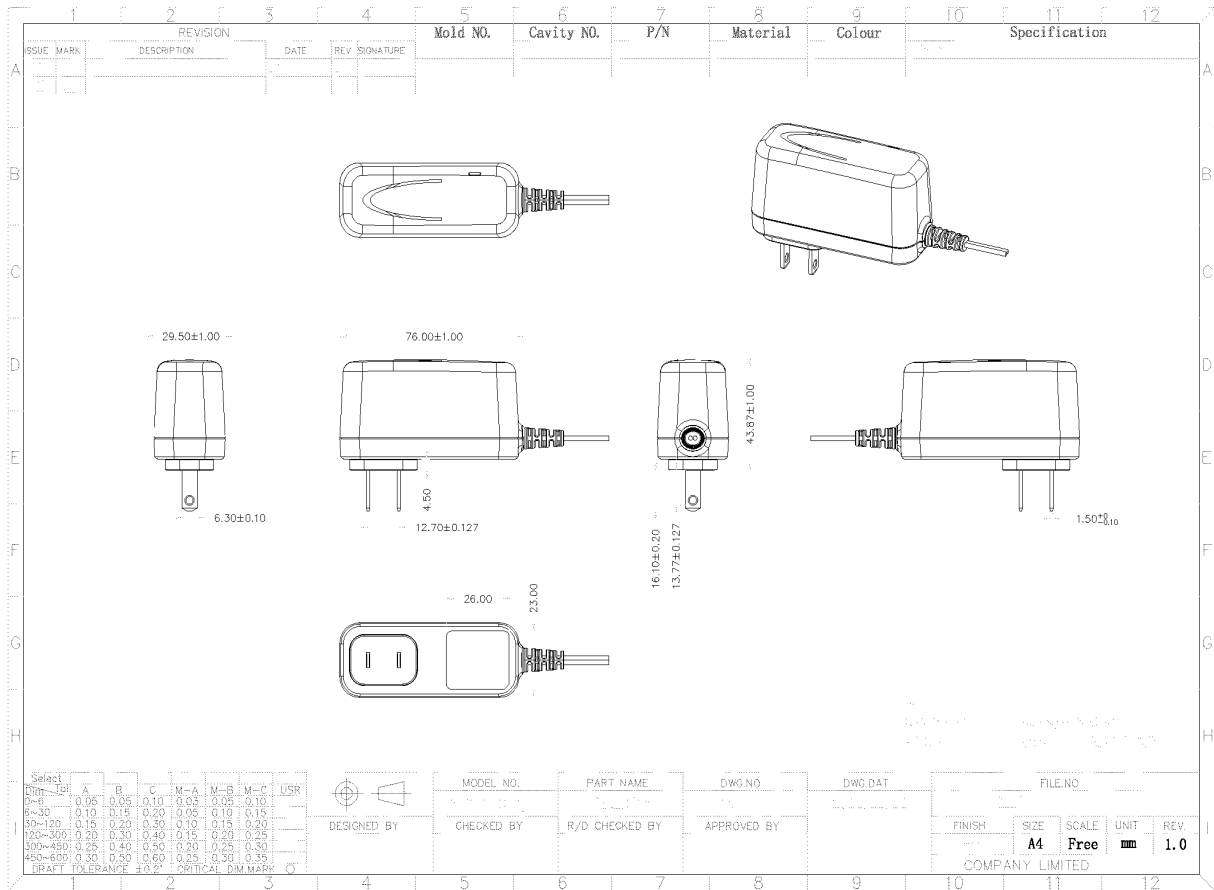
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NBS12E098yyyHz NBS12E098yyyVz NBS12E098yyyD5 (050-1170)	9.8	50-1170
NBS12E099yyyHz NBS12E099yyyVz NBS12E099yyyD5 (050-1160)	9.9	50-1160
NBS12E100yyyHz NBS12E100yyyVz NBS12E100yyyD5 (050-1150)	10.0	50-1150
NBS12E101yyyHz NBS12E101yyyVz NBS12E101yyyD5 (050-1140)	10.1	50-1140
NBS12E102yyyHz NBS12E102yyyVz NBS12E102yyyD5 (050-1130)	10.2	50-1130
NBS12E103yyyHz NBS12E103yyyVz NBS12E103yyyD5 (050-1120)	10.3	50-1120
NBS12E104yyyHz NBS12E104yyyVz NBS12E104yyyD5 (050-1110)	10.4	50-1110
NBS12E105yyyHz NBS12E105yyyVz NBS12E105yyyD5 (050-1100)	10.5	50-1100
NBS12E106yyyHz NBS12E106yyyVz NBS12E106yyyD5 (050-1080)	10.6	50-1080

