



# PARTS NUMBER REQUEST & APPROVAL SHEET

Powering Communications

1. Part Number:

AAZAND2S2942510000

☒申請單：☒新增料件  
☐新增經銷商  
☐變更單

2. 製造商：  
(Manufacturer)

譚裕實業(股)

製造商料號：  
(Manufacturer P/N)

C942-510009-A

3. 經銷商：  
(Supplier)

譚裕實業(股)

經銷商料號：  
(Supplier P/N)

C942-510009-A

4. 種類名稱：  
(分群碼)

Antenna

5A. 品名描述(Part Description)：

ANT-D 譚裕 C942-510009-A

5B. 規格描述(Spec.Description)：

2.4GHz 2dBi swivel-SMA RoHS

6. 變更原因說明(Change Reason)：

(申請或變更料號請附上規格說明書) 如有任何變更, 須事前聯絡, 取得承認後, 始能變更

7. Series Approval ☐ 請勾選(規格請參照\_\_\_\_\_系列承認書)

8. 樣品發行：☒BILLION ☒EG-B ☐None

9. 備註(Remark)：此料已於5200G-7300G機種驗證通過 楊勝凱

| DCC 文管中心發行章 | 主管核准<br>Manager Signature |      | 審查<br>Engineer Signature |      | 承辦 |
|-------------|---------------------------|------|--------------------------|------|----|
|             | M.E.                      | E.E. | M.E.                     | E.E. |    |
|             | N/A                       |      | N/A                      |      |    |
|             | *無須審核者以"N/A"表示 *簽名時應註明日期  |      |                          |      |    |

申請日：2007/6/25

☒ (Request Date)

楊勝凱

申請者 (Request)

台北實驗室

申請單位 (Department)



鍵入者 (Key-in)

由零件工程師填寫

料號申請/零件承認單: 第 1 頁

F-BEC0105-03



WHA YU INDUSTRIAL CO., LTD. (HEAD OFFICE)  
DONGGUAN AEON TECH CO.,LTD.(CHINA)  
TAI HWA ELECTRONIC CO., LTD.(CHINA)  
SHANGHAI HUA YU ELECTRONIC CO., LTD.(CHINA)  
SU ZHOU AEON TECH CO., LTD. (CHINA)

## SPECIFICATION FOR APPROVAL

**CUSTOMER:** 盛達電業股份有限公司

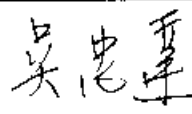
**PART NAME:** RF Antenna Assembly

**PART NO.:**

**REVISION:**

**W. Y. P/NO.:** C942-510009-A

**REV.:** X1

|                  | MANUFACTURER<br>SIGNATURE                                                                                                                                               | CUSTOMER<br>SIGNATURE |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| APPROVED<br>BY : | <br> |                       |
| DATE :           | 4/9-2011                                                                                                                                                                |                       |

### WHA YU GROUP

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台樺電業製品廠

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Fax: + 86-852-23843747

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上海譚裕電子有限公司

Address: 3586, Wai Qing Song Road, Qing Pu County, Shanghai China

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Fax: + 86-21-59741347

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Wujiang City, Jiangsu Province, China

Tel: + 86-512-63627980

Fax: + 86-512-63627981

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| 6. ....            | <b>RoHS</b> 排外條款          | ..... 10           |

