

Appendix B

Antenna Specification



WHA YU INDUSTRIAL CO., LTD. (HEAD OFFICE)

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

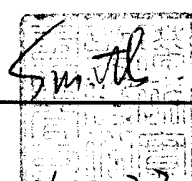
SPECIFICATION FOR APPROVAL

CUSTOMER: 友勁科技股份有限公司

PART NAME: 2.4G RF Antenna Assembly

PART NO: 11722B028A57*02 **REVISION:**

W. Y. P / NO.: C056-510120-A **REV.:** X2

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :	2005.10.22	

WHA YU GROUP

WHA YU INDUSTRIAL CO., LTD. (HEAD OFFICE)

譚裕實業股份有限公司

Address: #70 Shui Li Road, Hsin Chu City, Taiwan, R.O.C.

Tel: + 886-3-5714225 (REP)

Fax: + 886-3-5713853 • + 886-3-5723600

TAI HWA ELECTRONIC CO., LTD. (CHINA)

台樺電業製品廠

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

上海華裕電子有限公司

Address: Lian Ho Village, Bai Ho Town, Qing

Pu Country Shanghai, China

Tel: + 86-21-59741348 • + 86-21-59743624

Fax: + 86-21-59741347

RF Antenna Cable Assembly

Specification

1. Electrical Properties :

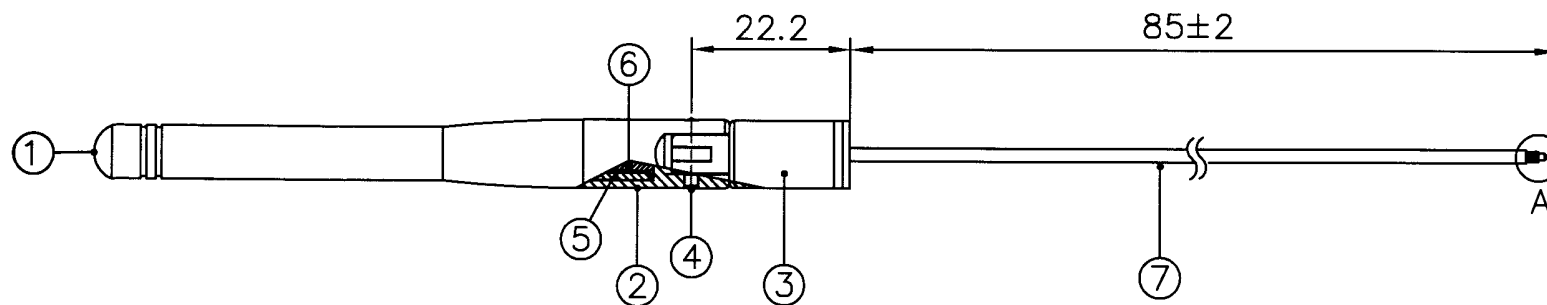
- 1.1 Frequency Rang..... 2.4GHz ~ 2.5GHz
- 1.2 Impedance 50 Ω Nominal
- 1.3 VSWR 1.92 Max.
- 1.4 Return Loss..... -10dB Maximum
- 1.5 Electrical Wave..... $1/2 \lambda$ Diople
- 1.6 Gain..... 1.8 dBi
- 1.7 Admitted Power..... 1W

