



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: 吉翁電子(深圳)有限公司

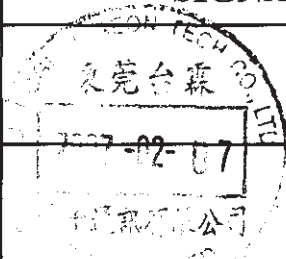
PART NAME: RF Antenna Assembly

PART NO.:

REVISION:

W. Y. P/NO.: K181--510049-A

REV.: X1

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :	2007.2.7	

WHA YU GROUP

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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
- 1.3 VSWR 1.92 Max.
- 1.4 Return Loss..... -10 dB Maximum
- 1.5 Radiation..... Omni-directional
- 1.6 Gain(peak)..... 2.0dBi
- 1.7 Polarization..... Linear Vertical
- 1.8 Admitted Power..... 1W

2. Physical Properties :

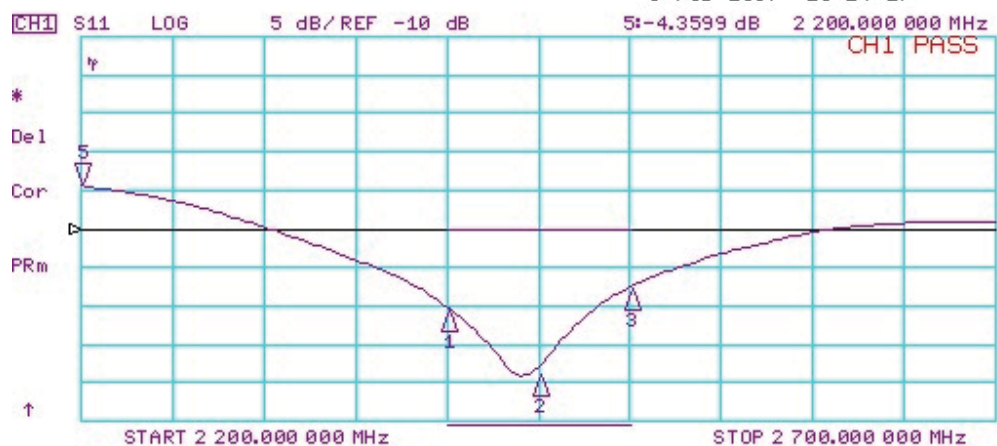
- 2.1 Cable..... RG-178 Coaxial Cable
- 2.2 Antenna Cap..... TPE
- 2.3 Upper Fixed..... PC
- 2.4 Bottom Fixed..... PBT
- 2.5 Operating Temp. -20°C ~ +65°C
- 2.6 Storage Temp. -30°C ~ +75°C
- 2.7 Color Black
- 2.8 Connector..... SMA Straight Plug Reverse

A		B		C		D		E		F		G																																									
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										A		02/05-2007																																									
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<div style="display: flex; justify-content: space-between;"> <div> <p>XX ±5</p> <p>X ±3.0</p> <p>X ±1.0</p> <p>XX ±0.5</p> <p>XXX ±0.1</p> </div> <div> <p>CUSTOMER'S SIGNATURE</p> </div> </div>																																																					
<p>THIS DRAWING, AND ITS INHERENT DESIGN CONCEPTS, ARE THE PROPERTY OF WHA YU AND AS SUCH MAY NOT BE COPIED, REPRODUCED, OR GIVEN TO THIRD PARTIES WITHOUT THE WRITTEN CONSENT OF WHA YU.</p>																																																					

RF Antenna Assembly

P/No. K181-510049-A SSR-00508 Spec:2.4~2.5GHz

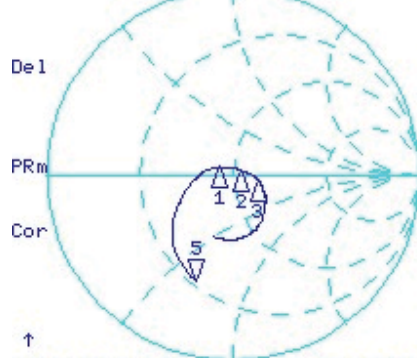
6 Feb 2007 15:14:27



CH1 Markers

1:-20.847 dB
2.40000 GHz
2:-29.233 dB
2.45000 GHz
3:-18.094 dB
2.50000 GHz

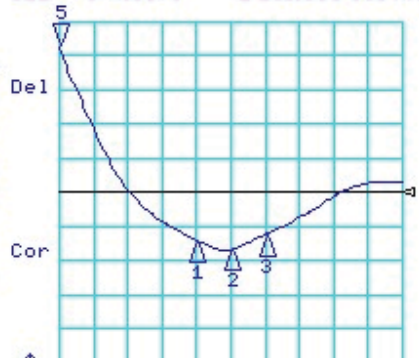
CH2 S11 1 U FS
S: 17.703 Ω -31.705 Ω 2.2818 pF
2 200.000 000 MHz