# RF Antenna Cable Assembly

## Specification

### 1. Electrical Properties :

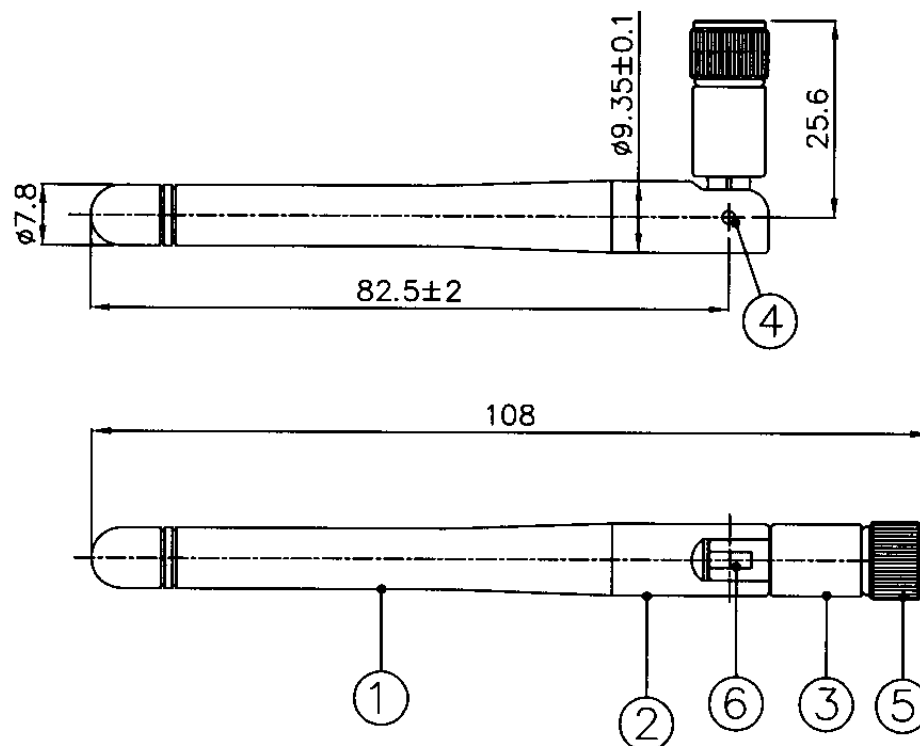
- 1.1 Frequency Range..... 2.4GHz ~ 2.5GHz
- 1.2 Impedance ..... 50Ω Nominal
- 1.3 VSWR ..... 1.92 : 1 Max.
- 1.4 Return Loss..... -10 dB Max.
- 1.5 Radiation ..... Omni-directional
- 1.6 Gain..... 1.8dBi typ.
- 1.7 Admitted Power..... 1W
- 1.8 Cable..... RG-178 Coaxial Cable
- 1.9 Connector..... SMA Plug Reverse

### 2. Physical Properties :

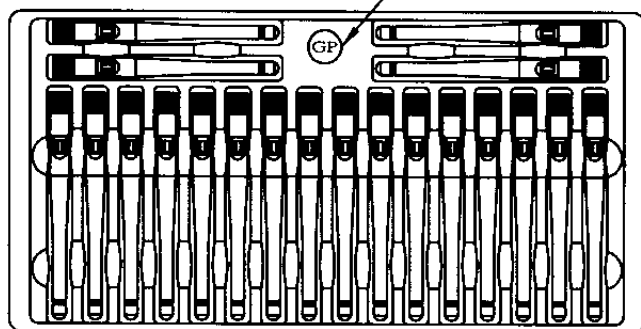
- 2.1 Antenna Cover..... TPE
- 2.2 Antenna Base..... PC
- 2.3 Antenna Base..... PBT
- 2.4 Operating Temp. .... -10°C ~ +60°C
- 2.5 Storage Temp. .... -10°C ~ +70°C
- 2.6 Color ..... Black

CG-

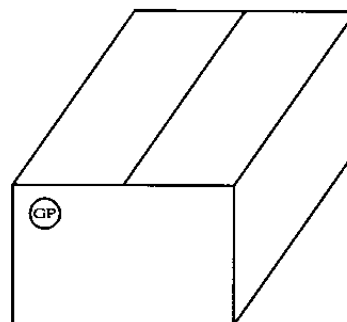
| REV | DATE      | DESCRIPTION |
|-----|-----------|-------------|
| X1  | 4/17-2007 | New Issue   |



GP環保標籤



Packing : 20pcs/Tray



GP標籤貼於外箱兩邊側麥左上角

|    |               |                                   |     |        |
|----|---------------|-----------------------------------|-----|--------|
| 6  | Cable         | RG-178 , Translucent Brown ; 50 Ω | 1   |        |
| 5  | Connector     | SMA Straight Plug/Reverse         | 1   |        |
| 4  | Rivet         | POM , Black                       | 2   |        |
| 3  | Antenna Base  | PBT ; Color:Black                 | 1   |        |
| 2  | Antenna Base  | PC ; Color:Black                  | 1   |        |
| 1  | Antenna Cover | TPE ; Color:Black                 | 1   |        |
| NO | DESCRIPTION   |                                   | QTY | REMARK |

CUSTOMER'S SINGATURE

|      |      |          |
|------|------|----------|
| XX   | ±5   | APPROVED |
| X    | ±3.0 | CHECKED  |
| .X   | ±1.0 | DRAWING  |
| .XX  | ±0.5 |          |
| .XXX | ±0.1 |          |
| 程永娟  |      |          |

