



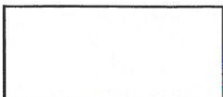
全漢企業股份有限公司

安規證書

料號 :
Model Name FSP045-RBBN3
版次 : 01
文件編號 : SFD-00005389
作者 : doration/田婷瑋(FSP)
Model No/Type : FSP045-RBBN3
SFA NO. : SFA20041182
Trade mark : -
安規種類 : KC/資訊類
發行日期 : 2020/07/01 16:45:13
備註 : 新增

33B8-FA1B-87A6-574A

방송통신기자재등의 적합등록 필증 <i>Registration of Broadcasting and Communication Equipments</i>	
상호 또는 성명 <i>Trade Name or Registrant</i>	Zhonghan Electronics (Shenzhen) Co., Ltd.
기자재명칭(제품명칭) <i>Equipment Name</i>	AC Adapter
기본모델명 <i>Basic Model Number</i>	FSP045-RBBN3
파생모델명 <i>Series Model Number</i>	
등록번호 <i>Registration No.</i>	R-R-FSZ-FSP045-RBBN3
제조사/제조(조립)국가 <i>Manufacturer/Country of Origin</i>	Zhonghan Electronics (Shenzhen) Co., Ltd. / 중국
등록연월일 <i>Date of Registration</i>	2020-05-28
기타 <i>Others</i>	
위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다. It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act. 2020년(Year) 05월(Month) 28일(Day) 국립전파연구원장  <i>Director General of National Radio Research Agency</i> ※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다. 위반시 과태료 처분 및 등록이 취소될 수 있습니다.	



안전인증서
Safety Certificate



안전인증번호: HU10142-20216A

제조업자/수입자명: Zhonghan Electronics (Shenzhen) Co.,Ltd.
(Manufacturer/Importer)

주 소: Building A2 in Section A, Building 4,6,7 in Section C, JuYuan Industrial Zone, TangWei Village, FuYong Town, BaoAn Dist., Shenzhen City, Guangdong, China
(Address)

제 품 명: 각류전원장치
(Product)

기본모델명: FSP045-RBBN3
(Basic Model)

파생모델명 (Series Model):

정격/안전기준상의 모델구분: 100-240 V~, 50-60 Hz, 1.5 A (O/P: 19 Vdc, 2.37 A)

시행기준: K 60950-1(2011-12)
(Standard)

본 인증서는 제조국명: 중국

제조업자명: Zhonghan Electronics (Shenzhen) Co.,Ltd.

제조공장의 주소: Building A2 in Section A, Building 4,6,7 in Section C, JuYuan Industrial Zone, TangWei Village, FuYong Town, BaoAn Dist., Shenzhen City, Guangdong, China
의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」 제9조제2항, 제4항, 제10조제2항 또는 제15조제2항에 따라 안전인증서를 발급합니다.
We issue this Safety Certificate for the above appliances in accordance with the Article 9(2), 9(4), 10(2) or 15(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.

2020 년 06 월 22 일
(Year) (Month) (Day)



한국기계전기전자시험연구원
Korea Testing Certification



※ 이 인증서는 「전기용품 및 생활용품 안전관리법」 에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가 인증 · 허가 등을 받아야 합니다.

첨부서류	
1. 전기용품의 안전관리부품 및 재질목록 (List of Critical Components)	cc ccc ccc ccc
2. 기본모델 · 파생모델의 내용 (Descriptions of the basic and series model)	cc ccc ccc ccc
3. 안전인증의 변경 현황 (Revisions Status)	cc ccc

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(Certificate No)

접수번호: 20200520 - 0049
(Receipt No)

1. 기본모델 · 파생모델의 내용(General Descriptions of Certified Products)

1.1 제품의 설명 (Product description)

인증제품의 개요는 다음과 같다.
(Information on certified basic model product is as follow)

구분(Section)	내용 (Description)
용도 (Normal use)	The apparatus designed to be used for converting AC main voltage to DC low voltage.
내부구조 (Internal construction)	The apparatus consists of Switching transformer, rectifying part etc.
외부구조 (External construction)	Providing with plastic enclosure having min. V-1 flammability and appliance inlet.
기타(Others)	Class 1

1.2 전기용품의 표시: 전기용품 및 생활용품 안전관리법 시행규칙 제20조(안전인종의 표시)에 따라 표시한다.

