深圳市欧凯科技有限公司
SHENZHEN OKEY TECH CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER SPEC: INPUT 100-240V AC 50/60HZ OUTPUT 9V 650mA

CUSTOMER PART NO:

OKEY PART NO: OK-W09-0650 AC/DC power adapter

SAMPLE NO: **DATE**: 2010-04-08

CUSTOMER		
APPROVED BY	CHECKED BY	TESTED BY

MANUFACTURER			
SALES	QE	APPROVED BY	DESIGNED BY
TONY HU	MR LI	MS HUANG	MR HU

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SHENZHEN OKEY TECH CO., LTD 深圳市欧凯科技有限公司	SWITCHING POWER SUPPLY SPECIFICATON (CLASS B)	
	OKEY TECH P/N:	CUSTOMER P/N:
	OK-W09-0650	

1 GENERAL

Description

This specification defines the performance characteristics for a class II adapter, single-phase **6.0W**. single output level power supply. simple design philosophy. overload latch-off protection during either(a) specified power threshold requirements or (b) short circuit condition.

Reliability level of **50K** hours MTBF and 0.6% annual field failure rate@**25℃**.

DC output voltage must be safe extra low (SELV) and limited power as defined by IEC 60950 3rd edition.

The maximum room ambient temperature, as mentioned in clause 1.4.12 of IEC 60950 3rd edition, for the external power supply is **40℃**.

Cooling: Natural convection/fan convection.

2 INPUT REQUIREMENTS

Input conditions: The supply shall operate over the voltage ranges as follows:

Rated input Voltage	100-240V AC
Operating range	90-264V AC
Rated input frequency	50/60HZ+/-3HZ
Rated input current	0.18A Max
Maximum input power	6.94W
Input current (No Load)	≦10MA
Power consumption (No Load)	0.30W Max
Primary current protection	An adequate internal fuse available for the AC input line
Configuration	2 Connector

AC inrush current

Peak inrush current shall be limited to 60A for a cold start. Under both cold and warm start conditions, there shall be no immediate damage or long-term impact on the reliability of the supply. The conformance test for this requirement shall be performed at+12% of the rated input voltage. Voltage and current waveforms will be observed on an oscilloscope following closure of the external power switch. Switch closure will be repeated until the waveforms show closure coincident with a voltage peak. The current measured during this occurrence will be defined as the peak inrush current.

3 OUTPUT REQUIREMENTS

Nominal DC output voltage	+9.0V
Minimum load current	0.01A
Rating load current	650mA

Peak load current	
Rating output power	6.0W
Line regulation	The line regulation is less than ±5% while measuring at rated load and ±10% of input voltage changing.
Load regulation	The load regulation for +9.0V is less than ±5% at measured output load from 10% to 100% rated load.
Peak load regulation	The peak load regulation for +9.0V is less than___, at measured output load from 30% to 100% rated load.
Ripple & noise	At 20MHZ, output parallel with a 100UF ceramic capacitor and a 10UF electrolytic capacitor to ground temperature at 25℃, nominal AC input voltage.
Switching efficiency	72% Minimum
	At nominal input voltage and full load
Turn on delay time	2000 MS at nominal input AC voltage and full load

Rise time	The supply shall have a start-up rise time of less than 20MS to rise to within regulation limits for all DC output
Hold up time	10MS minimum at nominal input AC voltage and full load
Output over-shoot	Less than 8% of nominal voltage value
Temperature coefficient	Output voltage temperature coefficient ±00.5%/℃
LED indication function	Available
Protection function	Available
Over-voltage protection	13.5V max, the output voltage shall be clamped by internal protection zener
Short-circuit protection	The adapter will not be damaged and with auto recovery function by short the DC output to ground
Over-current protection	The power unit will be protected when output power at 110-200% of all rated DC output

4 MECHANICAL

Enclosure and layout

Plastic case:

Weight: 85G Max

Dimension: 58*41*25 mm

Color: black

Input and output configuration

Input pin: EU pin

Output connector: 5.5*2.1*9.5mm

Polarity: inner+, outer-

Cord 2464 cables, UL 22AWG,1.2m (No lead)

