

# **Listing Constructional Data Report (CDR)**

1.0 Reference a	nd Address			
Report Number	180301487SHA-001	Original Issued:	26-Mar-2018	Revised: None
Standard(s)	Requirements [UL 62	2368-1:2014 Ed.2] ation And Commur	nication Technolog	gy Equipment - Part 1: Safety gy Equipment - Part 1: Safety
Applicant	GlobTek, Inc.		Manufacturer	GlobTek (Suzhou) Co., Ltd.
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Report No. 180301487SHA-001 GlobTek, Inc.

Page 2 of 36

Issued: 26-Mar-2018

Revised: None

2.0 Product Description **Product** ITE Power Supply GlobTek, Inc. Brand name Product covered by this report is power adapter, which can be used with detachable power supply cord and is designed for continuous operation. Different appliance inlets used on the device, which can provide earthing terminal or not. Protective earthing connection to secondary circuit by internal wiring is optional, so it can be Class I or Class II construction. Both two Description constructions were in consideration in this report. The power supplies which have an output current rating of 6A or less are all rated for Limited Power Source (LPS) application. Two pieces of outer enclosure are enclosed with ultrasonic welding without screw. The product is not intended to use in the environment which altitude exceed 5000m. GT followed by M or H; followed by 96900P or 961200P; may be followed by -; followed by 01 to 120; followed by 12 to 54; may be followed by .0 to .9; followed by -T2, -T2A, -T3, -T3A or -T3TAB; may be followed by one character. Models GT- followed by 96900P or 961200P; may be followed by -; followed by 01 to 120; followed by 12 to 54; may be followed by .0 to .9; followed by -T2, -T2A, -T3, -T3A or -T3TAB; may be followed by one character. Followed by "M" or "H" means for market identification and not related to safety. Followed by "01" to "120" denotes the rated output wattage designation, with interval of "1W", "01" stands for 1W, "120" stands for 120W. Followed by "12" to "54" and followed by ".0" to ".9" denotes the standard rated output voltage designation, with interval of "0.1V", "12" or "12.0" stands for 12V, "54" or "54.0" stands for 54V. Followed by "-T2" means desktop class II with C8 AC inlet; followed by "-T2A" means desktop class II with C18 AC inlet; Followed by "-T3" means desktop class I with C14 AC inlet; followed by "-T3A" means desktop class I with C6 AC inlet; followed by "-T3TAB" means desktop class I with C14 AC inlet and housing with a tab. Model Similarity May be followed by one character which can be "0" to "9", "A" to "Z", "-", "()" or "[]" for marketing purposes and have no bearing on safety or compliance. All models have same circuit diagram, PCB layout and enclosure size. Transformers used in all models are with same construction. The turns of secondary winding may be added or reduced according different output voltage. Each standard rated output voltage designation corresponds to a transformer model. Each transformer model is identical in insulation construction including clearance and creepage except number of turns per coil. Input: 100-240V~, 50-60Hz, 1.5A Ratings Output: 12-54VDC, Max. 9.2A, Max. 120W. Maximum ambient temperature is 40°C. Other Ratings

Photo 1 - External view

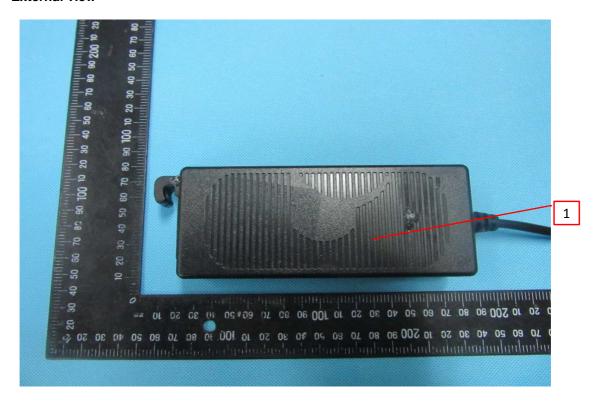


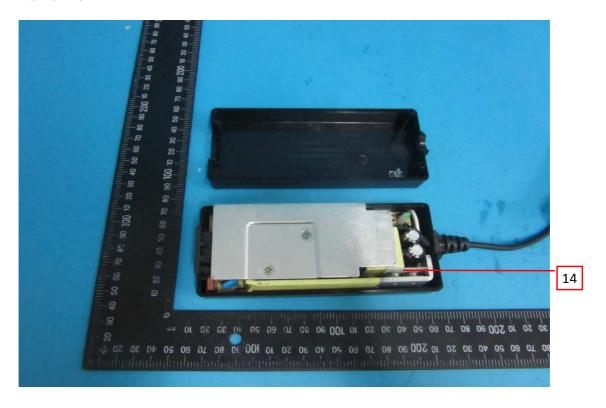
Photo 2 - External view



Photo 3 - External view



Photo 4 - Internal view



ED 16.3.15 (20-Apr-17) Mandatory

Photo 5 - PCB (Class II)

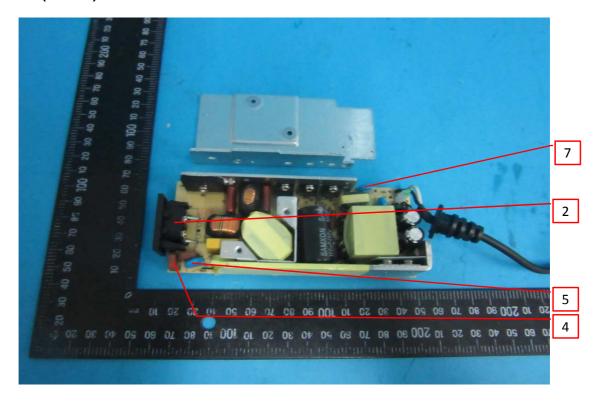
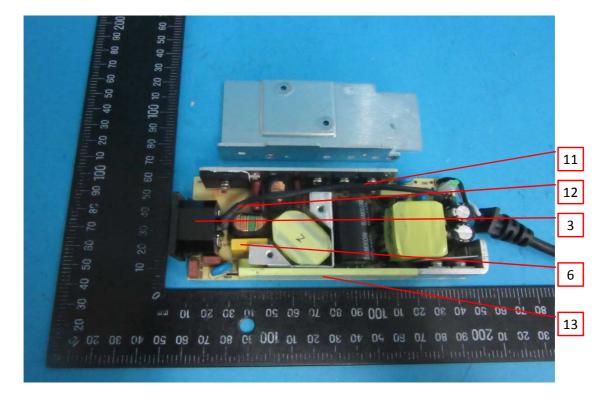


Photo 6 - PCB (Class I)

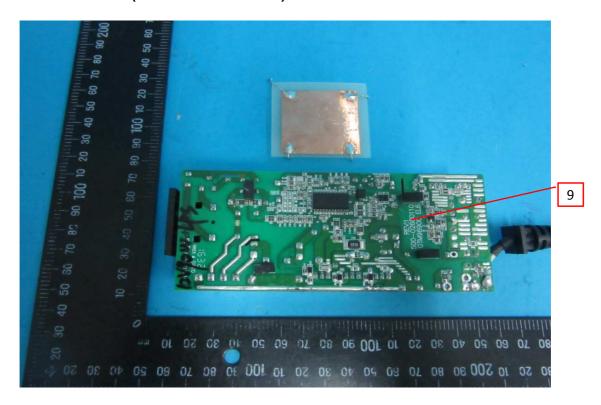


GlobTek, Inc.