(Marking of KC Mark: Marking shall comply with the Article 20 of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.)

1.3 등록모델 (Registered Models)

구분 (Class)	모델명 및 정격 (Model / Rating)	기본모델과의 차이점 (Difference between basic model and series model)
기본모델 (Basic model)	FSP045-RBBN3 100-240 V~, 50-60 Hz, 1.5 A (O/P: 19 Vdc, 2.37 A)	

[서식 CP401-18-00]

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2. 안전관리 부품 및 재질목록(List of Critical Components)

부품명 (회로기호)	제조사 (상표명)	모델명 (형식)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Components (Part no.)	Manufacturer (Brand)	Model (Type)		
Plastic Enclosure (Top and Bottom)	LOTTE ADVANCED MATERIALS CO LTD	HN-1064	V-0 min., 1.8 mm thick min., 130°C min.	UL
Alt.	SABC INNOVATIVE PLASTICS US L C	945	V-0 min., 1.8 mm thick min., 120°C min.	UL
AC Inlet (C6 type)	Canal Electronic Co., Ltd.	KC-101-1, KC-101-2, KC-101-3, KC-101-4	250Vac, 2.5A, 70°C	IEC
Alt.	Rich Bay Co., Ltd.	R-30790	250Vac, 2.5A, 70°C	IEC
Alt.	Rong Feng Industrial Co., Ltd.	RF-190	250Vac, 2.5A, 70°C	IEC
Alt.	Solteam Electronics Co. Ltd.	ST-03	250Vac, 2.5A, 70°C	IEC
Alt.	Teex-Union Technology Corporation	TU-333	250Vac, 2.5A, 70°C	IEC
Alt.	HCR Electronics Co., Ltd.	SK03	250Vac, 2.5A, 70°C	IEC
Alt.	Inalways Corporation	0724 series	250Vac, 2.5A, 70°C	IEC
Alt.	Zhe Jiang Bei Er Jia Electronic Co., Ltd.	ST-A04-001, ST-A04-002	250Vac, 2.5A, 70°C	IEC
Fuse (F1)	Suzhou Walter Electronic Co., Ltd.	2010 series	T2.5AL, 250Vac	IEC
Alt.	Liteluse Inc.	392	T2.5AL, 250Vac	IEC
Alt.	Bel Fuse Ltd.	RST-series	T2.5AL, 250Vac	IEC
Alt.	Conquer Electronics Co., Ltd.	MST series	T2.5AL, 250Vac	IEC
Alt.	Cooper Bussmann LLC	SS-5	T2.5AL, 250Vac	IEC

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부품명 (회로기호) Components (Part no.)	제조사 (상표명) Manufacturer (Brand)	모델명 (형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Varistor (VARI) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10471-D, TVR10471-V	300Vac, 385Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Thinking Electronic Industrial Co., Ltd.	TVR10621-D, TVR10621-V	395Vac, 510Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Thinking Electronic Industrial Co., Ltd.	TVR10561-D, TVR10561-V	350Vac, 450Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Thinking Electronic Industrial Co., Ltd.	TVR10681-D, TVR10681-V	420Vac, 560Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Thinking Electronic Industrial Co., Ltd.	TVR10751-D, TVR10751-V	465Vac, 615Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Guangxi New Future Information Industry Co., Ltd.	10D471K	300Vac, 385Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Guangxi New Future Information Industry Co., Ltd.	10D511K	320 Vac, 415Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Guangxi New Future Information Industry Co., Ltd.	10D561K	350Vac, 460Vdc (Flame class of body coating complied with V- 0)	IEC
Alt.	Guangxi New Future Information Industry Co., Ltd.	10D621K	385Vac, 505Vdc (Flame class of body coating complied with V- 0)	IEC

