

Antenna Information
WM323

					DSGD.			
					CHKD.	TITLE		ANT
						WM323		INFORMATION
					APPD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.	ALPSALPINE CO.,LTD.			

Contents

1. Information for the antenna.....	3
2. Antenna Under Test Report.....	4
3. Test Information.....	8
4. Test Method.....	8
5. Test Setups.....	8
6. Photographs of the EUT	9

					DSGD.			
					CHKD.	TITLE		ANT
						WM323		INFORMATION
					APPD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.	ALPSALPINE CO.,LTD.			

1. INFORMATION FOR THE ANTENNA

Manufacturer :

ALPSALPINE CO., LTD.

6-3-36 Furukawanakazato, Osaki-city, Miyagi-pref., 989-6181 Japan

Model Name:

WM323

Frequency range:

2412 - 2472MHz

Antenna Gain:

1.65dBi max

Antenna Type:

Inverted-L Antenna

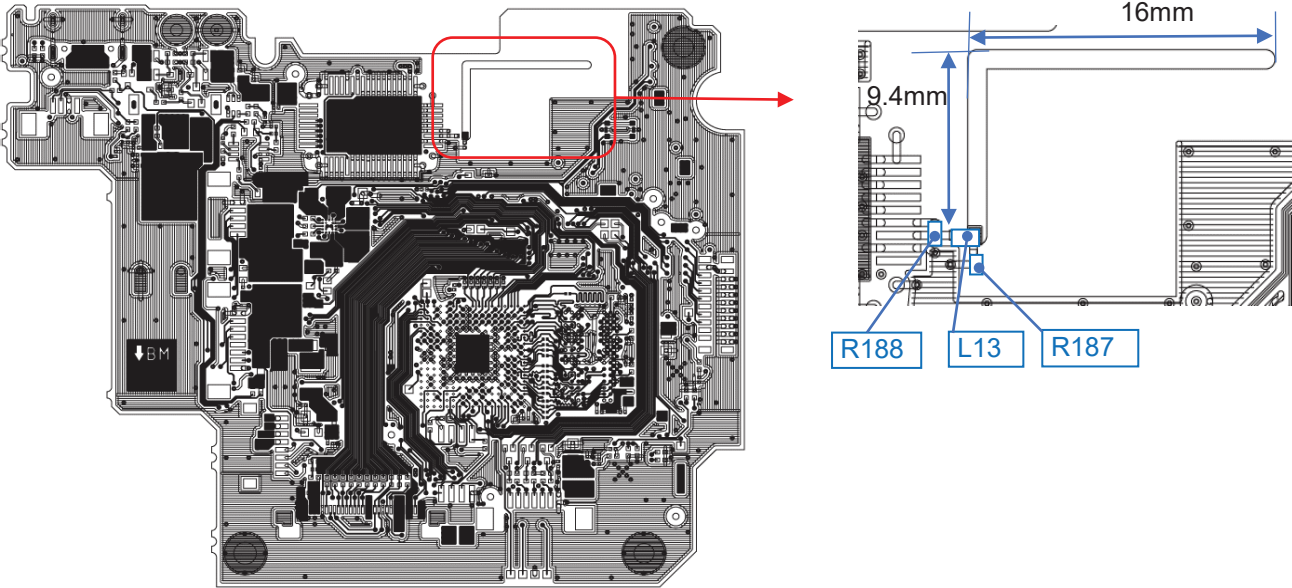
Connector of antenna:

N/A (Printed pattern on the circuit board)

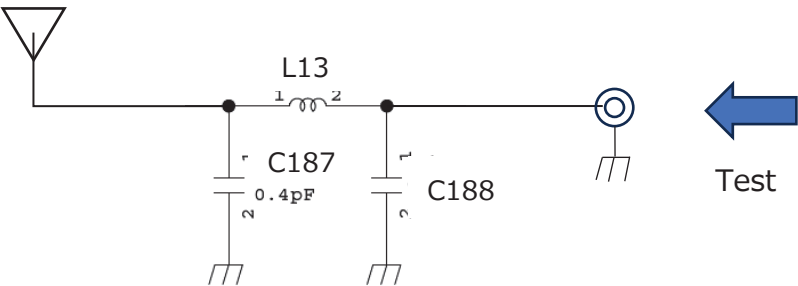
					DSGD.			
					CHKD.	TITLE		ANTENNA
						WM323		INFORMATION
					APPD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.	ALPSALPINE CO.,LTD.			

