

APPROVAL SHEET

Customer	
Description	Car Plug
P/N	CLA515
Output V/A	5VDC@1.5A
Date	2/9/2009
REV	01
Approval No.	

Authorized Signatures

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7.5W DC TO DC ADAPTER

1. Description

This product is a DC to DC power device, it can provide for a 7.5W DC Output power with constant voltage sources.

2. Input requirements

2-1 Line regulation

Input VDC From 10-30VDC output Load at Full Load, alls output shall be stay in Regulation.

2-2 Input Current

The input voltage at 12VDC full load. Input current 1.0A max.

3. Output requirements

The 10-30VDC, output power at full load, alls output Voltage shall be stay in regulation

3-1 Static load

Output Voltage	LOAD		Tolerance	Ripple & Noise
	Min.	Max.		
5.0VDC	0A	1.5A	4.90-5.25VDC	200mV Max

3-2 Efficiency

70% Min. at full load, nominal line, measured after minutes full load Burn-in.

4. Protection

4-1 Over voltage protection:

The adapter shall limit the output voltage to less than 5.85VDC

4-2 Over current protection:

1A replaceable fuse for protection against over-current

4-3 Short circuit protection

Units shall be protected against a continuous short circuit over the operating temperature range. A continuous short circuit shall not produce any excessive heat, smoke, flash, or fire. The adaptor must operate normally after the short circuit load condition is removed.

5. Environmental conditions

5-1 Operating specifications

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions.

5-1-1 Ambient Temperature

0-70°C

5-1-2 Relative Humidity

20%-90%RH

5-1-3 Altitude

Sea level to 100,000 feet

5-1-4 Vibration

1.0mm, 10-25Hz, 15 minutes per cycle for each axis(X,Y,Z)

5-1-5 Cooling

The power supply will operate with convection cooling. Blocking of any cooling Vents shall not cause damage or failure of the power supply.

5-2 Non-Operating Specifications

The power supply shall be capable of withstanding the following environmental Conditions extended periods of time, without sustaining electrical or mechanical Damage and subsequent operational deficiencies.

5-2-1 Ambient Temperature

-40~80°C

5-2-2 Relative Humidity

5%~95%

5-2-3 Altitude

Sea level to 10,000 feet

5-2-4 Vibration and shock

The power supply shall be designed to withstand normal transportation vibration per MIL-STD-810D, method 514 and procedures X, as it is mounted in the chassis Assembly and packed for shipping.

6. Mechanical Specification and Requirements**6-1 Material**

Material shall be consistent with approved samples. The material of Case shall be PC (or equivalent) and flame retardant according to UL94-V0

6-2 Dimensions

The unit not include cable, and Case dimensions is 63.5 x 36 x 26.3 mm.

6-3 Output Connector

The output cable shall be terminated with a mini USB connector.

6-4 Output Cord

The length of the cord shall be 1.75m ± 0.15m

7. Reliability and Quality Control

7-1 Burn-In

100% burn-in at full loading the power supply will be performed a minimum for 4 hours.

Burn-in at 40°C ±5°C under full load on all adaptors calculates MTBF.

7-2 Vibration Test

Non-operation vibration with shipping container shall be 2G's, 5-50Hz, 50-500Hz, after test now abnormally to be noted. Operation vibration shall be 1.5G's peak, 10-50Hz, 3 planes. After test no abnormally to be noted.

7-3 Component Derating

Semiconductor junction temperatures shall not exceed the manufactures maximum thermal rating.

8. International Standards

8-1 EMI Standards

12VDC; Full load, the adapter internal filter to meet (FCC Class B CISPR22 Class B)

9. Safety Standards

Certified Standard

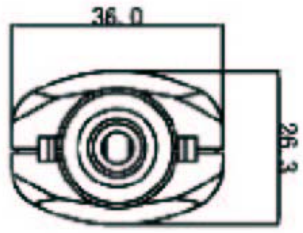
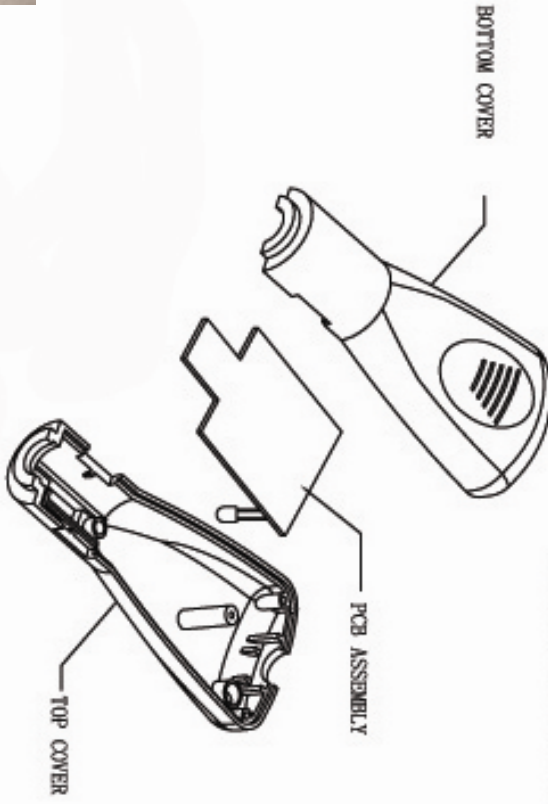
- 1. CE**
- 2. E-Mark**
- 3. FCC**
- 4. UL/cUL**
- 5. Australia**
- 6. ISO 7637**

10. Weight

- S.W. 0.1Kg per piece**
- N.W. 6Kg per carton**
- G.W. 6Kg per carton**

版本	版次
01	

NOTE:
1) GENERAL TOLERANCE ± 0.1



NS POWER INC. (China factory)

说明	General Notes	机型	Model			
		材质	Material			
		处理	Treatment			
制图	Drawn	江小琴	08.10.20	单位	Unit	mm
审核	Checked			比例	Scale	1:1
核准	Approved			投影	Projected	