[서식 CP401-18-00]

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접수번호: 20200520 - 0049 (Receipt No)

부품명(외문기호) Components(Part no.)	제조사(상표명) Manufacturer (Brand)	모델명(형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Alt.	Guangxi New Future Information Industry Co., Ltd.	10D681K	420Vac, 560Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K300 S10K300E2, S10K300E2K1	300Vac, 385Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K320, S10K320E2, S10K320E2K1	320Vac, 420Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K350E2K1	350Vac, 460Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K385, S10K385E2, S10K385E2K1	385Vac, 505Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K420, S10K420E2, S10K420E2K1	420Vac, 560Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K440	440Vac, 585Vdc (Flame class of body coating complied with V-0)	IEC
Alt.	EPCOS OHG(EN) EPCOS (ZHUHAI FTZ) CO LTD(US)	S10K460, S10K460E2, S10K460E2K1	460Vac, 615Vdc (Flame class of body coating complied with V-0)	IEC
X-Capacitor (CX1) (Optional) (X1 or X2 type)	Hua Jung Components Co., Ltd.	MKP	0.33μF max., 250Vac min., 100°C min., X2	IEC

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(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer (Brand)	모델명(형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Alt. Okaya Electric Industries Co., Ltd.	LEC-*)		0.33μF max., 250Vac min., 100°C min., X2	IEC
Alt. Carli Electronics Co., Ltd.	MPX		0.33μF max., 250Vac min., 100°C min., X2	IEC
Alt. Iskra, d d	KNB1530		0.33μF max., 250Vac min., 100°C min., X2	IEC
Alt. Iskra, d d	KNB1560, KNB1563, KNB1562		0.33μF max., 250Vac min., 100°C min., X2	IEC
Alt. Shiny Space Enterprise Co., Ltd.	SX1		0.33μF max., 250Vac min., 100°C min., X1 or X2	IEC
Alt. Chiefcon Electronics Co., Ltd.	CKX		0.33μF max., 250Vac min., 100°C min., X1 or X2	IEC
Alt. ZhutHai Sung Ho Electronics Co., Ltd.	CMP		0.33μF max., 250Vac min., 100°C min., X2	IEC
Alt. Ultra Tech Xiphi Enterprise Co., Ltd.	HQX		0.33μF max., 250Vac min., 100°C min., X2	IEC
Alt. Arcotronics	R.49		0.33μF max., 250Vac min., 100°C min., X1 or X2	IEC
Alt. Pilkor Electronics Co., Ltd.	PCX2 337		0.33μF max., 250Vac min., 100°C min., X2	IEC
Bridging-Capacitor (CYD) (optional) (Y1 type)	Walsin Technology AH Corp.		1500pF max., 250V min., 125°C min.	IEC
Alt. TDK Corporation	CD		1500pF max., 250V min., 125°C min.	IEC
Alt. Murata Mfg Co., Ltd.	KX		1500pF max., 250V min., 125°C min.	IEC
Alt. Success Electronics Co., Ltd.	SB, SE, SF		1500pF max., 250V min., 125°C min.	IEC
Alt. TDK Corporation	CD (miniature series)		1500pF max., 250V min., 125°C min.	IEC

