**SPECIFICATION FOR APPROVAL**

CUSTOMER LINE

|  |  |  |  |
| --- | --- | --- | --- |
| HANDLING | CHECK | APPROVAL | CONFIRMATION |
|  |  |  |  |
| DATE: | | | |

**PLEASE SIGN AND RETURN ONE COPY.**

With your signature, you confirm all the details in this specification, and the products will be made according to below description.

**REMARKS：**

**CUSTOMER:** SK4889

**PRODUCT:** Power Adaptor

**DESIGNED NO:** SK- W20190826002

**MODEL NO:** SK03T-1200150K

**VERSION:** 001

**MODEL NUMBER:** SK4889-1200150K1-01

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| --- | --- | --- | --- | --- | --- | --- |
| ITEM. | Revision Date | Revision Content | Effective Date | Arbiter | Revisor | Remarks |
| 1 | 2019.08,26 | Initial | 2019.08.26 | 姚德允 | 钱亚苹 |  |
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| MODEL NO. | SK03T-1200150K | | Approve | Check | Preparation |  |
| DESIGN NO. | SK-W20190826002 |  |  |  | 钱亚苹 |  |
| Date: |  |  |  |  |  |  |

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**1. Description**

This specification apply to the Switching power whose model No. is SK03T-1200150K, which has a high efficiency and reliability, and have the over voltage, over current and short circuit function.

**2. Electrical Specification**

2.1 INPUT SPECIFICATION

|  |  |
| --- | --- |
| Input Voltage Range | 90 VAC – 264 VAC |
| Rated Voltage | 100 VAC / 240 VAC |
| Input Frequency Range | 47 Hz – 63 Hz |
| Rated Input Frenquency | 50 Hz / 60 Hz |
| Input Current | 0.6A Max Full Load, Rated Voltage |
| No Load Input Power | 0.1W Max No Loading, Rated Voltage |
| No Load Input Current | 60 mA Max No Loading, Rated Voltage |
| Power Factor | NA |
| Inrush Current | 100A Type Peak, 220 VAC Input, Cold Start |

2.2 OUTPUT SPECIFICATION

2.2.1 Rated Output

|  |  |  |  |
| --- | --- | --- | --- |
| Rated Output Voltage (VDC) | Output Voltage Range (VDC) | Output Ripple & Noise (mV) | Rated Output Current (mA) |
| 12 | 11.4 – 12.6 | ≤120 | 1500 |

Notes: The test condition as with oscilloscope with bandwidth 20MHz. A 10uF E-cap and 0.1uF ceramic-cap shall be connected to the connector in parallel.\_

2.2.2 Output Overshoot At Turn On & Turn Off

|  |  |  |
| --- | --- | --- |
| Rated Output Voltage (VDC) | Proportion Of The Output Voltage Overshoot | |
| Turn On | Turn Off |
| 12 | 5% | 5% |

Note: The test condition as: All of output Current from Min to Max

2.2.3 Combine d Load / Line Regulation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rated Output Voltage (VDC) | Min. Loading | Rated Loading | Line Regulation | Load Regulation |
| 15 | OA | 2A | **±3%** | **±5%** |

2.2.4 Turn on delay time

Max. 3 Second Max. at 115Vac input and output Max. load.

2.2.5 Rise time:

40mS Max. at 115Vac input and output Max load.

2.2.6 Hold up time:

5mS Min. at 115Vac input and output Min. Load.

2.2.7 Average Efficiency:

In the regular voltage, The output current is at 25%, 50%, 75% and full load cases, The average efficiency of ≧85.00% (warm up 30 minutes), Which meet the standards of energy efficiency level VI.

**3. Protection Feature**

3.1 Output Short circuit protection:

The power supply will be auto recovered after short circuit faults remove.

3.2 Over current Protection

The power supply will be auto recovered after over current faults remove.

**4. Reliability Requirements**

4.1. Burn-in

The power supply shall be burn-in for 2-4 Hours under normal input and 80% rated load a 40℃±5℃

4.2. MTBF Qualification

The MTBF shall be at least 20,000 hours at 25℃, Full load and nominal input condition

**5. Environment Requirement**

5.1 Operating Temperature: 0℃-40℃

5.2 Storage Temperature: -40℃ to 85℃

5.3 Relative Humidity: 25%~90%, Relative Humidity 25%-90%,Non-Condensing

5.4 Storage Humidity: 10%~90%, Relative Humidity 10%-90%,Non-Condensing

5.5 Vibration:

5.5.1. Operating Standard: IEC 721-3-3 3M3

5 ~9Hz,A=1.5mm

9~200Hz, Acceleration 5m/S

5.5.2. Transportation: IEC721-3-2 2 2M2

5-9Hz, A=3.5mm,

9~200Hz, Acceleration=5m/S,

200~500Hz, Acceleration=15m/S

5.5.3. Axes, 10 cycles per axis:

No permanent damage may occur during testing and The product can restore to its original situation after power off / on.