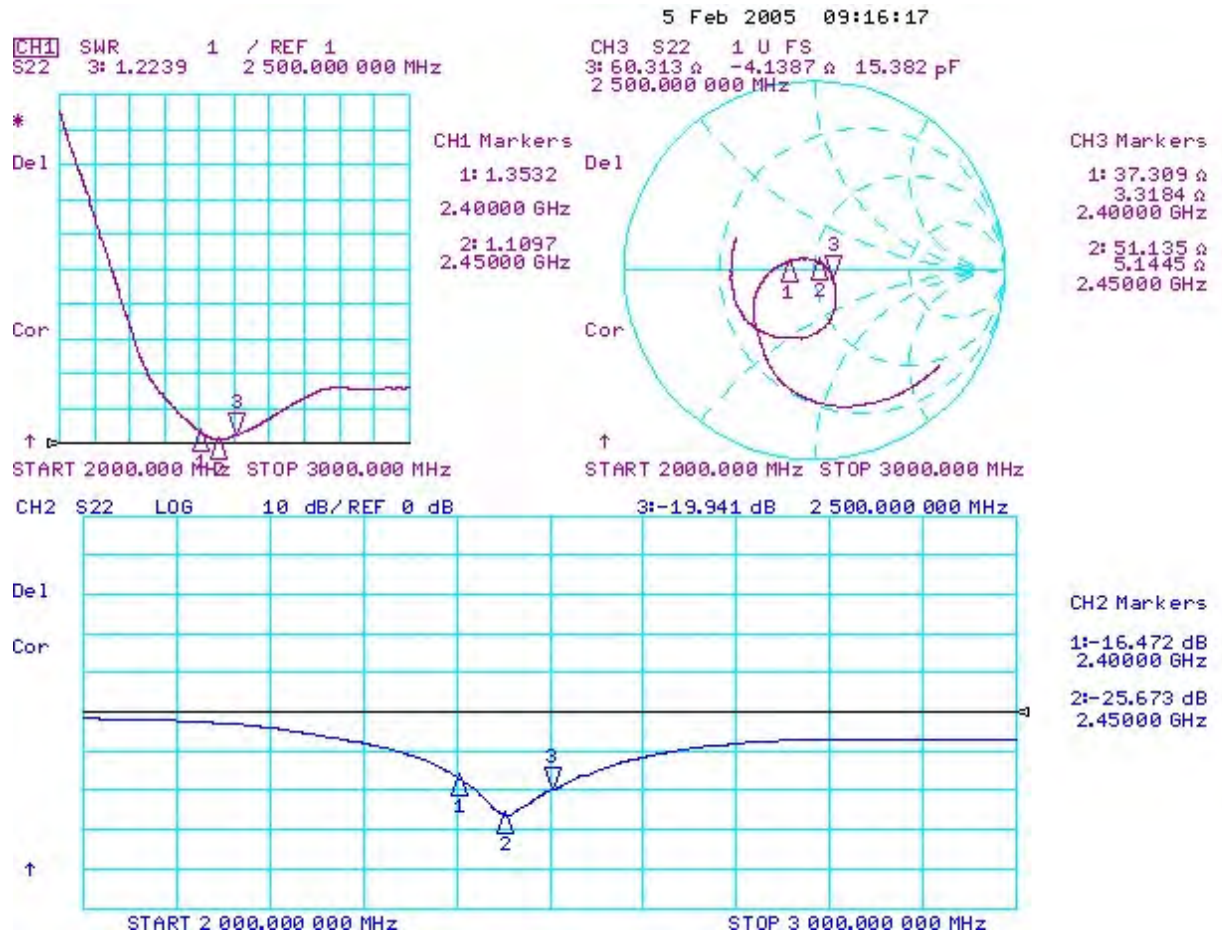
|                               |      |             |
|-------------------------------|------|-------------|
| CUSTOMER: 盛達                  |      |             |
| PART NO :                     |      |             |
| PARTNAME: RF Antenna Assembly |      |             |
| W.Y P/NO : C942-510009A       |      |             |
| REV                           | UNIT | FILE :      |
| X1                            | m/m  | SHEET : 1/1 |

**M.gear** Wha Yu Group

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RF Antenna Assembly  
P/NO :C942-510009-A SPEC : 2.4GHz