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부품명 (회로기호) Components (Part no.)	제조사 (상표명) Manufacturer (Brand)	모델명 (형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Photo Coupler (PC1)	Cosmo Electronics Corp.	KT10XX (XX=00~ZZ)	Dit=0.7mm, Int. dcr = thermal cycling test, Ext. dcr= 8.6mm, 115°C	IEC
Alt.	Everlight Electronics Co., Ltd.	EL1018	Dit=0.4mm, Int. dcr = thermal cycling test, Ext. dcr= 8.1mm, 110°C	IEC
Alt.	Lite-On Technology Corporation	LTV-1008	Dit=0.4mm, Int. dcr = thermal cycling test, Ext. dcr= 8.3mm, 115°C	IEC
Alt.	Lite-On Technology Corporation	LTV-817 LTV-817M	Dit=0.6mm, Int. dcr = 5.2mm Ext. dcr. = 7.6mm, thermal cycling test, 4800V, 115°C	IEC
Alt.	Vishay Semiconductor GmbH	TCET1103, TCET1108, TCET1109, TCET1103G, TCET1108G, TCET1109G, TCET1104G	Dit=0.5mm, Int. dcr = 6.0mm Ext. dcr= 7.7mm, 5000V, 110°C	IEC
Alt.	Vishay Semiconductor GmbH	TCET1114G	Dit=0.5mm, Int. dcr = 6.0mm Ext. dcr = 7.7mm, 5000V, 110°C	IEC
Alt.	Vishay Infrared Components Inc	SFH617A-	Dit=0.5mm, Int. dcr = 5.2mm Ext. dcr. = 7.8mm, thermal cycling test, 4800V, 115°C	IEC
Alt.	Nec Electronics Corp Compound Semiconductor Device Div.	PS2561, PS2561-1, PS2561AL1-1, PS2561BL1-1, PS2561D-1, PS2561DL1-1	Dit=0.4mm, Int. Ext. dcr. = 7.0mm, thermal cycling test, 3000V, 110°C	IEC

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부품명 (회로기호) Components (Part no.)	제조사 (상표명) Manufacturer (Brand)	모델명 (형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Alt. Sharp Corp. Electronic Components Group.		PC123	Dit.=0.4mm, Ext. dcr. = 8.0mm, thermal cycling test, 3000V, 100°C	IEC
Alt. Cosmo Electronics Corp.		K1010	Dit.=0.5mm, Int. dcr = 5.3mm Ext. dcr. = 8.0mm, thermal cycling test, 4800V, 100°C	IEC
Alt. Eyerlight Electronics Co., Ltd.		EL817	Dit.=0.5mm, Int. dcr = 5.3mm Ext. dcr. = 8.0mm, thermal cycling test, 4800V, 100°C	IEC
Bleeder resistor (R1, R2, R17, R24)	Interchangeable	Interchangeable	Max. 3MΩ, min. 1/4W	-
Bridging resistors (R18, R19, R20, R21, R22) (optional)	TA-1	TRM-120S006F	SMD type, 15 MΩ, 1/4W, distance between terminals: 2.0 mm (each one)	-
Choke (LF1) (Optional)	FSP/SPI	8LM05326	130°C	IEC
Choke (LF2) (Optional)	FSP/SPI	8LE00644	130°C	IEC
Transformer (T1)	FSP/SPI	8TV00399	Class B, UL Insulation system type SB14.2	-
Alt. FSP/SPI	8TV00412		Class B, UL Insulation system type DJ-130	-
All PCB	Interchangeable	Interchangeable	V-1 min., 130°C min.	UL

[서식 CP401-18-00]

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3. 전기용품안전인증의 변경현황 (Status of Certificate Revisions)

일자 (Date)	발급현황 (Status of Issues)
	변경내용 (Modification of Contents)
2020/06/22	기본모델 (Basic Model)

4. 기타 (Carefully Informed Note)