CH2 Markers

1: 42.129 Ω
2.8281 Ω
2.40000 GHz
2: 52.930 Ω
2.0195 Ω
2.45000 GHz
3: 63.535 Ω
-4.1230 Ω
2.50000 GHz

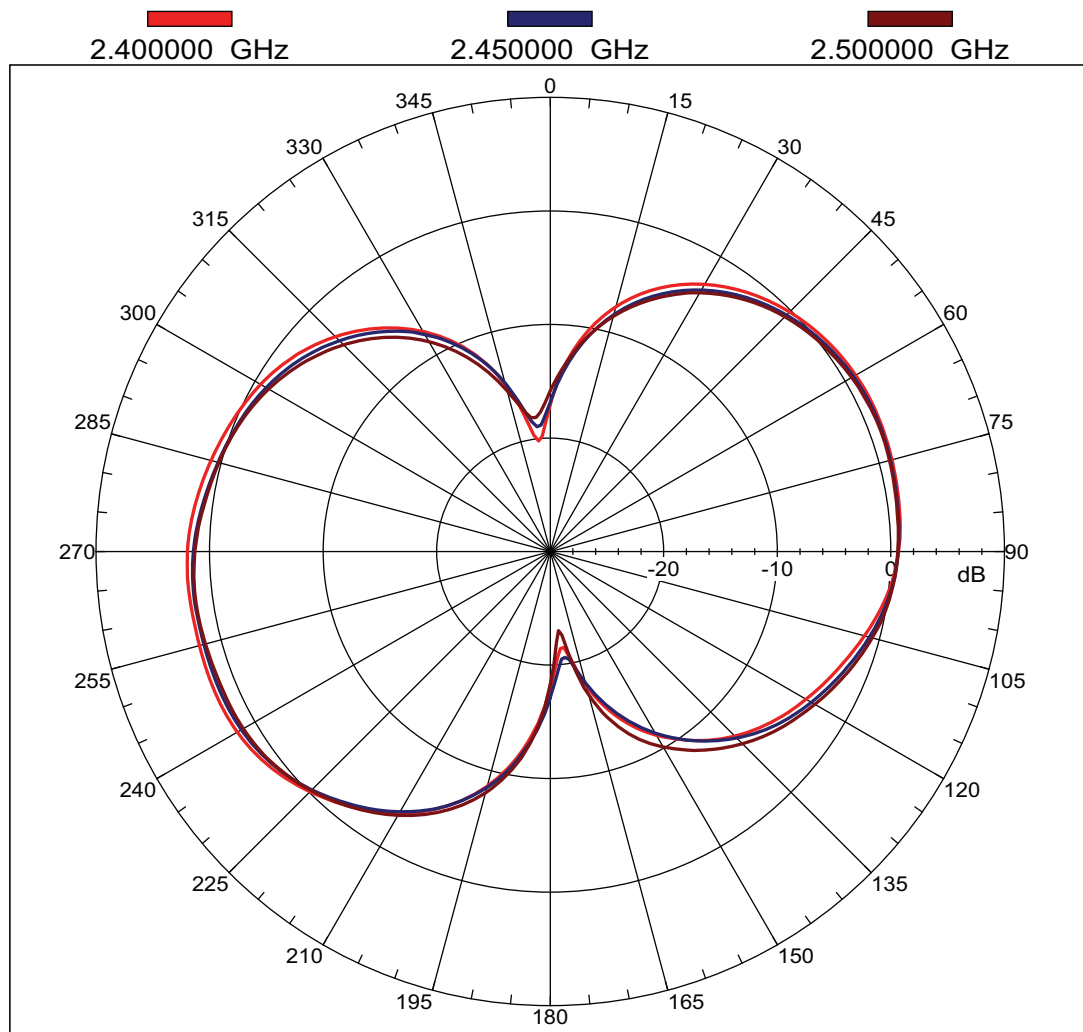
CH4 SWR 500 m / REF 1.92
S11 5: 4.0676 2 200.000 000 MHz



