

1-0. INTRODUCTION

This document defines the specifications for the 65 watts DC to DC adapter named ED1062 .

The device shall accept DC input from either an Car mobile/RV Cigarette or Air Plug.

A working indicator LED will display green when the output voltage is ON. The input plug shall mate with all common vehicle lighter sockets.

2-0. ELECTRONICS SPECIFICATION

Parameter	Specification
Input Operation voltage	11V---16VDC and 22V---32VDC for operation voltage(After turn on) Turn on voltage must be over 11.5VDC.
Maximum input current	10A
Inrush current	No damage to the relative components
Output voltage	19VDC+/-5%
Output current (Max.)	3.42A
Maximum rated output power	65W continuous
Maximum output voltage ripple & noise	180mVpk
Input under-voltage protection	Shutdown if input voltage is below 10.5VDC with auto recovery mode
Over current protection	Shutdown if output load exceed 110%~150% of Max. load, with latch mode
Output over voltage protection	28V maximum, shut down with latch mode if output OVP is triggered.
Over temperature protection	Shutdown with auto recovery mode if internal temperature is higher than 120°C when abnormal condition occurred
Efficiency	85% minimum.

3-0. DYNAMIC TEST

3-1. Step

Step	Frequency	Load	Slew Rate	Duty
Step 1	10Hz	0.05A ~ 90%	1.0A/us	50%
Step 2	100Hz	0.05A ~ 90%	1.0A/us	50%
Step 3	10Hz	10% ~ 100%	1.0A/us	50%
Step 4	100Hz	10% ~ 100%	1.0A/us	50%

3-2. Input voltage range: 11VDC , 12VDC , 24VDC , 32VDC

3-3. Output voltage range: 17.1V --- 20.9V

4-0. ENVIRONMENTAL

4-1. Operating Temperature

0°C to +40°C

4-2. Storage Temperature

-20°C to 85°C

4-3. Shock

Operational: 10G, 1/2 sine pulse, 11-millisecond duration, 3 drops each direction and axis

Non-operational: 60G, 1/2 sine pulse, 11-millisecond duration, 3 drops each direction and axis

The adapter shall survive a drop onto a hardwood surface from a height of 36" with no damage to the circuit board assembly and no cracking of the plastic case. The unit shall be dropped in a voluntary axis at least three times for this test. No components shall become loose from the PCB.

4-4. Vibration

Operational: 5 to 500Hz @ 0.5G acceleration for 30 minutes in each axis

Non-operational: 5 to 500Hz @ 1G acceleration for 1 hour in each axis

4-5. Electrostatic Discharge Sensitivity

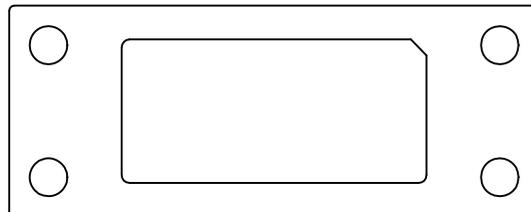
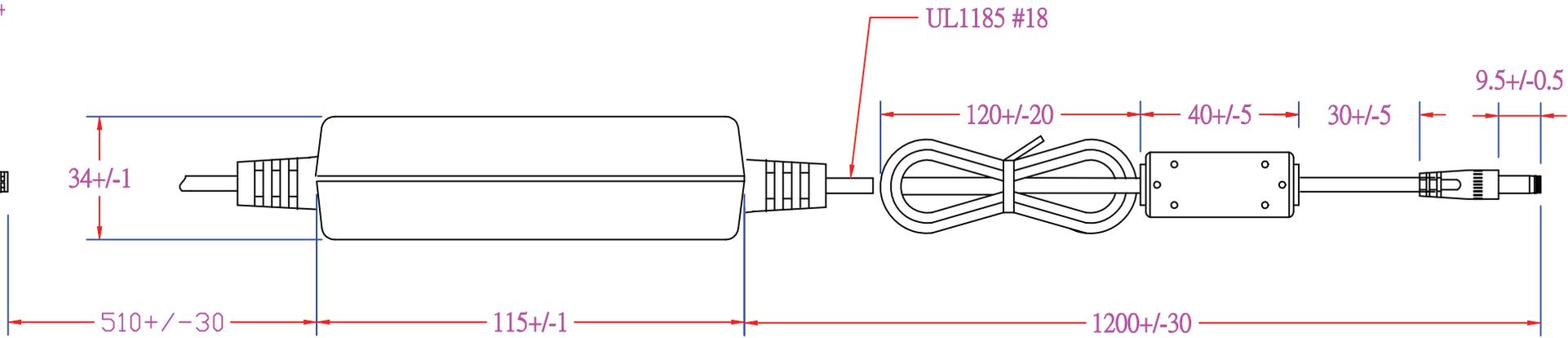
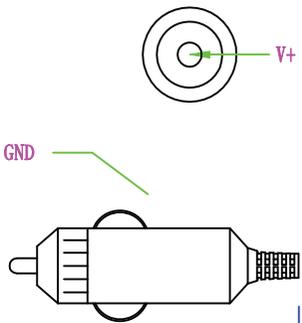
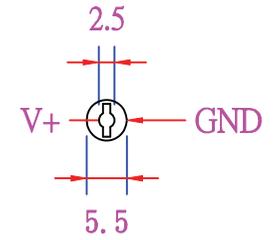
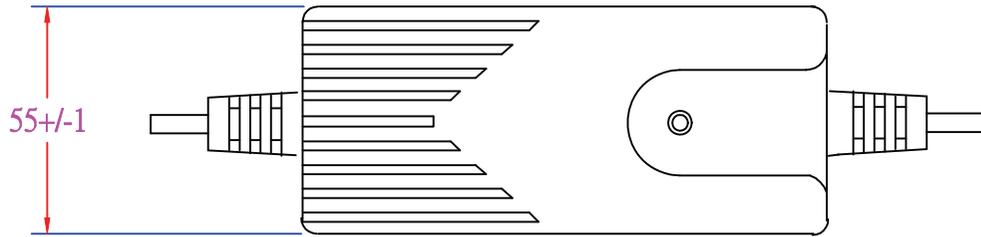
No hardware failure up to ± 8 KV. The test procedure should be according to IEC801-2(1991).

4-6. Burn In

4 hours at 40°C (+/-5°C), nominal input voltage, and 80% load condition.

4-7. MTBF

50,000 hours minimum.



MODEL	ED1082(12)	UNIT		APPROVED
DESCRIP	OUTLINE	SCALE		DESIGNED
NAME	CAR ADAPTER	DATE	2014-03-28	CHECK
CUSTOMER		CUS. P/N		DRAWING L. J. YU