5 REGULATORY COMPLIANCE

Safety requirement and certificates

Regulatory standard

The power unit will comply the following international regulatory standards

Safety authority	Country	status	standards
UL	USA		UL-60950
CSA	Canada		ETL-60950
TUV/GS	German		TUV/VDE
CE	Europe	Pass	CE Mark-EN 61347/60950
PSE	Japan		J-60950
EK	South korea		EK-60950
CCC	China	Pass	GB4943
UK	Britain		EN60950

Additional safety requirements

Dielectric withstand voltage, primary input AC short to secondary output

DC short:1,500V AC, 5MA, 1 Minute.

Insulation resistance, input to output: 10MΩ at 500 V DC.

Reinforced insulation system, primary to ground and primary to secondary.

The leakage current will not exceed 0.25MA.

6 ENVIRONMENT REQUIREMENTS

Temperature

Operating: between 0 ℃ and 40 ℃

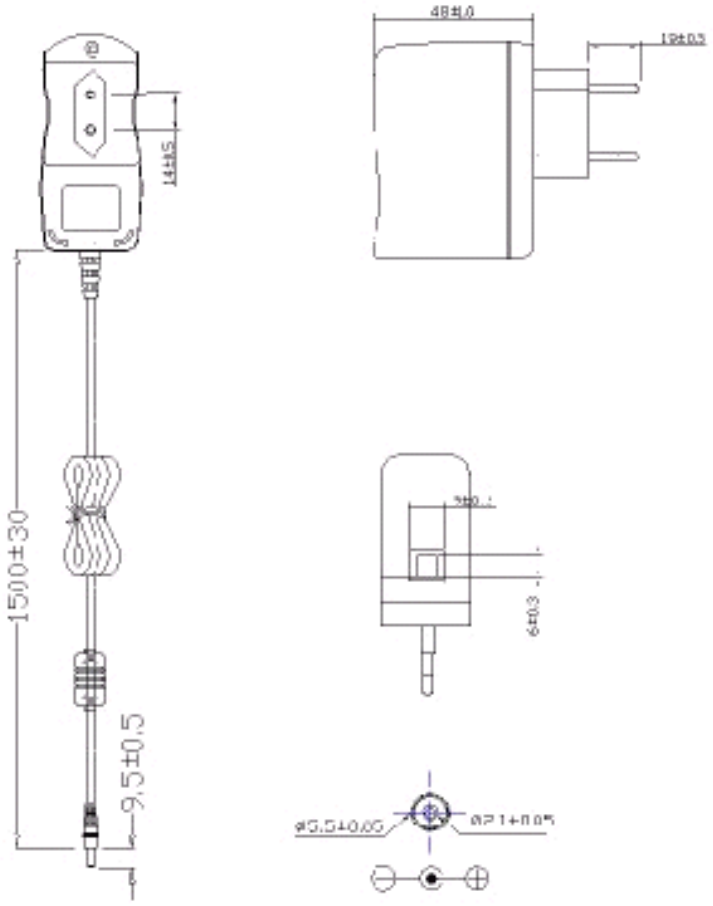
Non-operating: between-20 ℃ and +80 ℃

Humidity

Operating: between 10% and 90%

Non-operating: between 10% and 90%

7 APPEARANCE DRAWING (UNIT: MM)



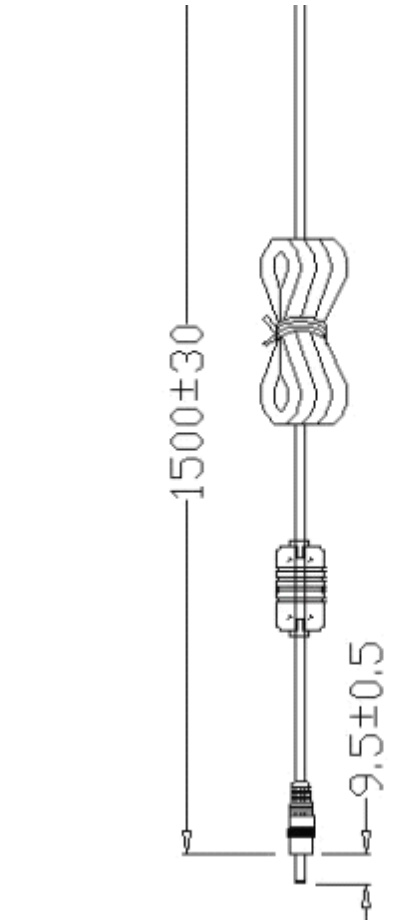
				TOLERANCE	
DRAWN	CHECKED	APPROVED		TITLE	DATE
Hozy			UNITS mm	DRAWING No.	2007/01/16
			SCALE		

