

RF Cable Assembly

Specification

1. Electrical Properties

1.1 Frequency Range	2.4~2.5GHz
1.2 Impedance	50 Ω
1.3 VSWR	2.0 Max
1.4 ANTENNA GAIN	2 dBi
1.5 RADIATION PEATTERN	OMNI

2. Physical Properties

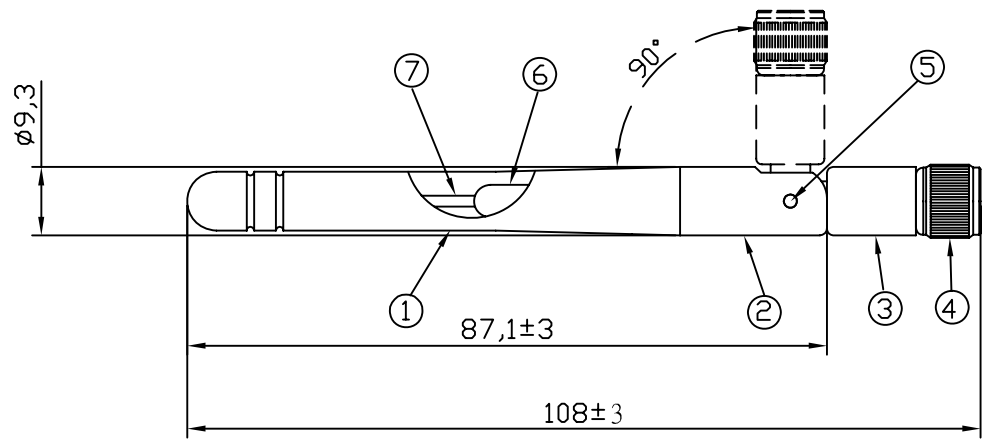
2.1 Cable Type	RG-178 Cable
2.2 Cable Connector1	SMA-Plug-Reverse
2.3 ANTENNA COVER	TPE
2.4 COLOR	Black
2.5 Operating Temperature	-20°C ~ +65°C
2.6 Storage Temperature	-30°C ~ +75°C

DRAW ID
CD

THIS DRAWING IS CONTROLLED DOCUMENT FOR VSO LTD IT IS SUBJECT TO CHANGE AND THE CONTROLLING ENGINEERING ORGANIZATION SHOULD BE CONTACTED FOR THE LATEST REVISION

THIS INFORMATION IS CONFIDENTIAL AND IS DISCLOSED TO YOU ON CONDITION THAT NO FURTHER DISCLOSURE IS MADE BY YOU TO OTHER THAN VSO LTD PERSONNEL WITHOUT WRITTEN AUTHORIZATION FROM VSO LTD

REVISION			
REV.	DESCRIPTION	APPROVAL	DATE



ELECTRONIC TEST CONDITION:
Frequency: 2.4~2.5GHz
Impedance: 50Ω
RL: -10dBi or Less

7	CABLE	RG-178 GP	1PCS
6	GROUND TUBE	∅4.4*∅1.6*L24.5 GP	1PCS
5	RIVET	BLACK GP	2PCS
4	CONNECTOR	SMA M/R GP	1PCS
3	BOTTOM FIXED BASE	ABS, COLOUR, BLACK GP	1PCS
2	UPPER FIXED BASE	ABS, COLOUR, BLACK GP	1PCS
1	ANTENNA CAP	SMA, COLOUR, BLACK GP	1PCS
ITEM	PART NAME	DESCRIPTION	Q'TY

备注	※未标注公差处, 请参照下例标准。						
发行	TOLERANCE UNLESS OTHERWISE SPECIFIED (※)						
	CLASS	A	B	C	D	E	⊕ G
	< 8mm	0.05	0.1	0.1	0.2	0.2	0.4 0.4
	8 ~ 25mm	0.08	0.15	0.15	0.3	0.3	0.6 0.6
	25 ~ 80mm	0.12	0.2	0.25	0.4	0.5	0.8 1.0
	80 ~ 250mm	0.25	0.3	0.4	0.6	0.8	1.2 1.5
	250 ~ 800mm	0.5	0.6	0.8	1.0	1.5	2.0 3.0
	> 800mm	1.0	1.0	1.5	1.7	3.0	4.0 6.0
	ANGLE	0.5					
	Units	MM	Rev.	A1			
	Size	A4	Scale	1:1			
	Sheet	PAGE					