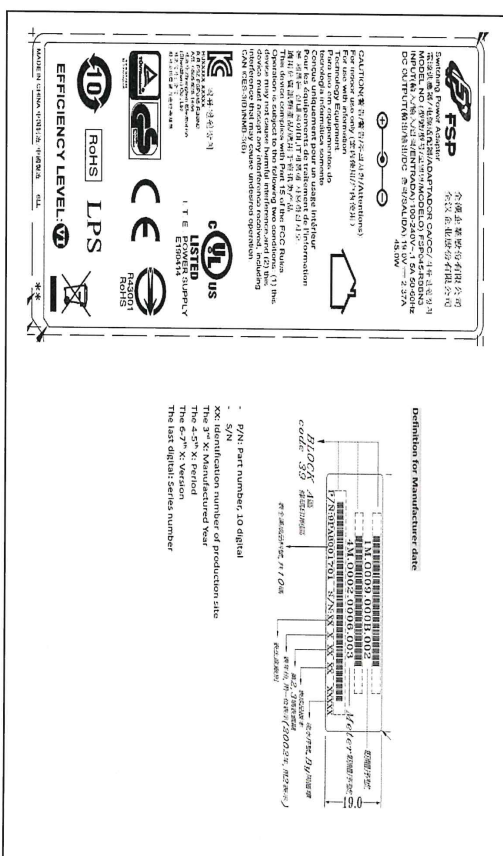
- 1) 안전관리부품 및 제철목록에 기재된 사항은 안전에 직접적인 영향을 주는 부분이므로 내용을 변경 또는 복수등재를 원하는 경우 안전인증변경신청 또는 안전확인변경신청을 하여야 합니다. 안전인증변경신청 또는 안전확인변경신청을 하지 않고 임의로 변경하는 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.
- The certificate holder should apply for a revision of the certificate if the registered critical components are to be changed, modified or alternated. Should the contents of Certificate are altered without the application for the modification, the administrative measures can occur according to the Electrical Appliances and Consumer Products Safety Control Act.
- 2) 전기검사(시료채취포함)를 거부, 방해 또는 기피하는 경우에는 전기용품 및 생활용품 안전관리법 제11조에 따라 안전인증이 취소될 수 있습니다.
- If Follow-up Factory Inspection, including sampling representative model by 11 categories of the certified product at factory-site for re-testing, should not has been arranged by Certificate holder, Safety Certification(KC Mark) may be withdrawn according to the Article 11 of the Electrical Appliances and Consumer Products Safety Control Act.
- 3) 공장주소(전화번호포함), 대표자, 상호 및 부품변경, 신고인정보 등 안전인증 또는 안전확인신청의 내용이 변경되었을 때, 안전인증변경신청 또는 안전확인변경신청을 하지 않을 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.
- Should a factory address, president name, manufacturer name and critical component are altered without the application for the modification, the administrative measures can occur according to the Electrical Appliances and Customer Products Safety Control Act.
- 4) 조건부 인증사항 (Conditional certification items):



