

(台灣) 譚裕實業股份有限公司

(大陸) 東莞台霖電子通訊有限公司
蘇州華廣電通有限公司
普翔電子貿易(上海)有限公司
東莞倍能電子有限公司

品名： 無線網路設備用天線

規格： Antenna+RG-178 Cable+SMA Plug Reverse

料號： C059-510138-A (SSR-01921)

客戶： 訊舟科技股份有限公司

客戶料號： 3009-00000085-01Z

日期： 2010/11/25

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確認				客戶確認
製作	審核	核准	業務	
Sauls 11/25	✓	Derek 11/25		

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RF Antenna Assembly

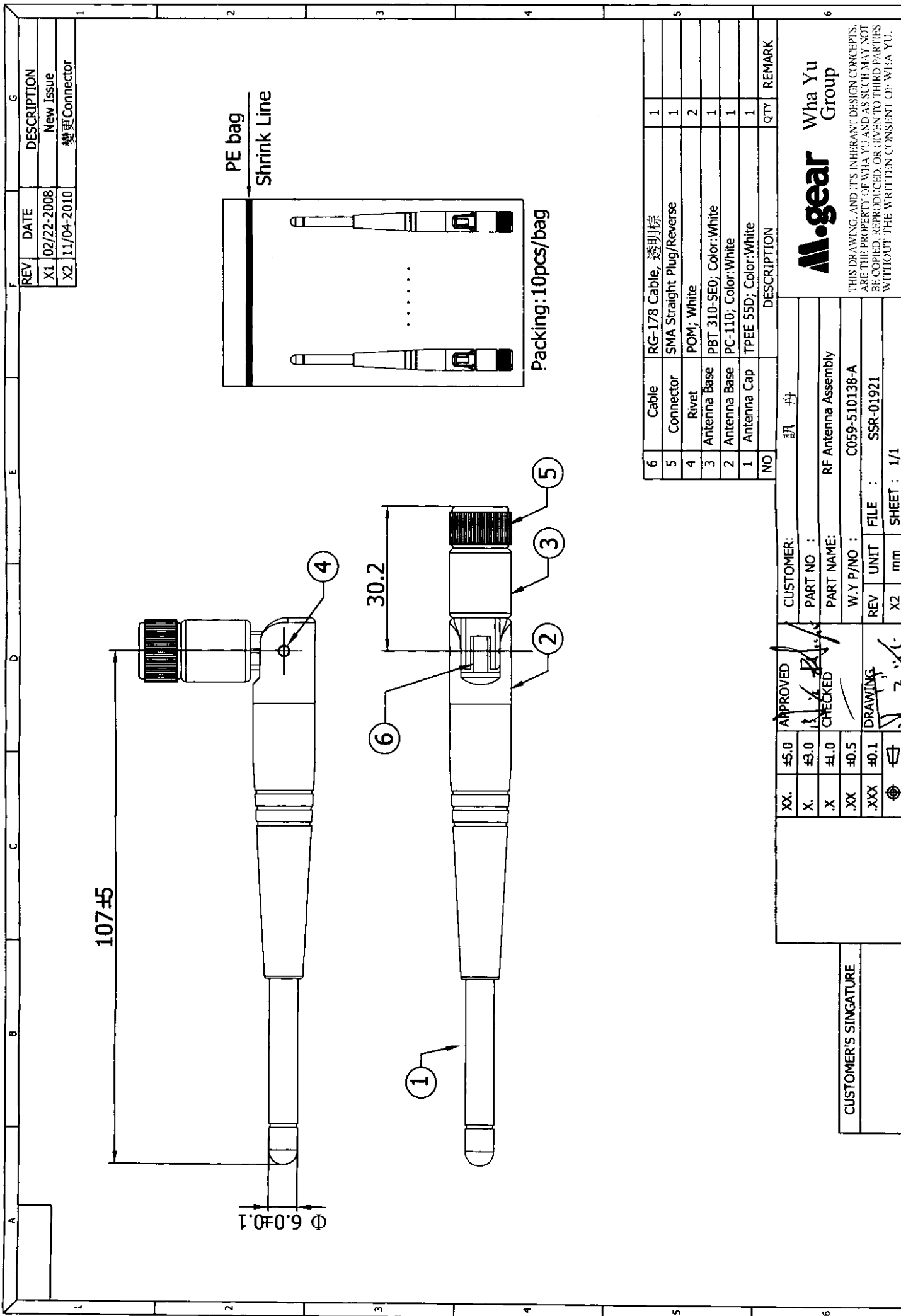
Specification

1. Electrical Properties :

- 1.1 Frequency Range..... 2.4GHz ~ 2.5GHz
- 1.2 Impedance 50Ω Nominal
- 1.3 VSWR 1.92 :1Max.
- 1.4 Return Loss..... -10 dB Max.
- 1.5 Radiation Omni-directional
- 1.6 Gain(peak)..... 3.0dBi
- 1.7 Polarization..... Linear; Vertical
- 1.8 Admitted Power..... 1W
- 1.9 Cable..... RG-178 Cable,透明棕,50Ω.
- 1.10 Connector..... SMA Straight Plug Reverse