2. Physical Properties :

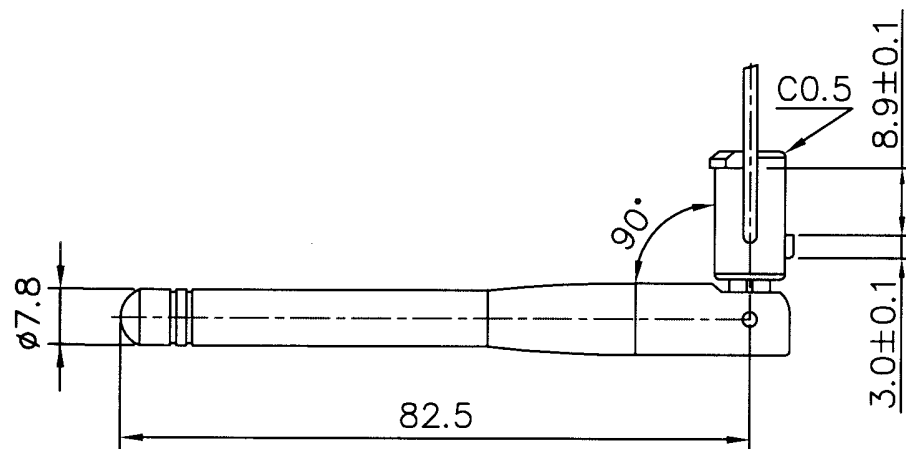
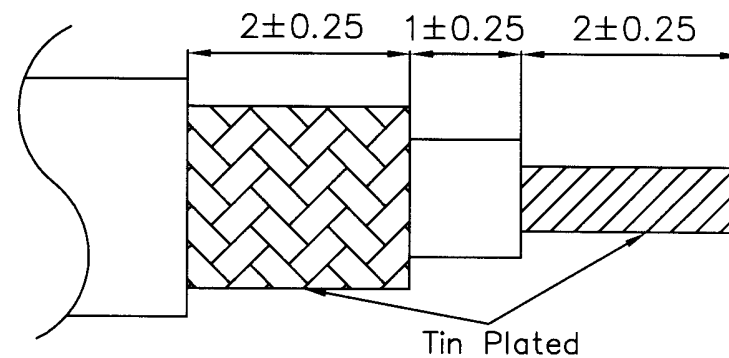
- 2.1 Cable..... RG-178 Cable
- 2.2 Antenna Cover..... TPE
- 2.3 Antenna Base..... PC
- 2.4 Operating Temp. -20°C ~ +65°C
- 2.5 Storage Temp. -30°C ~ +75°C
- 2.6 Color Cool Gray 4C

CG-

REV	DATE	DESCRIPTION
X1	10/13-2003	New Issue
X2	10/22-2003	Changed PART NO.




Detail A



7	Cable	RG-178 ,50Ω ,Translucent Brown	1	
6	Insulator	ABS Compound ,White	1	
5	Ground Tube	Brass ,Ni Plated	1	
4	Rivet	Brass ,Silver Surfaced	2	
3	Antenna Base	PC ; Color :Cool Gray 4C	1	
2	Antenna Base	PC ; Color : Cool Gray 4C	1	
1	Antenna Body	TPE ; Color : Cool Gray 4C	1	
NO	DESCRIPTION		QTY	REMARK

CUSTOMER'S SIGNATURE	XX	±5	APPROVED	
	X	±3.0	CHECKED	
	X	±1.0		
	XX	±0.5		
	XXX	±0.1	DRAWING	

CUSTOMER: 友勁科技股份有限公司		
PART NO : 11722B028A57*02		
PARTNAME: RF Antenna Cable Assembly		
W.Y PNO : C056-510120-A		
REV	UNIT	FILE : SSR-2643
X2	m/m	SHEET : 1/1


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 譚裕實業股份有限公司
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Cable Specification

Cable : Mil-C-17 Coaxial Cable RG-178

1. Construction :

- 1 Conductor..... 30AWG 7/38 SCCS
- 2 Dielectric..... PTFE OD : 0.033"±0.002"
- 3 Shielded..... 38AWG SPC OD : 0.051" Nominal
- 4 Jacket..... FEP OD : 0.071"±0.004"

2. Physical Properties :

- 1 Weight per 1000ft..... 6.3 lbs Maximum
- 2 Bend Radius..... 0.35" Minimum
- 3 Operating Temperature Range -55°C ~ 200°C

3. Electrical Properties:

- 1 Impedance..... 50±2 ohms
- 2 Capacitance..... 32 pF/ft Maximum
- 3 Cut off Frequency..... 116 GHz
- 4 Attenuation..... 45.0 dB/100ft @ 1GHz
64.4 dB/100ft @ 2GHz
79.7 dB/100ft @ 3GHz
92.7 dB/100ft @ 4GHz
104.3 dB/100ft @ 5GHz
115.0 dB/100ft @ 6GHz



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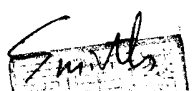
SPECIFICATION FOR APPROVAL

