

2. Electrical Specification

2.1 AC input characteristics

2.1.1 AC input voltage range

MINIMUM	NOMINAL	MAXIMUM
90VAC	100 – 240 VAC	264 VAC

2.1.2 AC input voltage frequency range

MINIMUM	NOMINAL	MAXIMUM
47Hz	50/60 Hz	63Hz

2.1.3 Input current

90VAC-264VAC AC INPUT VOLTAGE	0.8 A maximum
-------------------------------	---------------

2.1.4 Input inrush current

AT FULL LOAD, 25°C, COLD START:

NOMINAL AC INPUT VOLTAGE	No damage shall be occurred and the input fuse shall not be blown up.
--------------------------	---

2.1.5 Standby power

Input voltage 115VAC&230VAC no load power consumption less than 0.3W.

2.2 DC output characteristics(CC MODE)

2.2.1	OUTPUT VOLTAGE	+12V
2.2.2	OUTPUT CURRENT	2A
2.2.3	LINE REGULATION	+/-5%
2.2.4	LOAD REGULATION	+/-5%
2.2.5	RIPPLE AND NOISE	200mVp-p maximum At 20 MHz, and output parallel with 0.1uF & 10uF capacitors to ground Temperature at 25°C, At nominal input voltage output:0~2A
2.2.6	DYNAMIC RESPONSE	Within +/-20% @ 10%↔90% Load change, 2A/uS, 1KHz 50% duty cycle
2.2.7	OVERSHOOT	+10% rated output Voltage max. @ Power on

2.2.8	HOLD UP TIME	5 mS minimum At 90VAC~264VAC input AC voltage and full load
2.2.9	TURN-ON DELAY	3 Seconds maximum at 90VAC~264VAC input voltage
2.2.10	AVERAGE EFFICIENCY	82.09% minimum At 230VAC input voltage, 1/4,2/4,3/4 and full load calculation average efficiency. 230VAC no load power consumption less than 0.3W and adapter meet Efficiency level V ERP: 2009/125/EC
2.2.11	RISE TIME	100mS maximum at 90VAC~264VAC input voltage
2.2.12	UNDERSHOOT (TURN OFF)	1.2V max @ 90VAC~264VAC input, output:0~2A output, ambient:0°C~+40°C
2.2.13	CAPACITANCE LOAD ABILITY (CR MODE)	12V, output load set at CR mode, and 1000uF capacitor.

2.3 Protection characteristics

2.3.1 Over current protection: The output shall be protected against the over current conditions. A power cycle shall be required to restore normal operation. The max. output current is less than 5.5A at 90VAC-264VAC

2.3.2 Over voltage protection: The output voltage shall be clamped by internal protection zener diode. The over voltage protection is less than 21V.

2.3.3 Output short circuit protection

The power supply shall withstand a continuous output short without damage in 24 hours; The short may be applied before power on, or after power on; the power supply shall resume normal operation after the short is removed, no excessive heat, odor, or plastic deformation shall occur, no safety hazard.

2.4 Environmental

2.4.1 Operation temperature

0 °C ~ 40 °C

2.4.2 Operation humidity

10 ~ 95 % RH. NON-CONDENSING

2.4.3 Storage temperature

-20 °C ~ +85 °C

2.4.4 Storage humidity

10 ~ 95 % RH. NON-CONDENSING

2.4.5 Cooling method

Cooling shall be with natural convection Mode, no wind.

2.5 Safety & EMC requirement

2.5.1 LEAKAGE CURRENT

0.25mA maximum, at nominal AC input voltage and frequency

2.5.2 Dielectric strength

Primary (LN) to Secondary: 3000VAC 5mA 1 minute; 3600VAC 5mA 2 second for mass product.