Photo 7 - Back view of PCB (For Class I and Class II)



Photo 8 - Back view of PCB (For Class I and Class II)



Page 7 of 36 Issued: 26-Mar-2018 Revised: None

## 3.0 Product Photographs

Photo 9 - Transformer

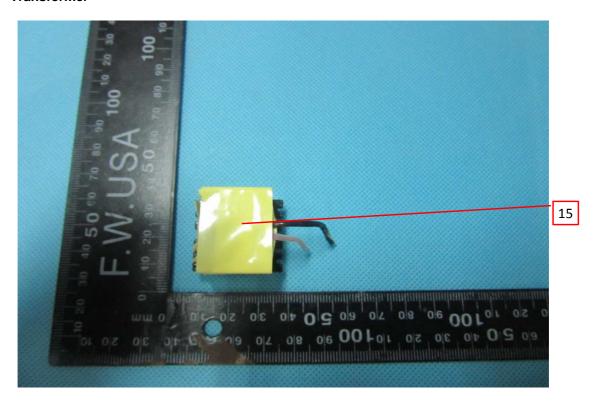
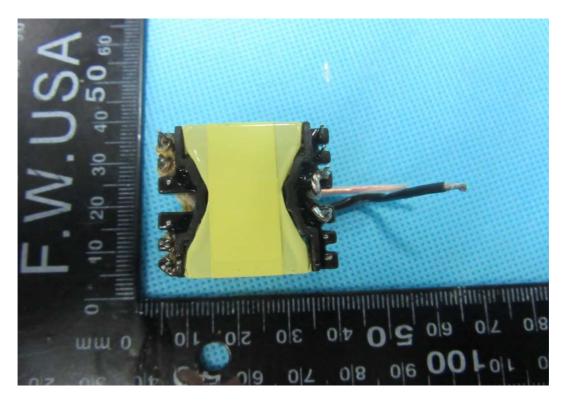


Photo 10 - Transformer



ED 16.3.15 (20-Apr-17) Mandatory

## 3.0 Product Photographs

Photo 11 - Transformer

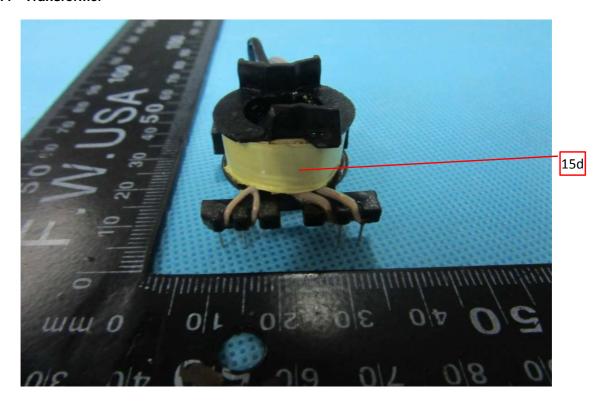


Photo 12 - Transformer



Photo 13 - Transformer

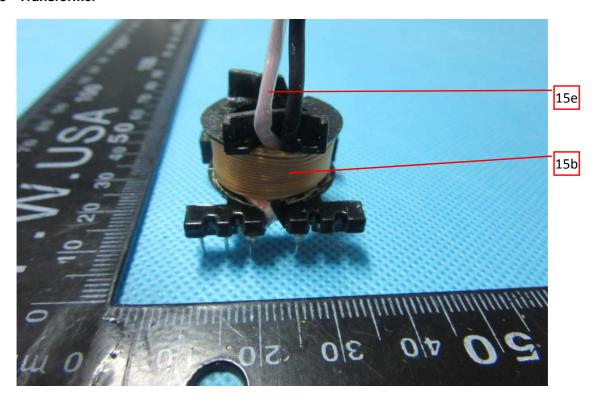
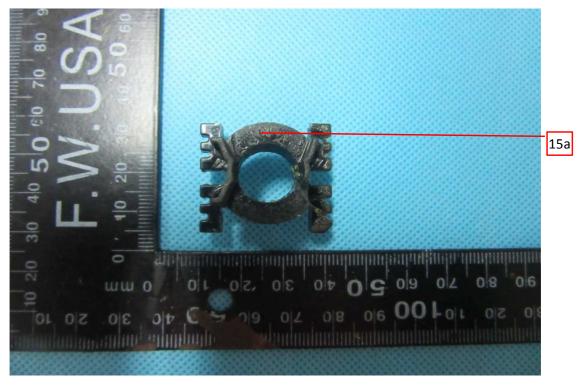


Photo 14 - Transformer



Report No. 180301487SHA-001 GlobTek, Inc. Issued: 26-Mar-2018 Revised: None

4.0 0	Critic	al Components				
Photo #	Item no.1	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity
				HF500R	PC, V-0, HWI 2, HAI 3, 125°C, min thickness: 2.0 mm; Fixed by ultrasonic welding and without opening;	cURus
				SE1X	PPE+PS, V-1, HWI 0, HAI 0, 105°C, min thickness: 2.0 mm; Fixed by ultrasonic welding and without opening;	cURus
				SE1	PPE+PS, V-1, HWI 0, HAI 0, 105°C, min thickness: 2.0 mm; Fixed by ultrasonic welding and without opening;	cURus
			SABIC INNOVATIVE PLASTICS B V	SE100	PPE+PS, V-0, HWI 2, HAI 3, 95°C, min thickness: 2.0 mm; Fixed by ultrasonic welding and without opening;	cURus
1	1	Enclosure (All models)		CX7211	PC, V-0, HWI 2, HAI 0, 90°C. Min. thickness: 2.0mm; Fixed by ultrasonic welding and without opening;	cURus
				EXCY0098	PC, V-0, HWI 2, HAI 0, 90°C. Min. thickness: 2.0mm; Fixed by ultrasonic welding and without opening;	cURus
				945 (GG)	PC, V-0, HWI 3, HAI 3, 120°C. Min. thickness: 2.0mm; Fixed by ultrasonic welding and without opening;	cURus
			TEIJIN	LN-1250P	PC, V-0, HWI 3, HAI 0, 115°C, min thickness: 2.0mm; Fixed by ultrasonic welding and without opening;	cURus
			CHEMICALS LTD	LN-1250G	PC, V-0, HWI 3, HAI 0, 115°C, min thickness: 2.0mm; Fixed by ultrasonic welding and without opening;	cURus