2. Physical Properties :

- 2.1 Antenna Body..... 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 White



REV	DATE	DESCRIPTION
X1	02/22-2008	New Issue
X2	11/04-2010	變更Connector

NO	DESCRIPTION	QTY	REMARK
6	Cable	1	
5	Connector	1	
4	Rivet	2	
3	Antenna Base	1	
2	Antenna Base	1	
1	Antenna Cap	1	

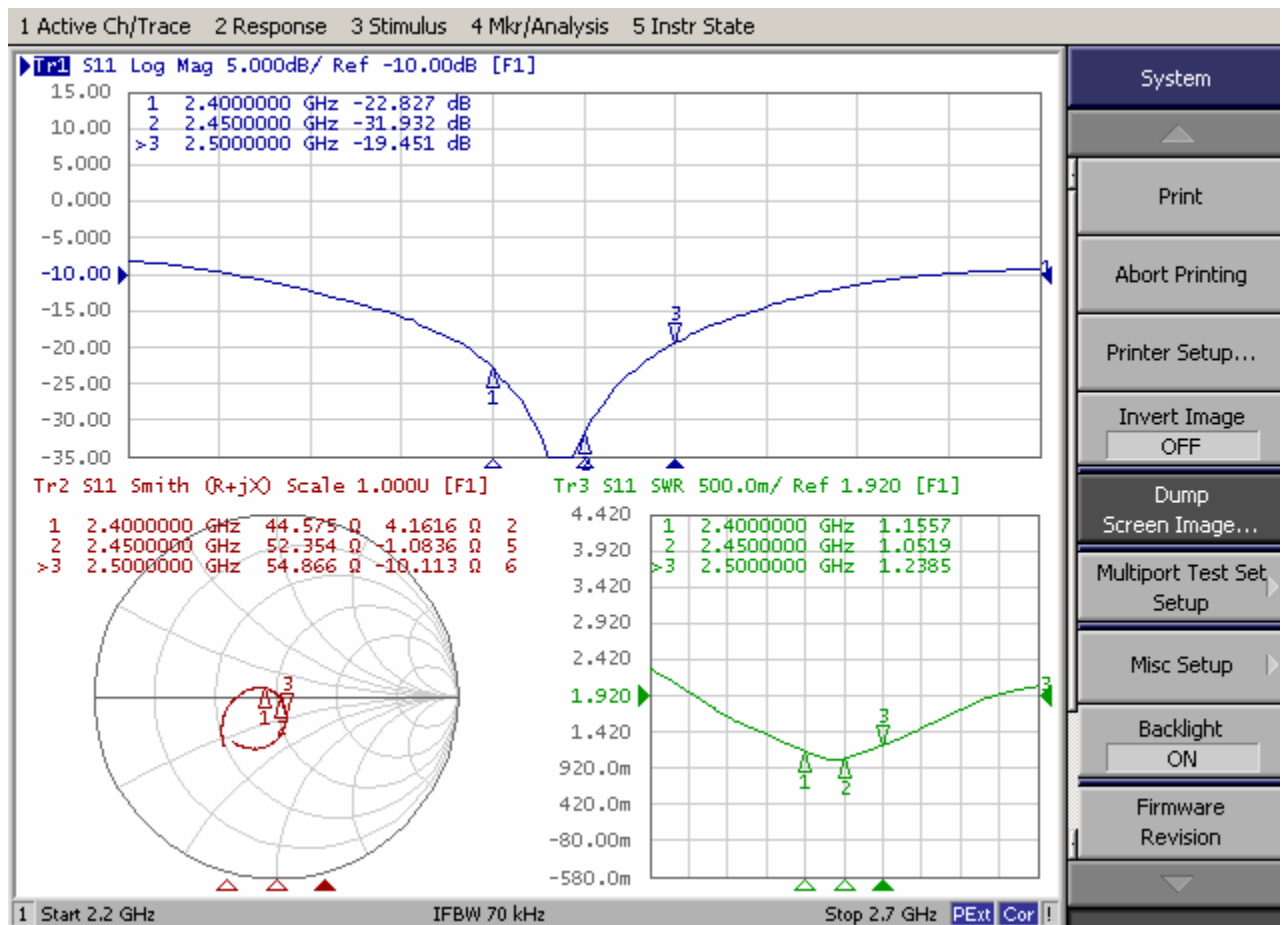
CUSTOMER: 訊 丹	
PART NO : RF Antenna Assembly	
W.Y P/NO : C059-510138-A	
REV	UNIT
X2	mm
FILE : SSR-01921	
SHEET : 1/1	
APPROVED	
XX. ±5.0	±3.0
X. ±3.0	±1.0
X. ±1.0	±0.5
XX. ±0.5	±0.1
XXX. ±0.1	
DRAWING	
CUSTOMER'S SIGNATURE	