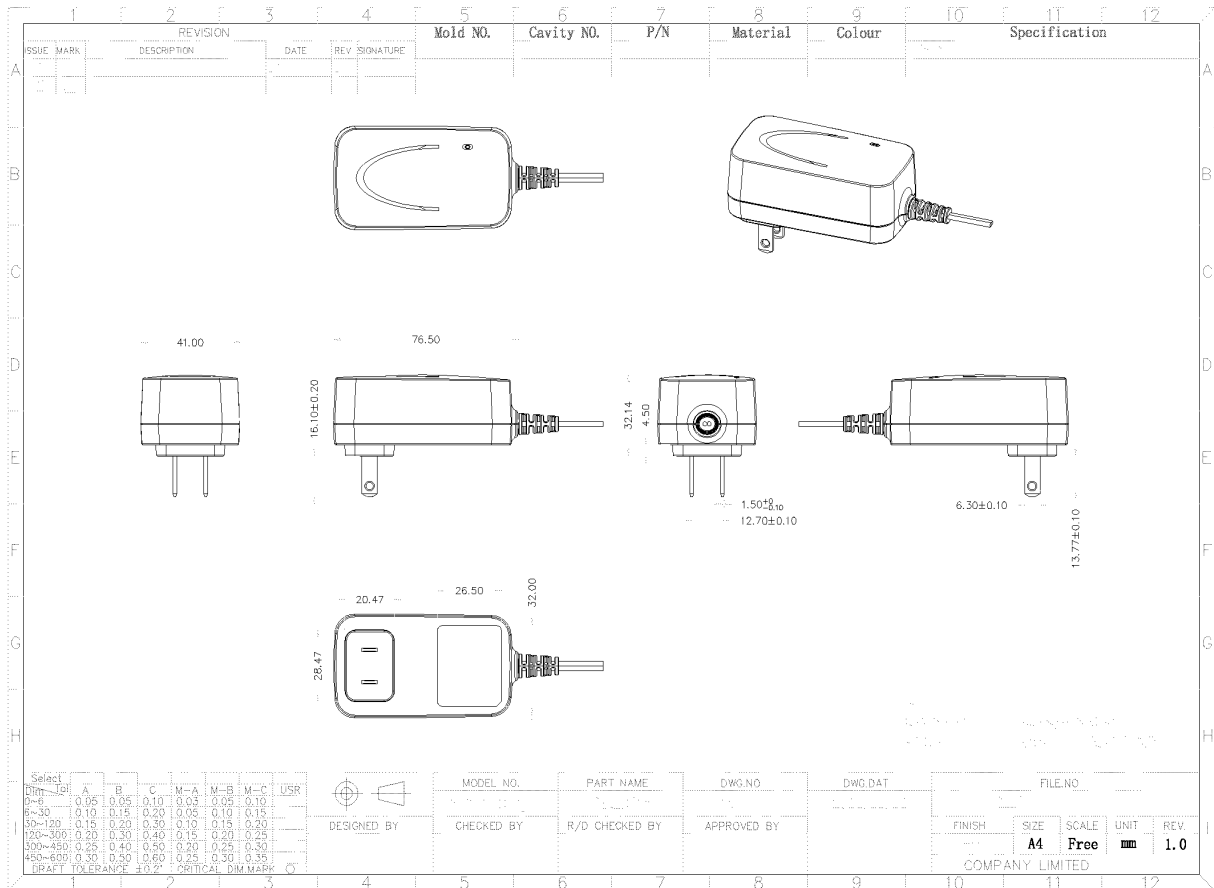
NBS12E107yyyHz NBS12E107yyyVz NBS12E107yyyD5 (050-1070)	10.7	50-1070
NBS12E108yyyHz NBS12E108yyyVz NBS12E108yyyD5 (050-1060)	10.8	50-1060
NBS12E109yyyHz NBS12E109yyyVz NBS12E109yyyD5 (050-1060)	10.9	50-1060
NBS12E110yyyHz NBS12E110yyyVz NBS12E110yyyD5 (050-1050)	11.0	50-1050
NBS12E111yyyHz NBS12E111yyyVz NBS12E111yyyD5 (050-1040)	11.1	50-1040
NBS12E112yyyHz NBS12E112yyyVz NBS12E112yyyD5 (050-1030)	11.2	50-1030
NBS12E113yyyHz NBS12E113yyyVz NBS12E113yyyD5 (050-1020)	11.3	50-1020
NBS12E114yyyHz NBS12E114yyyVz NBS12E114yyyD5 (050-1010)	11.4	50-1010
NBS12E115yyyHz NBS12E115yyyVz NBS12E115yyyD5 (050-1000)	11.5	50-1000
NBS12E116yyyHz NBS12E116yyyVz NBS12E116yyyD5 (050-990)	11.6	50-990
NBS12E117yyyHz NBS12E117yyyVz NBS12E117yyyD5 (050-980)	11.7	50-980