RoHS COMPLIANT		V SO		ELECTRIC CO., LTD.	
CUST. P/N: 康全		DRAW. :			
TITLE: ANTENNA		ENGIN. :			
VSO P/N:		CHECK. :			
UNITS mm	DWG. NO. : GRF0083	REV. A	APPR. :		

4

3

2

1

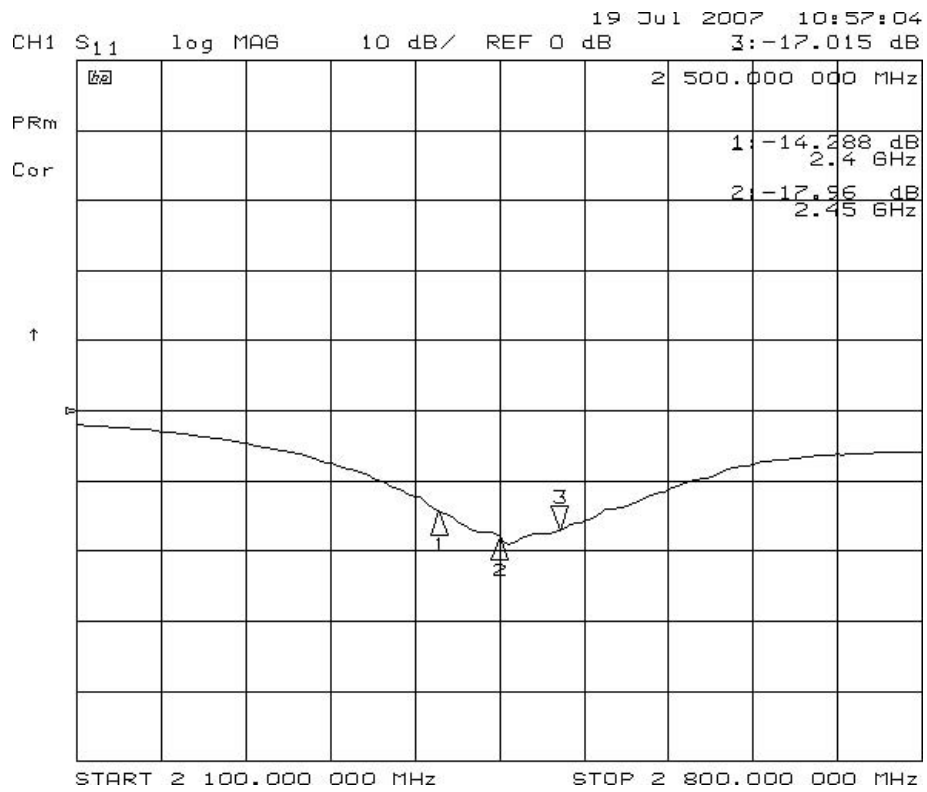
D

C

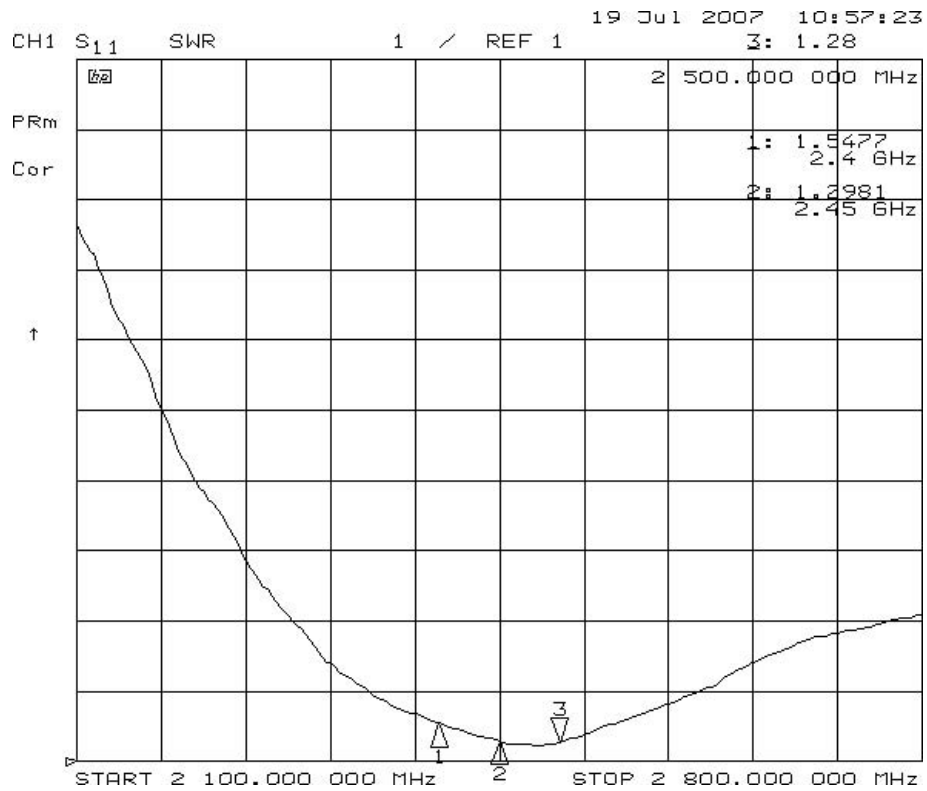
B

A

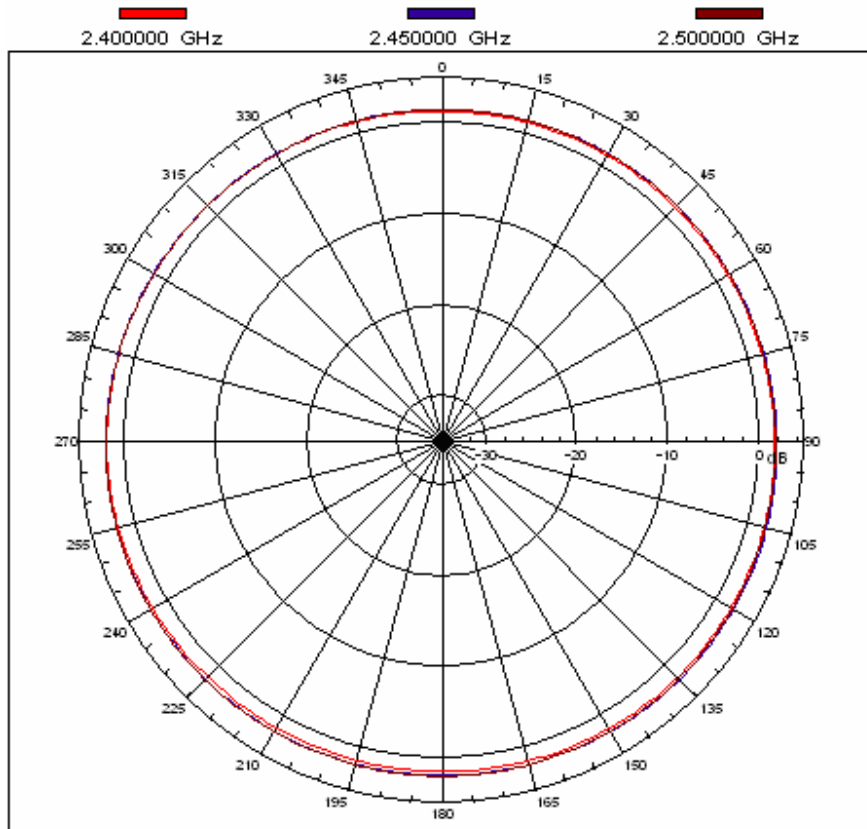
Return Loss



V.S.W.R



Far-field amplitude of 2.4~2.5GHz-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 1.90911 dBi
 Max far-field (global) = -44.91797 dB, Max far-field (plot) = -44.91798 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -96.000 deg, Vpeak at: 0.000 deg
 Plot centering: On

