


| 1.0 Reference and Address |  |                  |  |
|---------------------------|--|------------------|--|
| Report Number             | 180401371SHA-001   | Original Issued: | 22-Oct-2018  |
|                           |  | Revised:         | None   |
| Standard(s)               | <p>Information Technology Equipment Safety Part 1: General Requirements &gt;Valid without technical revision: 20Dec2020&lt; [UL 60950-1:2007 Ed.2+R:14Oct2014]</p> <p>Information Technology Equipment Safety Part 1: General Requirements (R2016) &gt;Valid without technical revision: 20Dec2020&lt; [CSA C22.2#60950-1:2007 Ed.2+A1;A2]</p> |                  |  |
| Applicant                 | GlobTek, Inc.  | Manufacturer     | GlobTek (Suzhou) Co., Ltd.   |
| Address                   | 186 Veterans Dr. Northvale, NJ 07647   | Address          | Building 4. No 76 JinLing East Road, Suzhou Industrial Park, Suzhou, JiangSu, 215021 |
| Country                   | USA  | Country          | China  |
| Contact                   | Mike Krakovyak   | Contact          | Demon Zhou   |
| Phone                     | (201)784-1000 Ext.106  | Phone            | 86 512 6279 0301 Ext.189   |
| FAX                       | (201)784-0111  | FAX              | 86 512 6279 0355   |
| Email                     | Krakovyakm@globtek.com   | Email            | demon.zhou@globtek.cn  |

| <b>2.0 Product Description</b> |   |
|--------------------------------|---|
| Product                        | ITE Power Supply  |
| Brand name                     |    |
| Description                    | Products covered by this report are power adapters, with AC inlet to be used with detachable power supply cord or with non-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 constructions were in consideration in this report. Two pieces of outer enclosure are enclosed with screws. The product is not intended to use in the environment which altitude exceed 5000m. Test was conducted under 40°C ambient.  |
| Models                         | GT followed by M, - or H; followed by 961600P or 961800P; followed by 01 to 180; followed by 12 to 54; followed by -T2, -T2A, -T3, -T3A or -TP; may be followed by six character.<br>GT followed by M, - or H; followed by 961600P or 961800P; followed by 01 to 180; followed by 12.0 to 54.0; followed by -T2, -T2A, -T3, -T3A or -TP; may be followed by six character.  |
| Model Similarity               | <p>Followed by 'M' or '-' or 'H' for market identification and not related to safety.</p> <p>Followed by "01" to "180" denotes the rated output wattage designation, with interval of "01", "01" stands for 1W, "180" stands for 180W.</p> <p>Followed by "12" to "54" or "12.0" to "54.0" 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.</p> <p>Followed by "-T2" means desktop class II with C8 AC inlet;</p> <p>Followed by "-T2A" means desktop class II with C18 AC inlet;</p> <p>Followed by "-T3" means desktop class I with C14 AC inlet;</p> <p>Followed by "-T3A" means desktop class I with C6 AC inlet;</p> <p>Followed by "-TP" means desktop with power cord and US plug;</p> <p>Followed by any six character which can be "0" to "9", "A" to "Z", "-", "()" or "[]" or blank for marketing purposes and have no bearing on safety or compliance.</p> <p>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 transformer model is identical in insulation construction including clearance and creepage except number of turns per coil.</p> |
| Ratings                        | Input: 100-240V~, 50-60Hz, 2.2A;<br>Output: 12-54 VDC, Max.13.33A Max. 180W<br>See illustration 1 for details.  |
| Other Ratings                  | N/A   |