2. ANTENNA UNDER TEST REPORT

Outline drawing



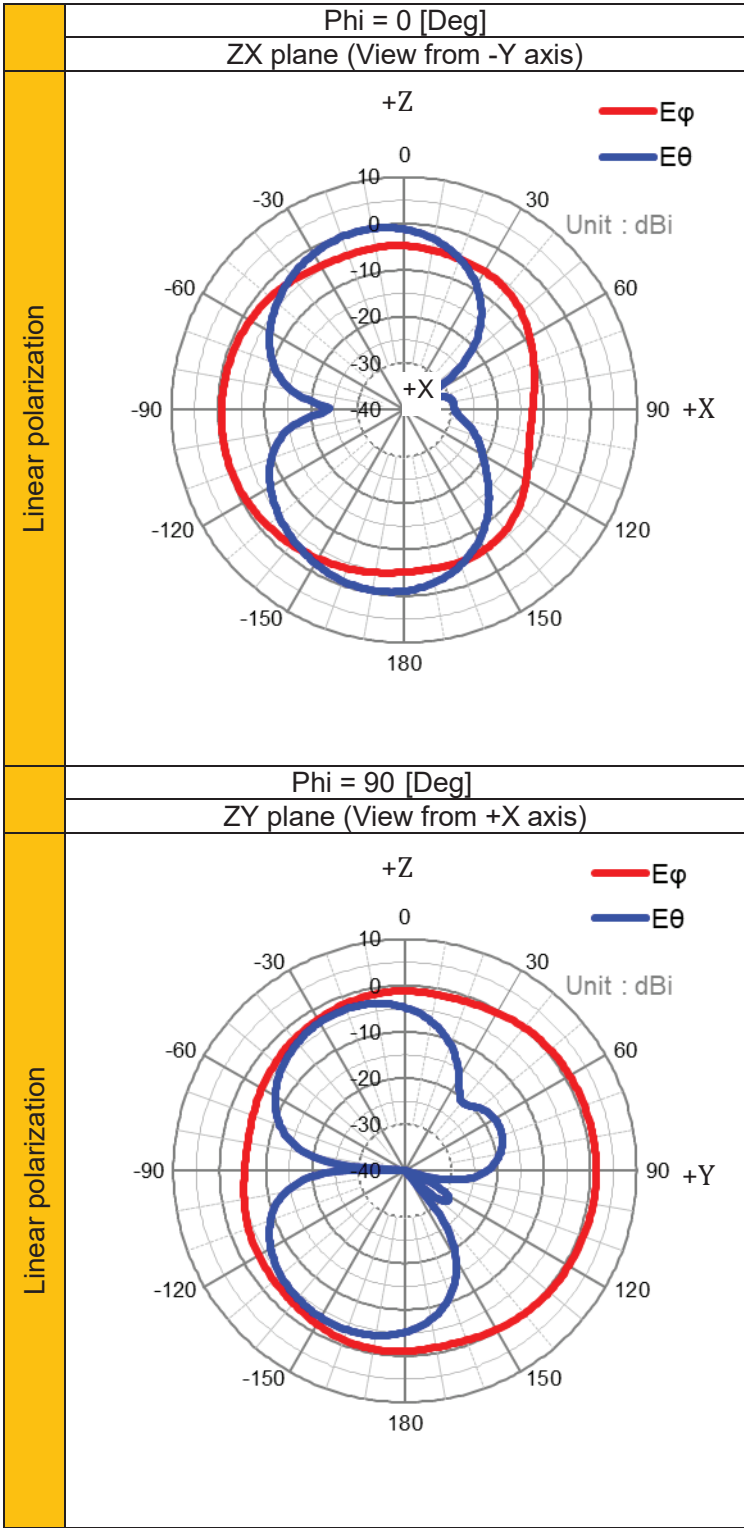
Circuit diagram



Ref.no	Constant	Unit
C187	0.4	pF
L13	4.7	nH
C188	OPEN	pF

					DSGD.			
					CHKD.	TITLE	WM323	ANTENNA INFORMATION
					APPD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.	ALPSALPINE CO.,LTD.			