4.0 Critical Components Mark(s) of Manufacturer/ Item Technical data and securement conformity Name Type / model<sup>2</sup> no.1 trademark<sup>2</sup> means Zhejiang LECI Electronics Co., DB-8 cURus Ltd. Rich Bay Co., Ltd. R-201SN90 cURus Sun Fair Electric Wire & Cable S-01 cURus (HK)Co. Ltd. **TECX-UNIONS** Technology SO-222 series cURus Corporation 2.5A, 250Vac Rong Feng RF-180 Standard sheet: C8 cURus AC inlet (For Industrial Co., Ltd. 2 5 class II models) Inalways 0721 series cURus

CDJ-8

ST-A03-005

SS-120A

10A, 250Vac

Standard sheet: C18

Corporation

Kunshan Dlk Electronics

Technology Co.,

ZHE JIANG BEI

**ELECTRONIC CO** 

Industrial Co.,Ltd

ER JIA

Rong Feng

LTD

Issued: 26-Mar-2018

Revised: None

cURus

cURus

cURus

**4.0 Critical Components** Mark(s) of Item Manufacturer/ Technical data and securement Name Type / model<sup>2</sup> conformity trademark<sup>2</sup> no.1 means Zhejiang LECI Electronics Co., DB-6 cURus Ltd. R-30790 cURus Rich Bay Co., Ltd. R-307 cURus Sun Fair Electric Wire & Cable S-02 cURus (HK)Co. Ltd. **TECX-UNIONS** cURus Technology TU-333 series Corporation Rong Feng cURus RF-190 Industrial Co., Ltd. 2.5A, 250Vac Standard sheet: C6 Inalways 0724 cURus Corporation Kunshan Dlk Electronics CDJ-2 cURus Technology Co., Ltd Shenzhen Delikang Electronics CDJ-2 cURus AC inlet (For 6 3 Technology Co class I models) Zhe Jiang Bei Er Jia Electronic Co ST-A04-002 cURus Ltd Zhejiang LECI Electronics Co., **DB-14** cURus Ltd. Rich Bay Co., Ltd. R-301SN cURus Sun Fair Electric Wire & Cable S-03 cURus (HK)Co. Ltd. **TECX-UNIONS** TU-301-S cURus 10A, 250Vac Technology Standard sheet: C14 TU-301-SP cURus Corporation Rong Feng SS-120 cURus Industrial Co., Ltd. Inalways 0711 cURus Corporation Zhe Jiang Bei Er Jia Electronic Co cURus ST-A01-003J Ltd

Issued: 26-Mar-2018

4.0 Critical Components Mark(s) of Item Manufacturer/ Technical data and securement Name conformity Type / model<sup>2</sup> trademark<sup>2</sup> no.1 means Conquer **MST** cURus Electronics Co., T3.15A, 250Vac MET cURus Ever Island 2010 cURus Electric Co., Ltd. T3.15A, 250Vac and Walter **ICP** cURus Electric Bel Fuse Ltd. RST T3.15A, 250Vac cURus Cooper SS-5 T3.15A, 250Vac cURus Bussmann LLC Shenzhen Lanson Electronics Co. SMT cURus T3.15A, 250Vac Ltd. Fuse (F1, F2) 4 5 Zhongshan (F2 is optional) Lanbao Electrical RTI-10 series cURus T3.15A, 250Vac Appliances Co., Ltd. Hollyland 5ET T3.15A, 250Vac cURus Company Limited Sunny East Enterprise Co. CFD-Serie(s) T3.15A, 250Vac cURus Ltd. Das & Sons 385T series T3.15A, 250Vac cURus International Ltd. Dongguan Better Electronics 932 T3.15A, 250Vac cURus Technology Co., THINKING TVR10471K cURus Max. Continuous voltage: min **ELECTRONIC** 300Vac(rms), 105°C INDUSTRIAL CO TVR14471K cURus LTD CNR-10D471K cURus CENTRA Max. Continuous voltage: min SCIENCE CORP 300Vac(rms), 105°C CNR-14D471K cURus SUCCESS SVR10D471K cURus Max. Continuous voltage: min **ELECTRONICS** 300Vac(rms), 105°C SVR14D471K cURus CO LTD **HONGZHI** HEL10D471K cURus Max. Continuous voltage: min **ENTERPRISES** 300Vac(rms), 85°C HEL14D471K cURus LTD LIEN SHUN 10D471K cURus Max. Continuous voltage: min Varistor MOV1 **ELECTRONICS** 5 5 300Vac(rms), 105°C 14D471K cURus (Optional) CO LTD CERAMATE GNR10D471K cURus Max. Continuous voltage: min TECHNICAL CO 300Vac(rms), 105°C GNR14D471K cURus LTD BRIGHTKING 14D471K cURus Max. Continuous voltage: min (SHENZHEN) CO 300Vac(rms), 105°C 10D471K cURus LTD **GUANGXI NEW** 14D471K cURus **FUTURE** Max. Continuous voltage: min **INFORMATION** 300Vac(rms), 85°C INDUSTRY CO 10D471K cURus LTD JVT10N471K cURus Max. Continuous voltage: min JOYIN CO LTD 300Vac(rms), 85°C JVT14N471K cURus