### 3.0 Product Photographs

Photo 1 - Front view

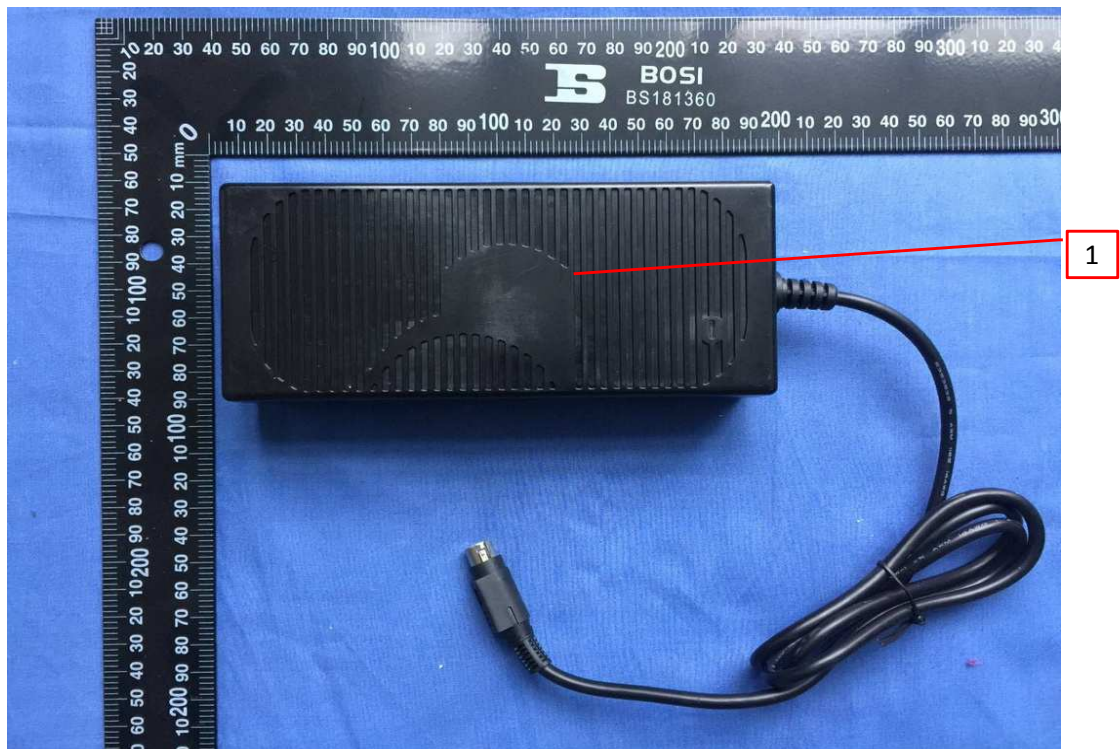


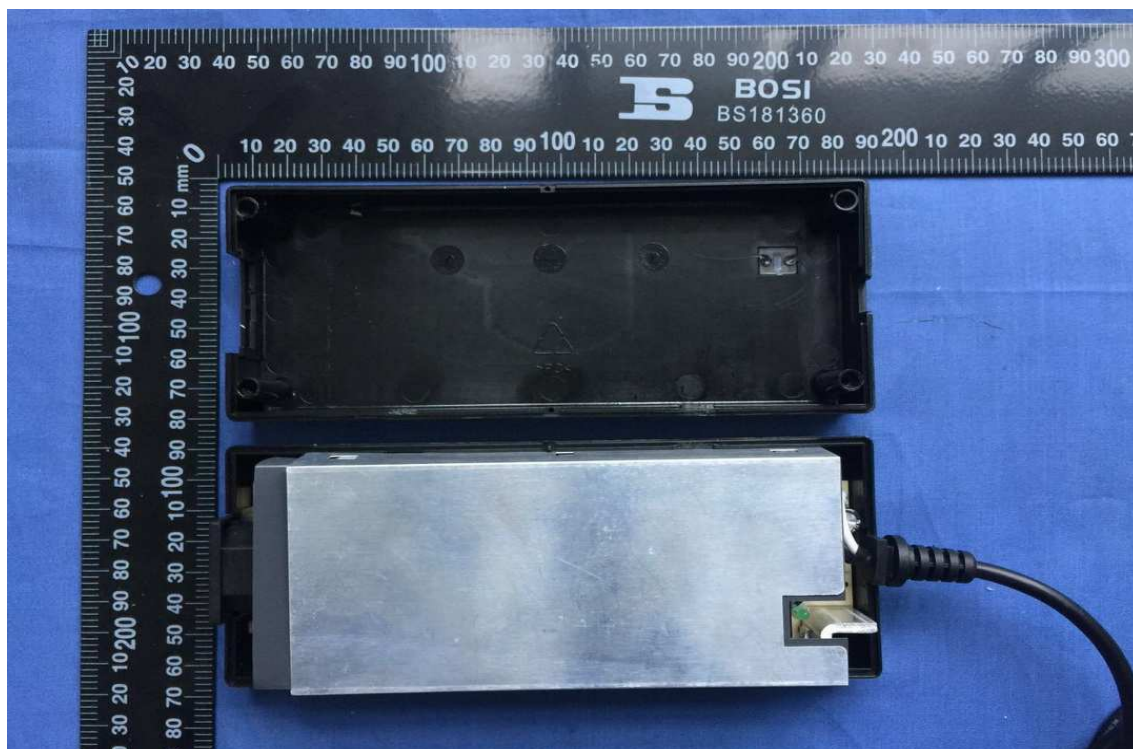
Photo 2 - Back view



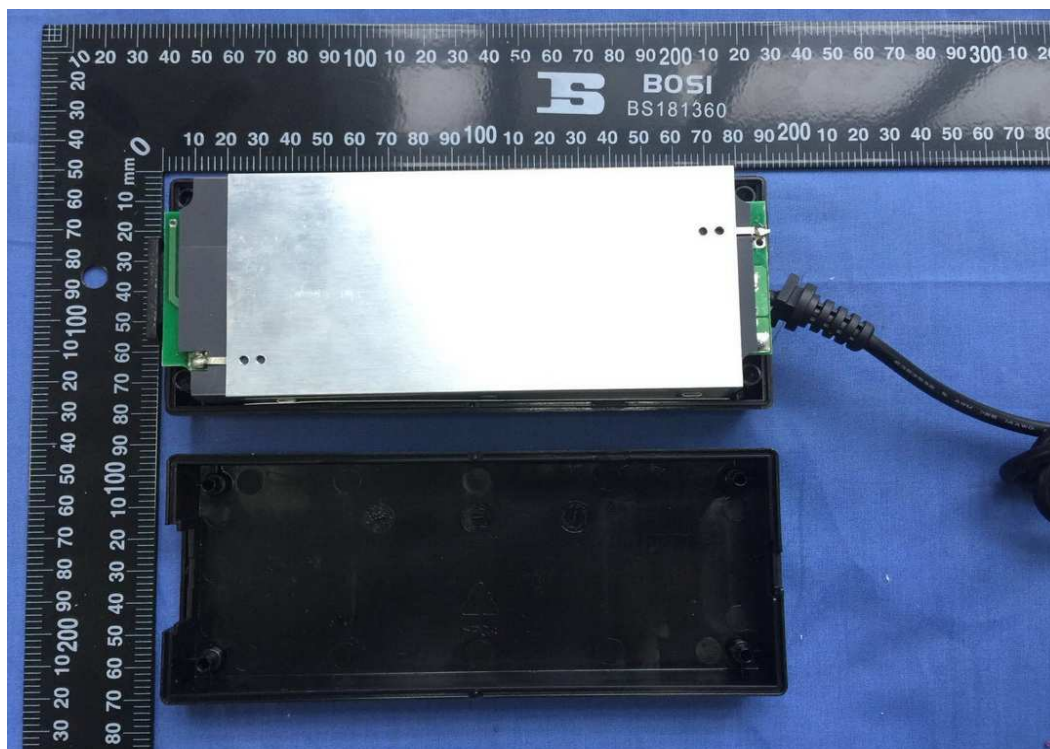


### 3.0 Product Photographs

**Photo 3 - Internal view with Top Enclosure Removed**



**Photo 4 - Internal view with Lower Enclosure Removed**



### 3.0 Product Photographs

Photo 5 - Internal view with Top Metal Cover Removed

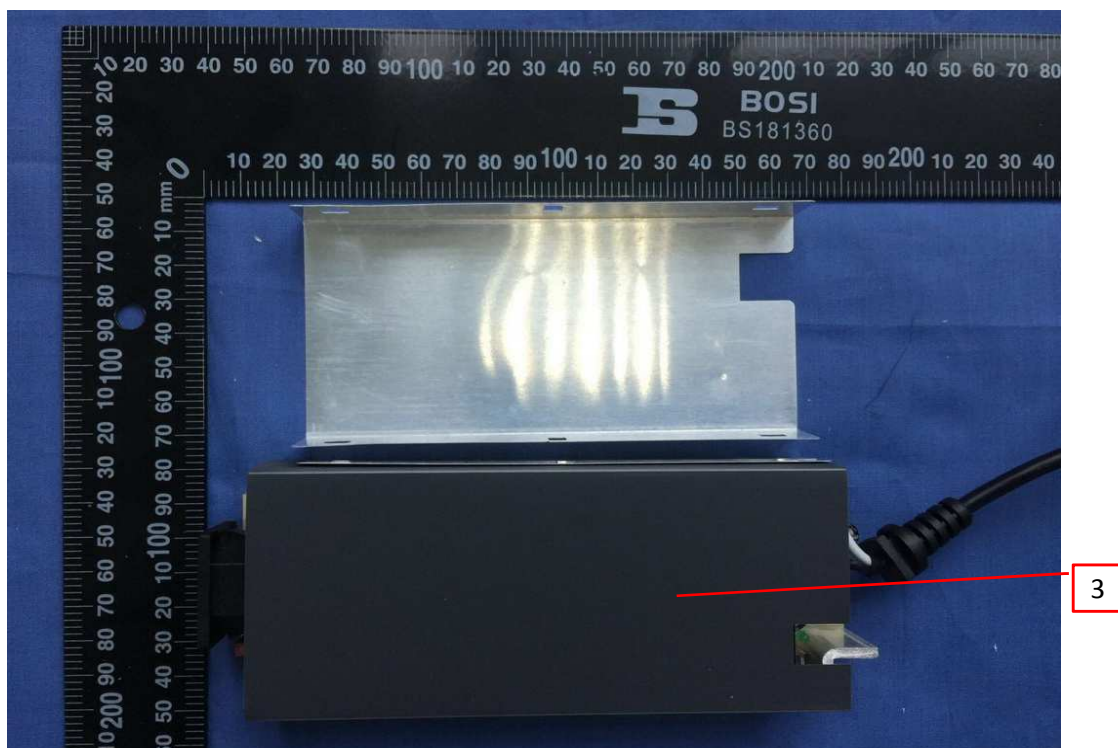
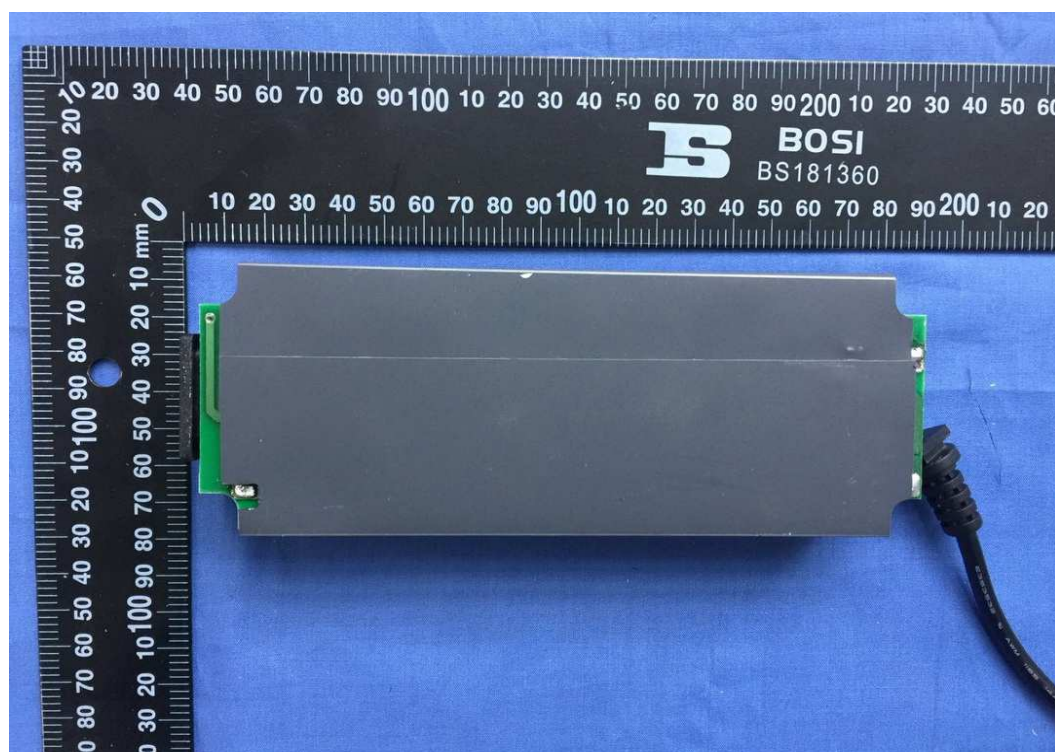


Photo 6 - Internal view with Lower Metal Cover Removed





### 3.0 Product Photographs

Photo 7 - Internal view with Insulation Sheet Removed

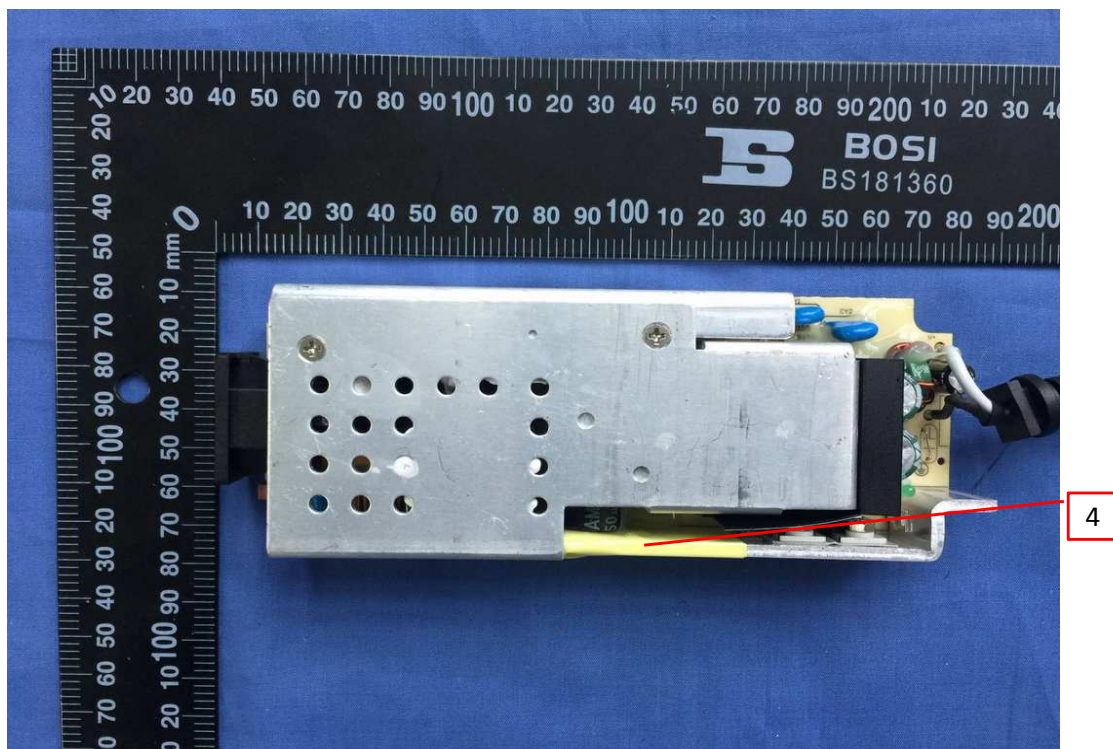
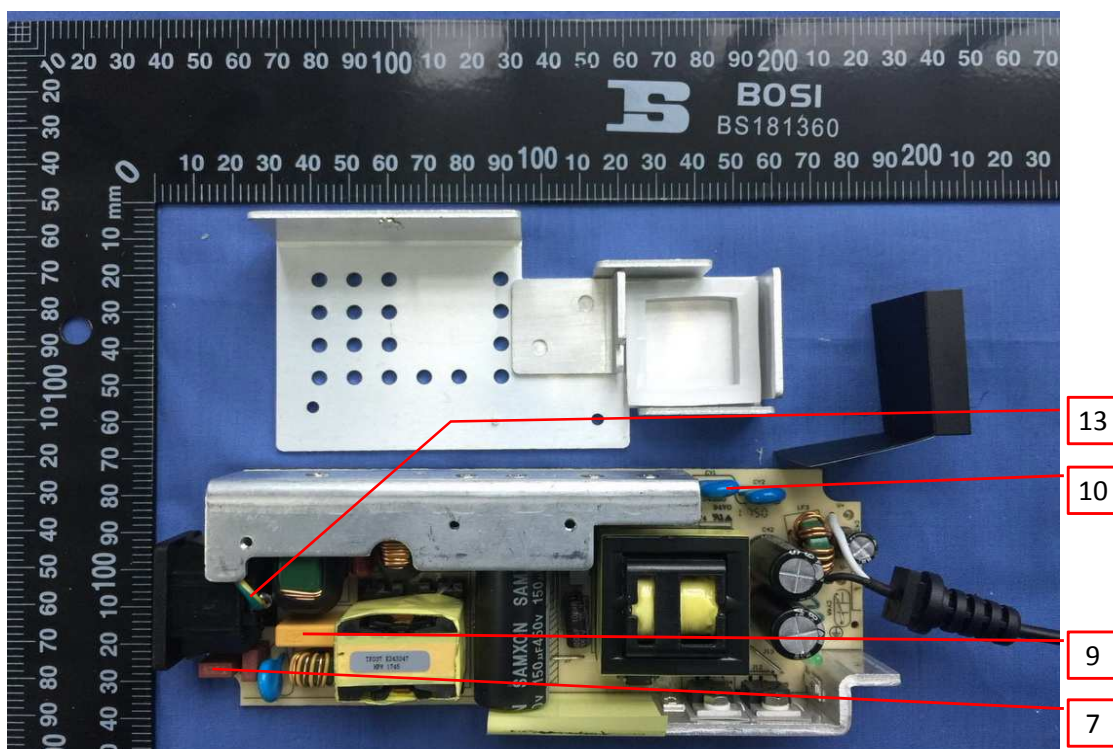


Photo 8 - PCB Top Side (Class I)



### 3.0 Product Photographs

Photo 9 - PCB Top Side (Class II)

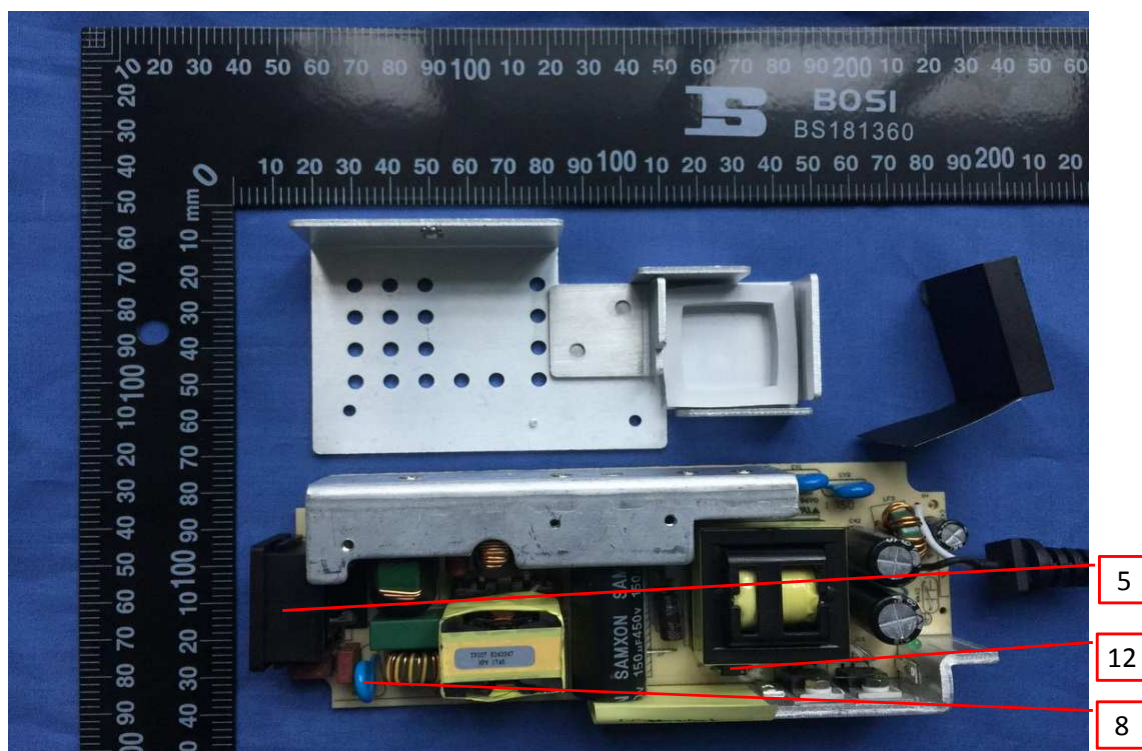
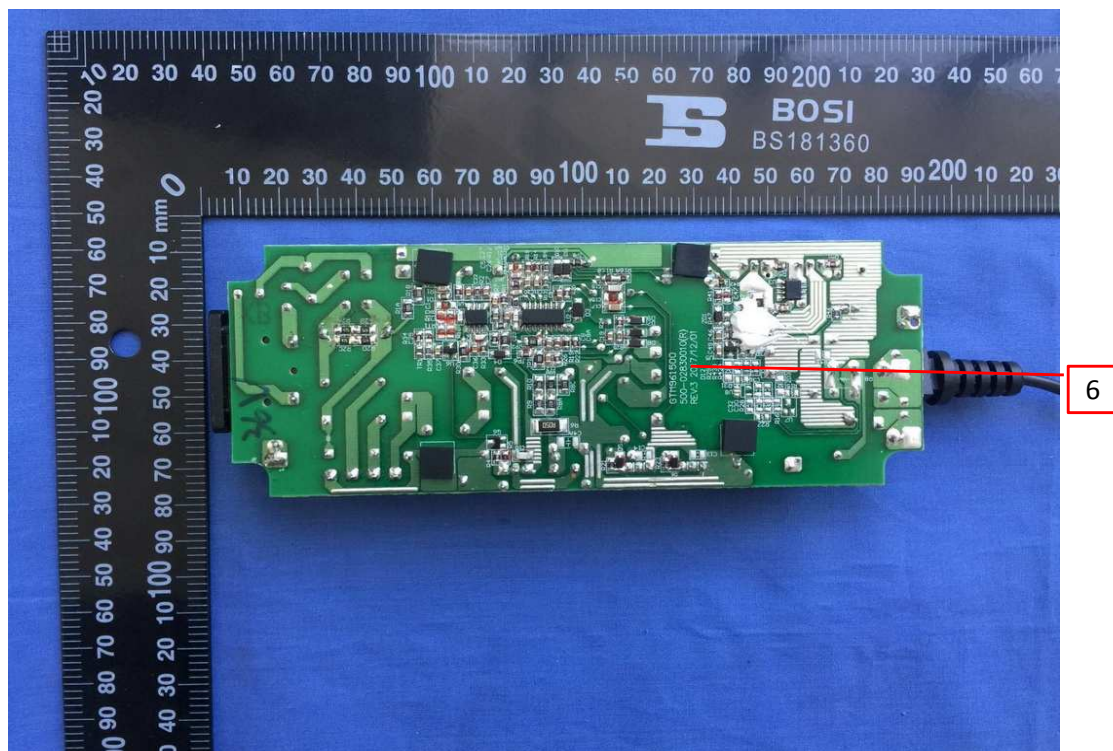