NBS12E118yyyHz NBS12E118yyyVz NBS12E118yyyD5 (050-970)	11.8	50-970
NBS12E119yyyHz NBS12E119yyyVz NBS12E119yyyD5 (050-970)	11.9	50-970
NBS12E120yyyHz NBS12E120yyyVz NBS12E120yyyD5 (050-1000)	12.0	50-1000
NBS12E121yyyHz NBS12E121yyyVz NBS12E121yyyD5 (050-990)	12.1	50-990
NBS12E122yyyHz NBS12E122yyyVz NBS12E122yyyD5 (050-980)	12.2	50-980
NBS12E123yyyHz NBS12E123yyyVz NBS12E123yyyD5 (050-980)	12.3	50-980
NBS12E124yyyHz NBS12E124yyyVz NBS12E124yyyD5 (050-970)	12.4	50-970
NBS12E125yyyHz NBS12E125yyyVz NBS12E125yyyD5 (050-960)	12.5	50-960
NBS12E126yyyHz NBS12E126yyyVz NBS12E126yyyD5 (050-950)	12.6	50-950
NBS12E127yyyHz NBS12E127yyyVz NBS12E127yyyD5 (050-940)	12.7	50-940
NBS12E128yyyHz NBS12E128yyyVz NBS12E128yyyD5 (050-940)	12.8	50-940

NBS12E129yyyHz NBS12E129yyyVz NBS12E129yyyD5 (050-930)	12.9	50-930
NBS12E130yyyHz NBS12E130yyyVz NBS12E130yyyD5 (050-920)	13.0	50-920
NBS12E131yyyHz NBS12E131yyyVz NBS12E131yyyD5 (050-920)	13.1	50-920
NBS12E132yyyHz NBS12E132yyyVz NBS12E132yyyD5 (050-910)	13.2	50-910
NBS12E133yyyHz NBS12E133yyyVz NBS12E133yyyD5 (050-900)	13.3	50-900
NBS12E134yyyHz NBS12E134yyyVz NBS12E134yyyD5 (050-900)	13.4	50-900
NBS12E135yyyHz NBS12E135yyyVz NBS12E135yyyD5 (050-890)	13.5	50-890
NBS12E136yyyHz NBS12E136yyyVz NBS12E136yyyD5 (050-880)	13.6	50-880
NBS12E137yyyHz NBS12E137yyyVz NBS12E137yyyD5 (050-870)	13.7	50-870
NBS12E138yyyHz NBS12E138yyyVz NBS12E138yyyD5 (050-870)	13.8	50-870
NBS12E139yyyHz NBS12E139yyyVz NBS12E139yyyD5 (050-860)	13.9	50-860

NBS12E140yyyHz NBS12E140yyyVz NBS12E140yyyD5 (050-860)	14.0	50-860
NBS12E141yyyHz NBS12E141yyyVz NBS12E141yyyD5 (050-850)	14.1	50-850
NBS12E142yyyHz NBS12E142yyyVz NBS12E142yyyD5 (050-850)	14.2	50-850
NBS12E143yyyHz NBS12E143yyyVz NBS12E143yyyD5 (050-840)	14.3	50-840
NBS12E144yyyHz NBS12E144yyyVz NBS12E144yyyD5 (050-830)	14.4	50-830
NBS12E145yyyHz NBS12E145yyyVz NBS12E145yyyD5 (050-830)	14.5	50-830
NBS12E146yyyHz NBS12E146yyyVz NBS12E146yyyD5 (050-820)	14.6	50-820
NBS12E147yyyHz NBS12E147yyyVz NBS12E147yyyD5 (050-820)	14.7	50-820
NBS12E148yyyHz NBS12E148yyyVz NBS12E148yyyD5 (050-810)	14.8	50-810
NBS12E149yyyHz NBS12E149yyyVz NBS12E149yyyD5 (050-810)	14.9	50-810
NBS12E150yyyHz NBS12E150yyyVz NBS12E150yyyD5 (050-800)	15.0	50-800