Wha Yu Group

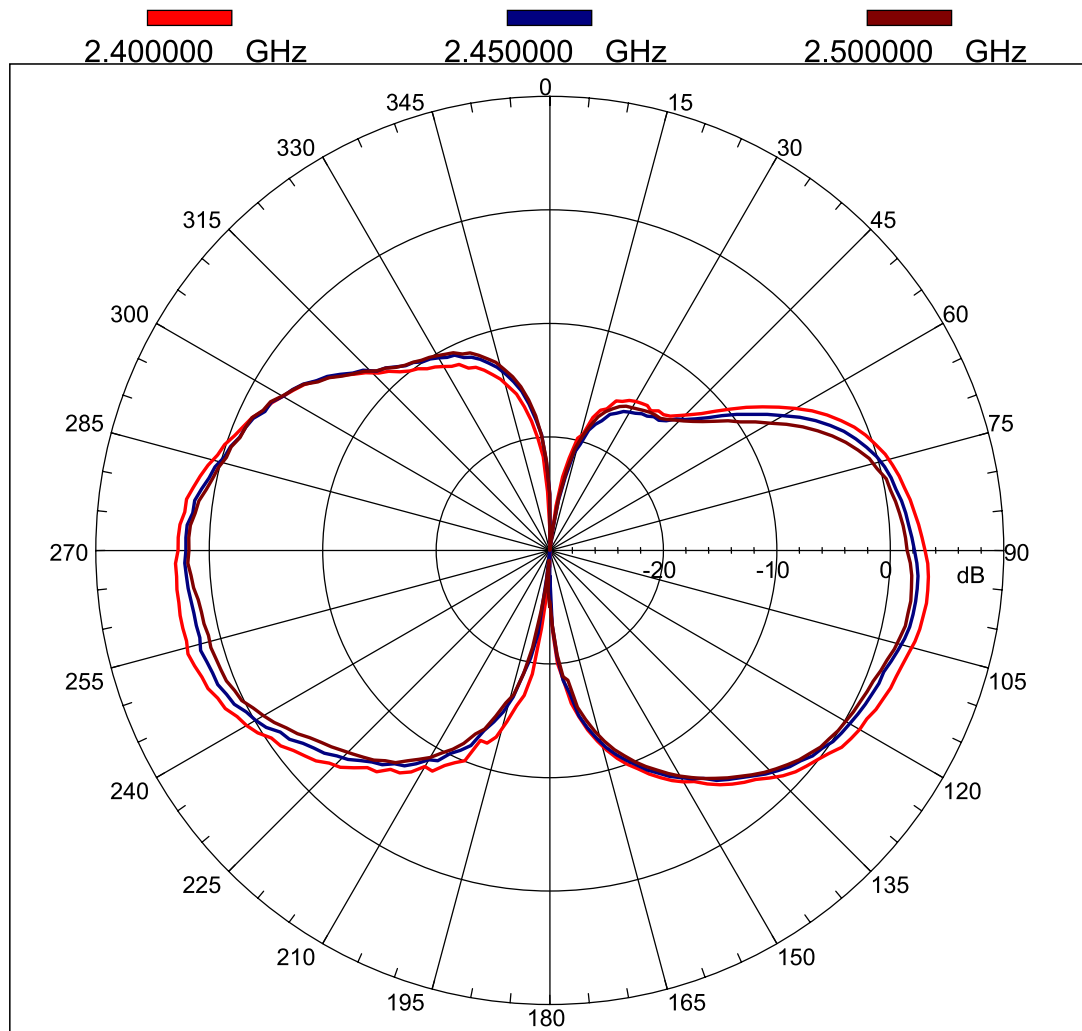
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RF Antenna Assembly