Photo 10 - PCB Bottom Side (12.0-36.0V model, Class I)





### 3.0 Product Photographs

Photo 11 - PCB Bottom Side (36.1-54V model, Class I)

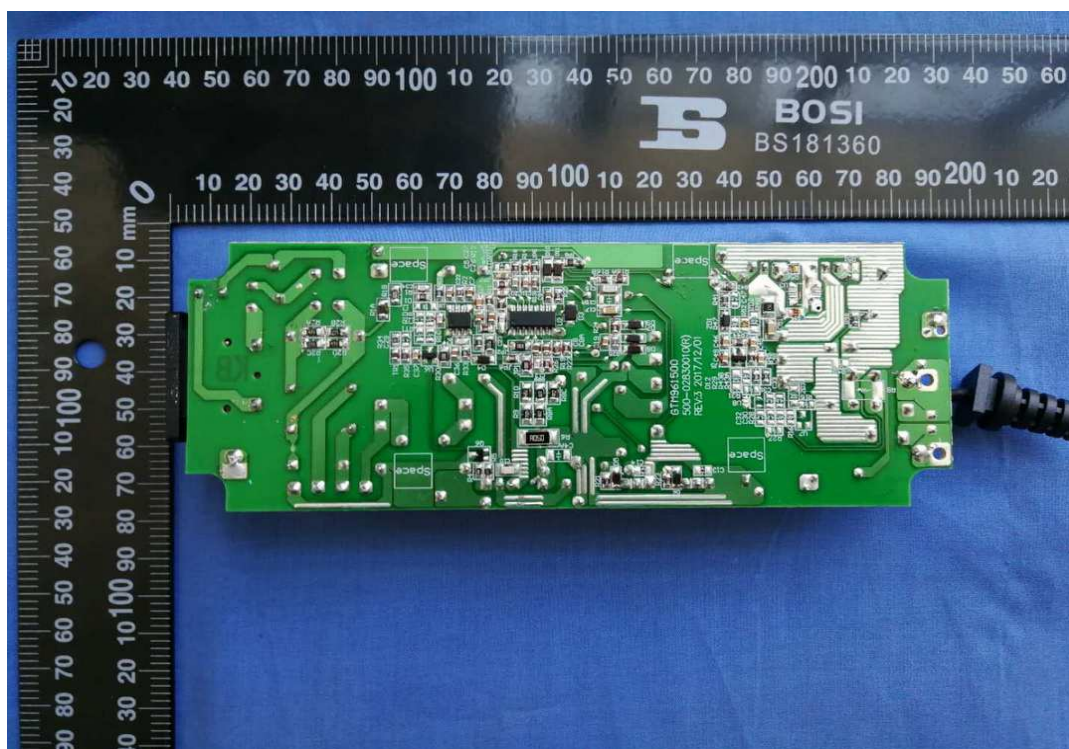
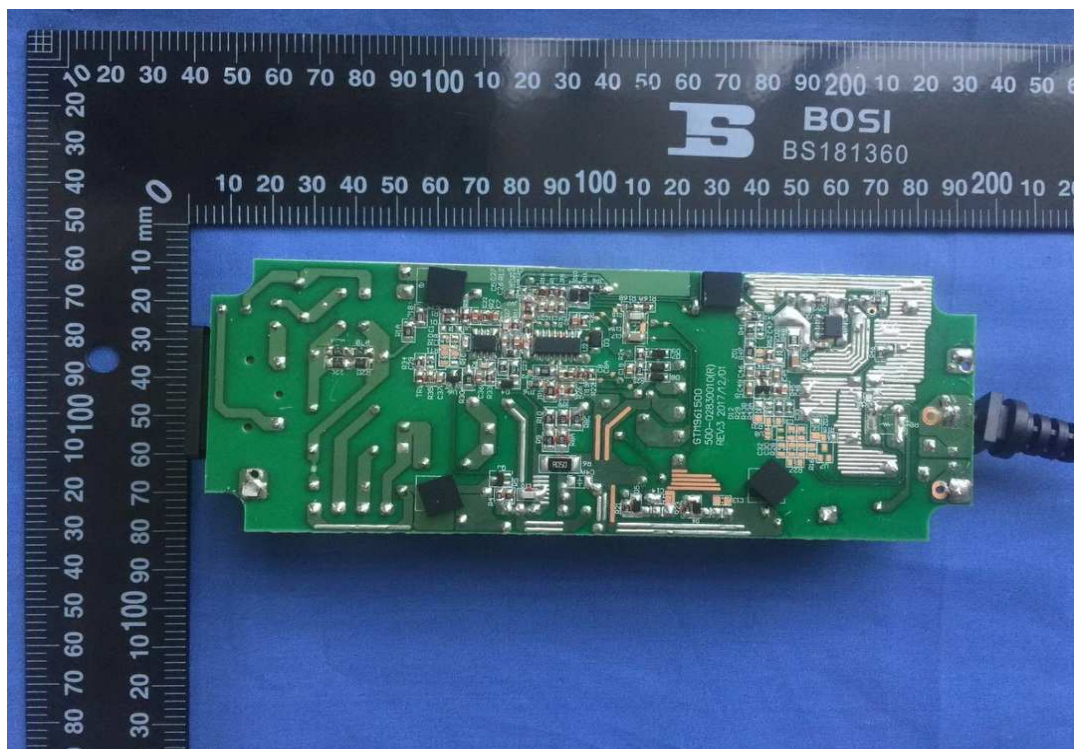


Photo 12- PCB Bottom Side (12.0-36.0V model, Class II)





### 3.0 Product Photographs

Photo 13 - PCB Bottom Side(36.1-54V model, Class II)

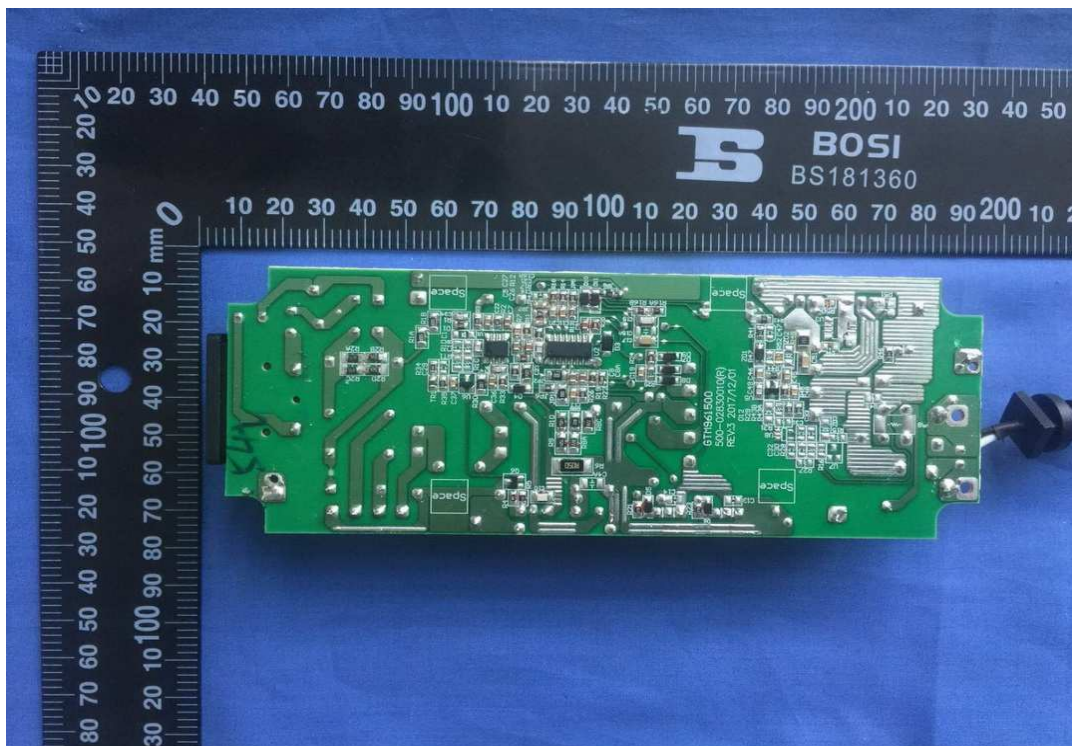


Photo 14 - Cord Connected Model with Plug





### 3.0 Product Photographs

Photo 15 - Transformer

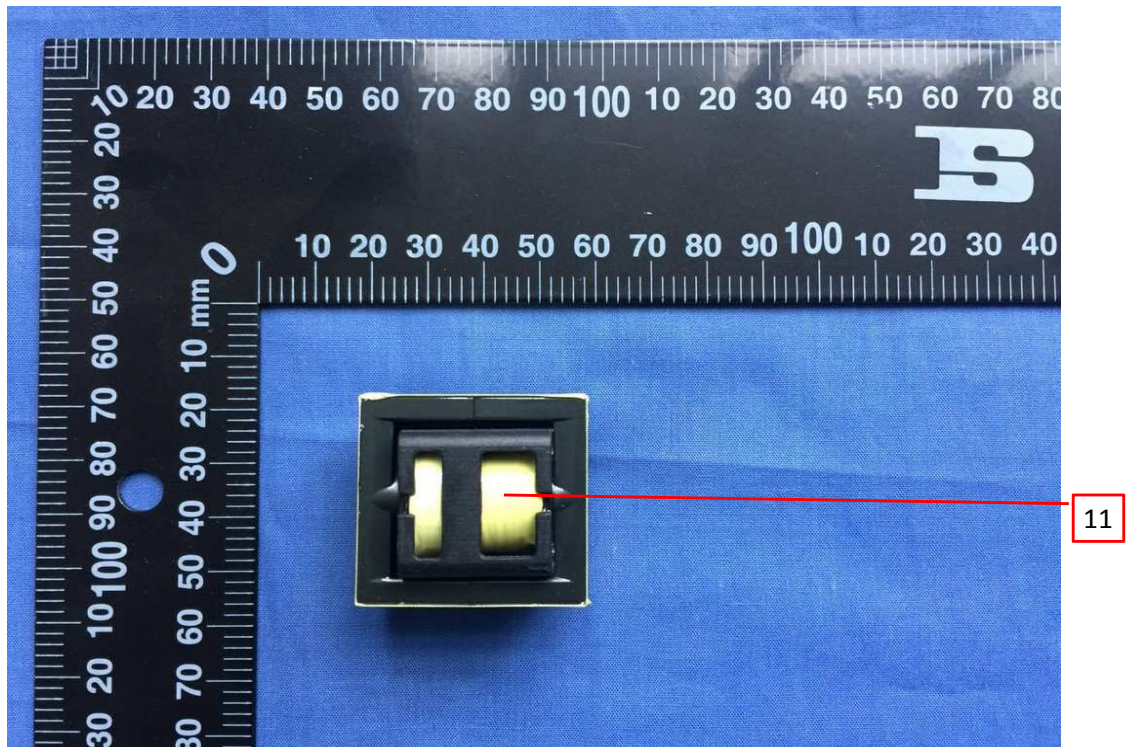
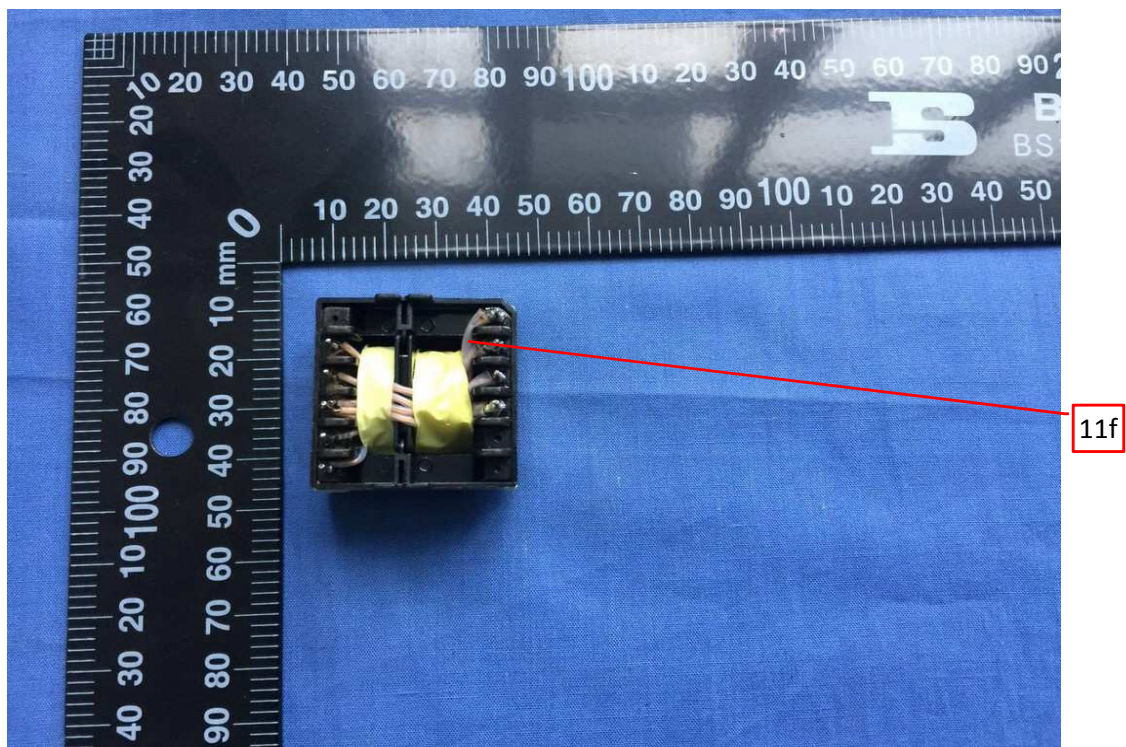