Dim	Int	A	B	C	M-A	M-B	M-C	USR
0-9	0.05	0.05	0.10	0.05	0.05	0.10		
10-30	0.10	0.15	0.30	0.05	0.10	0.15		
30-120	0.15	0.20	0.30	0.10	0.15	0.20		
120-300	0.20	0.30	0.40	0.15	0.20	0.25		
300-450	0.25	0.40	0.50	0.20	0.25	0.30		
450-600	0.30	0.50	0.60	0.25	0.30	0.35		

DESIGNED BY	CHECKED BY	R/D CHECKED BY	APPROVED BY
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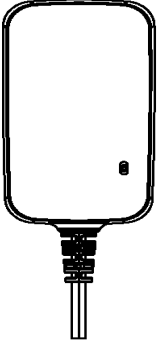
MODEL NO.	PART NAME	DWG. NO.	DWG. DAT	FILE NO.
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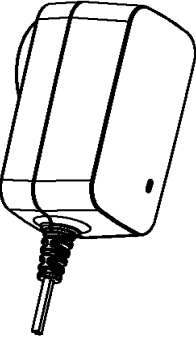
COMPANY LIMITED

1	2	3	4	5	6	7	8	9	10	11	12
ISSUE MARK	REVISION	DATE	REV SIGNATURE	Mold NO.	Cavity NO.	P/N	Material	Colour	雾面	Specification	
A 1	First Release	2014.9.10	1.0 IAN								
2											

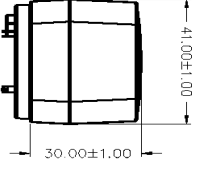
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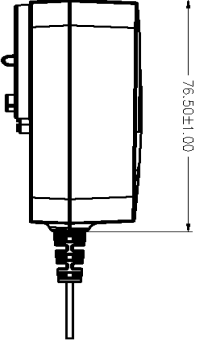
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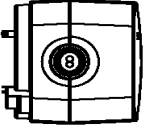
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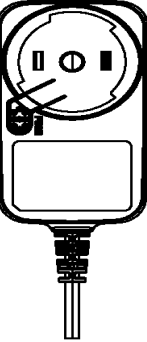
E




F



G



H



Notes:

1. 需符合ROHS, REACH, PAHS等环保要求.
2. 加“1,2,3.....”标示的尺寸为重点检测尺寸

Select	A	B	C	M-A	M-B	M-C	USR
Dim To							
0~6	0.05	0.05	0.10	0.03	0.05	0.10	
6~30	0.10	0.15	0.20	0.05	0.10	0.15	
30~120	0.15	0.20	0.30	0.10	0.15	0.20	
120~300	0.20	0.30	0.40	0.15	0.20	0.25	
300~450	0.25	0.40	0.50	0.20	0.25	0.30	
450~600	0.30	0.50	0.60	0.25	0.30	0.35	
DRAFT TOLERANCE ±0.2 CRITICAL DIM.MARK							

