# SPECIFICATION FOR APPROVAL 

|  | CUSTOMER APPROVAL |
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| CONTENT: |  |
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| SIGNATURE: | DATE: |

CUSTOMER:
PART NO.: $\qquad$ REV: A0
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 |  |  |  |  |  |
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| Approved | Checked | Prepared | QA | Sales |  |
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Model No.: K05S050100G BUSB
Input: $\quad 100-240 V_{\mathrm{AC}} \quad 50 / 60 \mathrm{~Hz}$

Unit Color:
BLACK

Output: $\quad 5.0 \mathrm{~V}_{\mathrm{DC}} 1.0 \mathrm{~A}$
Description: ROHS

Product Category: AC ADAPTOR

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### 2.0 Electrical performance

2.1 Input Characteristics:

| Rated input voltage | 100-240Vac |
| :--- | :---: |
| Operating range | $90-264 \mathrm{Vac}$ |
| Rated input frequency | $50-60 \mathrm{~Hz}$ |
| Rated input current | $\mathbf{0 . 2 \mathrm { A } \mathrm { Max } .}$ |
| Power consumption (no loading) | An adequate internal Resistance fuse on the AC input line is |
| provide. |  |

### 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 | 1.0A |
| 2.2.4 | Rating output power | 5.0W |
| 2.2.5 | Line regulation | The line regulation is less than $\pm 5 \%$ 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 | $\leqslant 300 \mathrm{mVp}-\mathrm{p}$ ( $100-240 \mathrm{Vac}$ ) |
|  |  | Full load Ripple and noise 300 mVp -p (100-240Vac) max. Measurement is done by 20 MHZ bandwidth oscilloscope and the output Paralleled a $0.1 \mu \mathrm{~F}$ ceramic capacitor and a $10 \mu \mathrm{~F}$ electrolysis capacitor.(test under the Condition of rated input and rated output) |
| 2.2.9 | Average efficiency | Accord with energy level VI. Average efficiency $73.62 \%$ minimum |
|  |  | $115 \mathrm{~V} / 63 \mathrm{~Hz}$ and $230 \mathrm{~V} / 47 \mathrm{~Hz}$, output current from $100 \%, 75 \%, 50 \%$, 25\%. |


| 2.2 .10 | Turn on delay time | $\mathbf{5 0 0 0} \mathbf{~ m S . ~ A t ~ n o m i n a l ~ i n p u t ~ A C ~ v o l t a g e ~ a n d ~ f u l l ~ l o a d ~}$ |
| :--- | :--- | :--- |
| 2.2 .11 | Rise time | The Supply shall have a start-up rise time of less than $\mathbf{1 0 0} \mathbf{~ m S}$ to <br> rise to within regulation limits for all DC outputs. |
| 2.2 .12 | Hold up time | $\mathbf{5} \mathbf{~ m s}$ minimum At nominal input AC voltage and full load |
| 2.2 .13 | Output over-shoot | Less than $\underline{10 \%}$ of nominal voltage value |
| 2.2 .14 | Protection function | Over current protection |
|  | At rated AC input, output current in the range of <br> 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 3000 Vac for 2 s between AC input terminal to DCoutput terminal and enclosure. The cutoff current is specified as 10 mA

### 2.4 Insulation Resistance:

DC $500 \mathrm{~V} \underline{30} \mathrm{M} \Omega$ min between input to output and enclosure.

### 2.5 Overload Test:

In an ambient temperature of $\underline{25^{\circ}}{ }^{\circ} \mathrm{C}$ applies a power source of rated input with the output load adjusted to $10 \%$ of rated output and rated continuously for 4 Hours, after turning off 60 minutes in normal temperature.

### 2.6 Humidity Test:

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

### 3.0 Mechanical Characteristics

### 3.1Drop Test:

Product shall be dropped from a height of $8 \underline{0} \mathrm{~cm}$, onto 1 cm 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 $\underline{0^{\circ} \mathrm{C}}$ to $\underline{45^{\circ} \mathrm{C}}, \underline{20 \%}$ 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 $-20^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ with relative humidity up to $\underline{90 \%}$ no condensation.

### 5.0 Surface Structure:

5.1 Appearance: Rift, dirty etc. are not permitted.
5.2 Outline: Dimension and express as drawing Model No. :K05S050100G BUSB
5.3 Net Weight: $\underline{45}$ g 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 $20--25^{\circ} \mathrm{C}$.
8.0 Appearance Drawing(Unit:mm) :

9.0 Nameplate(Unit:mm) :


Note:

1) Ming plate for radium carving.
2) "YYWW"expressed the production cycle: "YY" the year, "WW" the week.

10 Packing Drawing(Unit:mm) :


PE BAG



NOTE: A case of 300 PCS, a total of 3 layers, 100 PCS/layer. 1) Cardboard and Corrugated Board Material: $B=C$
3) Outer Carton Material: $A=B$
2) PE Bag Material : 0.03 mm
4) Anlistatig: No requirement.
5) Environmental protection requirement: 94/62/EC.
6) We will select cardboard packing if customer don't specify packing type.
7)The sample package for temporary packaging, the big goods packaging as shown above packaging.