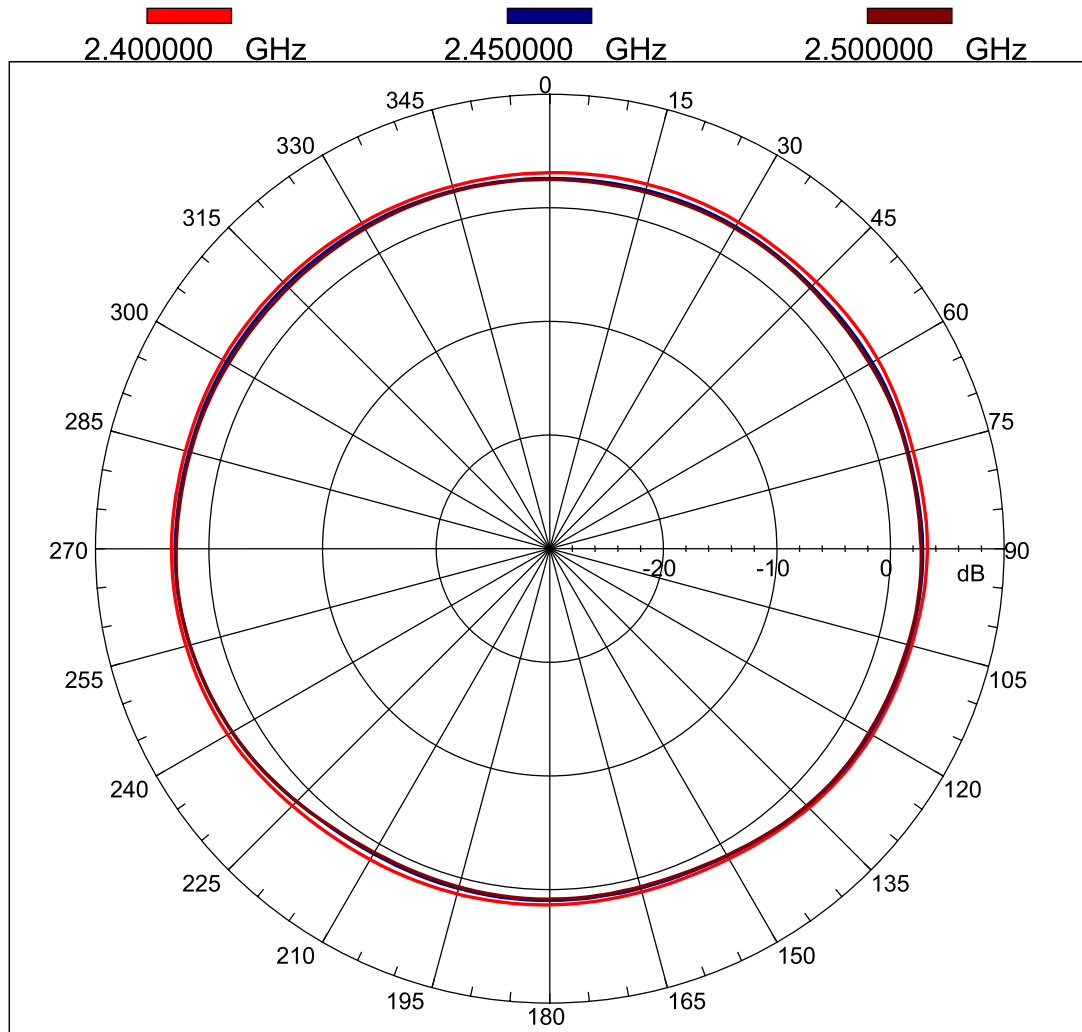
P/No.C059-510138-A SSR-01921 Spec:2.4~2.5GHz



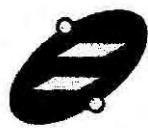
Far-field amplitude of C059-510138-A SSR-01921 E-PLANE.nsi



Far-field amplitude of C059-510138-A SSR-01921 H-PLANE.nsi



型号 Type	RG178/50	料号 P/N	SY178/50-007(Brown)	
结构图 Structure drawing				
结构特性 Structure characteristics				
结构 Structure	项目 Item		标准值 Standard value	
①内导体 Inner conductor	材料 Material		镀银铜线 Silverplated copper wire	
	组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		7/0.102	
	(绞合)标称外径(mm) (Intertwist)NOM.O.D.(mm)		0.306±0.02	
②绝缘层 Insulation	材料 Material		聚四氟乙烯 PTFE	
	颜色 Color		本色 Natural	
	标称外径(mm) NOM.O.D.(mm)		0.86±0.05	
③外导体 Outer conductor	材料 Material		镀锡铜线 Tinned copper wire	
	组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		3/0.1	
	标称外径(mm) NOM.O.D.(mm)		1.3±0.05	
	覆盖率(%) Coverage ratio(%)		≥90	
④护套层 Jacket	材料 Material		聚全氟乙丙烯 FEP	
	颜色 Color		棕 Brown	
	标称外径(mm) NOM.O.D.(mm)		1.78±0.05	
电性能特性 Electrical characteristics				
项目 Item	标准值 Standard value	项目 Item	频率 Frequency	标准值 Standard value 单位 Unit:dB/m
电容(pF/m) Capacitance(pF/m)	96	衰减 Attenuation	0.1GHz	≤0.52
速率(%) Velocity(%)	70		0.4GHz	≤1.20
阻抗(Ω) Impedance(Ω)	50±2		1GHz	≤1.70
驻波比 Standing wave ratio	≤1.3@0~6GHz		2GHz	≤2.42
最大工作电压(V) Max.operating voltage(V)	1000		3GHz	≤3.08
最大工作频率(GHz) Max.operating frequency(GHz)	3		4GHz	≤3.63
			5GHz	≤4.15
			6GHz	≤4.80
机械性能特性 Mechanical characteristics				
项目 Item	单位 Unit	标准值 Standard value		
最小弯曲半径(一次) Min.bending radius static	mm	10		
最小弯曲半径(重复) Min.bending radius repeated	mm	—		
工作温度范围 Operating temperature	℃	-55~+200		