Antenna 802.11B 2dBi_H

NSI2000 V4.0.174, Filename:C:\kao\20060606Antenna-2.4GHz\H.nsi
 Measurement date/time: 2/8/2007 17:08:54 PM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: 1.529 dB
 -3. dB beam width: Not Found
 -6. dB beam width: Not Found
 -10. dB beam width: Not Found
 Left Sidelobe: Not Found
 Right Sidelobe: Not Found

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 361
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 1.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 3

Beam	Frequency	Azimuth	Elevation	Pol
1	2.400 GHz	Azimuth	Elevation	Single-pol

=====

Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 2.05904 dBi
 Max far-field (global) = -45.56202 dB, Max far-field (plot) = -45.56203 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -103.000 deg, Vpeak at: 0.000 deg
 Plot centering: On

Antenna 802.11B 2dBi_H

NSI2000 V4.0.174, Filename:C:\kao\20060606Antenna-2.4GHz\H.nsi
Measurement date/time: 2/8/2007 17:08:54 PM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: 1.761 dB
-3. dB beam width: Not Found
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: Not Found
Right Sidelobe: Not Found

Far-field display setup

Azimuth (deg)
Span = 360.00001 deg, Center = 0.000 deg, #pts = 361
Start= -180.00001 deg, Stop = 180.00001 deg, Delta = 1.000 deg
Elevation (deg)
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 3

Beam Frequency Azimuth Elevation Pol

2 2.450 GHz Azimuth Elevation Single-pol

=====
Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg

Gain = 2.06895 dBi

Max far-field (global) = -45.79614 dB, Max far-field (plot) = -45.79616 dB

Normalization: Reference, Network offset = 0.000 dB

Hpeak at: -106.00001 deg, Vpeak at: 0.000 deg

Plot centering: On

Antenna 802.11B 2dBi_H

NSI2000 V4.0.174, Filename:C:\kao\20060606Antenna-2.4GHz\H.nsi
Measurement date/time: 2/8/2007 17:08:54 PM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: 1.726 dB
-3. dB beam width: Not Found
-6. dB beam width: Not Found
-10. dB beam width: Not Found
Left Sidelobe: Not Found
Right Sidelobe: Not Found

Far-field display setup

Azimuth (deg)
Span = 360.00001 deg, Center = 0.000 deg, #pts = 361
Start= -180.00001 deg, Stop = 180.00001 deg, Delta = 1.000 deg
Elevation (deg)
Center = 0.000 deg, #pts = 1