CH4 Markers

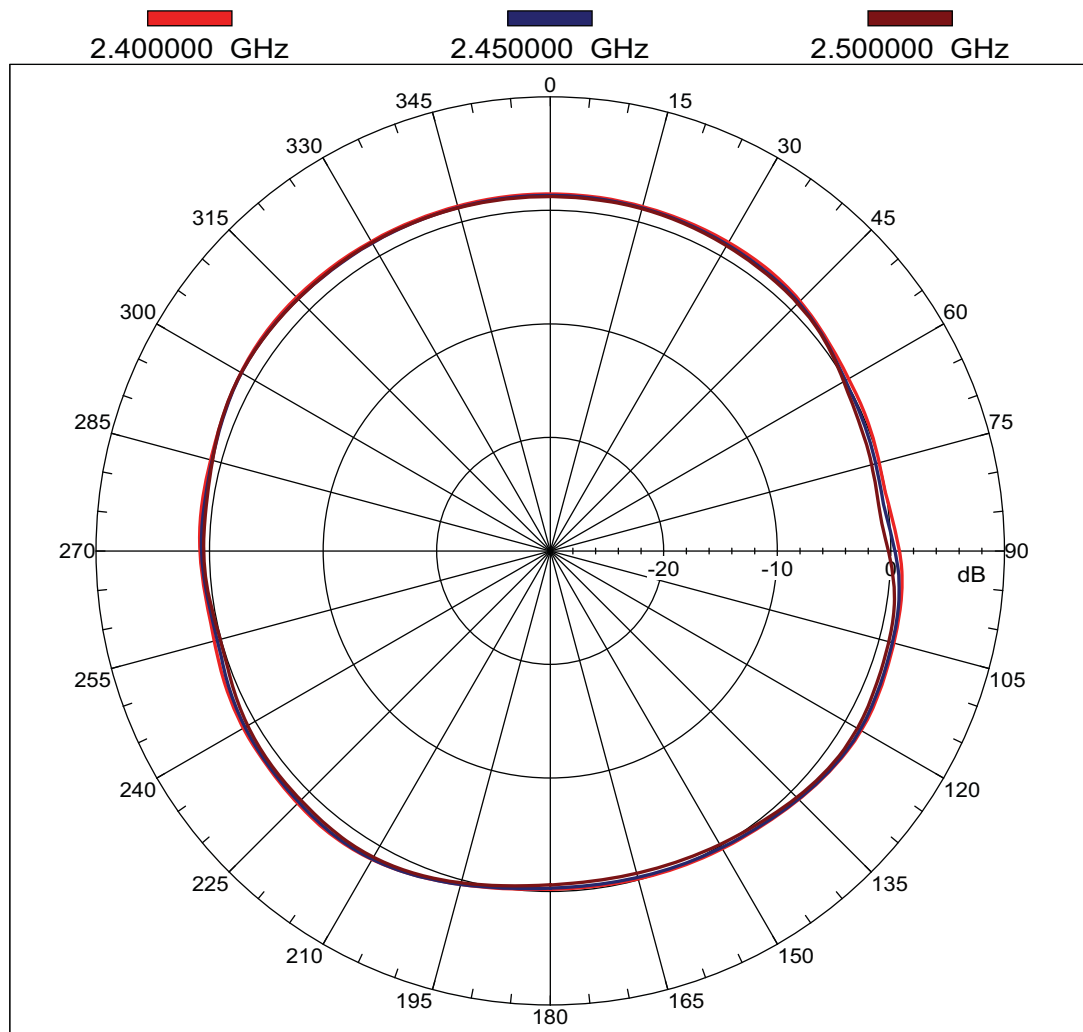
1: 1.1995
2.40000 GHz
2: 1.0715
2.45000 GHz
3: 1.2845
2.50000 GHz