DESIGNED BY IAN

MODEL NO. 12V1A-插式-AC

CHECKED BY

EXTERIOR 3Y

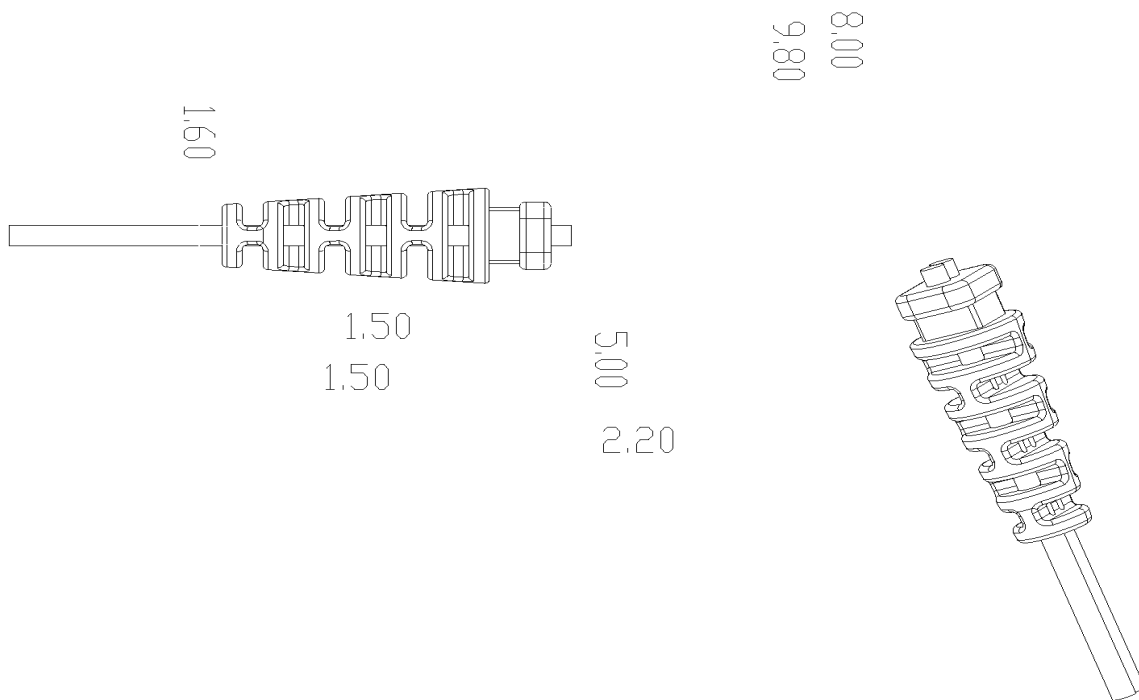
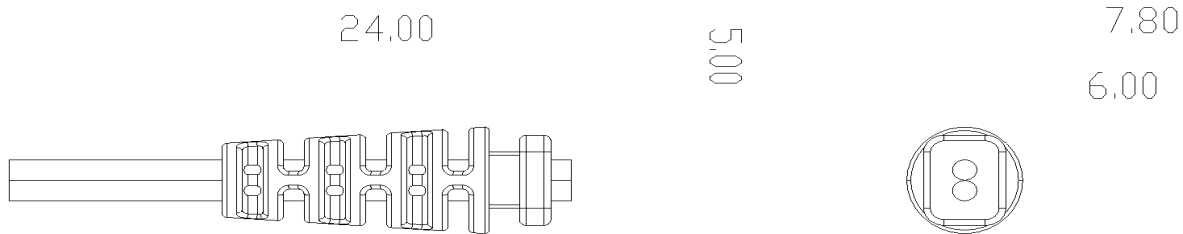
DWG. NO. XXX