CUSTOMER: 友勁科技股份有限公司

PART NAME: 2.4G RF Antenna Assembly

PART NO: 11722B028A57*03 **REVISION:**

W. Y. P / NO.: C056-510113-A **REV.:** X2

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :	2003-10-22	

WHA YU GROUP

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RF Antenna Cable Assembly

Specification

1. Electrical Properties :

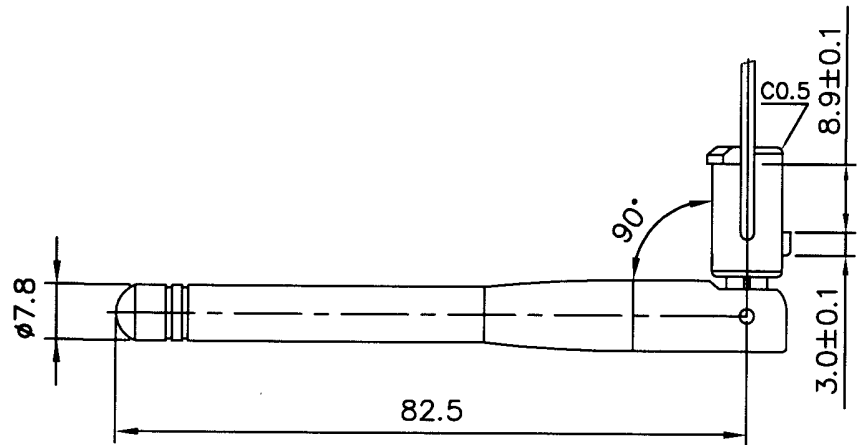
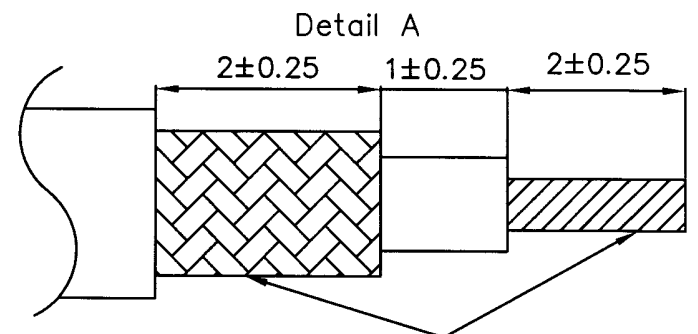
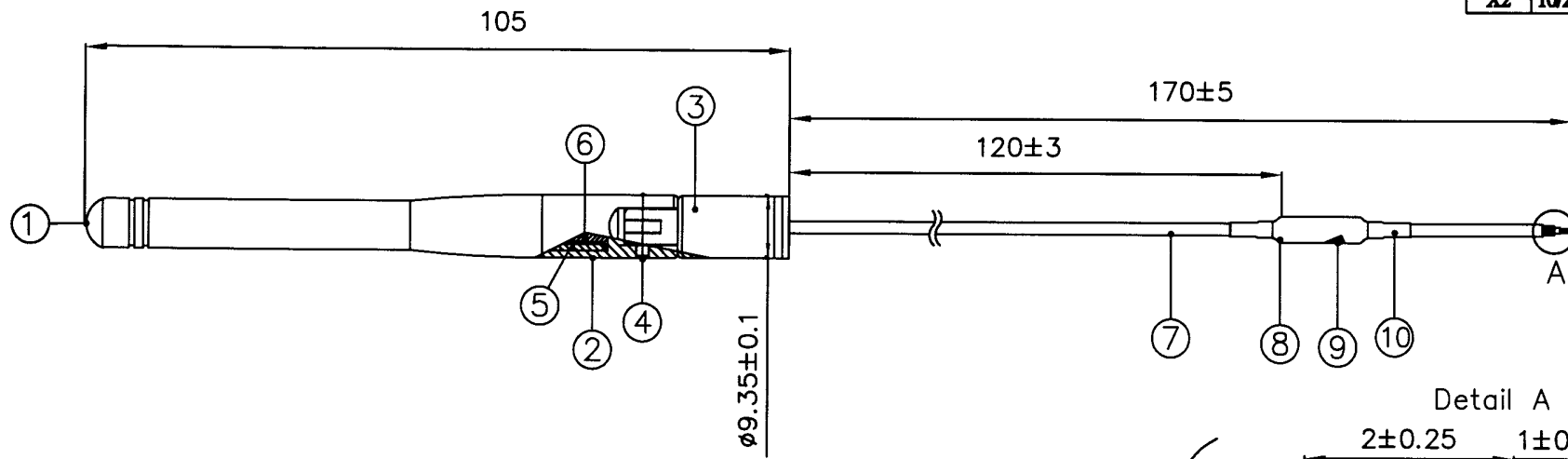
- 1.1 Frequency Rang.....2.4GHz ~ 2.5GHz
- 1.2 Impedance 50 Ω Nominal
- 1.3 VSWR 1.92 Max.
- 1.4 Return Loss.....-10dB Maximum
- 1.5 Electrical Wave..... 1/2 λ Diople
- 1.6 Gain..... 1.8 dBi
- 1.7 Admitted Power..... 1W

2. Physical Properties :

- 2.1 Cable..... RG-178 Cable
- 2.2 Antenna Cover..... TPE
- 2.3 Antenna Base.....PC
- 2.4 Operating Temp. -20°C ~ +65°C
- 2.5 Storage Temp. -30°C ~ +75°C
- 2.6 Color Cool Gray 4C
- 2.7 Core.....RH 4*2*10


CG-xx

REV	DATE	DESCRIPTION
X1	10/03-2003	New Issue
X2	10/22-2003	Changed PART NO.



