

# **SPECIFICATION FOR APPROVAL**

# **CUSTOMER APPROVAL**

<b>CONTENT:</b>
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**SIGNATURE:** 

DATE:

CUSTOMER:

PART NO .:

HM065

REV: <u>A0</u>

Please sign and return one copy.

All production units will be built according to this specification, The component specifications remain as same, its brand can be changed

Manufacturer				
Approved	Checked	Prepared	QA	Sales
Model No.: K05S050050G B35S68 Unit Color: BLACK				
Input: $100-240V_{AC}$ 50/60Hz Output: $5.0V_{DC}$ 0.5A				

Product Category: AC ADAPTOR Description: ROHS

Dongguan Guanjin Electronics Technology Co.,Ltd

King Powerleader(HongKong)Limited

Address:Block 16 Qiantou New Industrial Park Niushan,Dongcheng District Dongguan

City, Guangdong Province, China

TEL:0769-23286919 FAX:0769-23286658



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### **1.0HISTORY REVISION**

Revision Date	Revision Page	Description	Remark



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# 2.0 Electrical performance

2.1 Input Characteristics:	
Rated input voltage	100-240Vac
Operating range	90-264Vac
Rated input frequency	50-60Hz
Rated input current 0.2A Max.	
Power consumption (no loading)	<b>0.1W Max.</b> (Input voltage 115V and 230V)
Primary current protection	An adequate internal Resistance fuse on the AC input line is provide.
Configuration	<u>2</u> Conductor

# 2.2 Output Characteristics:

2.2.1	Nominal dc output voltage	5.0V
2.2.2	Minimum load current	0.0A
2.2.3	Rating load current	0.5A
2.2.4	Rating output power	2.5W
2.2.5	Line regulation	The line regulation is less than ±5% while measuring at rated load and +/-10% of input voltage changing.
2.2.6	Load regulation	The load regulation for output is less than $\pm 5\%$ , at measured output load from 10% to 100% rated load .
2.2.7	No load voltage range	4.75-5.30V
2.2.8	Ripple and noise	≪300mVp-p(100-240Vac)
		Full load Ripple and noise 300mVp-p (100-240Vac) max. Measurement is done by 20MHZ bandwidth oscilloscope and the output Paralleled a $0.1\mu$ F ceramic capacitor and a $10\mu$ F electrolysis capacitor.(test under the Condition of rated input and rated output)
2.2.9	Average efficiency	Accord with energy level VI. Average efficiency 73.16% minimum
		115V/60Hz and 230V/50Hz, output current from 100%, 75%, 50%, 25%.

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2.2.10	Turn on delay time	5000 mS. At nominal input AC voltage and full load
2.2.11	Rise time	The Supply shall have a start-up rise time of less than <b>100 mS</b> to rise to within regulation limits for all DC outputs.
2.2.12	Hold up time	<b>5 mS</b> minimum At nominal input AC voltage and full load
2.2.13	Output over-shoot	Less than 10% of nominal voltage value
2.2.14	Protection function	
	Over current protection	At rated AC input, output current in the range of, the power supply will protect

#### 2.3Dielectric Withstand Voltage (HI-POT):

Engineering test: This Adapter shall be applied 3000Vac for 60s between AC input terminal to DC output terminal and enclosure. The cutoff current is specified as 10 mA; Large cargo product testing: This Adapter shall be applied 3000Vac for 2s between AC input terminal to DCoutput terminal and enclosure. The cutoff current is specified as 10 mA

#### 2.4 Insulation Resistance:

DC <u>500</u> V <u>30</u> M $\Omega$  min between input to output and enclosure.

#### 2.5 Overload Test:

KPTEC

In an ambient temperature of  $\underline{25}^{\circ}$ C applies a power source of rated input with the

output load adjusted to 10% of rated output and rated continuously for  $\underline{4}$  Hours,

after turning off 60 minutes in normal temperature.

#### 2.6 Humidity Test:

Temperature  $\underline{45}^{\circ}$  C,  $\underline{90}$   $\underline{-95\%}$  RH for  $\underline{4}$  Hours after taken out from oven.

#### **3.0 Mechanical Characteristics**

#### 3.1 Strain Relief Test:

Distance plug or 30CM SR position to impose a 10 pound weight, 1 minutes after the shift is less than 2MM.

#### 3.2 Cord Bending Test:

The cord shall withstand a weight of 250 g, swinging from left to right at an angle

of <u>120</u> degree, <u>40 cycle/min</u>, <u>1000</u> times minimum. The cord shall be conductible.

#### 3.3 Drop Test:

Product shall be dropped from a height of 80cm, onto 1cm thickness dry wood surface 1 times from 3 different surface.

#### 4.0 Environmental:

# 4.1 Operating Temperature and Humidity Range:

Operate over the temperature range of  $\underline{0^{\circ}C}$  to  $\underline{45^{\circ}C}$ ,  $\underline{20\%}$  to  $\underline{90\%}$  relative humidity no condensation.

# 4.2 Storage Temperature and Humidity Range

The operation specified herein will not be adversely affected if stored or transported within the temperature limits of  $\underline{-20^{\circ}C}$  to  $\underline{+70^{\circ}C}$  with relative humidity up to  $\underline{90\%}$  no condensation.