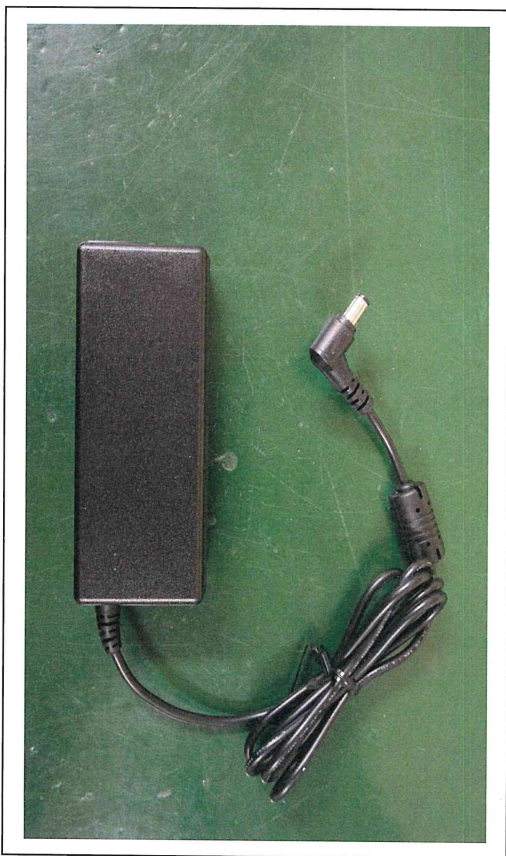
기초문서관리자료

안전인증번호: HU10142-20216A
No. 1 표시사항

접수번호: 20200520-0049



No.2 외부사건



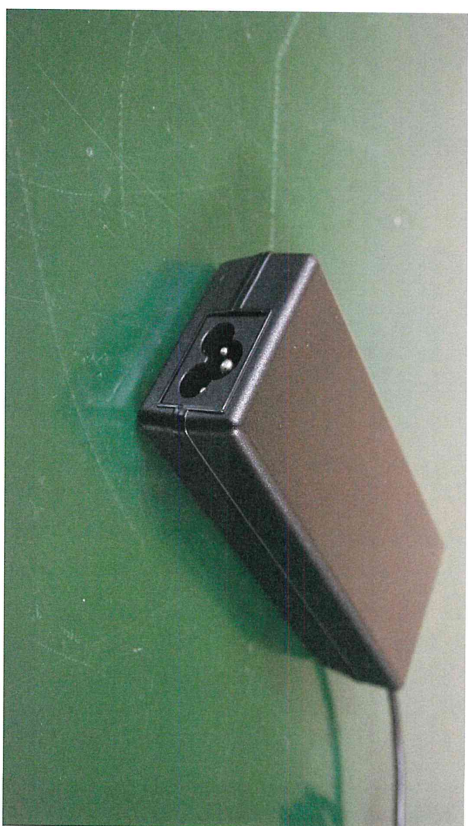
한국기계전기전자시험연구원

Korea Testing Certification

기술문서붙임자료

안전인증번호 : HU10142-20216A
No.3 외부사진

접수번호:20200520-0049



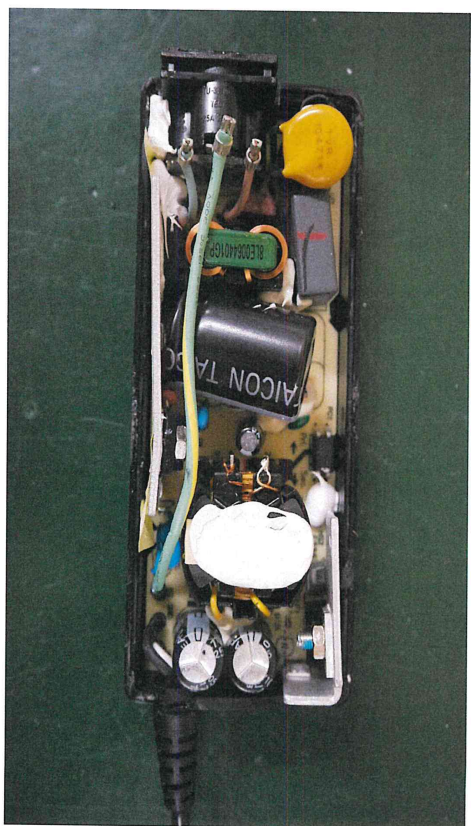
No.4 외부사진



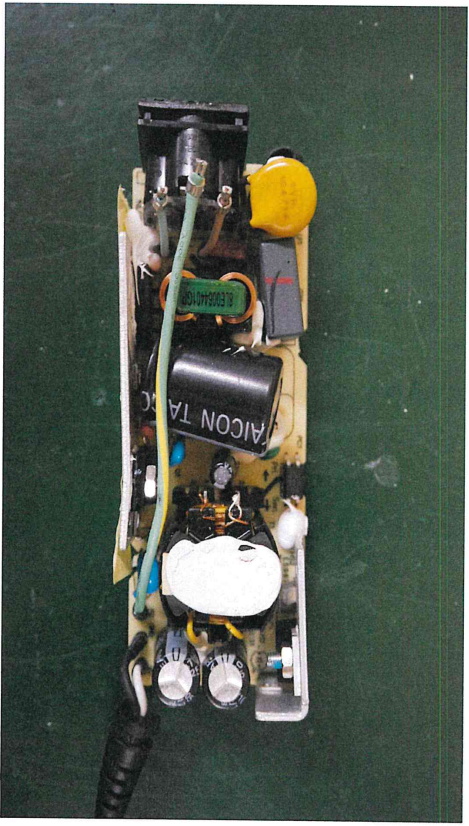
기술문서붙임자료

안전인증번호: HU10142-20216A
No.5 내부사진

접수번호: 20200520-0049



No.6 내부사진



기술문서붙임자료

안전인증번호 : HU10142-20216A 접수번호 : 20200520-0049
No.7 내부 사진