5.6 Dropping Packed:

After the Dropping test (1 corner, 3 edges, and 6 surfaces, Height: 76cm 10times, function well.

**6. Safety and EMI Requirement:**

6.1 Safety: Accord with mark ■

|  |  |  |  |
| --- | --- | --- | --- |
| Certificates | Country | Standard |  |
| □ UL/CUL | USA | UL60065 |  |
| □ UL/CUL | USA | UL60950 |  |
| □ TUV/GS | EUROPE | EN60065 |  |
| □TUV/GS | EUROPE | UL60950 |  |
| □FCC | USA | CLASS B |  |
| □CE | EUROPE | EN60065 |  |
| □CE | EUROPE | EN60950 |  |
| □MEPS | AUSTRALIA | AS/NZS 4665 |  |
| □SAA | AUSTRALIA | AS/NZS 60065 |  |
| □SAA | AUSTRALIA | AS/NZS 60950 |  |
| □CCC | CHINA | GB8898 |  |
| □CCC | CHINA | GB4943 |  |
| □PSE | JAPAN | J60950(H22) |  |
| □CB | EUROPE | IEC60065 |  |
| □CB | EUROPE | IEC60950 |  |
| □C-TICK | AUSTRALIA | AS/NZS CISPR13:2004 |  |
| □EK/KC | KOREA | K60065 |  |
| ■EK/KC | KOREA | K60950 |  |

6.2 EMI STANDARD: Meets the Limits

6.2.1. Fcc class B rules

6.2.2. EN55032 class B rules

6.3 Dielectric Strength Testing: Dielectric strength to meet the requirements under the table

6.3.1 HI-POT TEST:

|  |  |  |
| --- | --- | --- |
| ITEM | SPECIFICATION | REMARK |
| Primary to Secondary | 3000VAC/5mA/60S | No arcing |
| Primary to P.G. | - | - |
| Secondary to P.G | - | - |

Note: Before testing, input L/N short circuit, make output positive and negative short circuit and connected.

6.3.2. 500Vdc/60Sec, isolation resistance 〉50M ohm

Note: at the test, input L/N short circuit, make output positive and negative short circuit.

**7. Test Equipment List**

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Name Of Equipment | Manufacturer | Model |
| 1 | AC Power Source | Chroma | 6210 |
| 2 | Oscilloscope | Tektronix | TDS1002B |
| 3 | Electronic Load | TET | T3515 |
| 4 | Multimeter | FLUCK | 87Ⅲ |
| 5 | Dynamometer | Chroma | 2100 |
| 6 | Thermograph | LUTRON | Tw-902c |
| 7 | Plug Lead Bend Test Machine | LIANXIN | LX-817 |
| 8 | Salt Spraying Tester | LIANXIN | LX-8827B |
| 9 | Vibration Table | JINGJI | FZD-25 |
| 10 | Drop Test Bed | SELF-MADE |  |

**8. MECHANICAL REQUIREMENT**

8.1 Enclosure

The power supply size: L \* W \* H = 87.97mm \* 42.47mm \* 49mm

8.2 Input Connector

Two pin input plug.

**9. MECHANICAL SPECIFICATIONS**

9.1 Dimension

L \* W \* H = 87.97mm \* 42.47mm \* 49mm, as below

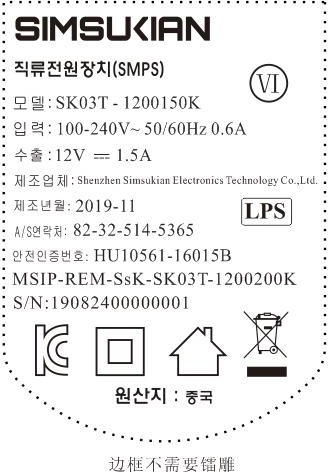


**10. Weight**

The weight of the power supply shall be about 174g

**11. Label Drawing**

11.1 Label: as below



**12 DC cable**

12.1 Wire size chart: One end 08-A card, one end E1508 cold pressure terminal, as below



12.2 DC Polarity as below

The red terminal is positive and the yellow terminal is negative)

12.3 Wire size chart: NA

**13. Package Drawing: 100 PCS / CARTON**



**PACKING**

Our own packing style will be adopted if no special packing required .

A Inner package CPE bag

B Outer package

Paper-box.

Size: 460×360×240mm, 4 × 9 card packaging 3 sheet 450X350mm

C Outer package notes include the information

Customer Name, LOT Number, Model No., Date, and so on.