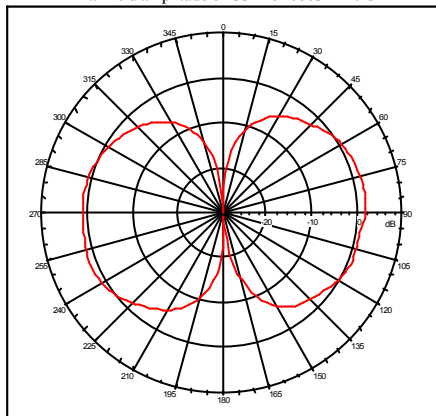


6/1/2005



# 華裕實業股份有限公司 WHA YU INDUSTRIAL CO., LTD

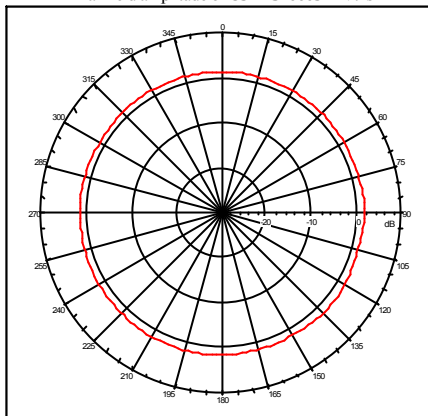
Far- field amplitude o C942-510009-4-H.nsi



2.4GHz

Gain = 1.71342 dBi

Far- field amplitude o C942-510009-4-V.nsi

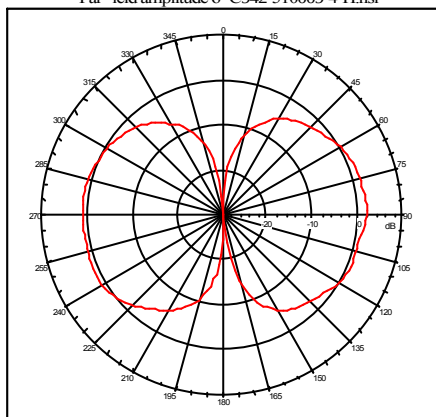


2.4GHz

Gain = 1.53731 dBi

Avg value: 1.266 dB

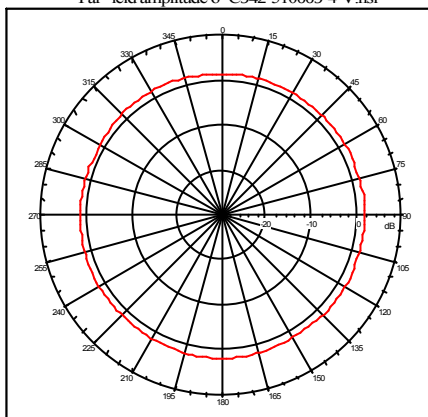
Far- field amplitude o C942-510009-4-H.nsi



2.45GHz

Gain = 1.80788 dBi

Far- field amplitude o C942-510009-4-V.nsi

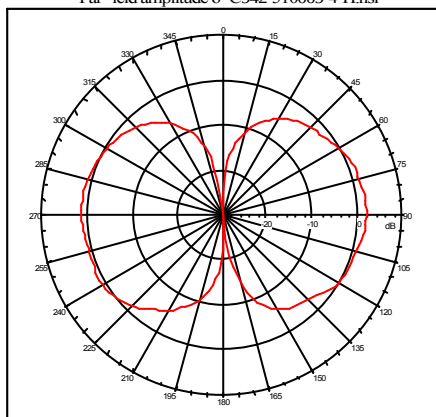


2.45GHz

Gain = 1.6137 dBi

Avg value: 1.335 dB

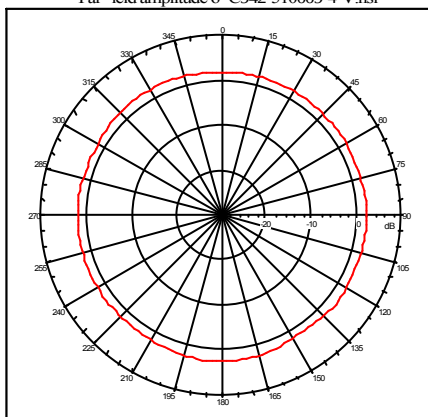
Far- field amplitude o C942-510009-4-H.nsi