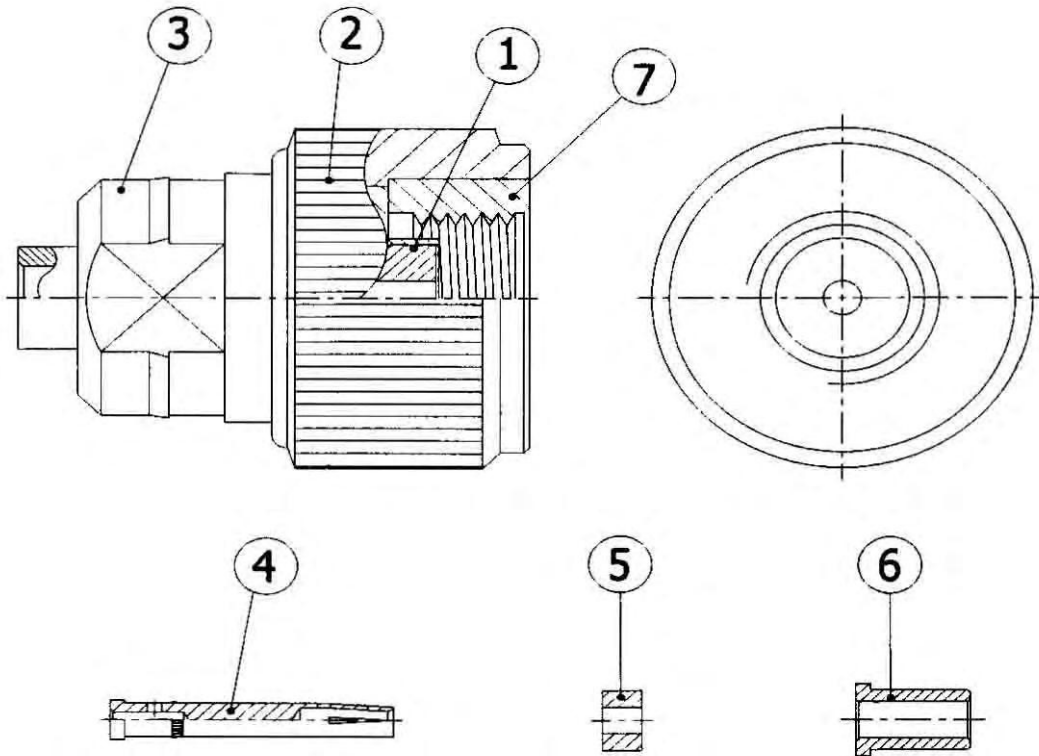
華裕實業股份有限公司

WHA YU INDUSTRIAL CO., LTD

Connector Material Data Sheet

華裕料號 Whayu P/N	100-2001251-AZ	產品名稱 Product Name	Big SMA Straight Plug Reverse For RG-178
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Structural Drawing



Material									Surface
1	Dielectric	Teflon	PTFE						N/A White
2	Shell	Plastic	PBT+FB						White
3	Body	Zinc Alloy	Zn	Fe	Al	Mg	Cu	Pb	Nickel Plated(80 μ ")
4	Pin	Phosphor Bronze	Cu	Sn	P	Zn	Pb		Gold Plated (5 μ ")
5	Dielectric	Teflon	PTFE						N/A White
6	Ferrule	Brass	Cu	Pb	Fe	Fe+Sn	Zn		Nickel Plated(80 μ ")
7	Screw	Brass	Cu	Pb	Fe	Fe+Sn	Zn		Nickel Plated(80 μ ")

Remark :