Issued: 26-Mar-2018

4.0 Critical Components Mark(s) of Item Manufacturer/ Technical data and securement Name conformity Type / model<sup>2</sup> trademark<sup>2</sup> no.1 means Cheng Tung Max. 0.22µF, 310Vac, 110°C, type CTX cURus Industrial Co., Ltd. X2 or X1 Tenta Electric Max. 0.22µF, 275Vac, 100°C, type MEX cURus Industrial Co. Ltd. X2 or X1 Joey Electronics Max. 0.22µF, 300Vac, 110°C, type (Dong Guan) Co., MPX cURus X2 or X1 Ltd. Ultra Tech Xiphi Max. 0.22µF, 275Vac, 110°C, type Enterprise Co. cURus HQX X2 or X1 Ltd. Yuon Yu Max. 0.22µF, 275Vac, 100°C, type cURus Electronics Co. **MPX** X2 or X1 Ltd. Okaya Electric Max. 0.22µF, 275Vac, 100°C, type cURus RE series Industries X2 or X1 VISHAY Max. 0.22µF, 310Vac, 110°C, type cURus Capacitors F1772 X2 or X1 Belgium NV Winday Electronic Max. 0.22µF, 275Vac, 100°C, type Industries Co., **MPX** cURus X2 or X1 X capacitor Ltd. 6 6 (CX1) (Optional) MPX cURus Dain Electronics Max. 0.22µF, 275Vac, 100°C, type MEX cURus X2 or X1 Co., Ltd. NPX cURus Sinhua Electronics Max. 0.22µF, 310Vac, 110°C, type MPX cURus (Huzhou) Co., Ltd. X2 or X1 Shenzhen Jinghao Max. 0.22µF, Min. 250Vac, 110°C, Capacitor Co., cURus CBB62B type X2 or X1 Ltd. Foshan Shunde Chuang Ge Max. 0.22µF, 275Vac, 100°C, type MKP-X2 cURus Electronic X2 Industrial Co., Ltd. Jiangsu Xinghua Max. 0.22µF, Min. 300Vac, 110°C, Huayu Electronics MPX - Series cURus type X2 or X1 Co., Ltd. Hongzhi Max. 0.22µF, 275Vac, 100°C, type MPX cURus Enterprises Ltd.

Issued: 26-Mar-2018

4.0 Critical Components Mark(s) of Item Manufacturer/ Technical data and securement Name conformity Type / model<sup>2</sup> trademark<sup>2</sup> no.1 means TDK Y1, AC250V, max 2200pF, CD cURus CORPORATION -25~+125°C SUCCESS SE cURus Y1, AC250V, max 2200pF, **ELECTRONICS** -40~+125°C SB cURus CO LTD Y1, AC250V, max 2200pF, MURATA MFG KX cURus CO LTD -40~+125°C WALSIN Y1, AC250V, max 2200pF, TECHNOLOGY AH series cURus -40~+125°C **CORP** Y capacitor **HAOHUA** Y1, AC250V, max 2200pF, 5 7 (CY1, CY2) CT7 cURus **ELECTRONIC CO** -30~+125°C (Optional) Y1, AC250V, max 2200pF, JYA-NAY CO LTD JN cURus -25~+125°C Jyh Chung Y1, AC250V, max 2200pF, Electronic Co., JD cURus -25~+125°C Jerro Electronics Y1, AC250V, max 2200pF, JX cURus -25~+125°C Corp. WELSON Y1, AC250V, max 2200pF, INDUSTRIAL CO WD cURus -25~+125°C LTD LITE-ON Ext. Cr: min. 8.0 mm; DTI: min. Technology LTV-817 0.6 mm; Thermal cycling test. cURus Corporation Max. operating temp.: 115°C. Fairchild Ext. Cr: min. 7.8 mm; DTI: min. Semiconductor FOD817B 0.6 mm; Thermal cycling test. cURus

**BPC-817** 

**BPC-817 M** 

**BPC-817 S** 

EL817

Max. operating temp.: 115°C

Ext. Cr: min. 7.0 mm; DTI: min.

0.4 mm; Thermal cycling test.

Max. operating temp.: 100°C.

0.5 mm; Thermal cycling test.

Max. operating temp.: 110°C.

Ext. Cr: min. 7.7 mm; DTI: min.

Pte. Ltd.

Bright Led

Everlight

Ltd.

Electronics Corp.

Electronics Co.,

Optocoupler

(U2)

7

8

cURus

cURus

cURus

cURus

Issued: 26-Mar-2018

4.0	Critic	al Components				
Photo #	Item		Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity
			WALEX ELECTRONIC (WUXI) CO LTD	T2 T2A T2B T4	Min. 1.6 mm thickness, min. V-0, 130°C	cURus cURus cURus cURus
			DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1 2V0 FR4	Min. 1.6 mm thickness, min. V-0, 130°C	cURus cURus cURus
			CHEERFUL ELECTRONIC (HK) LTD	02 03 03A	Min. 1.6 mm thickness, min. V-0, 130°C	cURus cURus cURus
			DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	Min. 1.6 mm thickness, min. V-0, 130°C	cURus
			SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1	Min. 1.6 mm thickness, min. V-0, 130°C	cURus
			DAFENG AREX ELECTRONICS	04V0	Min. 1.6 mm thickness, min. V-0,	cURus
			TECHNOLOGY CO LTD	02V0	130°C	cURus
			BRITE PLUS ELECTRONICS	DKV0-3A	Min. 1.6 mm thickness, min. V-0,	cURus
			(SUZHOU) CO LTD	DGV0-3A	130°C	cURus
			KUOTIANG ENT LTD	C-2 C-2A	Min. 1.6 mm thickness, min. V-0, 130°C	cURus cURus
8	9	PCB	PACIFIC WIN INDUSTRIAL LTD	PW-02	Min. 1.6 mm thickness, min. V-0, 130°C	cURus cURus
			SHENZHEN TONGCHUANGXI N ELECTRONICS CO LTD		Min. 1.6 mm thickness, min. V-0, 130°C	cURus
			YUANMAN PRINTED CIRCUIT CO LTD	1V0	Min. 1.6 mm thickness, min. V-0, 130°C	cURus
			SUZHOU XINKE ELECTRONICS	XK-2	Min. 1.6 mm thickness, min. V-0,	cURus
			CO LTD	XK-3	130°C	cURus
			KUNSHAN CITY HUA SHENG CIRCUIT BOARD CO LTD	HS-S	Min. 1.6 mm thickness, min. V-0, 130°C	cURus
			JIANGSU DIFEIDA ELECTRONICS CO LTD	DFD-1	Min. 1.6 mm thickness, min. V-0, 130°C	cURus
			HUIZHOU SHUNJIA ELECTRONICS CO LTD	SJ-B	Min. 1.6 mm thickness, min. V-0, 130°C	cURus