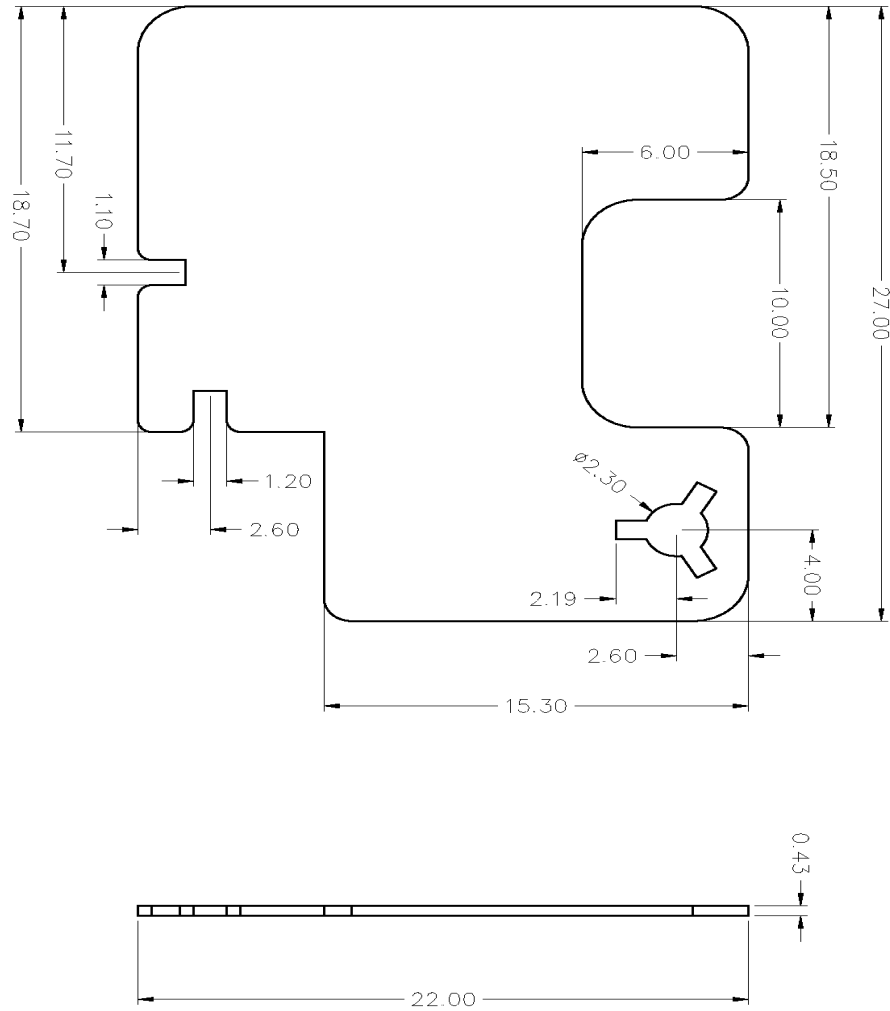
APPROVED BY

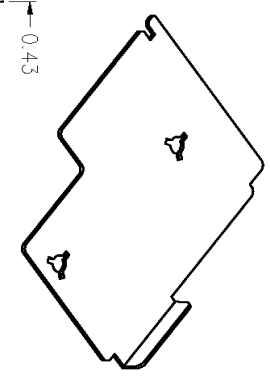
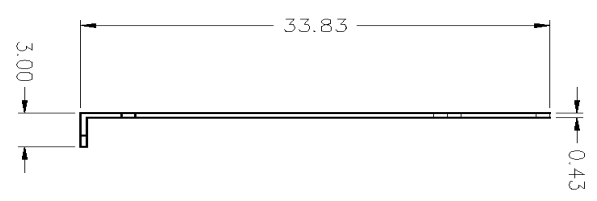
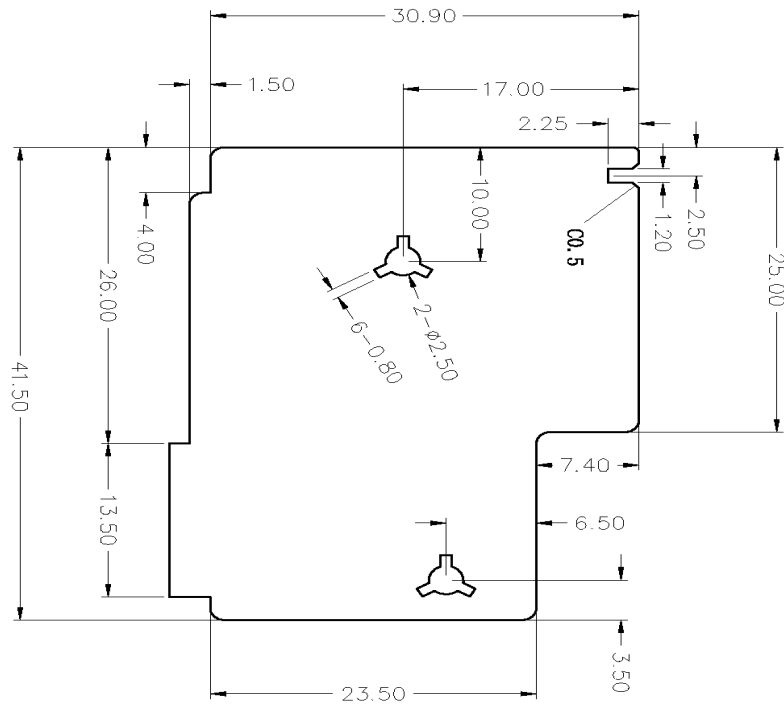
DWG. DAT 2014.9.10