SGS Test Report

Product : RF Antenna Assembly

Content

No	Description		Report No.	Page
1	Cable	RG-178 Cable	SHR10042031341125	P.9~14
2	Antenna Body	TPE	CE/2009/C4753 RLSHC000210520009	P.15~26
3	Antenna Base	PC	CE/2009/C2186 GZ1006070544A/CHEM	P.27~32 P.21~26
4	Antenna Base	PBT	EC411447607 GZ1006070544A/CHEM	P.33~37 P.21~26
5	Rivet	POM	RLSZC000617140001 GZ1006070544A/CHEM	P.38~41 P.21~26
6	Connector	SMA Plug Reverse	CANEC1001179201 GZ1003018338/CHEM CANEC0906266803 CNAEC0906266801 CE/2010/12110 GZ1001003827/CHEM CE/2010/A1609	P.42~80
7	Signal Tube	Brass,Plated-Gold	CANEC1001179201 CANEC0906266803	P.42~45 P.56~61
8	Ground Tube	Brass,Plated-Ni;POM	CANEC1001179201 CNAEC0906266801 SH8100745/CHEM	P.42~45 P.62~67 P.81~84
9	H.S Tube	Heat Shrink Tube	CE/2010/37865 SHAEC1006698003	P.85~97

Result for RoHS : PASS

Test Report

Report No.:SHR10042031341125

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Applicant :Jiangyin Shenyu Communication Technology Co.,Ltd

Address :Xinyuan Road 1-1, Chengjiang Jiangyin, Jiangsu

Report on the submitted sample(s) said to be:

Sample Name :Coaxial-cable

1. Silver plating copper Clad Steel wire inner conductor 2. FEP Insulation
3. Silver plating copper wire external conductor 4. Brown FEP tegument

Sample Description :1.Silvery metal wire 2.Colorless transparent plastic wire skin 3.Silvery metal wire 4.Light brown plastic wire skin

Part No. :RF-0.81 RF-1.13 RF-1.32 RF-1.37 RG142 RG174 RG178 RG316 RG179 RG223 RG400

Sample Received Date :Apr.20, 2010

Testing Period :Apr.20, 2010 to Apr.24, 2010

Test Requested :To determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) contents in the submitted sample according to the request of client.

Test Method:

Tested Item	Test Method	Measured Equipment	M.D.L.
Lead (Pb)/ Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2 mg/kg
	IEC 62321:2008 Ed.1 Sec.9		
Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex B	UV-Vis	/
	IEC 62321:2008 Ed.1 Annex C		2 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
Fluorine (F)	Refer to BS EN 14582:2007	IC	10mg/kg
Chlorine (Cl)	Refer to BS EN 14582:2007	IC	10mg/kg
Bromine (Br)	Refer to BS EN 14582:2007	IC	10mg/kg
Iodine (I)	Refer to BS EN 14582:2007	IC	10mg/kg

Test Result(s): Please refer to following pages.

Tested by 

Inspected by Zhang Yijun

Approved by

Date May.4, 2010

Technical Manager

Test Report

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Test Result:

Tested Item	Content			
	1	2	3	4
Lead (Pb)	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium (Cr(VI))	Negative	N.D.	Negative	N.D.

Tested Item	Content			
	1	2	3	4
Polybrominated Biphenyls(PBBs)				
Monobromobiphenyl	/	N.D.	/	N.D.
Dibromobiphenyl	/	N.D.	/	N.D.
Tribromobiphenyl	/	N.D.	/	N.D.
Tetrabromobiphenyl	/	N.D.	/	N.D.
Pentabromobiphenyl	/	N.D.	/	N.D.
Hexabromobiphenyl	/	N.D.	/	N.D.
Heptabromobiphenyl	/	N.D.	/	N.D.
Octabromobiphenyl	/	N.D.	/	N.D.
Nonabromobiphenyl	/	N.D.	/	N.D.
Decabromobiphenyl	/	N.D.	/	N.D.
Polybrominated Diphenyl Ethers(PBDEs)				
Monobromodiphenyl ether	/	N.D.	/	N.D.
Dibromodiphenyl ether	/	N.D.	/	N.D.
Tribromodiphenyl ether	/	N.D.	/	N.D.
Tetrabromodiphenyl ether	/	N.D.	/	N.D.
Pentabromodiphenyl ether	/	N.D.	/	N.D.
Hexabromodiphenyl ether	/	N.D.	/	N.D.
Heptabromodiphenyl ether	/	N.D.	/	N.D.
Octabromodiphenyl ether	/	N.D.	/	N.D.
Nonabromodiphenyl ether	/	N.D.	/	N.D.
Decabromodiphenyl ether	/	N.D.	/	N.D.

Test Report

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Tested Item	Content			
	1	2	3	4
Halogen				
Fluorin (F)	/	>20%	/	>20%
Chlorin (Cl)	/	N.D.	/	N.D.
Bromine (Br)	/	N.D.	/	N.D.
Iodin (I)	/	N.D.	/	N.D.

Note: The sample had been dissolved totally tested for Lead, Cadmium, and Mercury.

-M.D.L. = Method Detection Limit

-N.D. = Not Detected (<M.D.L.)