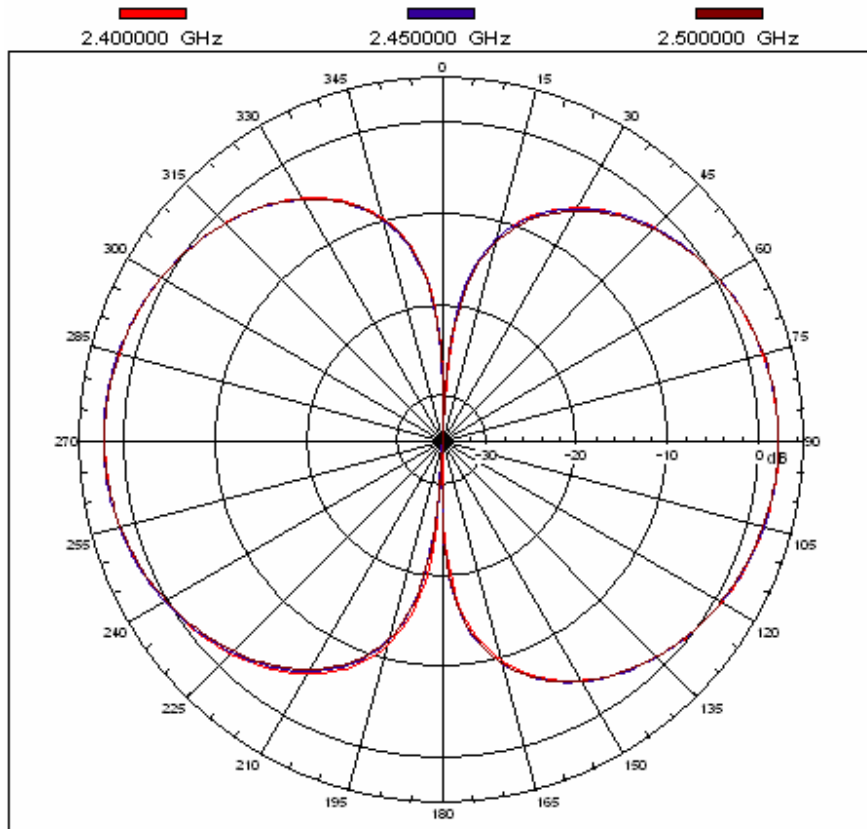
Selected beam(s) 1 of 3

Beam Frequency Azimuth Elevation Pol

3 2.500 GHz Azimuth Elevation Single-pol

=====

Far-field amplitude of 2.4~2.5GHz-E.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 2.13338 dBi
 Max far-field (global) = -44.20898 dB, Max far-field (plot) = -44.20898 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -90.000 deg, Vpeak at: 0.000 deg
 Plot centering: On

Antenna 802.11B 2dBi_E

NSI2000 V4.0.174, Filename:C:\kao\20060606Antenna-2.4GHz\E.nsi
 Measurement date/time: 2/8/2007 17:24:37 PM, Filetype: NSI-97

Far-field Cut Analysis:
 Avg value: -2.278 dB
 -3. dB beam width: 81.55 deg
 -6. dB beam width: 112.87 deg
 -10. dB beam width: 138.75 deg
 Left Sidelobe: Not Found
 Right Sidelobe: -0.12 dB at 91.755 deg

Far-field display setup
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 361
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 1.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 3

Beam	Frequency	Azimuth	Elevation	Pol
1	2.400 GHz	Azimuth	Elevation	Single-pol

=====

Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 2.26517 dBi
 Max far-field (global) = -44.84233 dB, Max far-field (plot) = -44.84234 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -89.00001 deg, Vpeak at: 0.000 deg
 Plot centering: On

Antenna 802.11B 2dBi_E

NSI2000 V4.0.174, Filename:C:\kao\20060606Antenna-2.4GHz\E.nsi

Measurement date/time: 2/8/2007 17:24:37 PM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -2.288 dB

-3. dB beam width: 78.91 deg

-6. dB beam width: 110.15 deg

-10. dB beam width: 136.40 deg

Left Sidelobe: Not Found

Right Sidelobe: -0.26 dB at 91.755 deg

Far-field display setup

Azimuth (deg)

Span = 360.00001 deg, Center = 0.000 deg, #pts = 361

Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 1.000 deg

Elevation (deg)

Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 3

Beam Frequency Azimuth Elevation Pol

2 2.450 GHz Azimuth Elevation Single-pol

=====

Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg

Gain = 2.16568 dBi

Max far-field (global) = -45.20905 dB, Max far-field (plot) = -45.20906 dB

Normalization: Reference, Network offset = 0.000 dB

Hpeak at: -88.00001 deg, Vpeak at: 0.000 deg

Plot centering: On

Antenna 802.11B 2dBi_E

NSI2000 V4.0.174, Filename:C:\kao\20060606Antenna-2.4GHz\E.nsi

Measurement date/time: 2/8/2007 17:24:37 PM, Filetype: NSI-97

Far-field Cut Analysis:

Avg value: -2.371 dB

-3. dB beam width: 79.07 deg

-6. dB beam width: 110.17 deg

-10. dB beam width: 136.61 deg

Left Sidelobe: Not Found

Right Sidelobe: -0.16 dB at 86.741 deg

Far-field display setup

Azimuth (deg)

Span = 360.00001 deg, Center = 0.000 deg, #pts = 361

Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 1.000 deg

Elevation (deg)

Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 3

Beam Frequency Azimuth Elevation Pol

3 2.500 GHz Azimuth Elevation Single-pol

=====