2.5GHz

Gain = 1.80662 dBi

Far- field amplitude o C942-510009-4-V.nsi



2.5GHz

Gain = 2.21979 dBi

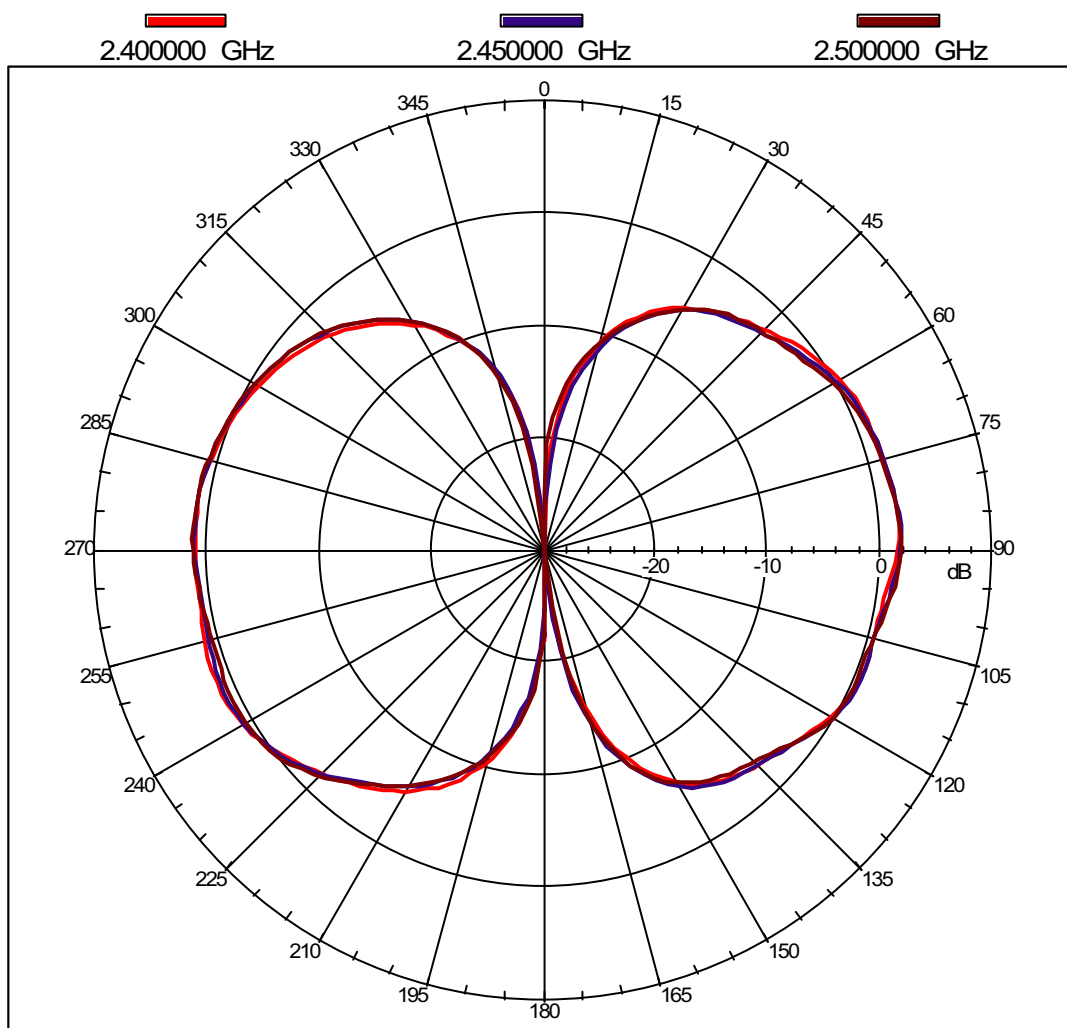
Avg value: 1.781 dB



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Far- field amplitude of C942-510009-A 1-H.nsi