NO	DESCRIPTION	QTY	REMARK
10	Cable	Heat Shrink Tube	1
9	Core	RH 4*10*2	1
8	Tube	Heat Shrink Tube	1
7	Cable	RG-178 Cable	1
6	Insulator	ABS Compound, White	1
5	Ground Tube	Brass, Ni Plated	1
4	Rivet	Brass, Plated (Ni)	2
3	Antenna Base	PC; Color: Cool Gray 4C	1
2	Antenna Base	PC; Color: Cool Gray 4C	1
1	Antenna Body	TPE; Color: Cool Gray 4C	1

CUSTOMER'S SIGNATURE	XX ±3.0	APPROVED	CUSTOMER: 友勁科技股份有限公司
	X ±2.0	<i>Sm. th 10/22</i>	
	X ±1.0	CHECKED	PARTNAME: RF Antenna Cable Assembly
	XX ±0.5	<i>beta 10/22</i>	W.Y P/NO: C056-510113-A
	XXX ±0.1	DRAWING	REV UNIT FILE: SSR-2643
		<i>10-22-03</i>	X2 m/m SHEET: 1/1


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1. Construction :

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- 2 Dielectric..... PTFE OD : 0.033"±0.002"
- 3 Shielded.....38AWG SPC OD : 0.051" Nominal
- 4 Jacket.....FEP OD : 0.071"±0.004"

2. Physical Properties :

- 1 Weight per 1000ft..... 6.3 lbs Maximum
- 2 Bend Radius.....0.35" Minimum
- 3 Operating Temperature Range -55°C ~ 200°C

3. Electrical Properties:

- 1 Impedance..... 50±2 ohms
- 2 Capacitance..... 32 pF/ft Maximum
- 3 Cut off Frequency..... 116 GHz
- 4 Attenuation.....45.0 dB/100ft @ 1GHz
64.4 dB/100ft @ 2GHz
79.7 dB/100ft @ 3GHz
92.7 dB/100ft @ 4GHz
104.3 dB/100ft @ 5GHz
115.0 dB/100ft @ 6GHz



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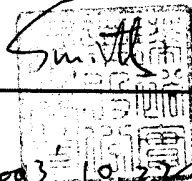
SPECIFICATION FOR APPROVAL