FINISH A4 Free mm 1.0

1	2	3	4	5	6	7	8	9	10	11	12																																																																																																																																																												
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ISSUE MARK	DESCRIPTION	DATE	REV	SIGNATURE																																																																																																																																																																			
A 1	First Release	2011.10.07	A1	???																																																																																																																																																																			
<table border="1"> <tr> <td>Dim</td> <td>Select</td> <td>A</td> <td>B</td> <td>C</td> <td>M-A</td> <td>M-B</td> <td>M-C</td> <td>USR</td> <td colspan="2">MODEL NO.</td> <td>PART NO.</td> </tr> <tr> <td>0~6</td> <td>0.05</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">Plug UL</td> <td></td> </tr> <tr> <td>6~30</td> <td>0.10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">CHECKED</td> <td></td> </tr> <tr> <td>30~120</td> <td>0.15</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">P/N</td> <td></td> </tr> <tr> <td>120~300</td> <td>0.20</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">APPROVED</td> <td></td> </tr> <tr> <td>300~450</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">DWG. DATE</td> <td>2011.10.07</td> </tr> <tr> <td>450~600</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">MATERIAL</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">FINISH</td> <td>Not</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">SIZE</td> <td>A4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">SCALE</td> <td>Free</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">UNIT</td> <td>mm</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">REV.</td> <td>A1</td> </tr> <tr> <td colspan="12" style="text-align: center;">ELECTRONIC LIMITED</td> </tr> </table>												Dim	Select	A	B	C	M-A	M-B	M-C	USR	MODEL NO.		PART NO.	0~6	0.05								Plug UL			6~30	0.10								CHECKED			30~120	0.15								P/N			120~300	0.20								APPROVED			300~450	0								DWG. DATE		2011.10.07	450~600									MATERIAL												FINISH		Not										SIZE		A4										SCALE		Free										UNIT		mm										REV.		A1	ELECTRONIC LIMITED											
Dim	Select	A	B	C	M-A	M-B	M-C	USR	MODEL NO.		PART NO.																																																																																																																																																												
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AC ADAPTER

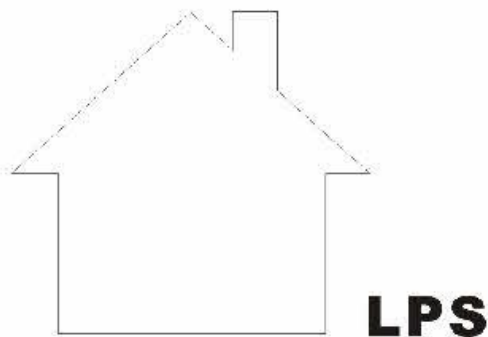
MODEL:NBS12E120100VU

INPUT:100-120V~, 50/60Hz, 0.3A

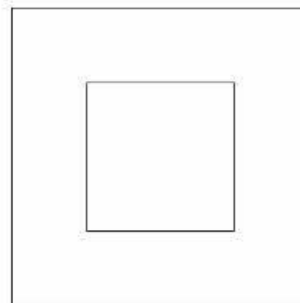
OUTPUT:12.0V = 1.0A

FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

C  **US**
LISTED
E335801
3PM7
AV PRODUCT
I.T.E.POWER SUPPLY



EFFICIENCY LEVEL 



MADE IN CHINA XXYY

AC ADAPTER

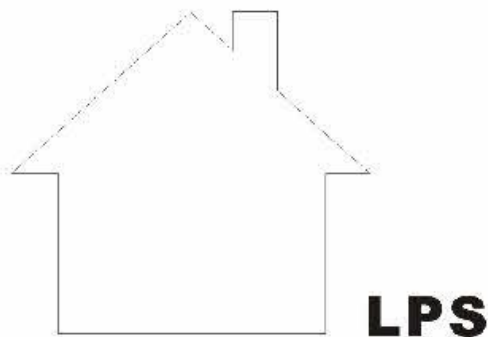
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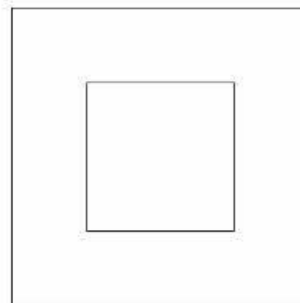
OUTPUT:12.0V == 1.0A

FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

C  **US**
LISTED
E335801
3PM7
AV PRODUCT
I.T.E.POWER SUPPLY



EFFICIENCY LEVEL 



MADE IN CHINA XXYY

AC ADAPTER

MODEL:NBS12E120100HU

INPUT:100-120V~, 50/60Hz, 0.3A

OUTPUT:12.0V = 1.0A



LISTED

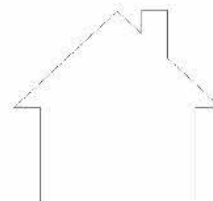
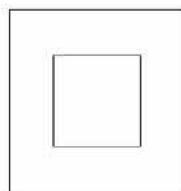
E335801

3PM7

AV PRODUCT

I.T.E.POWER SUPPLY

FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE



LPS

EFFICIENCY LEVEL VI



MADE IN CHINA

XXYY

AC ADAPTER

MODEL:NBS12E120100HU

INPUT:100-240V~, 50/60Hz, 0.3A

OUTPUT:12.0V = 1.0A



LISTED

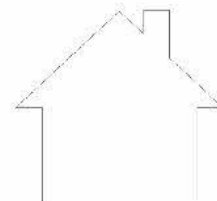
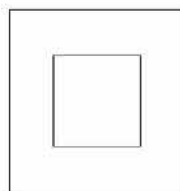
E335801