Photo 16 - Transformer





### 3.0 Product Photographs

Photo 17 - Transformer

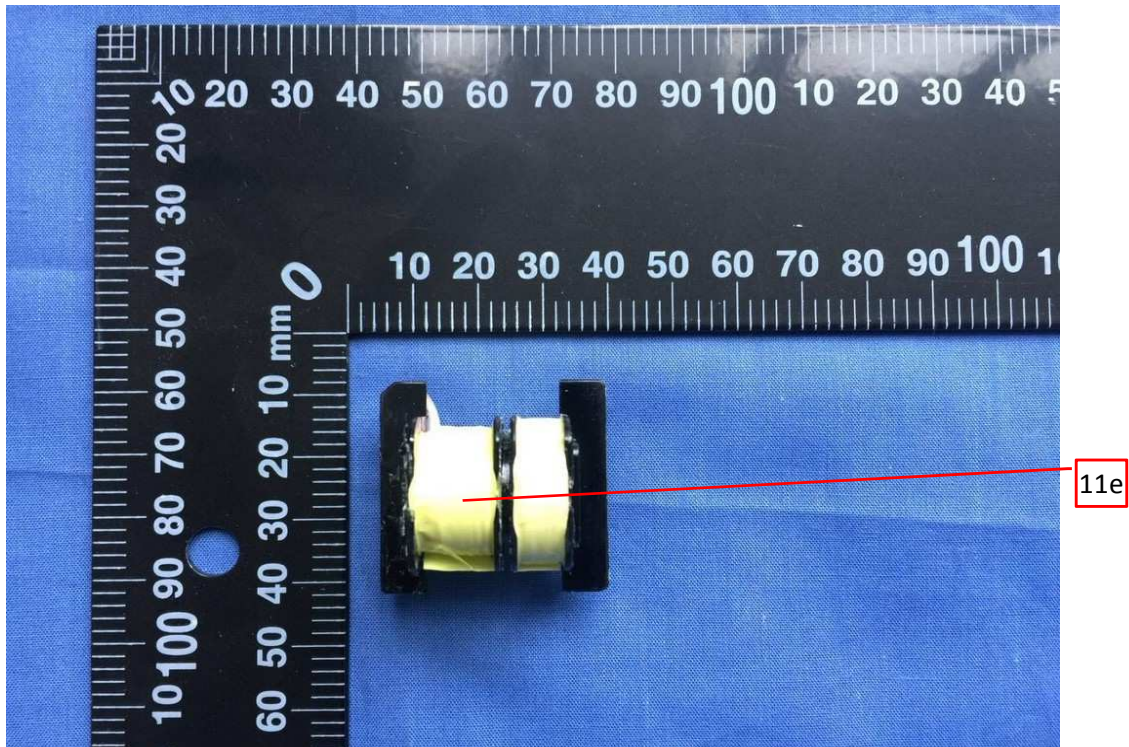
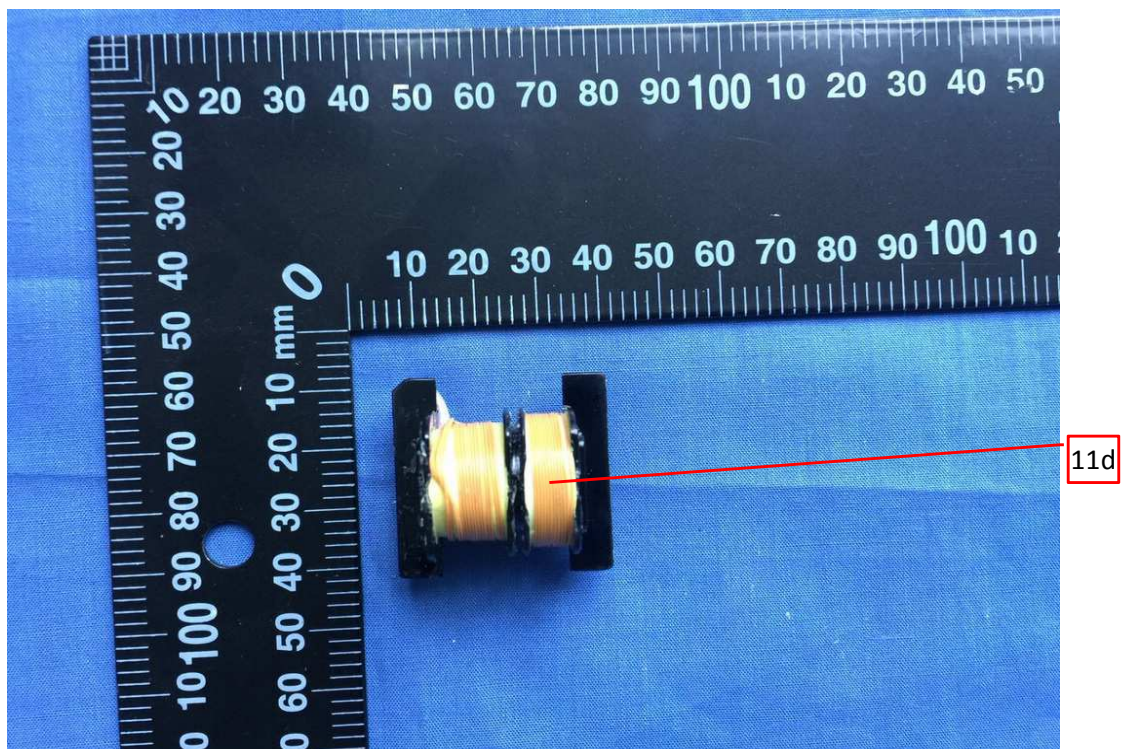


Photo 18 - Transformer





### 3.0 Product Photographs

Photo 19 - Transformer

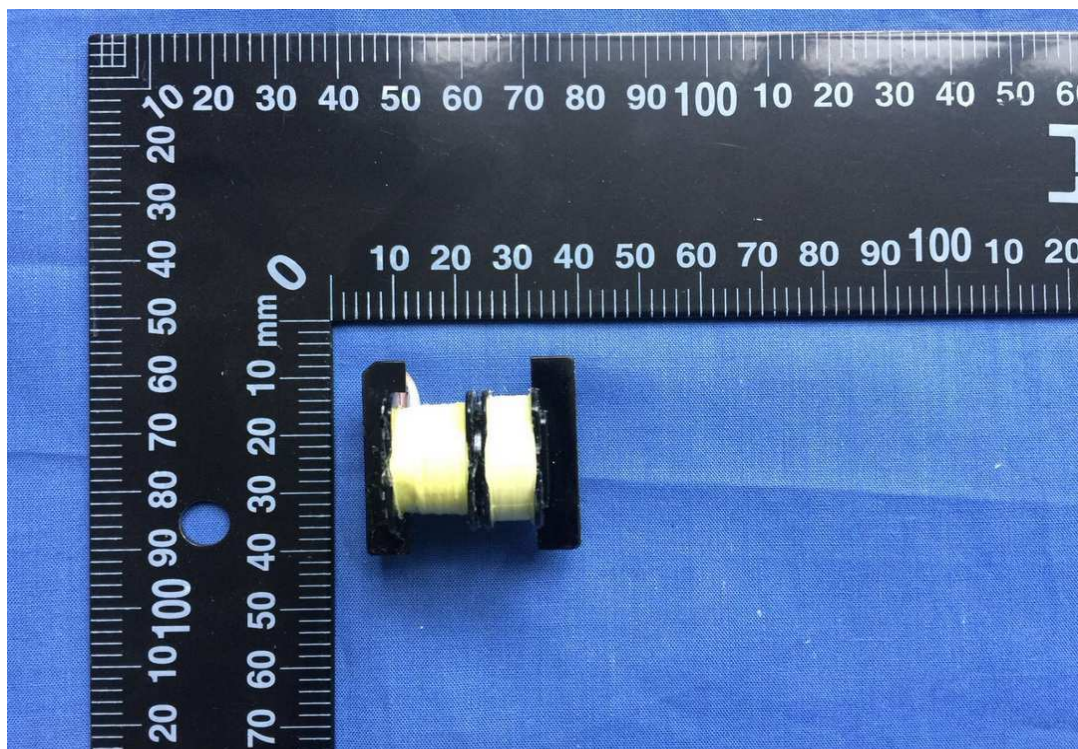
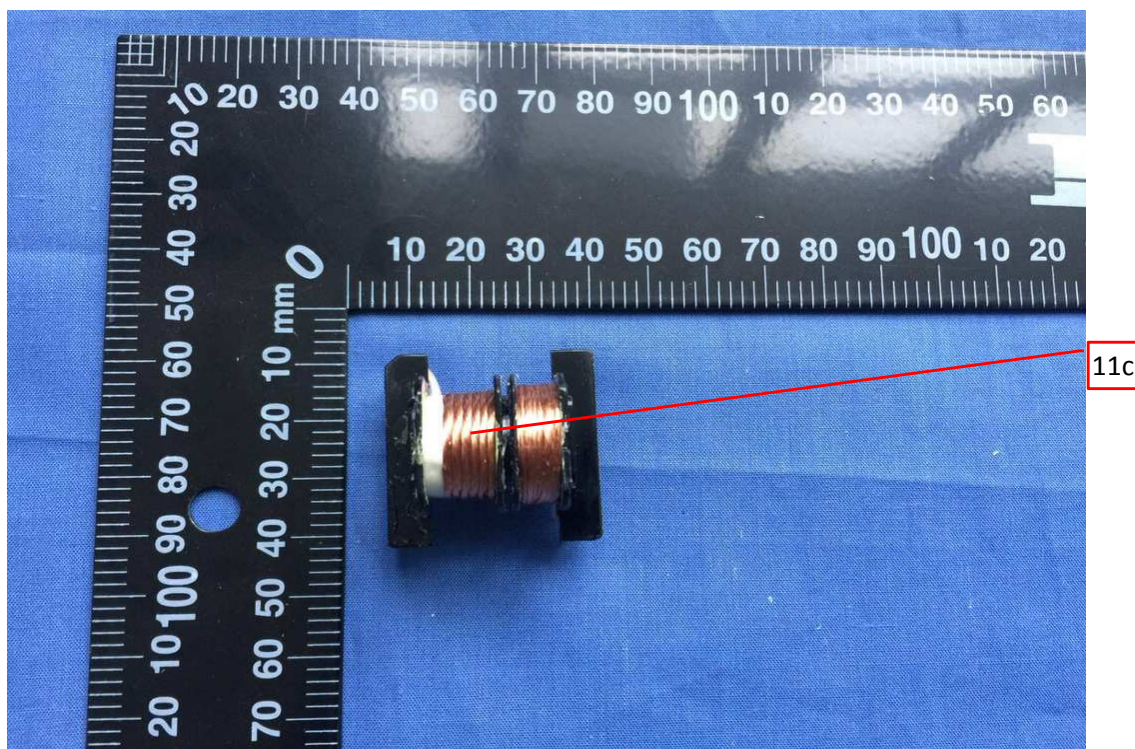