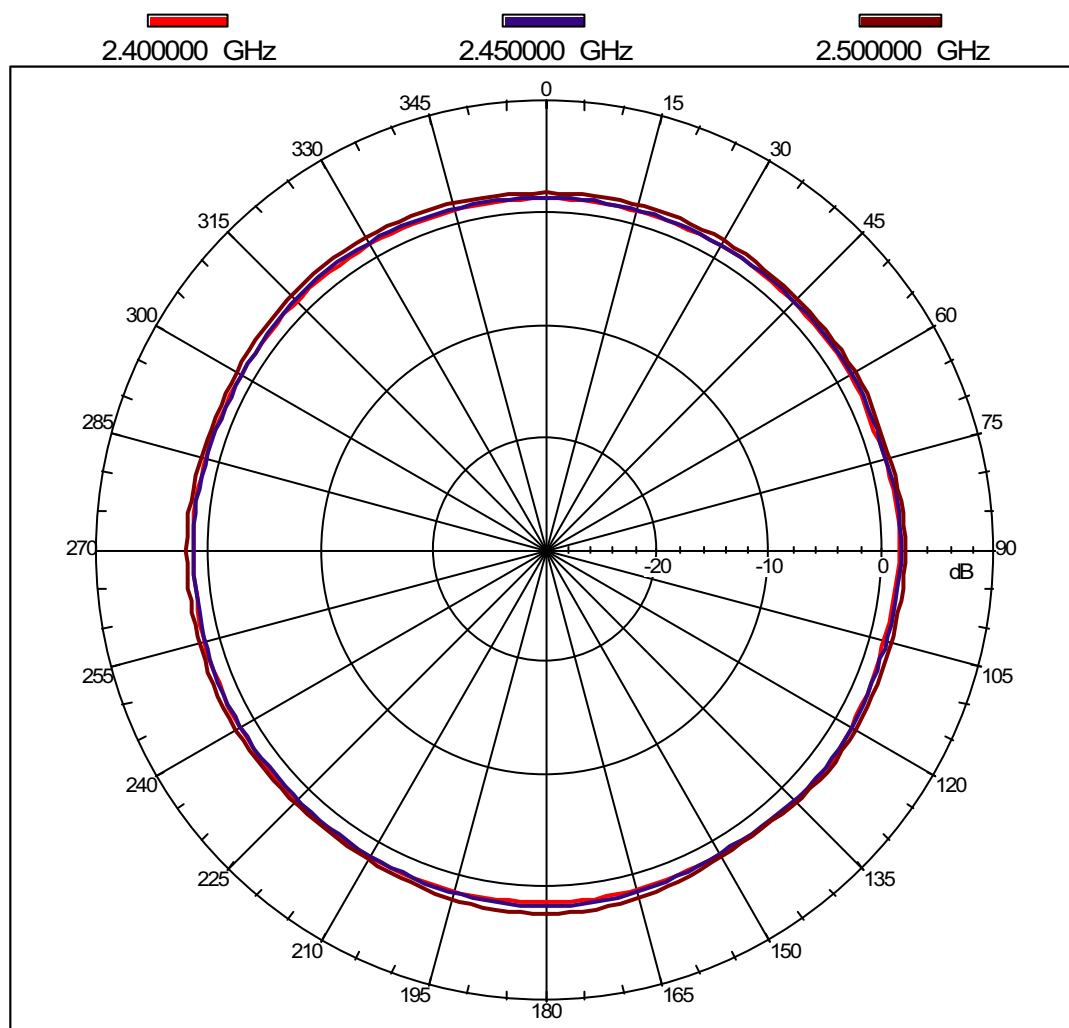




# 華裕實業股份有限公司

## WHA YU INDUSTRIAL CO., LTD

Far- field amplitude o C942-510009-A l-V.nsi

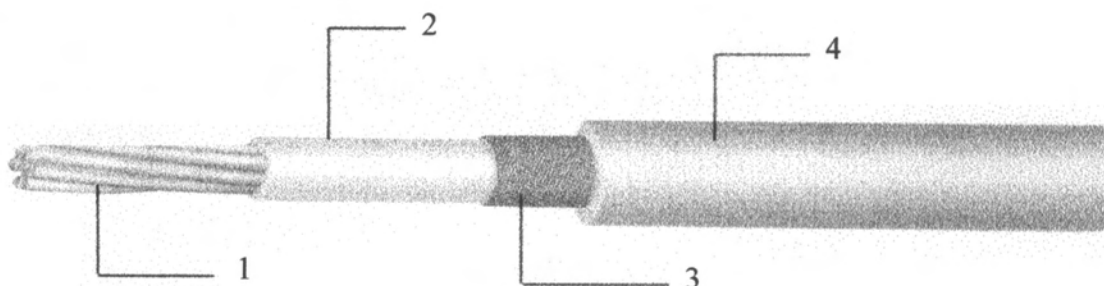


|                     |                                                  |         |               |
|---------------------|--------------------------------------------------|---------|---------------|
| RG 178 B/U          | FEP INSULATED<br>HIGH-FREQUENCY COAXIAL<br>CABLE | PAGE    | 1 / 2         |
| PRODUCT<br>STANDARD |                                                  | ISSUED  | 21. Oct. 2003 |
|                     |                                                  | REVISED |               |