2.5.3 Insulation resistance: input to output 500VDC 10Mohm MIN.

2.5.4 Radio Frequency Electromagnetic immunity: EN61000-3-2:2006

Range : 30MHz-1000MHz

Field Strength : 3V/m

Distance Antenna-EUT : 3m

Polarity of Antenna : Horizontal and Vertical

Performance: Criteria B

2.5.5 Injected Current Susceptibility: EN61000-4-6:1996 +A1:2001

Range: 0.15MHz-80MHz

Voltage Level: 3V

Step: ≤ 0.015 decades / sec

Performance: Criteria A

2.5.6 Lightning surge: IEC61000-4-5:1995+A1:2000 & ITU K.21:2003

- 1.2/50 usec Open Circuit voltage

- 8/20 usec Short Circuit current

Power line: +/-2.5kV

Performance: Criteria B.

2.5.7 Electrolytic discharge (ESD): EN61000-4-2:1995+A1:1998+A2:2001

- Air Discharge: ±8kV

- Contact Discharge: ±4kV

Performance: Criteria B

2.5.8 Electric fast transient (EFT): EN61000-4-4:2004

techniques - Electrical fast transient/burst immunity test

Pulse Amplitude-AC Power Port: 1.0KV

Burst Frequency: 100kHz

Polarity of Antenna : Positive and Negative

Performance: Criteria B

2.5.9 Safety compliance

Item	Country	Standard	Certified Status	Certificate No.	Report No
CB	Global	IEC60950-1:2005	---	---	---
GS/CE	Europe	EN60950-1:2006	---	---	---
UL/CUL	U.S.A/Canada	UL60950-1	---	E135856	E135856-A85-UL-1
DOFT	Australia	AS/NZS 60950.1:2003	----	----	----
UK Safety	United Kingdom	BS EN60950-1:2006	----	----	----
PSE	Japan	J60950	---	---	---
CCC	China	GB4943-2001	-----	-----	-----
EK Mark	Korea	K60950-1	---	---	---
BSMI	Taiwan	CNS14336	---	---	---

2.5.10.EMC compliance

Item	Country	Standard	Certified Status	Certificate No.	Report No
CE	Europe	EN55022&55024	----	----	----
FCC	U.S.A/Canada	Class B,Part 15	---	---	A10012504
C-Tick	Australia	AX/NZS CISPR 22	---	---	---

2.5.11 PCB REV.:1 032

2.6 Reliability requirement

2.6.1 MTBF calculation

The power supply shall be designed and Prediction to have a mean time between failures (MTBF) of 50000 operating hours minimum and conditions: @115VAC/230VAC, full load, 0°C ~40°C, MTBF calculation meet Telcordia Technologies Special Report SR-332 (Issue 2).

2.6.2 E-cap life time: 3 years @ full load ,ambient 30°C,nominal input voltage,frequency

2.6.3 High temperature test (Operating)

Full load 40°C, storage 12 hours, then power on/off 5 times at 90Vac input, operating 48hours,and then power on/off 5 times at 264Vac input, operating 48 hours,
Normal performance after test condition is removed.

2.6.4 Low temperature test (Operating)

Full load 0°C, storage 12 hours, then power on/off 5 times at 90Vac input, operating 48 hours,and then power on/off 5 times at 264Vac input, operating 48 hours,
Normal performance after test condition is removed.

2.6.5 High temperature and humidity test (Operating)

+40°C, 90% RH, Load 0.8A, 90Vac input, 24 hours; +40°C, 90% RH, Load 2A, 264Vac input, 24 hours.

Normal performance after test condition is removed.

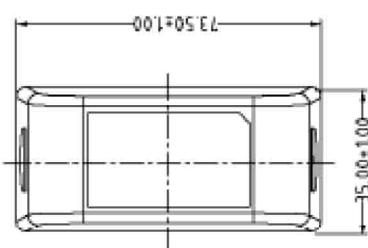
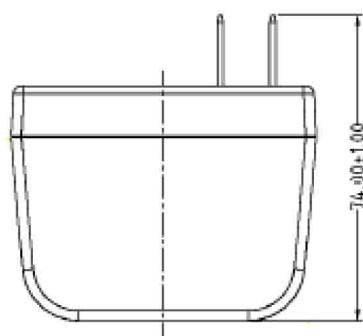
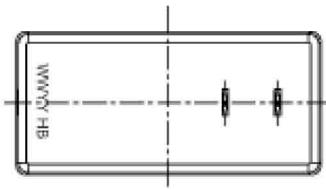
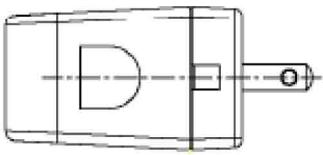
2.6.6 High temperature and humidity test (Non-operating)