Photo 20 - Transformer





### 3.0 Product Photographs

Photo 21 - Transformer

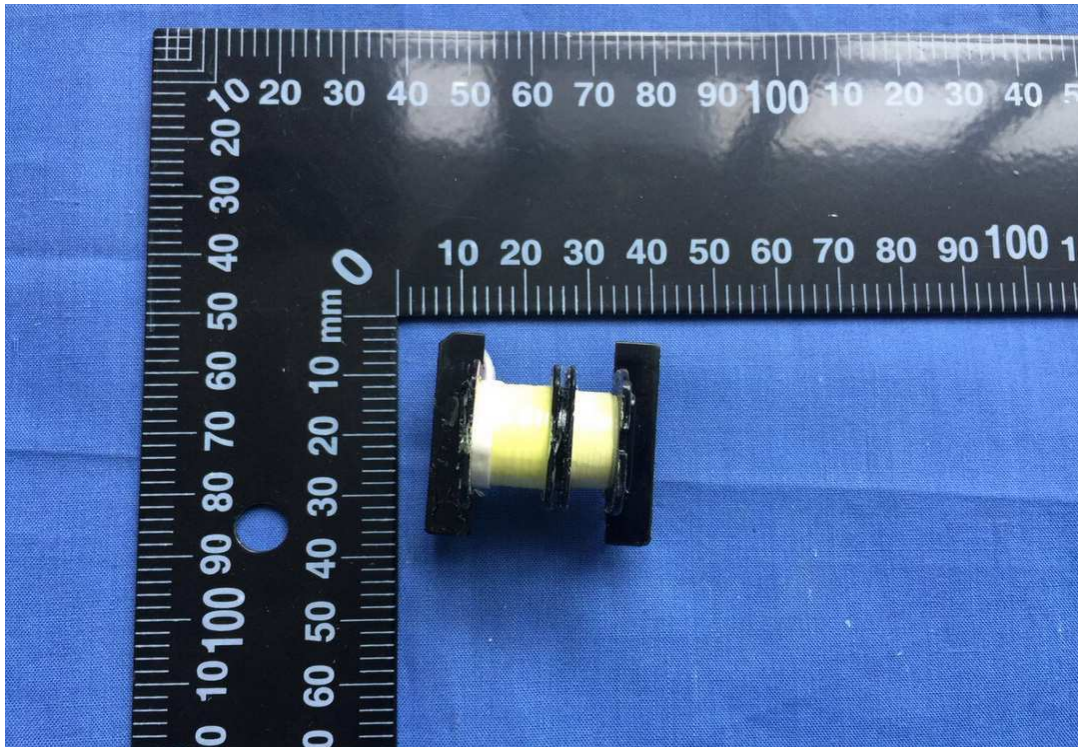
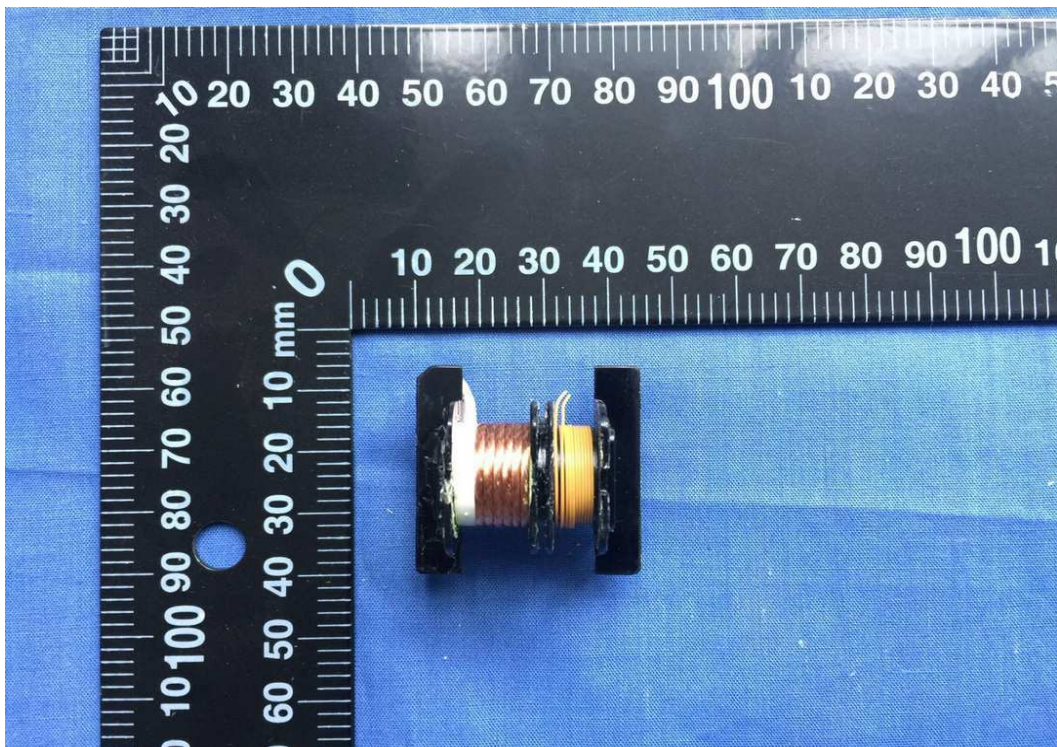
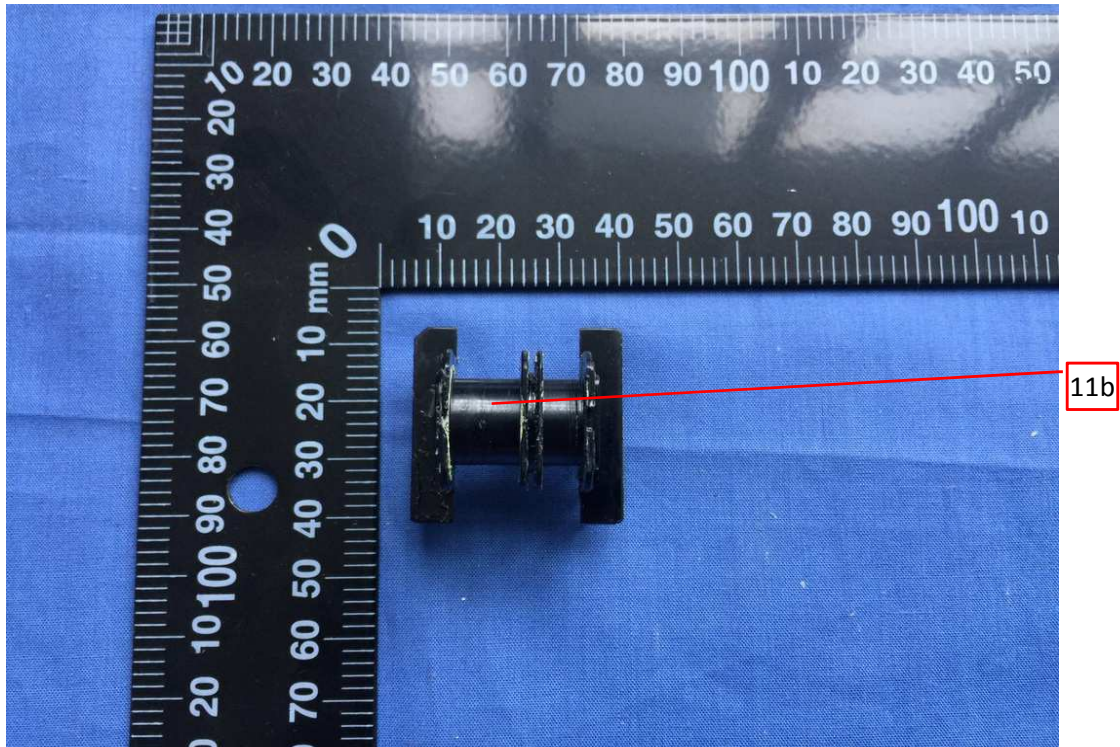


Photo 22 - Transformer



### 3.0 Product Photographs

Photo 23 - Transformer





| 4.0 Critical 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 <sup>3</sup> |
| 1                       | 1                     | Enclosure | SABIC INNOVATIVE PLASTICS            | SE1X                      | PPE+PS, Min.V-1, Min. 2.0mm thickness, 105°C | cURus                              |
|                         |                       |           |                                      | SE1                       | PPE+PS, Min.V-1, Min. 2.0mm thickness, 105°C | cURus                              |
|                         |                       |           |                                      | HF500R                    | PC, Min.V-0, Min. 2.0mm thickness, 125°C     | cURus                              |
|                         |                       |           |                                      | CX7211                    | PC/ABS, Min.V-0, Min. 2.0mm thickness, 90°C  | cURus                              |
|                         |                       |           |                                      | C2950                     | PC/ABS, Min.V-1, Min. 2.0mm thickness, 105°C | cURus                              |
|                         |                       |           |                                      | 945                       | PC, Min.V-1, Min. 2.0mm thickness, 120°C     | cURus                              |
|                         |                       |           | SABIC JAPAN L L C                    | SE1X                      | PPE+PS, Min.V-1, Min. 2.0mm thickness, 105°C | cURus                              |
|                         |                       |           |                                      | SE1                       | PPE+PS, Min.V-1, Min. 2.0mm thickness, 105°C | cURus                              |
|                         |                       |           |                                      | HF500R                    | PC, Min.V-0, Min. 2.0mm thickness, 125°C     | cURus                              |
|                         |                       |           |                                      | CX7211                    | PC/ABS, Min.V-0, Min. 2.0mm thickness, 90°C  | cURus                              |
|                         |                       |           |                                      | C2950                     | PC/ABS, Min.V-1, Min. 2.0mm thickness, 105°C | cURus                              |
|                         |                       |           |                                      | 945                       | PC, Min.V-1, Min. 2.0mm thickness, 120°C     | cURus                              |
|                         |                       |           | COVESTRO DEUTSCHLAND AG [PC RESINS]  | 6485+                     | PC, Min.V-0, Min. 2.0mm thickness, 115°C     | cURus                              |
|                         |                       |           | TEIJIN CHEMICALS LTD                 | LN-1250P                  | PC, Min.V-0, Min. 2.0mm thickness, 115°C     | cURus                              |
|                         |                       |           |                                      | LN-1250G                  | PC, Min.V-0, Min. 2.0mm thickness, 115°C     | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 2                       | 2                     | Output cord            | SUZHOU DIOUDE ELECTRONICS CO LTD   | 1185                      | 14 to 22 AWG, 2 to 6 wires, 300V, Min. 80°C, VW-1 supplied with a stripped and tinned connection, or any style DC output connector.  | cURus                              |
|                         |                       |                        |  | 2464                      |  | cURus                              |
|                         |                       |                        |  | SPT-1                     |  | cURus                              |
|                         |                       |                        |  | SVT                       |  | cURus                              |
|                         |                       |                        | ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD                   | 1185                      | 14 to 22 AWG, 2 to 6 wires, 300V, Min. 80°C, VW-1 supplied with a stripped and tinned connection, or any style DC output connector.  | cURus                              |
|                         |                       |                        |  | 2464                      |  | cURus                              |
|                         |                       |                        |  | SPT-1                     |  | cURus                              |
|                         |                       |                        |  | SVT                       |  | cURus                              |
|                         |                       |                        | SUZHOU YEMAO ELECTRONIC CO LTD   | 1185                      | 14 to 22 AWG, 2 to 6 wires, 300V, Min. 80°C, VW-1 supplied with a stripped and tinned connection, or any style DC output connector.  | cURus                              |
|                         |                       |                        |  | 2464                      |  | cURus                              |
|                         |                       |                        | GLOBTEK INC  | 1185                      | 14 to 22 AWG, 2 to 6 wires, 300V, Min. 80°C, VW-1 supplied with a stripped and tinned connection, or any style DC output connector.  | cURus                              |
|                         |                       |                        |  | 2464                      |  | cURus                              |
|                         |                       |                        |  | SPT-1                     |  | cURus                              |
|                         |                       |                        |  | SVT                       |  | cURus                              |
|                         |                       |                        | Various  | Various                   | 14 to 22 AWG, 2 to 6 wires, 300V, 100°C, VW-1 supplied with a stripped and tinned connection, or any style DC output connector. Performance parameter shall be equal 1185,2464,SPT-1 or SPT-2. | cURus                              |
| 5                       | 3                     | Mylar Insulating sheet | 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 INNOVATIVE PLASTICS US L L C                                       | FR60 series               | V-0, min. 0.4 mm thickness, 130°C  | cURus                              |
|                         |                       |                        |  | FR63 series               |  | cURus                              |
|                         |                       |                        |  | FR65 series               |  | cURus                              |
|                         |                       |                        |  | FR7 series                |  | cURus                              |
|                         |                       |                        |  | FR700 series              |  | cURus                              |
|                         |                       |                        | CHENGDU KANGLONGXIN PLASTICS CO LTD                                      | KLX PP WT-10 series       | VTM-0, min. 0.4 mm thickness, 110°C  | cURus                              |
|                         |                       |                        | SICHUAN LONGHUA FILM CO LTD  | PP-(i)(j)                 | V-0, min. 0.4 mm thickness, 105°C  | cURus                              |