## I - Scope

This specification presents a FEP insulated high-frequency coaxial cable AWG 30, 1.8 mm O.D. for internal wiring of electronic equipment, such as Computer / Notebook with wireless communication systems.

## II - Construction



| Item               |                | Unit   | Details                        |
|--------------------|----------------|--------|--------------------------------|
| 1. Inner Conductor | Material       | —      | CP-AG                          |
|                    | Composition    | No./mm | AWG 30 or 7 × 0.1              |
|                    | Dia. (approx.) | mm     | 0.305                          |
| 2. Dielectric      | Material       | —      | Extruded FEP                   |
|                    | Nom. O.D.      | mm     | 0.84 ± 0.05                    |
|                    | Color          | —      | Natural                        |
| 3. Outer Conductor | Material       | —      | Silver coated copper           |
|                    | Composition    | —      | Braided (16 / 3 / 0.1)         |
|                    | Dia. (approx)  | mm     | 1.29 ± 0.07                    |
| 4. Jacket          | Material       | —      | Extruded FEP                   |
|                    | Dia.           | mm     | 1.80 ± 0.08                    |
|                    | Color          | —      | Standard color is Light Orange |

Note :



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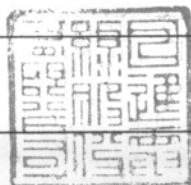
*Shen Bin Chao*  
*Shen Bin Chao*

|                     |                                                  |         |               |
|---------------------|--------------------------------------------------|---------|---------------|
| RG 178 B/U          | FEP INSULATED<br>HIGH-FREQUENCY COAXIAL<br>CABLE | PAGE    | 2 / 2         |
| PRODUCT<br>STANDARD |                                                  | ISSUED  | 21. Oct. 2003 |
|                     |                                                  | REVISED |               |

### III – Characteristics

| Item                     | Unit     | Specified Value                                          | Note       |
|--------------------------|----------|----------------------------------------------------------|------------|
| Temperature Rating       | °C       | -55 ~ +200                                               |            |
| Voltage Lasting          | V        | 1000                                                     |            |
| Dielectric strength      | —        | Dielectric core: No breakdown at<br>AC 3 kv for 0.2 sec. | Spark test |
|                          |          | Jacket: No breakdown at<br>AC 3 kv for 0.2 sec.          | Spark test |
| Characteristic Impedance | Ω        | 50 ± 2                                                   | TDR method |
| Capacitance              | pF / ft  | 29.4                                                     |            |
| Attenuation. (Max.)      | dB/100ft | 16.0                                                     | 100.0 MHz  |
|                          |          | 33.0                                                     | 400.0 MHz  |
|                          |          | 52.0                                                     | 1.0 GHz    |
|                          |          | 94.0                                                     | 3.0 GHz    |
| Approx. Weight           | g / m    | 7.68                                                     |            |

Note :