CUSTOMER: 友勁科技股份有限公司

PART NAME: 2.4G RF Antenna Assembly

PART NO: 11723B02*357*00 **REVISION:**

W. Y. P / NO.: C056-510114-A **REV.:** X2

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :	2003-10-22	

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RF Antenna Cable Assembly

Specification

1. Electrical Properties :

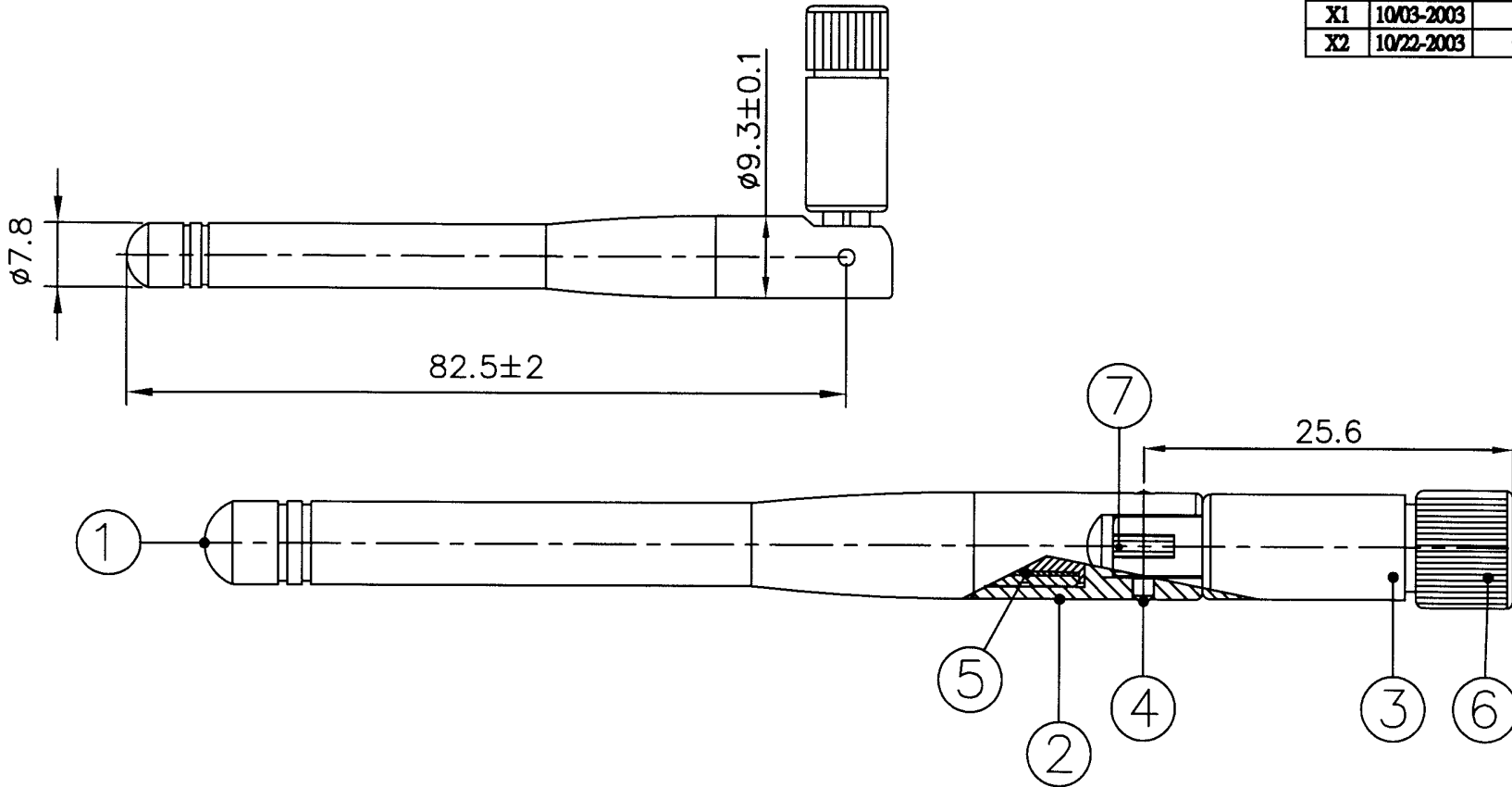
- 1.1 Frequency Rang.....2.4GHz ~ 2.5GHz
- 1.2 Impedance 50 Ω Nominal
- 1.3 VSWR 1.92 Max.
- 1.4 Return Loss..... -10dB Maximum
- 1.5 Electrical Wave..... 1/2 λ Diople
- 1.6 Gain..... 1.8 dBi
- 1.7 Admitted Power..... 1W

2. Physical Properties :

- 2.1 Cable..... RG-178 Cable
- 2.2 Antenna Cover..... TPE
- 2.3 Antenna Base..... PC
- 2.4 Operating Temp. -20 $^{\circ}$ C ~ +65 $^{\circ}$ C
- 2.5 Storage Temp. -30 $^{\circ}$ C ~ +75 $^{\circ}$ C
- 2.6 Color Cool Gray 4C
- 2.7 Connector..... SMA Plug Reverse Plated Gold

CG-


REV	DATE	DESCRIPTION
X1	10/03-2003	New Issue
X2	10/22-2003	Changed PART NO.



NO	DESCRIPTION	QTY	REMARK
7	Cable	1	RG-178 , Translucent Brown ; 50 Ω
6	Connector	1	SMA Straight Plug/Reverse Plated Gold
5	Ground Tube	1	Brass , Ni plated
4	Rivet	2	Brass , Plated Ni
3	Antenna Base	1	PC ; Color : Cool Gray 4C
2	Antenna Base	1	PC ; Color : Cool Gray 4C
1	Antenna Cover	1	TPE ; Color : Cool Gray 4C

CUSTOMER'S SIGNATURE	XX	±5	APPROVED	Smith 10/22/03 Peter 10/22/03 10-22-03
	X	±1.0	CHECKED	
	X	±0.1		
	XX	±0.01		
	XXX	±0.005	DRAWING	

CUSTOMER: 友勁科技股份有限公司		
PART NO : 11723B02*357*00		
PARTNAME: 24G RF Antenna Assembly		
W.Y.P/NO : C056-510114-A		
REV	UNIT	FILE : SSR-2643
X2	m/m	SHEET : 1/1


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