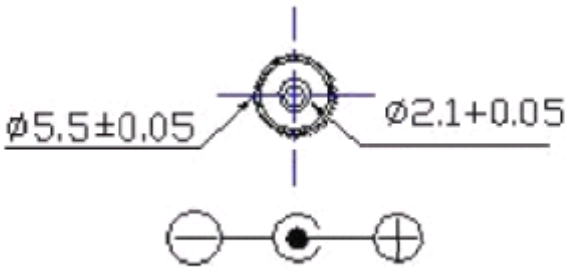
NOTE: Case cover and chassis material PPHOX black
AC Pin material:
No-lead

8 NAME PLATE

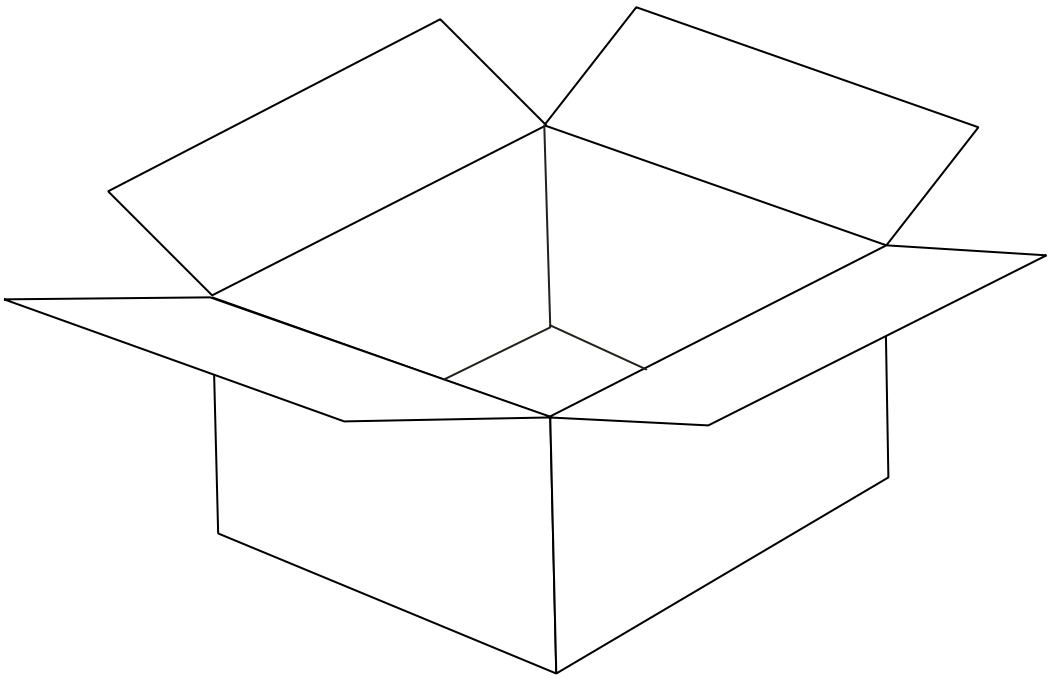

15.50
12.00
OKEY AC ADAPTER
MODEL: OK-W09-0650
INPUT: 100-240V~ 50/60Hz
OUTPUT: 9V⎓ 650 mA
RoHS
MADE IN CHINA
SHENZHEN OKEY TECHNOLOGY CO., LTD

9 DIMENSION OF OUTPUT PLUG & DC CORD





10 BOX DRAWING



430*430*270mm

240 pcs/carton