Various

GlobTek, Inc. Revised: None **4.0 Critical Components** Mark(s) of Item Manufacturer/ Technical data and securement Name Type / model<sup>2</sup> conformity trademark<sup>2</sup> no.1 means SHANGHAI HcURus 211001 **FAST** Min. 1.6 mm thickness, min. V-0, **ELECTRONIC CO** 130°C 411001 cURus LTD Min. 1.6 mm thickness, min. V-0, cURus Various Various 130°C, Fully comply with UL 796 KUNSHAN NEW 1185 cURus **ZHICHENG** Min. 24AWG, min. 300Vac, min. **ELECTRONICS** 2464 cURus 80°C **TECHNOLOGIES** CO LTD 2468 cURus ZHUANG SHAN 1185 cURus CHUAN **ELECTRICAL** Min. 24AWG, min. 300Vac, min. 2464 cURus 80°C PRODUCTS (KUNSHAN) CO cURus 2468 LTD ZHUANG SHAN SPT-1 cURus CHUAN Min. 24AWG, min. 300Vac, min. **ELECTRICAL** 2 10 Output cord 105°C PRODUCTS (KUNSHAN) CO SPT-2 cURus LTD 1185 cURus SUZHOU YEMAO Min. 24AWG, min. 300Vac, min. ELECTRONIC CO 2464 cURus 80°C LTD 2468 cURus SUZHOU SPT-1 cURus DIOUDE Min. 24AWG, min. 300Vac, min. **ELECTRONICS** 105°C SPT-2 cURus CO LTD Min. 24AWG, min. 300Vac, min.

Various

cURus

80°C, performance parameter

shall be equal to 1185, 2464, 2468, SPT-1 or SPT-2.

Issued: 26-Mar-2018

Revised: None 4.0 Critical Components Mark(s) of Item Manufacturer/ Technical data and securement Name conformity Type / model<sup>2</sup> trademark<sup>2</sup> no.1 means cURus 1015 KUNSHAN NEW cURus 1007 **ZHICHENG** 1185 Min. 18AWG, min. 300Vac, min. cURus **ELECTRONICS** 3271 cURus **TECHNOLOGIES** 3266 cURus CO LTD cURus 1569 ZHUANG SHAN 1015 cURus CHUAN 1007 Min. 18AWG, min. 300Vac, min. cURus ELECTRICAL 80°C **PRODUCTS** cURus 1185 (KUNSHAN) CO 1569 cURus LTD DONGGUAN 1015 cURus CHUANTAI WIRE Min. 18AWG, min. 300Vac, min. 1007 cURus PRODUCTS CO 80°C 1569 cURus LTD Earthing wire for YONG HAO 1015 cURus 6 11 class I model ELECTRICAL 1007 Min. 18AWG, min. 300Vac, min. cURus only 80°C INDUSTRY CO cURus 1185 LTD cURus 1569 SHENG YU 1015 cURus Min. 18AWG, min. 300Vac, min. **ENTERPRISE CO** 80°C 1007 cURus LTD 1015 cURus KUNSHAN 1007 cURus **XINGHONGMEN** 1185 Min. 18AWG, min. 300Vac, min. cURus **G ELECTRONIC** 80°C cURus 3271 cURus CO LTD 3266 cURus 1569 cURus 1015 SUZHOU YEMAO Min. 18AWG, min. 300Vac, min. ELECTRONIC CO 1007 cURus 80°C LTD 1185 cURus Min. 18AWG, min. 300Vac, min. Various Various cURus 80°C **SHENZHEN RSFR** cURus **WOER HEAT-**RSFR-H 600V, 125°C cURus SHRINKABLE MATERIAL CO RSFR-HPF cURus LTD QIFURUI **ELECTRONICS** 600V, 125°C cURus QFR-h CO SALIPT S-901-300V, 125°C cURus Heat shrinkable DONGGUAN 300 6 12 tube SALIPT CO LTD SALIPT S-901-600V, 125°C cURus 600 GUANGZHOU K-2 (+) 600V, 125°C cURus KAIHENG **ENTERPRISE** K-2 (CB) 300V, 125°C cURus **GROUP** 

CHANGYUAN ELECTRONICS

(SHENZHEN) CO

**CB-HFT** 

Min. 300V, 125°C

cURus

Issued: 26-Mar-2018

	Critic	al Components			 	Mark(a) of
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity
			3M COMPANY ELECTRICAL	1350F-1		cURus
			MARKETS DIV (EMD)	1350T-1		cURus
			BONDTEC PACIFIC CO LTD	370S		cURus
		Insulating tape	JINGJIANG YAHUA PRESSURE	PZ		cURus
6	13	wrapping around the heatsink	SENSITIVE GLUE	СТ	Min.130°C	cURus
		(Optional)	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A		cURus
			CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX		cURus
			TORAY INDUSTRIES INC	Lumirror H10	VTM-2, min. 0.4 mm thickness, 105°C	cURus
			SKC CO LTD	SH71S	VTM-2, min. 0.4 mm thickness, 105°C	cURus
			FORMEX,DIV OF IL TOOL WORKS INC, FRMRLY FASTEX, DIV OF IL TOOL WORKS INC	FORMEX GK series	V-0, min. 0.4 mm thickness, 115°C	cURus
			SABIC	FR60 series		cURus
		Malor localetics	INNOVATIVE	FR63 series	V-0, min. 0.4 mm thickness,	cURus
4	14	Mylar Insulating sheet	PLASTICS US L L	FR65 series	130°C	cURus
		SHEEL	С	FR7 series		cURus
				FR700 series		cURus
			MIANYANG LONGHUA FILM	PP-BK-20	VTM-0, min. 0.4 mm thickness,	cURus
			CO LTD	PP-BK-17	-80°C	cURus
				PP-BK-18		cURus
			CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX PP WT-10 series	VTM-0, min. 0.4 mm thickness, 110°C	cURus
			CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX FRPC- 1860B	VTM-0, min. 0.4 mm thickness, 80°C	cURus
				TF047	Output voltage range:12.0V- 13.4V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX- 130-TM (GLOBTEK INC); BOAM- 01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR

		al Components				Mark(s) of
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	conformity
				TF075	Output voltage range:13.5V- 14.9V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX- 130-TM (GLOBTEK INC); BOAM- 01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF048	Output voltage range:15.0V- 16.9V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX- 130-TM (GLOBTEK INC); BOAM- 01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF076	Output voltage range:17.0V- 18.9V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX- 130-TM (GLOBTEK INC); BOAM- 01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF072	Output voltage range:19.0V-21.3V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130-TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
9	15	Transformer (T1)	GlobTek/ ENG/ BOAM/ HAOPUWEI	TF077	Output voltage range:21.4V-23.9V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130-TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
			TIMOI OWEI	TF049	Output voltage range:24.0V-27.4V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130-TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR

4.0	Critic	al Components				
Photo #	Item no.1	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity
				TF078	Output voltage range:27.5V-31.4V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130-TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF073	Output voltage range:31.5V-36.0V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130-TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF079	Output voltage range:36.1V- 41.9V; with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130- TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF050	Output voltage range:42.0V- 48.0V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX- 130-TM (GLOBTEK INC); BOAM- 01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR
				TF074	Output voltage range:48.1V-54.0V; Class B with insulation system designation ENG130-1 (ENG ELECTRIC CO LTD); GTX-130-TM (GLOBTEK INC); BOAM-01, B01 (SHAN DONG BOAM ELECTRIC CO LTD) or ZT-130 (WUXI HAOPUWEI ELECTRONICS CO LTD).	NR

Page 22 of 36

4.0 (	Critic	al Components				
Photo #	Item no.1	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity
			CHANG CHUN PLASTICS CO	T375J	V-0, 150°C, thickness 0.45 mm	cURus
			LTD	T375HF	min.	cURus
14	15a	Bobbin	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150°C, thickness 0.45 mm min.	cURus
			HITACHI CHEMICAL CO LTD	CP-J-8800	V-0, 150°C, thickness 0.45 mm min.	cURus
			PACIFIC ELECTRIC WIRE & CABLE	UEWN/U	MW28-C, 130°C	cURus
			(SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C	cURus
			JUNG SHING	UEW-4	MW75-C, 130°C	cURus
			WIRE CO LTD	UEY-2	MW28-C, 130°C	cURus
			JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C	cURus
13	15b	Magnet wire	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C	cURus
			WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C	cURus
			JIANGSU DARTONG M & E CO LTD	UEW	MW75-C, 130°C	cURus
			SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C	cURus
			ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW79#, 130°C	cURus

4.0 Critical Components Mark(s) of Item Manufacturer/ Technical data and securement Name conformity Type / model<sup>2</sup> no.1 trademark<sup>2</sup> means GREAT Reinforced Insulation, rated 130°C **LEOFLON** (Class B), 1.41 kVolts peak for cURus TRW(B) **INDUSTRIAL CO** Information Technology; LTD Reinforced Insulation, rated 130°C COSMOLINK CO TIW-M(B) (Class B), 1.41 kVolts peak for cURus LTD Information Technology; Reinforced Insulation, rated 130°C FURUKAWA TEX-E ELECTRIC CO (Class B), 1.41 kVolts peak for cURus LTD Information Technology; TOTOKU Reinforced Insulation, rated 130°C ELECTRIC CO TIW-2 (Class B), 1.40 kVolts peak for cURus Information Technology; **LTD** Reinforced Insulation, rated 130°C E&B-XXXB (Class B), 1.40 kVolts peak for cURus E&B Triple-insulated Information Technology; 12 15c **TECHNOLOGY** wire Reinforced Insulation, rated 130°C CO LTD cURus E&B-XXXB-1 (Class B), 1.40 kVolts peak for Information Technology; HUALIN **ELECTRIC WIRE** Reinforced Insulation, rated 130°C TAW-B PRODUCTS (Class B), 1.41 kVolts peak for cURus (QUANNAN) CO Information Technology; LTD CHANGYUAN Reinforced Insulation, rated 130°C **ELECTRONICS CB-TIW** (Class B), 1.41 kVolts peak for cURus (SHENZHEN) CO Information Technology; LTD SHENZHEN Reinforced Insulation, rated 130°C JIUDING NEW DTIW-B (Class B), 1.40 kVolts peak for cURus MATERIAL CO Information Technology; LTD 3M COMPANY 1350F-1 130°C cURus ELECTRICAL 130°C 1350T-1 cURus MARKETS DIV 44 130°C cURus (EMD) BONDTEC 370S 130°C cURus PACIFIC CO LTD JINGJIANG PΖ 130°C cURus YAHUA CT 130°C PRESSURE cURus SENSITIVE GLUE WF 130°C cURus CO LTD JINGJIANG 11 JINGYI 15d Insulating tape **ADHESIVE** JY25-A 130°C cURus PRODUCT CO LTD SHENZHEN CITY WEICHUANGDA MATERIAL W-001 130°C cURus TECHNOLOGY CO LTD **CHANG SHU** LIANG YI TAPE LY-XX 130°C cURus INDUSTRY CO LTD

Issued: 26-Mar-2018

4.0 (	Critic	al Components				
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity
			GREAT HOLDING	TFT	300V, 200°C	cURus
			INDUSTRIAL CO LTD	TFS	600V, 200°C	cURus
13	15e	PTFE tubing	SHENZHEN WOER HEAT- SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C	cURus
			CHANGYUAN ELECTRONICS	СВ-ТТ-Т	300V, 200°C	cURus
			(SHENZHEN) CO LTD	CB-TT-S	600V, 200°C	cURus
			DONGGUAN XIANGQUAN PRINTING CO LTD	XQ03	Temperature range: -40~+80°C;	cURus
			FAN JA PAPER	FJ-03-3	Temperature range: -40~+80°C;	cURus
			PRINTING CO LTD	FJ07	Temperature range40~+60 C,	cURus
			E-LIN ADHESIVE LABEL CO LTD	EL-15	Temperature range: -40~+80°C;	cURus
3	16	Adhesive-Type Label (Not shown)	SHENZHEN CORWIN PRINTING CO LTD	CW-01	Temperature range: -40~+80°C;	cURus
			YUEN CHANG SPECIAL PRINTING (SHENZHEN) CO LTD	JL-08	Temperature range: 0~+80°C;	cURus
			GlobTek	Various	Permanently secured Engraving or Silkscreen or Laser printing	NR
			Various	Various	Temperature range: min40 ~+80°C; Certified according UL 969.	cURus

#### NOTES:

Issued: 26-Mar-2018

<sup>1)</sup> Not all item numbers are indicated (called out) in the photos, as their location is obvious.

<sup>2) &</sup>quot;Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.