| 4.0 Critical 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 <sup>3</sup> |
| 7                       | 4                     | Insulating tape wrapping around the heatsink (Optional) | 3M COMPANY ELECTRICAL MARKETS DIV (EMD)        | 1350F-1                   | 130°C                               | cURus                              |
|                         |                       |   |  | 1350T-1                   |                                     | cURus                              |
|                         |                       |   | BONDTEC PACIFIC CO LTD                         | 370S                      | 130°C                               | cURus                              |
|                         |                       |   | JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD | PZ                        | 130°C                               | cURus                              |
|                         |                       |   |  | CT                        |                                     | cURus                              |
|                         |                       |   | JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD       | JY25-A                    | 130°C                               | cURus                              |
|                         |                       |   | CHANG SHU LIANG YI TAPE INDUSTRY CO LTD        | LY-XX                     | 130°C                               | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 9                       | 5                     | Appliance Inlet (CN1) | Zhejiang LECI Electronics Co., Ltd.        | DB-6                      | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Tecx-Unions Technology Corp                | TU-333                    | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Rich Bay Co Ltd                            | R-30790                   | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Sun Fair Electric Wire & Cable (HK) Co Ltd | S-02                      | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | DLK Electronics Technology Co Ltd          | CDJ-2                     | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Inalways Corp.                             | 0724                      | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Zhe Jiang Bei Er Jia Electronic Co Ltd     | ST-A04-002                | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Rong Feng Industrial Co., Ltd.             | RF-190                    | 250 Vac, 2.5A, Standard sheet: C6   | cURus                              |
|                         |                       |                       | Zhejiang LECI Electronics Co., Ltd.        | DB-14                     | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Tecx-Unions Technology Corp                | TU-301-S                  | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Tecx-Unions Technology Corp                | TU-301-SP                 | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Rich Bay Co Ltd                            | R-301SN                   | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Sun Fair Electric Wire & Cable (HK) Co Ltd | SS-120                    | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Inalways Corp.                             | 0711                      | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Zhe Jiang Bei Er Jia Electronic Co Ltd     | ST-A01-003J               | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Rong Feng Industrial Co., Ltd.             | SS-120                    | 250 Vac, 10A, Standard sheet: C14   | cURus                              |
|                         |                       |                       | Zhejiang LECI Electronics                  | DB-8                      | 250 Vac, 2.5A, Standard sheet: C8   | cURus                              |
|                         |                       |                       | Delikang Electronics Technology Co Ltd     | CDJ-8                     | 250 Vac, 2.5A, Standard sheet: C8   | cURus                              |
|                         |                       |                       | Rich Bay Co Ltd                            | R-201SN90                 | 250 Vac, 2.5A, Standard sheet: C8   | cURus                              |
|                         |                       |                       | Sun Fair Electric Wire & Cable (HK) Co Ltd | S-01                      | 250 Vac, 2.5A, Standard sheet: C8   | cURus                              |
|                         |                       |                       | Tecx-unions Technology Corp                | SO-222 series             | 250 Vac, 2.5A, Standard sheet: C8   | cURus                              |



| 4.0 Critical 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 <sup>3</sup> |
|                         |                       |                                | Inalways Corp.                                | 0721                      | 250 Vac, 2.5A, Standard sheet: C8                                | cURus                              |
|                         |                       |                                | Zhe Jiang Bei Er Jia Electronic Co Ltd        | ST-A03-005                | 250 Vac, 2.5A, Standard sheet: C8                                | cURus                              |
|                         |                       |                                | Rong Feng Industrial Co., Ltd                 | RF-180                    | 250 Vac, 2.5A, Standard sheet: C8                                | cURus                              |
|                         |                       |                                | Rich Bay Co Ltd                               | R-301SN                   | 250Vac,10A, Standard sheet: C18                                  | cURus                              |
|                         |                       |                                | Rong Feng Industrial Co., Ltd                 | SS-120A                   | 250Vac,10A, Standard sheet: C18                                  | cURus                              |
| 10                      | 6                     | PCB                            | Various                                       | Various                   | Min. 1.6 mm thickness, min. V-0, 130°C, Fully comply with UL 796 | cURus                              |
| 8                       | 7                     | Fuse (F1, F2) (F2 is optional) | CONQUER ELECTRONICS CO LTD                    | MST series                | T4AL, 250V   | cURus                              |
|                         |                       |                                | EVER ISLAND ELECTRIC CO LTD & WALTER ELECTRIC | 2010                      | T4AL, 250V   | cURus                              |
|                         |                       |                                | Zhongshan Lanbao Electrical Appliances        | RTI-10                    | T4AL, 250V   | cURus                              |
|                         |                       |                                | BEL FUSE INC                                  | RST series                | T4AL, 250V   | cURus                              |
|                         |                       |                                | COOPER BUSSMANN LLC                           | SS-5                      | T4AL, 250V   | cURus                              |
|                         |                       |                                | DONGGUAN BETTER ELECTRONICS TECHNOLOGY CO LTD | 932                       | T4AL, 250V   | cURus                              |
|                         |                       |                                | SHENZHEN LANSON ELECTRONICS CO LTD            | SMT                       | T4AL, 250V   | cURus                              |
|                         |                       |                                | CONQUER ELECTRONICS CO LTD                    | MET series                | T4AL, 250V   | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 9                       | 8                     | Varistor MOV1 (Optional) | THINKING ELECTRONIC INDUSTRIAL CO LTD | TVR10471K,                | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          | THINKING ELECTRONIC INDUSTRIAL CO LTD | TVR14471K                 | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          | CENTRA SCIENCE CORP                   | CNR-10D471K               | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | CNR-14D471K               |   | cURus                              |
|                         |                       |                          | SUCCESS ELECTRONICS CO LTD            | SVR10D471K                | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | SVR14D471K                |   | cURus                              |
|                         |                       |                          | WALSIN TECHNOLOGY CORP                | VZ10D471K                 | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | VZ14D471K                 |   | cURus                              |
|                         |                       |                          | LIEN SHUN ELECTRONICS CO LTD          | 10D471K                   | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | 14D471K                   |   | cURus                              |
|                         |                       |                          | CERAMATE TECHNICAL CO LTD             | GNR10D471K                | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | GNR14D471K                |   | cURus                              |
|                         |                       |                          | BRIGHTKING (SHENZHEN) CO LTD          | 14D471K                   | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | 10D471K                   |   | cURus                              |
|                         |                       |                          | JOYIN CO LTD                          | 10N471K                   | Max. Continuous voltage: min 300Vac(rms), 105°C | cURus                              |
|                         |                       |                          |                                       | 14N471K                   |   | cURus                              |



| 4.0 Critical 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 <sup>3</sup> |
| 8                       | 9                     | X capacitor (CX1) | CHENG TUNG INDUSTRIAL CO LTD             | CTX                       | Max. 0.47μF, Min. 300V, -40°C ~+105°C, X1 or X2 | cURus                              |
|                         |                       |                   | TENTA ELECTRIC INDUSTRIAL CO LTD         | MEX                       | Max. 0.47μF, Min. 300V, -40°C ~+100°C, X1 or X2 | cURus                              |
|                         |                       |                   | JOEY ELECTRONICS (DONG GUAN) CO LTD      | MPX                       | Max. 0.47μF, Min. 300V, -40°C ~+110°C, X1 or X2 | cURus                              |
|                         |                       |                   | ULTRA TECH XIPHI ENTERPRISE CO LTD       | HQX                       | Max. 0.47μF, Min. 250V, -40°C ~+110°C, X2       | cURus                              |
|                         |                       |                   | XIANGTAI ELECTRONIC (SHENZHEN) CO LTD    | MKP                       | Max. 0.47μF, Min. 300V, -40°C ~+110°C, X1 or X2 | cURus                              |
|                         |                       |                   |  | MPX                       |   | cURus                              |
|                         |                       |                   | CARLI ELECTRONICS CO LTD                 | MPX                       | Max. 0.47μF, Min. 250V, -40°C ~+100°C, X2       | cURus                              |
|                         |                       |                   | DAIN ELECTRONICS CO LTD                  | MEX                       | Max. 0.47μF, Min. 250V, -40°C ~+110°C, X1 or X2 | cURus                              |
|                         |                       |                   |  | MPX                       |   | cURus                              |
|                         |                       |                   |  | NPX                       |   | cURus                              |
|                         |                       |                   | YUON YU ELECTRONICS CO LTD               | MPX                       | Max. 0.47μF, Min. 250V, -40°C ~+100°C, X2       | cURus                              |
|                         |                       |                   | SINHUA ELECTRONICS (HUZHOU) CO LTD       | MPX                       | Max. 0.47μF, Min. 250V, -40°C ~+110°C, X1 or X2 | cURus                              |
|                         |                       |                   | JIANGSU XINGHUA HUAYU ELECTRONICS CO LTD | MPX                       | Max. 0.47μF, Min. 250V, -40°C ~+100°C, X2       | cURus                              |
|                         |                       |                   | SHENZHEN JINGHAO CAPACITOR CO LTD        | CBB62B                    | Max. 0.47μF, Min. 250V, -40°C ~+110°C, X2       | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 8                       | 10                    | Y capacitor (CY1, CY2)<br>(Optional) | TDK CORPORATION                       | CD                        | Y1, AC250V, max. 2200pF (for class II models), max. 1500pF (for class I models), -25~+125°C | cURus                              |
|                         |                       |                                      | SUCCESS ELECTRONICS CO LTD            | SE                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      |                                       | SB                        |   | cURus                              |
|                         |                       |                                      | MURATA MFG CO LTD                     | KX                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | WALSIN TECHNOLOGY CORP                | AH series                 | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | HAOHUA ELECTRONIC CO                  | CT7                       | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | XIANGTAI ELECTRONIC (SHENZHEN) CO LTD | YO-series                 | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | JUHONG ELE COMPANY                    | JB- series                | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | JYA-NAY CO LTD                        | JN                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | JYH CHUNG ELECTRONICS CO LTD          | JD                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | WELSON INDUSTRIAL CO LTD              | WD                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | WALSIN TECHNOLOGY CORP                | AC                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | TDK CORPORATION                       | CS                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | MURATA MFG CO LTD                     | KY Series                 | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |
|                         |                       |                                      | SUCCESS ELECTRONICS CO LTD            | SF                        | Y1, AC250V, max. 2200pF (for class I models), max. 1500pF (for class II models), -25~+125°C | cURus                              |



| 4.0 Critical 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 <sup>3</sup> |
|                         |                       |      | GlobTek INC                          | TF081                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 12.0V-14.9VDC; | NR                                 |
|                         |                       |      |                                      | TF082                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 13.4V-14.9VDC; | NR                                 |
|                         |                       |      |                                      | TF083                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 15.0V-18.9VDC; | NR                                 |
|                         |                       |      |                                      | TF084                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 17.0V-18.9VDC; | NR                                 |
|                         |                       |      |                                      | TF085                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 19.0V-23.9VDC; | NR                                 |
|                         |                       |      |                                      | TF086                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 21.5V-23.9VDC; | NR                                 |
|                         |                       |      |                                      | TF087                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 24.0V-31.9VDC; | NR                                 |
|                         |                       |      |                                      | TF088                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 27.6V-31.9VDC; | NR                                 |

| 4.0 Critical 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 <sup>3</sup> |
|                         |                       |      |                                      | TF089                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 32.0V-41.9VDC; | NR                                 |
|                         |                       |      |                                      | TF090                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 36.5V-41.9VDC; | NR                                 |
|                         |                       |      |                                      | TF091                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 42.0V-47.9VDC; | NR                                 |
|                         |                       |      |                                      | TF092                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 48.0V-54.0VDC; | NR                                 |
|                         |                       |      |                                      | TF081                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 12.0V-14.9VDC; | NR                                 |
|                         |                       |      |                                      | TF082                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 13.4V-14.9VDC; | NR                                 |
|                         |                       |      |                                      | TF083                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 15.0V-18.9VDC; | NR                                 |
|                         |                       |      |                                      | TF084                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 17.0V-18.9VDC; | NR                                 |



| 4.0 Critical 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 <sup>3</sup> |
| 15                      | 11                    | Transformer (T1) | SHAN DONG<br>BOAM ELECTRIC<br>CO LTD | TF085                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 19.0V-23.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF086                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 21.5V-23.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF087                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 24.0V-31.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF088                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 27.6V-31.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF089                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 32.0V-41.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF090                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 36.5V-41.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF091                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 42.0V-47.9VDC; | NR                                 |
|                         |                       |                  |                                      | TF092                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 48.0V-54.0VDC; | NR                                 |

| 4.0 Critical Components |                       |      |   |                           |   |                                    |
|-------------------------|-----------------------|------|---|---------------------------|---|------------------------------------|
| Photo #                 | Item no. <sup>1</sup> | Name | Manufacturer/<br>trademark <sup>2</sup>   | Type / model <sup>2</sup> | Technical data and securement means   | Mark(s) of conformity <sup>3</sup> |
|                         |                       |      | WUXI<br>HAOPUWEI<br>ELECTRONICS<br>CO LTD | TF081                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 12.0V-14.9VDC; | NR                                 |
|                         |                       |      |   | TF082                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 13.4V-14.9VDC; | NR                                 |
|                         |                       |      |   | TF083                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 15.0V-18.9VDC; | NR                                 |
|                         |                       |      |   | TF084                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 17.0V-         | NR                                 |
|                         |                       |      |   | TF085                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 19.0V-         | NR                                 |
|                         |                       |      |   | TF086                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 21.5V-         | NR                                 |
|                         |                       |      |   | TF087                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 24.0V-31.9VDC; | NR                                 |
|                         |                       |      |   | TF088                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 27.6V-31.9VDC; | NR                                 |