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*Hebe Lin*
*Shen Bin Chao*



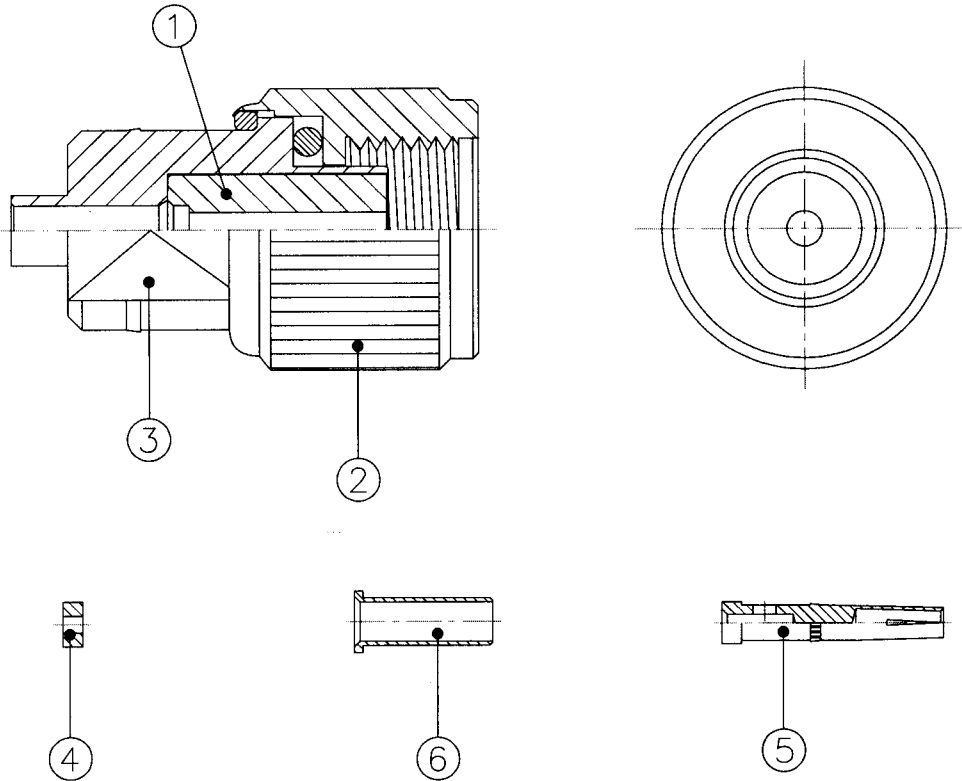
譚裕實業股份有限公司

WHA YU INDUSTRIAL CO., LTD

Connector 材質證明書

|                   |                |                      |                                      |
|-------------------|----------------|----------------------|--------------------------------------|
| 譚裕料號<br>Whayu P/N | 100-2001150-AZ | 產品名稱<br>Product Name | SMA Plug Reverse Straight For RG-178 |
|-------------------|----------------|----------------------|--------------------------------------|

結構圖面



材質成份

表面處理

|   |     |              |      |    |    |       |    |     |
|---|-----|--------------|------|----|----|-------|----|-----|
| 1 | 絕緣體 | Teflon       | PTFE |    |    |       |    | N/A |
| 2 | 外殼  | Brass        | Cu   | Pb | Fe | Fe+Sn | Zn | 電著  |
| 3 | 本體  | Brass        | Cu   | Pb | Fe | Fe+Sn | Zn | 鍍鎳  |
| 4 | 絕緣體 | Teflon       | PTFE |    |    |       |    | N/A |
| 5 | 中心針 | Phos. Bronze | Cu   | Sn | P  | Zn    | Pb | 鍍金  |
| 6 | 尾管  | Brass        | Cu   | Pb | Fe | Fe+Sn | Zn | 鍍鎳  |
|   |     |              |      |    |    |       |    |     |
|   |     |              |      |    |    |       |    |     |
|   |     |              |      |    |    |       |    |     |
|   |     |              |      |    |    |       |    |     |

Remark :



ET-QA-0017-A2



**華裕實業股份有限公司**  
WHA YU INDUSTRIAL CO., LTD

## RoHS 排外條款說明 RoHS Exclusive item Hazardous Substance

本公司保證，本產品均屬環保產品，皆符合 RoHS 法規要求，並適用於 RoHS 規定之排除條款。

We hereby confirm and assure that all parts and sub-materials delivered to your company comply with RoHS Standard and apply to RoHS Exclusive item.

**RoHS 合金類排除條款要求如下：**

**RoHS Exclusive item：**

| 合金種類<br>alloys item     | 鉛允許含量(ppm)<br>Lead acceptance concentration |
|-------------------------|---------------------------------------------|
| 鋼材<br>steel             | <3,500ppm                                   |
| 鋁合金<br>aluminium alloys | <4,000ppm                                   |
| 銅合金<br>copper alloys    | <40,000ppm                                  |
| 焊錫<br>solder            | <1,000ppm                                   |

立承諾書人

公司名稱：華裕實業股份有限公司  
company name: WHA YU INDUSTRIAL CO., LTD

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聯絡電話：03-5714225  
TEL: +886-3-5714225

負責人：\_\_\_\_\_ 林祺生 \_\_\_\_\_ 董事長  
sign by

立約日期：西元 2006 年 9 月 05 日  
Date: 2006. 09. 05