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#### 5.0 Surface Structure:

5.1 Appearance: Rift, dirty etc. are not permitted.

- 5.2 Outline: Dimension and express as drawing
- 5.3 Net Weight: <u>80 g</u> Max.

6.0 Safety & EMC:

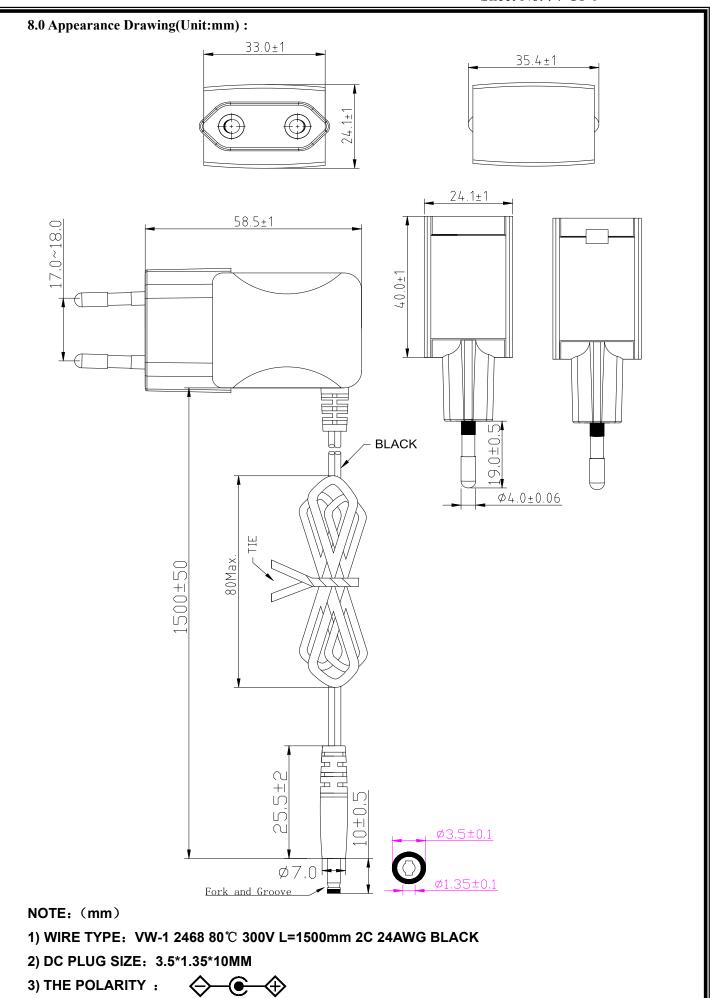
- 6.1 Safety Standard : EN62368-1:2014/A11:2017
- 6.2 EMC Standard : EN55032:2015, EN55035:2017

#### 7.0 MTBF:

The design and construction of this power supply shall exhibit a minimun mean time between failure of 35000 hours full rated load operation at 20--25  $^{\circ}$ C.

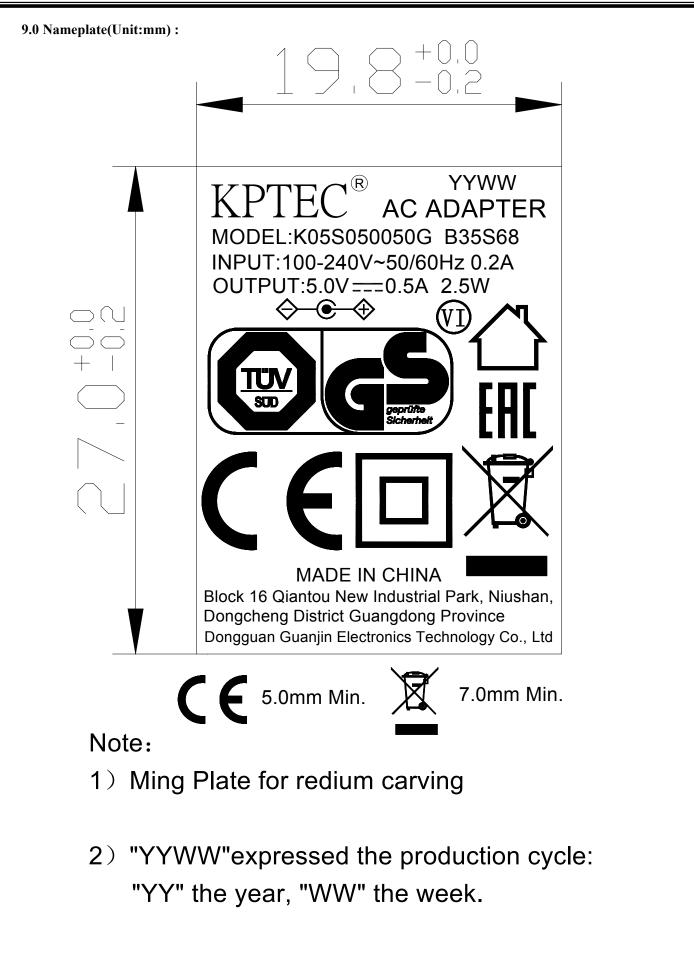


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