+40°C, 95% RH, 48 hours, tested within 3 minutes in ambient 25°C after take out from chamber; Meet to Dielectric strength and insulation resistance test

8. data code or week code

ISSUE	ZONE	DESCRIPTION	DATE	RE-USER
1	2	3	4	5
		PREVISION		
			6	7
			8	9
			10	11
			12	

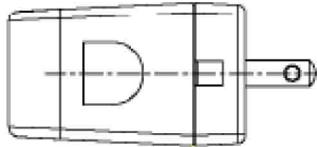
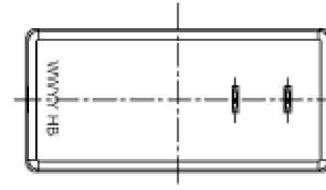
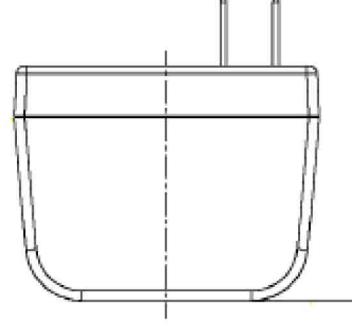
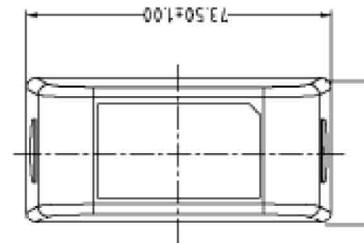
WW: WEEK YY: YEAR
HB: FOR ROHS PRODUCT



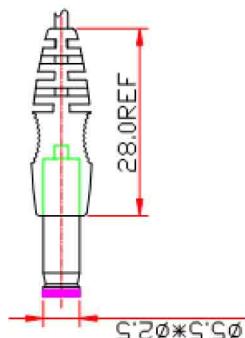
CASE 顏色為白色(C-62)

Item	Dimensions			Model No.	Part No.	Date	Material	Part Name
	Center distance (mm)	±0.15	±0.2					
Center distance (mm)	±0.15	±0.2	±0.3	±0.5	DSA-30W(2/4)		Q4/Q4/07	UNIT
Center distance (mm)	±0.15	±0.25	±0.4	±0.5	DRAWN	CHECKED	REV.D	CASE
general dimensions(mm)	±0.15	±0.25	±0.4	±0.5	±0.7	P/N	FILE NO.	UNIT
general dimensions(mm)	±0.15	±0.25	±0.4	±0.5	±0.7	APPROVED	SCALE	mm
general dimensions(mm)	±0.15	±0.25	±0.4	±0.5	±0.7		SIZE	inch
general dimensions(mm)	±0.15	±0.25	±0.4	±0.5	±0.7		REV.	REV.

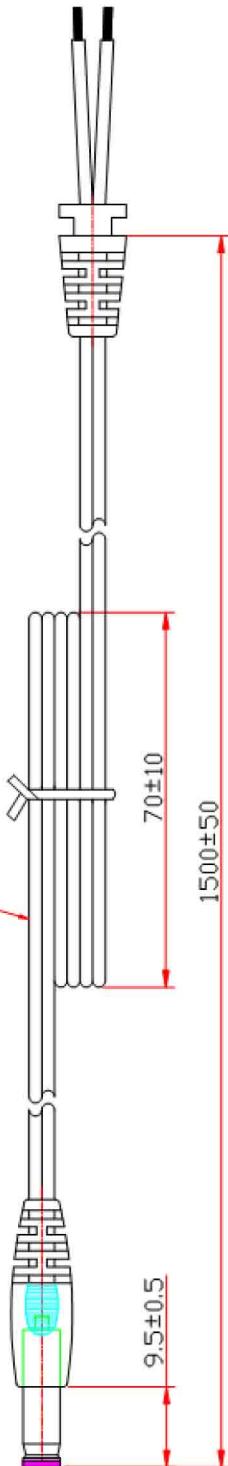
9. Outline drawing

Technical Drawing - CASE																																																																								
1	2	3	4	5	6	7	8	9	10	11	12																																																													
A	B	C	D	E	F	G	H	I	J	K	L																																																													
 																																																																								