Far-field amplitude of K181-510049-A SSR-00508 H E-PLANE.nsi



2007.02.07

Far-field amplitude of K181-510049-A SSR-00508 V H-PLANE.nsi



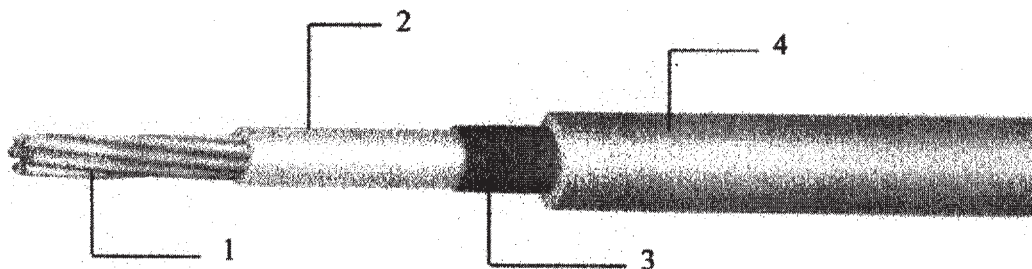
2007.02.07

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

I - Scope

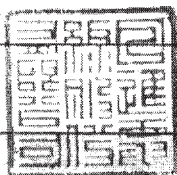
This specification presents a FEP insulated high-frequency coaxial cable AWG 30, 1.8 mm O.D. for internal wiring of electronic equipment, such as Computer / Notebook with wireless communication systems.

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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Nizing Electric Co., Ltd.

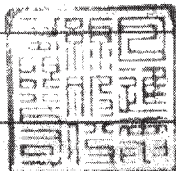
11-15 Santai Rd., Hsinchuang, Taipei Hsien, 242, Taiwan, R.O.C.
Tel: 02-29016164 Fax: 29050644 E-mail: shenbinnizing@yahoo.com.tw

RG 178 B/U	FEP INSULATED HIGH-FREQUENCY COAXIAL CABLE	PAGE	2 / 2
PRODUCT 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 AC 3 kv for 0.2 sec.	Spark test
		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	
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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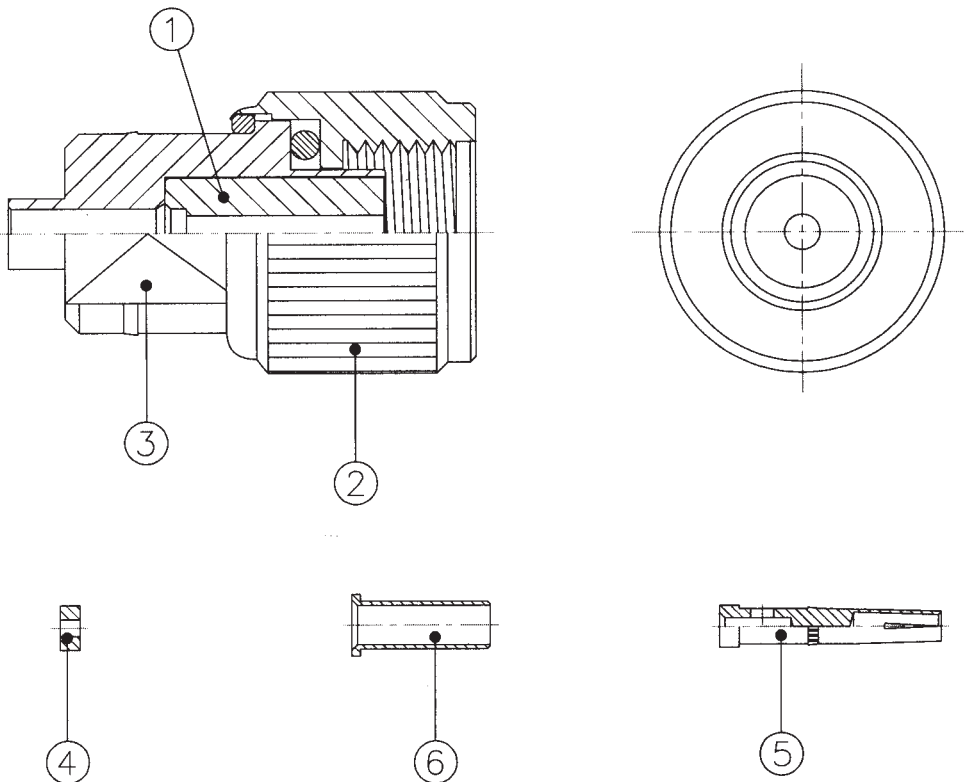
華裕實業股份有限公司

WHA YU INDUSTRIAL CO., LTD

Connector 材質證明書

華裕料號 Whayu P/N	100-2001150-AZ	產品名稱 Product Name	SMA Plug Reverse Straight For RG-178
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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