

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: | 明泰科技股份有限公司 | | |
|--------------|---------------------|-----------|--|
| PART NAME: | RF Antenna Assembly | | |
| PART NO.: | | REVISION: | |
| W. Y. P/NO.: | C037-510794-A | REV.: X2 | |

| | MANUFACTURER SIGNATURE | CUSTOMER SIGNATURE |
|-----------------|---------------------------|-----------------------|
| APPROVED BY: | 子法至書間問講 | |
| DATE : | サノハー> 「中間画園 | |

WHA YU GROUP

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台樺電業制品廠

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Address: Rm. 1103A, President Commercial Centre, 608 Nathan Road, Mong Kok, Kowloon, Hong Kong

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SHANGHAI HUA YU ELECTRONIC CO., LTD. (CHINA)

上海 譁 裕 電 子 有 限 公 司

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

Tel: + 86-21-59741348 · + 86-21-59744101~4

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SU ZHOU AEON TECH CO., LTD. (CHINA)

蘇州華廣電通有限公司

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RF Antenna Cable Assembly

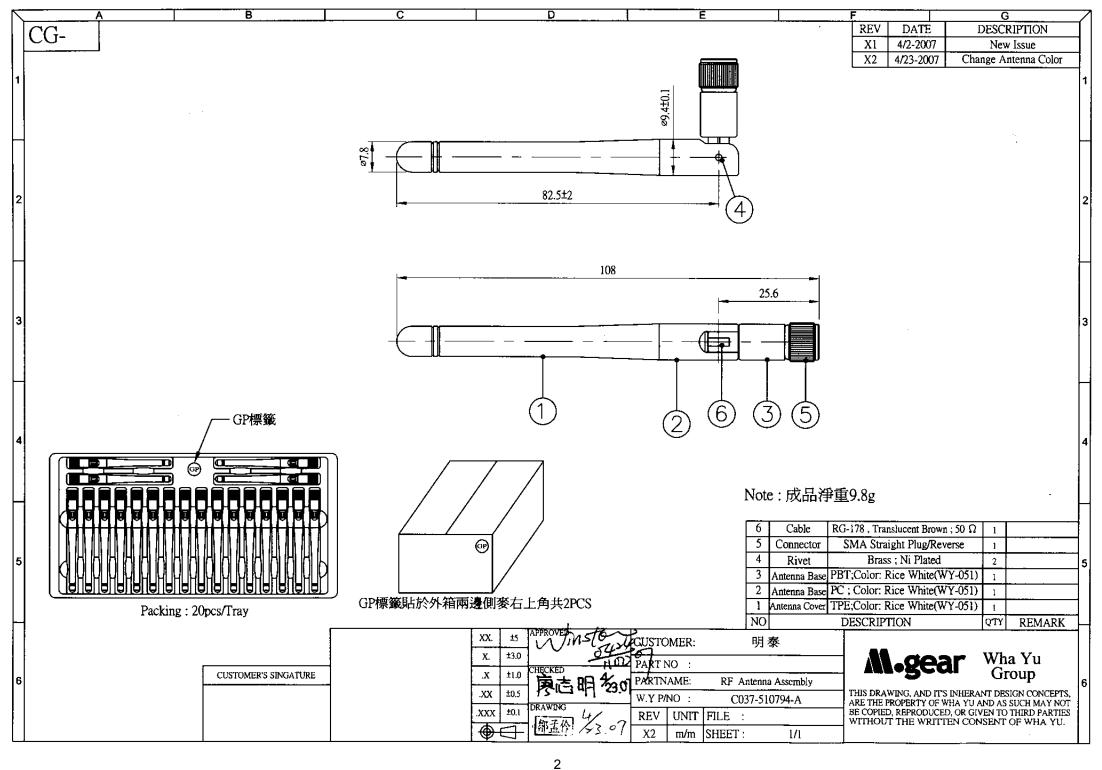
Specification

1. Electrical Properties:

- 1.1 Frequency Range...... 2.4GHz ~ 2.5GHz
- 1.2 Impedance 50Ω Nominal
- 1.4 Return Loss.....-10 dB Max.
- 1.5 RadiationOmni-directional
- 1.7 Polarization.....Linear Vertical
- 1.8 Admitted Power..... 1W
- 1.9 Cable......RG-178 Coaxial Cable
- 1.10 Connector...... SMA Plug Reverse

2. Physical Properties:

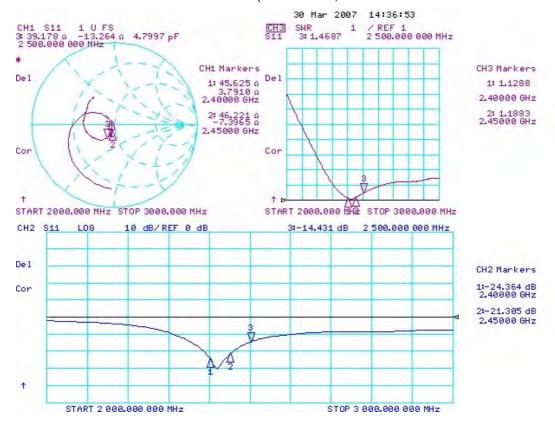
- 2.1 Antenna Cover.....TPE
- 2.2 Antenna Base..... PC
- 2.3 Antenna Base..... PBT
- 2.4 Operating Temp.-10 ~ +60
- 2.5 Storage Temp.-10 ~ +70