| 4.0 Critical 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 <sup>3</sup> |
|                         |                       |                               |                                      | TF089                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 32.0V-41.9VDC; | NR                                 |
|                         |                       |                               |                                      | TF090                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 36.5V-41.9VDC; | NR                                 |
|                         |                       |                               |                                      | TF091                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 42.0V-47.9VDC; | NR                                 |
|                         |                       |                               |                                      | TF092                     | Class B, with insulation system and critical component shown as below items (11a - 11f), TF081 for model with input voltage range: 100-240VAC, output voltage range: 48.0V-54.0VDC; | NR                                 |
| 15                      | 11a                   | Insulation system (Not shown) | GLOBTEK INC                          | GTX-130-TM                | Class B   | cURus                              |
|                         |                       |                               | SHAN DONG BOAM ELECTRIC CO LTD       | BOAM-01                   | Class B   | cURus                              |
|                         |                       |                               | SHAN DONG BOAM ELECTRIC CO LTD       | B1                        | Class B   | cURus                              |
|                         |                       |                               | WUXI HAOPUWEI ELECTRONICS CO LTD     | GTX-130-TM                | Class B   | cURus                              |
|                         |                       |                               | WUXI HAOPUWEI ELECTRONICS CO LTD     | ZT-130                    | Class B   | cURus                              |



| 4.0 Critical 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 <sup>3</sup> |
| 23                      | 11b                   | Bobbin      | CHANG CHUN PLASTICS CO LTD                      | T375J                     | V-0, 150°C, thickness 0.45 mm min.  | cURus                              |
|                         |                       |             |   | T375HF                    | V-0, 150°C, thickness 0.45 mm min.  | cURus                              |
|                         |                       |             |   | 4130                      | V-0, 140°C, thickness 0.74 mm min.  | cURus                              |
|                         |                       |             | 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                              |
| 20                      | 11c                   | Magnet wire | PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD | UEWN/U                    | MW28-C, 130°C                       | cURus                              |
|                         |                       |             | BOLUO COUNTY XIN LONG ELECTRICIAN DATA CO LTD   | 2UEW-F                    | MW 79-C, 155°C                      | cURus                              |
|                         |                       |             | PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD | UEWS/U                    | MW75-C, 130°C                       | cURus                              |
|                         |                       |             | JUNG SHING WIRE CO LTD                          | UEW-4                     | MW75-C, 130°C                       | cURus                              |
|                         |                       |             | JUNG SHING WIRE CO LTD                          | UEY-2                     | MW28-C, 130°C                       | cURus                              |
|                         |                       |             | JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD   | 2UEW/130                  | MW75-C, 130°C                       | cURus                              |
|                         |                       |             | 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                              |
|                         |                       |             | NINGBO JINTIAN NEW MATERIAL CO LTD              | 2UEW                      | MW 75-C, 130°C                      | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 18                      | 11d                   | Triple-insulated wire | GREAT LEOFLON INDUSTRIAL CO LTD         | TRW(B)                    | Reinforced Insulation, rated 130°C (Class B), 1.41 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | COSMOLINK CO LTD                        | TIW-M Serie(s)            | Reinforced Insulation, rated 130°C (Class B), 1.41 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | FURUKAWA ELECTRIC CO LTD                | TEX-E                     | Reinforced Insulation, rated 130°C (Class B), 1.41 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | TOTOKU ELECTRIC CO LTD                  | TIW-2                     | Reinforced Insulation, rated 130°C (Class B), 1.40 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | E&B TECHNOLOGY CO LTD                   | E&B-XXXB                  | Reinforced Insulation, rated 130°C (Class B), 1.40 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | E&B TECHNOLOGY CO LTD                   | E&B-XXXB-1                | Reinforced Insulation, rated 130°C (Class B), 1.40 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD | CB-TIW                    | Reinforced Insulation, rated 130°C (Class B), 1.41 kVolts peak for Information Technology; | cURus                              |
|                         |                       |                       | SHENZHEN JIUDING NEW MATERIAL CO LTD    | DTIW-B                    | Reinforced Insulation, rated 130°C (Class B), 1.40 kVolts peak for Information Technology; | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 17                      | 11e                   | Insulating tape | 3M COMPANY<br>ELECTRICAL<br>MARKETS DIV<br>(EMD)           | 1350F-1                   | 130°C                               | cURus                              |
|                         |                       |                 |  | 1350T-1                   | 130°C                               | cURus                              |
|                         |                       |                 |  | 44                        | 130°C                               | cURus                              |
|                         |                       |                 | BONDTEC<br>PACIFIC CO LTD                                  | 370S                      | 130°C                               | cURus                              |
|                         |                       |                 | JINGJIANG<br>YAHUA<br>PRESSURE<br>SENSITIVE GLUE<br>CO LTD | PZ                        | 130°C                               | cURus                              |
|                         |                       |                 | JINGJIANG<br>YAHUA<br>PRESSURE<br>SENSITIVE GLUE<br>CO LTD | CT                        | 130°C                               | cURus                              |
|                         |                       |                 | JINGJIANG<br>YAHUA<br>PRESSURE<br>SENSITIVE GLUE<br>CO LTD | WF                        | 130°C                               | cURus                              |
|                         |                       |                 | JINGJIANG<br>JINGYI<br>ADHESIVE<br>PRODUCT CO<br>LTD       | JY25-A                    | 130°C                               | cURus                              |
|                         |                       |                 | CHANG SHU<br>LIANG YI TAPE<br>INDUSTRY CO<br>LTD           | LY-XX                     | 130°C                               | cURus                              |
| 16                      | 11f                   | PTFE tubing     | GREAT<br>HOLDING<br>INDUSTRIAL CO<br>LTD                   | TFT                       | 300V, 200°C                         | cURus                              |
|                         |                       |                 | GREAT<br>HOLDING<br>INDUSTRIAL CO<br>LTD                   | TFS                       | 600V, 200°C                         | cURus                              |
|                         |                       |                 | SHENZHEN<br>WOER HEAT-<br>SHRINKABLE<br>MATERIAL CO<br>LTD | WF                        | 600V, 200°C                         | cURus                              |
|                         |                       |                 | CHANGYUAN<br>ELECTRONICS<br>(SHENZHEN) CO<br>LTD           | CB-TT-T                   | 300V, 200°C                         | cURus                              |
|                         |                       |                 | CHANGYUAN<br>ELECTRONICS<br>(SHENZHEN) CO<br>LTD           | CB-TT-S                   | 600V, 200°C                         | cURus                              |



| 4.0 Critical 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 <sup>3</sup> |
| 9                       | 12                    | Photo Coupler (U4) | EVERLIGHT ELECTRONICS CO LTD                     | EL817                     | Double protection optical isolators, providing 5000 vac isolation            | cURus                              |
|                         |                       |                    | COSMO ELECTRONICS CORP                           | K1010                     | Optical isolators, double protection type, providing 5000 V ac isolation     | cURus                              |
|                         |                       |                    |  | KP1010                    |  | cURus                              |
|                         |                       |                    | Lite-On Technology Corporation                   | LTV-817                   | Double protection optical isolators having an isolation voltage of 5300 Vrms | cURus                              |
|                         |                       |                    | FAIRCHILD SEMICONDUCTOR CORP                     | H11A817B                  | Double Protection Optical isolators, providing 5000 vac isolation            | cURus                              |
|                         |                       |                    |  | FOD817B                   |  | cURus                              |
|                         |                       |                    | SHARP CORP ELECTRONIC COMPONENTS AND DEVICES BU  | PC817                     | Double protection optical isolated switches, providing 5000 Vac isolation    | cURus                              |
|                         |                       |                    | BRIGHT LED ELECTRONICS CORP                      | BPC-817 A/B/C/D/L         | Double protection optical isolators 5000 Vac isolation voltage               | cURus                              |
|                         |                       |                    |  | BPC-817 M                 |  | cURus                              |
|                         |                       |                    |  | BPC-817 S                 |  | cURus                              |
|                         |                       |                    | TOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION | TLP781F                   | Double protection optical isolators having an isolation voltage of 5000 Vrms | cURus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 8                       | 13                    | Earthing wire | KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD   | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | DONGGUAN CHUANTAI WIRE PRODUCTS CO LTD                 | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | YONG HAO ELECTRICAL INDUSTRY CO LTD                    | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | DONGGUAN GUNEETAL WIRE & CABLE CO LTD                  | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | SHENG YU ENTERPRISE CO LTD                             | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | KUNSHAN XINGHONGMEN G ELECTRONIC CO LTD                | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | SUZHON YEMAO ELECTRONIC CO LTD                         | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
|                         |                       |               | Various  | 1015                      | Min. 20 AWG, Min. 300V, Min. 80°C. For class I model series use only | cURus                              |
|                         |                       |               |  | 1007                      |  | cURus                              |
|                         |                       |               |  | 1185                      |  | cURus                              |
| 14                      | 14                    | Plug          | YUNG LI CO LTD   | YP-12                     | Min.125V, Min.10A, for followed by -TP models use only.              | cULus                              |
|                         |                       |               |  | YP-18                     |  | cULus                              |
|                         |                       |               | JHI WEI ELECTRIC WIRE & CABLE CO LTD                   | JW-02                     | Min.125V, Min.10A, for followed by -TP models use only.              | cULus                              |
|                         |                       |               |  | JW-03                     |  | cULus                              |
|                         |                       |               | SELF-MAN INDUSTRIAL CO                                 | SM-045                    | Min.125V, Min.12A, for followed by -TP models use only.              | cULus                              |

| 4.0 Critical 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 <sup>3</sup> |
| 14                      | 15                    | Power Supply Cord               | YUNG LI CO LTD                                | SVT                       | Min.18AWG, 105°C, VW-1, with or without Hospital Grade USA Plug or Regular Use USA Plug, NEMA 5-15P or 1-15P, for followed by -TP models use only. | cULus                              |
|                         |                       |                                 | JHI WEI ELECTRIC WIRE & CABLE CO LTD          | SVT                       | Min.18AWG, 105°C, VW-1, with or without Hospital Grade USA Plug or Regular Use USA Plug, NEMA 5-15P or 1-15P, for followed by -TP models use only. | cULus                              |
|                         |                       |                                 | I SHENG ELECTRONICS (KUNSHAN) CO LTD          | SVT                       | Min.18AWG, 105°C, VW-1, with or without Hospital Grade USA Plug or Regular Use USA Plug, NEMA 5-15P or 1-15P, for followed by -TP models use only. | cULus                              |
| 2                       | 16                    | Adhesive-Type Label (Not shown) | DONGGUAN XIANGQUAN PRINTING CO LTD            | XQ03                      | Temperature range: -40~+80°C;  | cURus                              |
|                         |                       |                                 | FAN JA PAPER PRINTING CO LTD                  | FJ-03-3                   | Temperature range: -40~+80°C;  | cURus                              |
|                         |                       |                                 |   | FJ07                      |  | cURus                              |
|                         |                       |                                 | E-LIN ADHESIVE LABEL CO LTD                   | EL-15                     | Temperature range: -40~+80°C;  | cURus                              |
|                         |                       |                                 | 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: min. -40 ~+80°C; Certified according UL 969.  | cURus                              |

NOTES:

- 1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.
- 2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.
- 3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.



|  |
|--|
| <b>5.0 Critical Unlisted CEC Components</b>                |
| <b>No Unlisted CEC components are used in this report.</b> |

## 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.

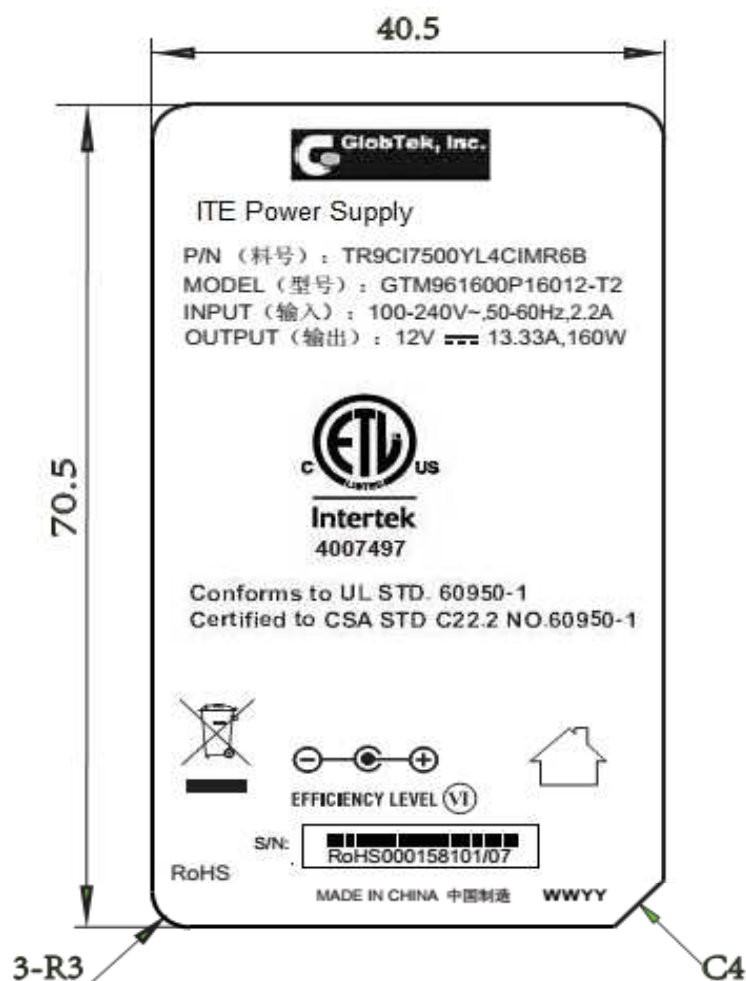
Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