-mg/kg= ppm =parts per million.

-Negative = Absence of Cr (VI). The Cr (VI) concentration detected in the boiling water extraction solution is less than 0.02 mg/kg with 50cm² sample surface area used.

Test Report

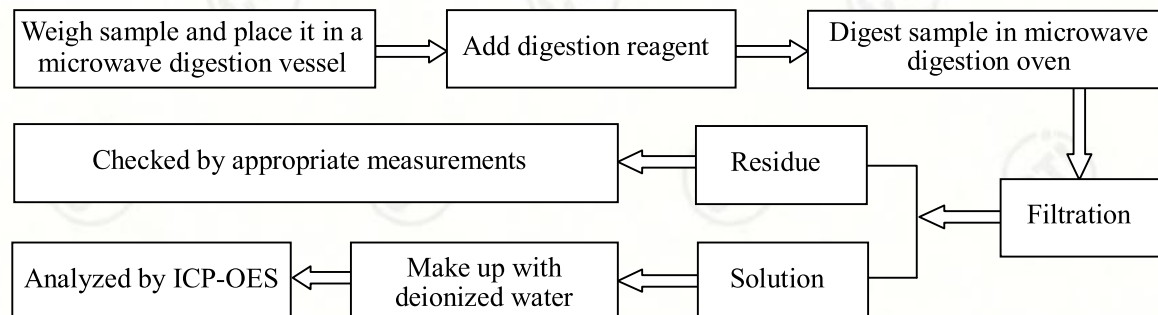
Report No.:SHR10042031341125

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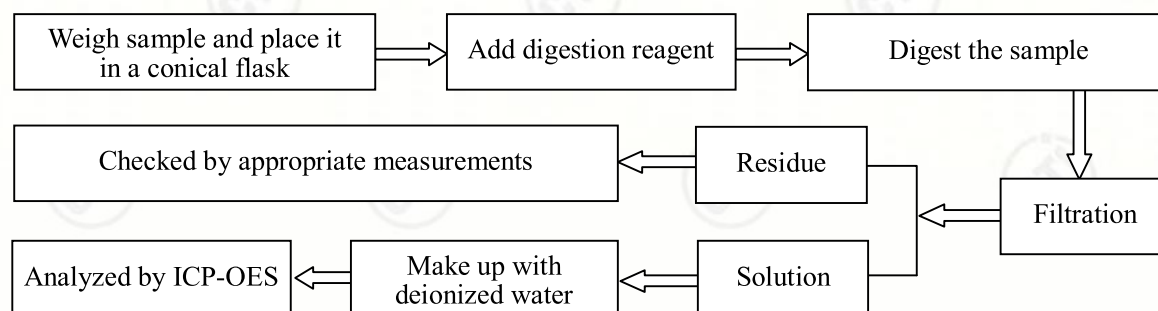
Test Process :