<sup>3)</sup> Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

Report No. 180301487SHA-001

Issued: 26-Mar-2018 Page 25 of 36 GlobTek, Inc. Revised: None

# 5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

Report No. 180301487SHA-001 Issued: 26-Mar-2018 Page 26 of 36 GlobTek, Inc. Revised: None

### 6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

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

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

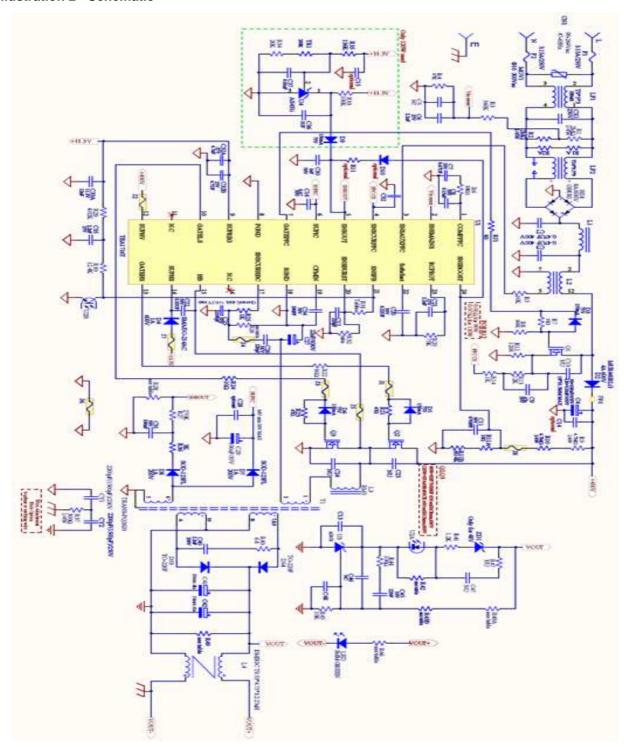
- 1. Spacing In primary circuits, minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity and minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
  - Limits between different polarity of Line and Neutral before fuse: CI = 3.6mm; Cr = 3.6mm.
  - Limits between different polarity of fuse: CI = 3.0mm; Cr = 3.0mm.
  - Limits between primary parts and secondary parts: CI = 6.9mm; Cr = 6.9mm.
- 2. Mechanical Assembly Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
- 3. Corrosion Protection All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
- 4. Accessibility of Live Parts For adapter models, all uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings and metal enclosure earthed with ventilation holes other than those specifically described in Sections 4 and 5.
- Grounding All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord and the equipment grounding terminal.
- 6. Polarized Connection This product is not provided with a polarized power supply connection.
- 7. Internal Wiring Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At pointswhere internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. UL approved wiring is used as secondary output lead wire of SELV circuits.
- 8. PCB layout Refer to Illustration No. 3 for PCB layout requiring verification during Field Representative Inspection Audits.
- 9. Schematics Refer to Illustration No. 2 or schematics requiring verification during Field Representative Inspection Audits
- 10. Transformer construction Refer to Illustration No. 4 for transformer construction requiring verification during Field Representative Inspection Audits.
- 11. Markings The product is marked as follows: brand name, model number, electrical ratings, manufacturer. Refer to Illustration No. 5 for details.
- 12. Cautionary Markings No Cautionary Markings.
- 13. Installation, Operating and Safety Instructions Instructions for installation and use of this product are provided by the manufacturer. They are kept in file and need not be repeated here.

# 7.0 Illustrations

# Illustration 1 - Model List

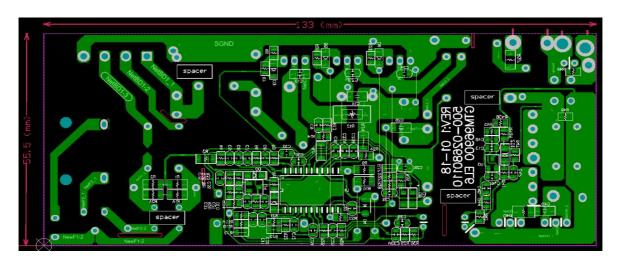
Model	Output Voltage	Max. output current	Max. output power
GT*96900P**-	12-54Vdc	7.5A	90W
T2/T2A/T3/T3A/T3TAB*	12-54 v d C	1.JA	90 <b>V</b> V
GT*961200P**-	12-14.9Vdc	9.2A	111W
T2/T2A/T3/T3A/T3TAB*	12-14.5Vuc	9.2A	11100
GT*961200P**-	15-54Vdc	8A	120W
T2/T2A/T3/T3A/T3TAB*	15-54VdC	0A	12000

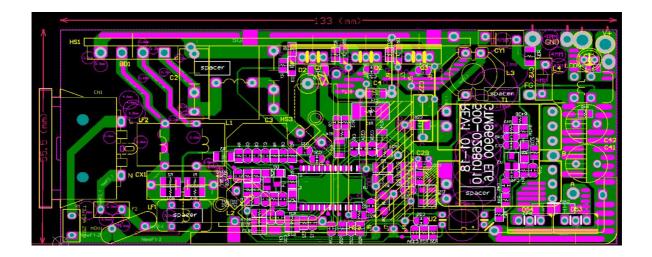
## Illustration 2 - Schematic



## 7.0 Illustrations

## **Illustration 3 - PCB LAYOUT**

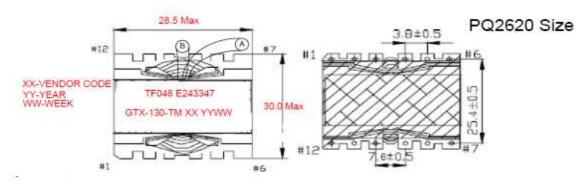


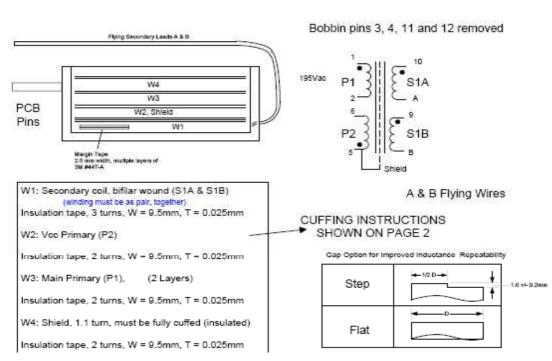


Report No. 180301487SHA-001 GlobTek, Inc.