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RF Antenna Assembly

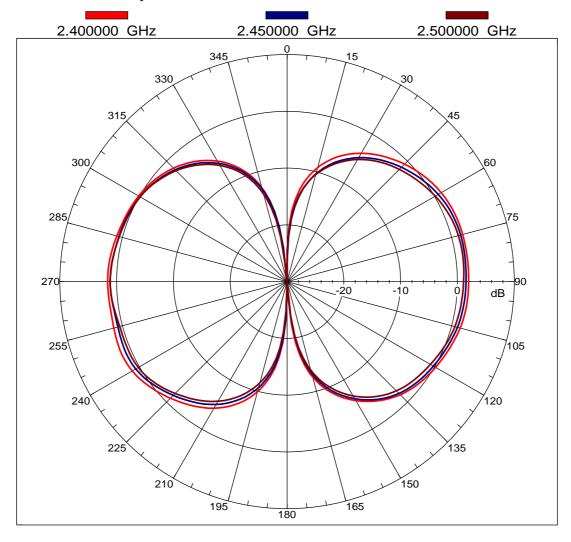
P/NO: C037-510794-A (SSR-71267) SPEC: 2.4~2.5 GHz



2007/3/30

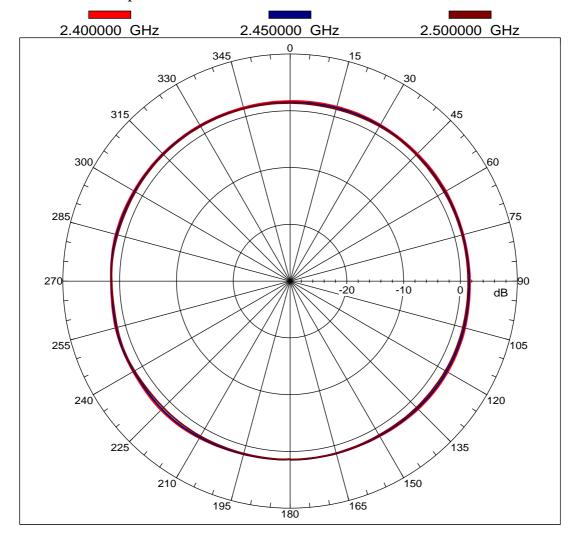
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Far-field amplitude of C037-510794-A SSR-71267 H E-PLANE.nsi



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Far-field amplitude of C037-510794-A $\,$ SSR-71267 $\,$ V $\,$ H-PLANE.nsi



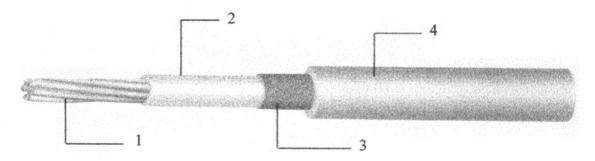
11-15 Santai Rd., Hsinchuang, Taipei Hsien, 242, Taiwan, R.O.C. Nizing Electric Co., Ltd. Tel: 02-29016164 Fax: 29050644 E-mail: shenbinnizing@yahoo.com.tw

| RG 178 B/U | FEP INSULATED | PAGE | 1/2 |
|------------|------------------------|---------|---------------|
| PRODUCT | HIGH-FREQUENCY COAXIAL | ISSUED | 21. Oct. 2003 |
| STANDARD | CABLE | 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: | | MADE BY | Roebe Lin |
|-------|---------|-----------|---------------|
| Note. | | APPROVALS | Shen Kin chat |
| | 6 5 6 3 | | / |

11-15 Santai Rd., Hsinchuang, Taipei Hsien, 242, Taiwan, R.O.C. Nizing Electric Co., Ltd. Tel: 02-29016164 Fax: 29050644 E-mail: shenbinnizing@yahoo.com.tw

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

III – Characteristics

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

| Notes | MADE BY | Roebe Lin |
|-------|-----------|---------------|
| Note: | APPROVALS | Then Bin Char |
| | | |



洋裕實業股份有限公司

WHA YU INDUSTRIAL CO., LTD

Connector 材質證明書

| 譁衤 Wha | 谷料號 ayu P/N | 100-200 | 1156-AZ | | 產品 | 品名稱 ct Name | | Plug Rev | erse Straight For RG-178 |
|-----------|--|--------------|---------|-----|----|----------------|-------------|----------|--------------------------|
| | 結構圖面 | | | | | | | | |
| | | | | | | | | | |
| | (| 4) | 材質成 | 6 | | | E | 5 | ★ 元 ► 田 |
| 1 | 絕緣體 | Teflon | 的貝队 | 1/J | | TFE | | | 表面處理 N/A |
| 2 | 外殼 | POM | | | | POM | | | Cool Gray 1C |
| 3 | 本體 | Brass | Cu | Pb | Fe | Fe+Sn | Zn | | 鍍 鎳 |
| 4 | 経縁體 | Teflon | | | | TFE | Z 11 | | 政珠 N/A |
| 5 | 中心針 | Phos. Bronze | Cu | Sn | Р | Zn | Pb | | |
| 6 | 尾管 | Brass | | Pb | | | | | 鍍金 |
| Remark | <u> L. </u> | D1455 | Cu | ru | Fe | Fe+Sn | Zn | | 鍍鎳 |
| | | | | | | | | | 三美漢 |