1. Test for Pb/Cd Content

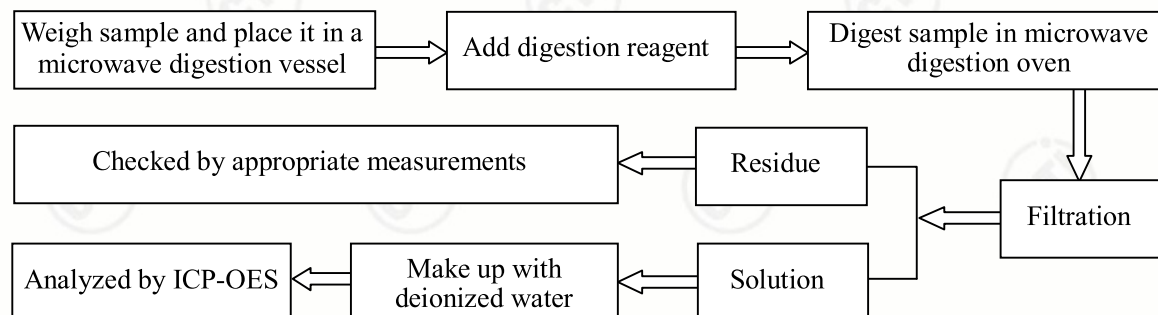
(1)IEC 62321:2008 Ed.1 Sec.8



(2)IEC 62321:2008 Ed.1 Sec.9



2. Test for Hg Content



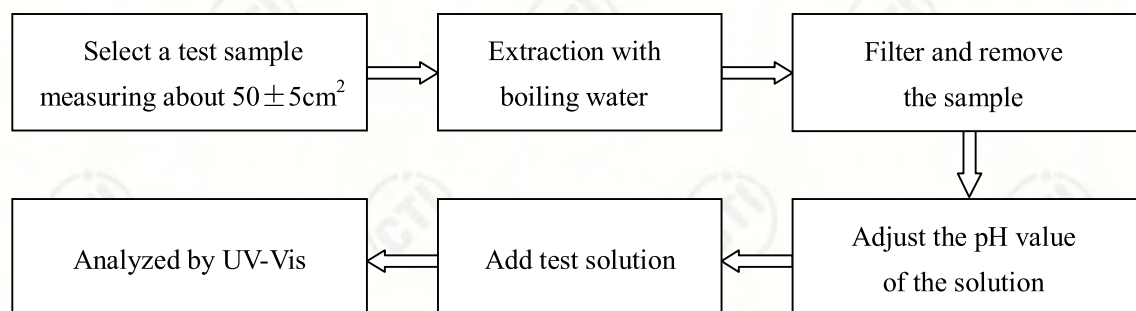
Test Report

Report No.:SHR10042031341125

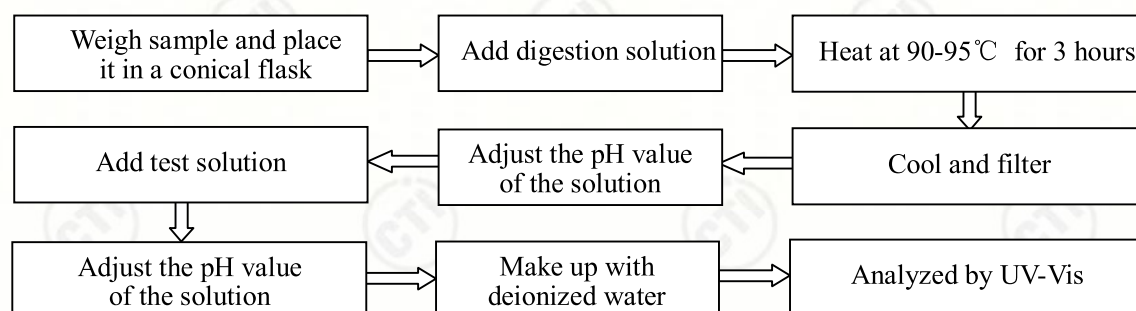
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3. Test for Cr (VI) Content

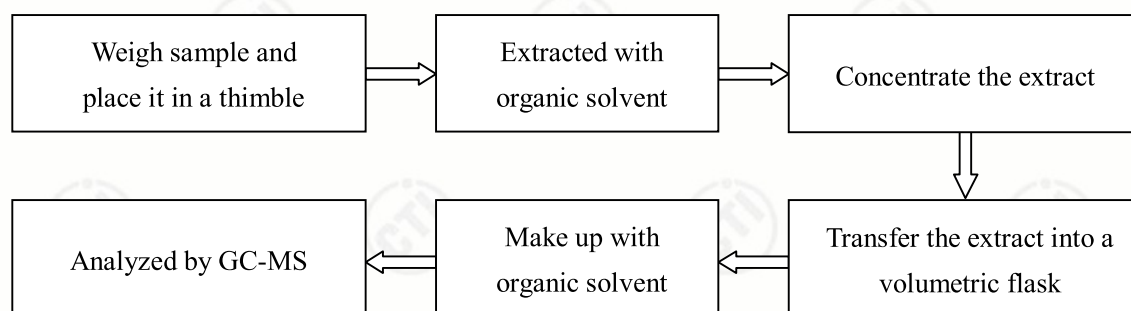
(1) IEC 62321:2008 Ed.1 Annex B



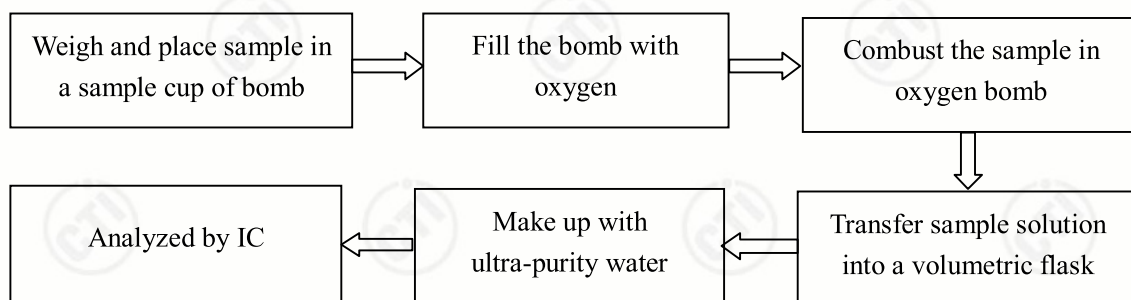
(2) IEC 62321:2008 Ed.1 Annex C



4. Test for PBBs /PBDEs Content



5. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)



Test Report

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Photo of the sample



1



2



3



4

*** End of report ***

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