																																																																								
																																																																								
CASE 頭色為白色(C-62)																																																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Item</th><th rowspan="2">Dimensions</th><th colspan="4">Part No.</th><th rowspan="2">DRAWING NO.</th><th rowspan="2">DRAWING DATE</th><th rowspan="2">REV.</th><th colspan="3">PART NAME</th></tr> <tr> <th>Model No.</th><th>Material</th><th>Notes</th><th>U.L. CASE</th><th>SCALe</th></tr> </thead> <tbody> <tr> <td>center distance (max)</td><td>0 ~ 200</td><td>~260</td><td>~380</td><td>800~</td><td>±0.5</td><td>±0.5</td><td>04/04/07</td><td></td><td></td><td></td></tr> <tr> <td>center distance(min)</td><td>±0.5</td><td>±0.5</td><td>±0.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>general dimensions(max)</td><td>±0.15</td><td>±0.25</td><td>±0.4</td><td>±0.5</td><td>±0.5</td><td>±0.7</td><td>04/04/07</td><td></td><td></td><td></td></tr> <tr> <td>general dimensions(min)</td><td>±0.15</td><td>±0.25</td><td>±0.4</td><td>±0.5</td><td>±0.5</td><td>±0.7</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>												Item	Dimensions	Part No.				DRAWING NO.	DRAWING DATE	REV.	PART NAME			Model No.	Material	Notes	U.L. CASE	SCALe	center distance (max)	0 ~ 200	~260	~380	800~	±0.5	±0.5	04/04/07				center distance(min)	±0.5	±0.5	±0.5								general dimensions(max)	±0.15	±0.25	±0.4	±0.5	±0.5	±0.7	04/04/07				general dimensions(min)	±0.15	±0.25	±0.4	±0.5	±0.5	±0.7				
Item	Dimensions	Part No.				DRAWING NO.	DRAWING DATE	REV.	PART NAME																																																															
		Model No.	Material	Notes	U.L. CASE				SCALe																																																															
center distance (max)	0 ~ 200	~260	~380	800~	±0.5	±0.5	04/04/07																																																																	
center distance(min)	±0.5	±0.5	±0.5																																																																					
general dimensions(max)	±0.15	±0.25	±0.4	±0.5	±0.5	±0.7	04/04/07																																																																	
general dimensions(min)	±0.15	±0.25	±0.4	±0.5	±0.5	±0.7																																																																		

ISSUE ZONE	DESCRIPTION	REVISION	DATE	REV/SER
A		1	2	3 4 5 6 7 8 9 10 11 12
B				
C				
D				
E				
F				
G				
H				



2468 20AWG/2C WTC-C-62 東聚
文字标示线接PLUG中央正



NOTE:
1.PLUG MATERIAL:WTC-C-62),PVC料,硬度30~40P;
2.PLUG 绝缘体为BK, 音叉式 带防滑凹槽;

3.极性接法依图LABEL指示

4.SR MATERIAL:WTC-C-62),PVC料 硬度60~70P;
5.材质符合“ROHS”要求;

6.禁止使用 所禁用之有害物质;
7.成品引线需通过10A测试

SP-242094

ITEM	dimension	MODEL NO.	PART NO.	DWG DATE	MATERIAL	PART NAME	UNIT	mm
center distance (metal)	ø 10 ~ 10 ~ 50	DSA-24PFD	XXXXXXXXXX-XXX	2014.03.20	DC CORD	SCALE	A4	I
center distance(resin)	±0.05 ±0.10 ±0.15	DESIGN	CHECKED	SAFETY	APPROVED	FILE NO.	REV. A	MR-374(V1)
general dimensions(metal)	±0.05 ±0.10 ±0.15							
general dimensions(resin)	±0.08 ±0.10 ±0.15							
1	2	3	4	5	6	7	8	9 10 11 12