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, 2.5 mm minimum spacing are maintained through air and 2.5 mm minimum spacing are maintained over surfaces of insulating material between current-carrying parts of opposite polarity and 6.1 mm minimum spacing are maintained through air and 6.1 mm minimum spacing are maintained over surfaces between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
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.
5. Grounding - For adapter models with earthing connection, 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. For adapter models without earthing connection, the products are not provided with grounding means as they are reinforced insulated.
6. Polarized Connection - For adapter models followed by -TP series are 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 points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 20AWG, with a minimum rating of 300V, 80°C.
8. Schematics and PCB layout - Refer to Illustration No(s). 2 for schematics, Illustration No(s). 3 for PCB layout requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked on a labeling system as described in item No. 16 of Section 4.0 as follows: brand name, model number, electrical ratings, manufacturer. Refer to Illustration No. 5 for details.
10. Cautionary Markings - Cautionary marking is not required.
11. Transformer - Supplier records must be provided that indicate the received shipment of transformers (section 4.0, item 11) was constructed as indicated in Illustrations 4a to 4d. These records must be available at the factory for inspection on every received shipment.
12. Safety Instructions - Specification for installation and use of this product are provided by the manufacturer. Refer to Illustration No. 6a and 6b for details.

## 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. 0216 = The second week of 2016.



## 7.0 Illustrations

### Illustration 6a - Instruction

# USER MANUAL

(Ver.1.0)

**CAUTION: Read all instructions and warnings prior to using this product. Improper use of this product may result in product damage, excess heat, toxic fumes, fire or explosion.**

**ATTENTION: Lisez toutes les instructions et les avertissements avant d'utiliser ce produit.**

**L'utilisation inappropriée de ce produit peut entraîner la détérioration du produit, l'excès de chaleur, des fumées toxiques, incendie ou une explosion.**

| MODEL  | INPUT                      | OUTPUT        |             |                  |
|--|----------------------------|---------------|-------------|------------------|
|  |                            | Voltage (Vdc) | Current (A) | Wattage (Max. W) |
| GT*961600P** T2/T2A/T3/T3A/TP*<br>GT*961800P** T2/T2A/T3/T3A/TP* | 100 240Vac<br>50-60Hz 2.2A | 12-14.9Vdc    | 13.33A      | 160W             |
| GT*961600P** T2/T2A/T3/T3A/TP*<br>GT*961800P** T2/T2A/T3/T3A/TP* |                            | 15-14.9Vdc    | 11.33A      | 170W             |
| GT*961600P** T2/T2A/T3/T3A/TP*<br>GT*961800P** T2/T2A/T3/T3A/TP* |                            | 19-54Vdc      | 9.47A       | 180W             |

### IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

#### DANGER – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

#### CONSIGNES DE SÉCURITÉ IMPORTANTES - Conservez ces instructions

#### DANGER - POUR RÉDUIRE LES RISQUES D'INCENDIE OU DE CHOC ÉLECTRIQUE, SUIVEZ ATTENTIVEMENT CES INSTRUCTIONS

- For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet, if needed.  
Pour la connexion à une alimentation pas aux Etats-Unis, utilisez un adaptateur de fixation de la configuration correcte pour la prise d'alimentation, si nécessaire.
- The product should be use together with a flexible cord in accordance with the following Table and an attachment plug for connection to the mains supply. The blade assembly for connection to the mains supply shall be of the grounding-type. The length of cord external to the unit and including the attachment plug shall not be less than 6 feet (1.8 m) as measured from the face of the attachment plug to the point of attachment or entry.  
Le produit doit être utiliser avec un cordon souple en conformité avec le tableau suivant et une fiche de branchement pour le raccordement au réseau électrique. L'ensemble de lame pour le raccordement au réseau électrique doit être du type de mise à la terre. La longueur du cordon d'alimentation externe à l'unité et dont la fiche de fixation ne doit pas être inférieure à 6 pieds (1,8 m), mesurée à partir de la face de la fiche de liaison au point d'attachement ou d'entrée.

| Flexible cord type<br>Type de cordon flexible  | Maximum length, feet (m)<br>Longueur maximale, pieds (m) |
|--|--|
| At least as serviceable as SP-2, SPE-2, SPT-2, SV, SVE, SVT<br>Au moins aussi utile que SP-2, SPE-2, SPT-2, SV, SVE, SVT   | 10 (3)   |
| At least as serviceable as S, SE, SO, SP-3, SPT-3, ST, STO, SJ, SJE, SJO, SJT, SJTO<br>Au moins aussi utile que S, SE, SO, SP-3, SPT-3, ST, STO, SJ, SJE, SJO, SJT, TJSO | Not specified<br>non spécifié                            |

- Risk of Electric Shock.  
RISQUE DE CHOC ÉLECTRIQUE.
- For indoor use only.  
POUR UNE UTILISATION EN INTÉRIEUR.
- Please check prior use, if output voltage and current of the power supply is suitable for the product.  
Se il vous plaît vérifier avant l'utilisation, si la tension de sortie et le courant de l'alimentation est adapté au produit.

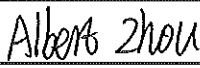
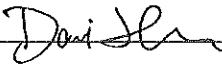
## 7.0 Illustrations

### Illustration 6b - Instruction

6. The socket-outlet shall be installed near the equipment and shall be easily accessible.  
La prise de courant doit être installée près de l'équipement et doit être facilement accessible.
7. The cover may under no circumstances be opened. If the cover is damaged, then the power supply may no longer be used.  
Le couvercle peut en aucun cas être ouvert. Si le couvercle est endommagé, l'alimentation ne peut plus être utilisé.
8. Children should be supervised to ensure that they do not play with the appliance.  
Les enfants doivent être surveillés pour s'assurer qu'ils ne jouent pas avec l'appareil.
9. Do not use this apparatus near water.  
Ne pas utiliser cet appareil près de l'eau.
10. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.  
**AVERTISSEMENT:** Pour réduire le risque d'incendie ou de choc électrique, ne pas exposer cet appareil à la pluie ou à l'humidité.
11. Clean only with dry cloth.  
Nettoyer uniquement avec un chiffon sec.
12. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.  
Ne pas installer à proximité de sources de chaleur telles que des radiateurs, registres de chaleur, poêles ou autres appareils (incluant les amplificateurs) qui produisent de la chaleur.  
**Normal environmental conditions:**
  - a) Altitude up to 5 000m;
  - b) Temperature -10 °C to 40 °C;
  - c) Storage environment: Temperature - 30-80°C. Humidity 0-95%RH (do not have condensate)

GlobTek, Inc.  
www.globtek.com  
186 Veterans Drive,  
Northvale, NJ 07647  
Tel. (201) 784-1000  
Fax (201) 784-0111

| 8.0 Test Summary  |   |           |   |             |                    |
|---|---|-----------|---|-------------|--------------------|
| Evaluation Period   | 29-May-2018 to 20-Aug-2018  |           |   | Project No. | 180401371SHA-001   |
| Sample Rec. Date  | 29-May-2018   | Condition | Prototype   | Sample ID.  | 0180529-09-001~020 |
| Test Location   | Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China |           |   |             |                    |
| Test Procedure  | Testing Lab   |           |   |             |                    |
| Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria. |   |           |   |             |                    |
| The following tests were performed:   |   |           |   |             |                    |
| Test Description  |   |           | Standard for Safety for Information Technology Equipment Safety Part 1: General Requirements: UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14 & CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2016) Amd. 1: 2011, Amd. 2: 2014 |             |                    |
|   |   |           | Clause  |             |                    |
| Input test  |   |           | 1.6.2   |             |                    |
| Capacitor discharging test  |   |           | 2.1.1.7   |             |                    |
| Voltage under normal conditions test  |   |           | 2.2.2   |             |                    |
| Voltage under fault conditions test   |   |           | 2.2.3   |             |                    |
| Limited Current Circuit Measurements  |   |           | 2.4.1, 2.4.2  |             |                    |
| Humidity condition test   |   |           | 2.9.2   |             |                    |
| Determination of working voltage test   |   |           | 2.10.2  |             |                    |
| Clearances measurement  |   |           | 2.10.3  |             |                    |
| Creepage distances measurement  |   |           | 2.10.4  |             |                    |
| Thin Sheet Material Test  |   |           | 2.10.5.9  |             |                    |
| Tranformer And Wire Insulation Electric Strength Test   |   |           | 2.10..5.6, 2.10.5.13  |             |                    |
| Strain Relief Test  |   |           | 3.2.6, 4.2.1, 4.2.7   |             |                    |
| Steady Force Test   |   |           | 4.2.1-4.2.4   |             |                    |
| Drop Test   |   |           | 4.2.6, 4.2.1  |             |                    |
| Stress Relief Test  |   |           | 4.2.7, 4.2.1  |             |                    |
| Heating Test  |   |           | 4.5.2   |             |                    |
| Touch current test  |   |           | 5.1   |             |                    |
| Electric strength test  |   |           | 5.2   |             |                    |
| Component Failure Test  |   |           | 5.3.1, 5.3.4, 5.3.7   |             |                    |
| Transformer Abnormal Operation Test   |   |           | 5.3.3, 5.3.7b, ANNEX C.1  |             |                    |
| Power Supply Output Short-Circuit/Overload Test   |   |           | 5.3.7   |             |                    |

| 8.1 Signatures   |   |              |  |
|--|---|--------------|--|
| A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0. |   |              |  |
| Completed by:  | Albert Zhou   | Reviewed by: | Dani Zhao  |
| Title:   | Engineer  | Title:       | Supervisor   |
| Signature:   |  | Signature:   |  |

## 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.                        |
| Address      | 186 Veterans Dr. Northvale, NJ 07647 |
| Country      | USA                                  |
| Product      | ITE Power Supply                     |

|                          |                     |
|--------------------------|---------------------|
| MULTIPLE LISTEE 1        | None                |
| Address                  |                     |
| Country                  |                     |
| Brand Name               |                     |
| ASSOCIATED MANUFACTURER  |                     |
| Address                  |                     |
| Country                  |                     |
| MULTIPLE LISTEE 1 MODELS | BASIC LISTEE MODELS |
|                          |                     |

|                          |                     |
|--------------------------|---------------------|
| MULTIPLE LISTEE 2        | None                |
| Address                  |                     |
| Country                  |                     |
| Brand Name               |                     |
| ASSOCIATED MANUFACTURER  |                     |
| Address                  |                     |
| Country                  |                     |
| MULTIPLE LISTEE 2 MODELS | BASIC LISTEE MODELS |
|                          |                     |

|                          |                     |
|--------------------------|---------------------|
| MULTIPLE LISTEE 3        | None                |
| Address                  |                     |
| Country                  |                     |
| Brand Name               |                     |
| ASSOCIATED MANUFACTURER  |                     |
| Address                  |                     |
| Country                  |                     |
| MULTIPLE LISTEE 3 MODELS | BASIC LISTEE MODELS |
|                          |                     |



## 10.0 General Information

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

### COMPONENTS

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

### LISTING MARK

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

The mark must include the following four items:

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

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

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

Can be used together when both standards are used.

**Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.**

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

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

### FOLLOW-UP SERVICE

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

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

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

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

### 10.1 Evaluation of Unlisted Components

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

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

Ship the samples to:  
Intertek Testing Services 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.

## 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:**

| <b><u>Product</u></b>  | <b><u>Test Voltage</u></b> | <b><u>Test Time</u></b> |
|--|----------------------------|-------------------------|
| <b>Product - One sample from each shipment of Section 4.0 item 11:</b> |                            |                         |
| Between primary circuit and secondary output                           | 3000Vac                    | 1 minute                |
| Between secondary circuit and core                                     | 3000Vac                    | 1 minute                |
| <b><u>Product</u></b>  | <b><u>Test Voltage</u></b> | <b><u>Test Time</u></b> |
| Between L/N and secondary output                                       | 3000Vac                    | 1 s                     |

The following changes are in compliance with the declaration of Section 8.1:

ED 16.3.15 (20-Apr-17) Mandatory