3PM7

AV PRODUCT

I.T.E.POWER SUPPLY

FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE



LPS

EFFICIENCY LEVEL VI



MADE IN CHINA

XXYY

AC ADAPTER

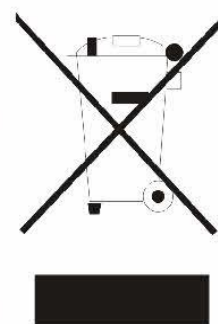
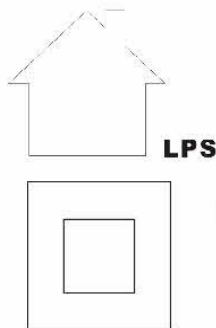
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INPUT:100-240V~, 50/60Hz, 0.3A

OUTPUT:12.0V = 1.0A



E335801
3PM7
AV PRODUCT
I.T.E.POWER SUPPLY



FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

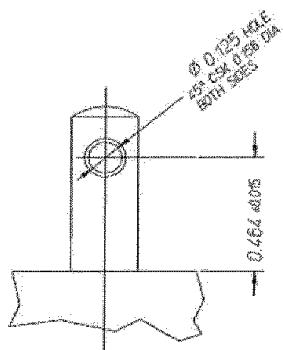
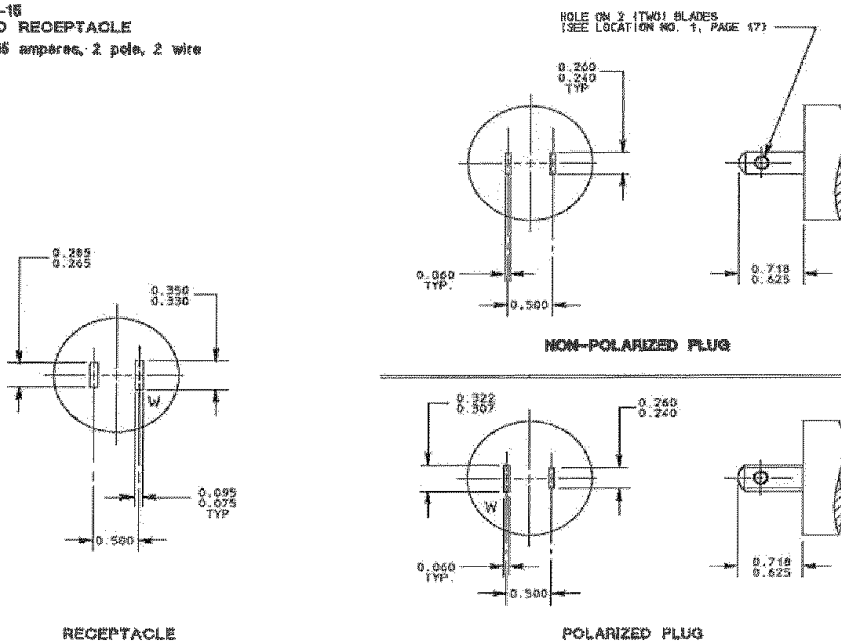


Mass Power Electronic Limited



MADE IN CHINA XXYY

FIGURE 1-16
PLUG AND RECEPTACLE
125 volts, 15 amperes, 2 pole, 2 wire



Test Record

Test Record No. 1

Testing was not considered necessary based upon previous evaluation under CB Scheme.

This report was based on:

1. The IEC60950-1 CB Report No.14118381, dated 2014-12-18 with UL Demko and CB Certificate Number DK-42711-UL, dated 2014-12-29, submitted via the CB Scheme and
2. The IEC60065 CB Report No. 14118381-1, dated 2014-12-18 with UL Demko and CB Certificate Number DK-42707-UL, dated 2014-12-29, submitted via the CB Scheme.

The test results and clause verdicts of the above noted report were reviewed and found to comply with the applicable Standard UL60950-1:2014 and UL60065:2013. As a result the clause verdicts and test results for this report were noted as N/A and have been referred to the UL Demko CB Report for details.

The following supplements are provided as a part of this Test Record. NOTE: These supplements are only available to the Applicant via the CDA system.

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Datasheet	2-01	UL 60950-1 Construction Review Datasheet
Datasheet	2-02	UL 60065 Construction Review Datasheet