MATERIAL SAFETY DATA SHEET

1. General Information

Product name : HAMBURG H-2 Supplier : HANPAO CO.,LTD.

jianshe Rd., longsheng chun longhua town, bao An District, shenzhen

city, Guangdong, china.

Tel: 0755-28126898 Fax: 0755-28126080

Emergency Tel. No.: HANPAO CO.,LTD.

jianshe Rd., longsheng chun longhua town, bao An District, shenzhen

city, Guangdong,china. Tel: 0755-28126898

2. Composition

Irradiated cross-linkied, flexible polyolefin, flame retardant, hea shrinkable tubing.

3. Hazards Identification

Most important hazards: If the product is overheated or burned, harmful vapors shall be formed. The heated product has the potential to cause thermal burns, if touched.

< Note > Durning heat-shrinking process, a slight characteristic odor of plastic may be noticed. This odor is not harmful.

4. First aid measures

Inhalation: If vapors from the burning or overheated product are inhaled, provide fresh air. If symptoms are not reduced, seek medical advice.

Skin contact: If the heated product contacts skin, remove the product immediately.

Eye contact: If the heated product contacts eyes, rinse thoroughly with plenty of water for at least 15 minutes and seek medical advice.

Ingestion: Seek medical advice.

5. Fire-fighting measures

Suitable extinguishing media: water spray, dry powder, CO2 foam.

<Note> The product is flame-retarded(self-extinguish), but will burn, if continuously exposed to flame. Use the extinguishing media appropriate for the source

of the fire. The self-contained breathing apparatus and the personal protective

equipment may be needed in the evnt of large fires.

MATERIAL SAFETY DATA SHEET

6. Accidental release measures

Personal precautions: Avoid contact with the heated product. Gloves may be required to handle the product, when hot. If overheated, avoid breathing fumes which may be emitted. Environmental precaution: In common with all good industrial practice, install in well

ventilated areas only.

Methods for cleaning up: Sweep up and down in a disposal container.

7. Handling: No special handling advice required.

Storage: Store at room temperature in unopened packs to avoid direct sunlight.

8. Exposure controls / personal protection

Technical measures: Normal manufacturing environment.

Personal protection equipment: Under normal operation, not necessary.

Hand protection: Gloves may be required to handle the product, when hot.

Eye protection: Under normal operation, not necessary. Other protection: Under normal operation, not necessary.

9. Physical and chemical properties

Form: : liquor(tubing)

Color(standard) : Black, red, yellow, green, blue and white

Odor : Slight characteristic plastic odor.

Melting point/range : The material has melting point, 90 nominal, but it will not flow over

Boiling point/range : Not applicable
Flash point : Unknown
Ingintion point : Unknown
Explosive properties : Not applicable
Vapor pressure : Not applicable
Specific gravity(20 : 1.35 nominal

Water solubility (20 : Small molecular solubility in water

10. Stability and preparation

Stability: Stable at normal conditions. Recommended max. operating temperature is 125

Don't heat over 300 to avoid harmul vapors which may be formed at high

temperature.

Material to avoid: None

Hazardous decomposition products: None under normal conditions. If the product is overheated or burned, harmful vapors (carbon monoxide and hydrogen halides) maybe be generated.

HBL-MSDS-2005

MATERIAL SAFETY DATA SHEET

11. Toxicological information

Acute toxicity : Unknown

Skin : Not irritating, but the heated product has potential to cause thermal burn.

Eyes : If the product is overheated or burned, vapors may irritate eyes.

Inhalation: Harmful vapors produced by overheating or burning may cause irritation to the

upper respiratory tract.

Ingestion: Not digestible.

Further information : During heating process of the product, slight plastic smell may cause

discomfort for susceptible persons.

12. Ecological information

Biodegradability : Unknown (no data)
Aquatic toxicity : Unknown (no data)
Further information : Unknown (no data)

13. Disposal considerations:

Product : Incinerate or bury in accordance with local and national regulations.

Contact proper local authorities

Contaminated packins: Cardboard boxes and reels can be delivered to local recycling facilities.

14. Transport information

Not classified as dangerous with regard to the transport regulation.

15. Regulatory Information

According to EC directive : Unknown
Symbol : Not applicable
R-phrase : Not applicable
S-phrase : Not applicable

16. Other Information

The information provided in this Product Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or property assurances. The information released only to the specific material designed and maybe be valid for such a material used in combination with any other materials or in any other materials or in any process, unless specified in this text.

Aproval by YINHAIYUN