### 7.0 Illustrations

## Illustration 4 - Transformer Specification



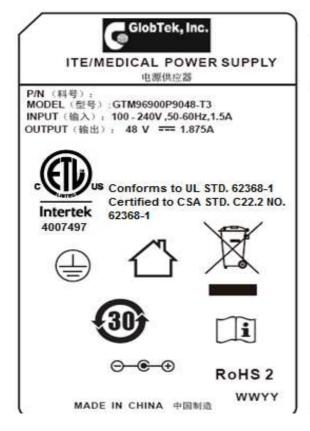


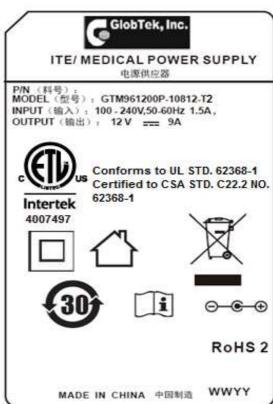
	12-13.4V	13.5-14.9V	15-16.9V	17-18.9V
Secondary	2X 2 Turns	2X 2 Turns	2X 2 Tums	2X 2 Turns
	80/0.1mm litz	80/0.1mm litz	80/0.1mm litz	80.1mm litz
Main Primary	31 turns	28 turns	26 turns	23 turns
	0.30mm TIW	0.30mm TIW	0.30mm TIW	0.30mm TIW
Vcc Primary	3 turns	3 tums	3 turns	3 turns
	4X 0.2mm TIW	4X 0.2mm TIW	4X 0.2mm TIW	4X 0.2mm TIW
	(12V)	(14V)	(15V)	(17V)
Model No.	TF-047	TF-075	TF-048	TF-076

	19-21.3V	21.4-23.9V	24-27.4V	27.5-31.4V	31.5-36V	36.1-41.9V	42-48V	48.1-54V
Secondary	2X 3 Turns	2X 3 Turns	2X 3 Turns	2X 4 Turns	2X 4 Turns	2X 5 Turns	2X 5 Turns	2X 6 Turns
	40/0.1mm litz	40/0.1mm litz	30/0.1mm litz	23/0.1mm litz	20/0.1mm litz	15/0.1mm litz	15/0.1mm litz	12/0.1mm litz
Main Primary	30 turns	26 turns	24 turns	28 turns	25 turns	26 turns	23 turns	23 turns
	0.30mm TIW							
Vcc Primary	3 turns	3 turns	3 tums	3 turns	3 turns	3 turns	2 turns	3 turns
	3X 0.3mm TIW	3X 0.3mm T/W	3X 0.3mm TIW					
	(19V)	(22V)	(24V)	(28V)	(32V)	(36V)	(48V)	(54V)
	TF-072	TF-077	TF-049	TF-078	TF-073	TF-079	TF-050	TF-074

### 7.0 Illustrations

### **Illustration 5 - Marking**





#### Note:

- 1. The marking plates of the other models listed in this report are identical with below except model name and output parameter.
- 2. The date code of manufacturing is presented as WWYY, YY = manufacturing year, WW = the week of the manufacturing year, e.g. 0217 = The second week of 2017.

Drop test

Stress relief Test

Determination of accessible parts test

GlobTek, Inc. Revised: None 8.0 Test Summary 27-Feb-2018 to 21-Mar-2018 Evaluation Period Project No. 180301487SHA 0180227-23-27-Feb-2018 Condition Prototype Sample Rec. Date Sample ID 001~015 Test Location Intertek Testing Services Shanghai Testing Lab Test Procedure Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria. The following tests were performed: Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements [UL 62368-1:2014 Ed.21 Test Description Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements [CSA C22.2#62368-1:2014 Ed.2] Energy source classifications 4.2 Protection against energy sources 4.3 Classification and limits of electrical energy sources 5.2 Classification of power sources (PS) and potential ignition 6.2 sources (PIS) 10 N steady force test 4.6.2 Strain on socket-outlet test 4.7.3 Temperature test for insulating materials and touch 5.4.1.4, 9.0 temperature Determination of working voltage test 5.4.1.8 Ball pressure test 5.4.1.10.3 Clearances and creepage distances measurement 5.4.2, 5.4.3 -Solid insulation measurement 5.4.4 Humidity conditioning test 5.4.8 \_ Electric strength test 5.4.9 \_ Thermal energy source classifications 9.2 input test B.2.5 Operating temperature measurement B.2.6 Simulated abnormal operating conditions B.3 Simulated single fault conditions test **B.4** Marking durability test F.3.10 Transformer overload tests G.5.3.3 Steady force test – 10 N T.2 -Steady force test - 250 N T.5 .

	ample of the product covered by ments of the standards indicated		luated and found to comply with the
Completed by:	Albert Zhou	Reviewed by:	Will Wang
Title:	Engineer	Title:	Assistant Manager
Signature:	Albert 2hou	Signature:	Wi Wary

T.7

T.8

V.1

Issued: 26-Mar-2018

**MULTIPLE LISTEE 3 MODELS** 

9.0 Correlation Page For Multiple Listings The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program. **BASIC LISTEE** GlobTek, Inc. 186 Veterans Dr. Northvale, NJ07647 Address USA Country Product ITE Power Supply MULTIPLE LISTEE 1 None Address Country **Brand Name ASSOCIATED MANUFACTURER** Address Country **BASIC LISTEE MODELS MULTIPLE LISTEE 1 MODELS** MULTIPLE LISTEE 2 None Address Country **Brand Name ASSOCIATED MANUFACTURER** Address Country **MULTIPLE LISTEE 2 MODELS BASIC LISTEE MODELS** MULTIPLE LISTEE 3 None Address Country **Brand Name** ASSOCIATED **MANUFACTURER** Address Country

**BASIC LISTEE MODELS** 

Issued: 26-Mar-2018

Page 33 of 36 Issued: 26-Mar-2018 Revised: None

#### 10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

#### COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

#### LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issue by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

**For US standards**, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

**For Canadian standards**, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use. The facsimile need not have a control number. A control number will be issued after signed Certification Agreements have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

#### FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

- 1. Conformance of the manufactured product to the descriptions in this Report.
- 2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
- 3. Manufacturing changes.
- 4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

- 1. Correct the non-conformance.
- 2. Remove the ETL Mark from non-conforming product.
- 3. Contact the issuing product safety evaluation center for instructions.

Issued: 26-Mar-2018 GlobTek, Inc. Revised: None

### 10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

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

> Ship the samples to: Intertek Testing Services Shanghai Limited **ETL Component Evaluation Center** Building No. 86, 1198 Qinzhou Road (North)

Shanghai 200233, China Attn: Ms. Angela Han

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

Page 35 of 36

Issued: 26-Mar-2018 GlobTek, Inc. Revised: None

#### 11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

### **Required Tests**

Dielectric Voltage Withstand Test

## 11.1 Dielectric Voltage Withstand Test

#### Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

### **Test Equipment**

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:

- 1 a voltmeter in the primary circuit;
- 2 a selector switch marked to indicate the test potential; or
- 3 a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

Products Requiring Dielectric Voltage Withstand Test:		
Product	Test Voltage	Test Time
All products covered by this Report.		
Between mains input to output terminal / enclosure with metal foil	3000Vac	1 - 4 s

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

Issued: 26-Mar-2018