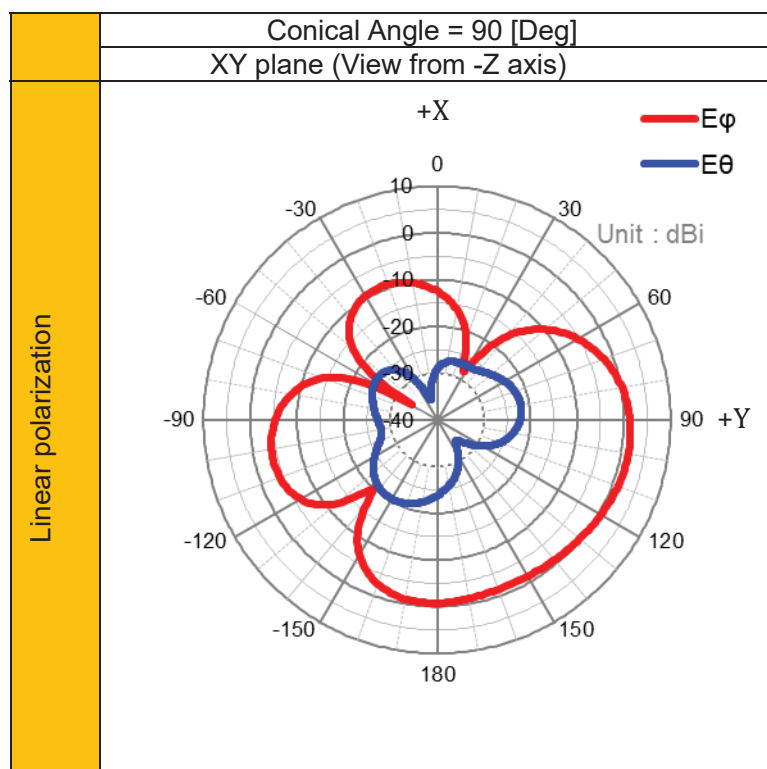
Frequency : 2442MHz



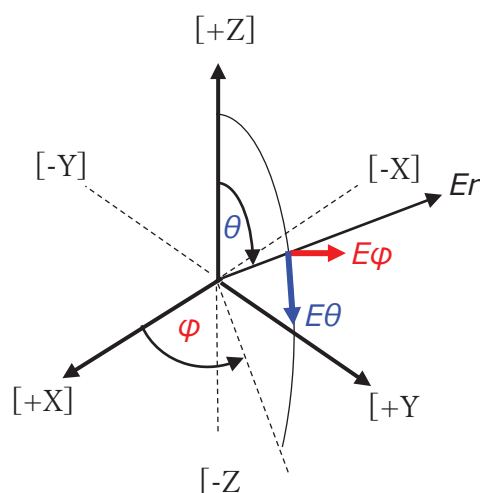
Plane	Gain [dBi]	Polarization	
		Phi(ϕ)	Theta(θ)
Z-X	Max	-0.58	-0.37
	0 deg	-4.75	-1.20

Plane	Gain [dBi]	Polarization	
		Phi(ϕ)	Theta(θ)
Z-Y	Max	1.33	-2.80
	0 deg	-1.20	-4.75

					DSGD.			
					CHKD.	TITLE WM323	ANTENNA INFORMATION	
					APPD.			
					<i>ALPSALPINE CO.,LTD.</i>			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.				



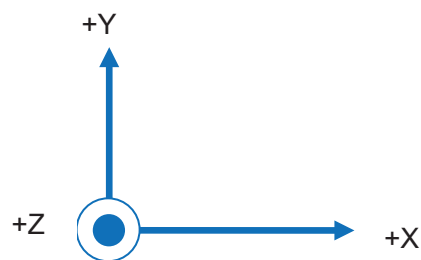
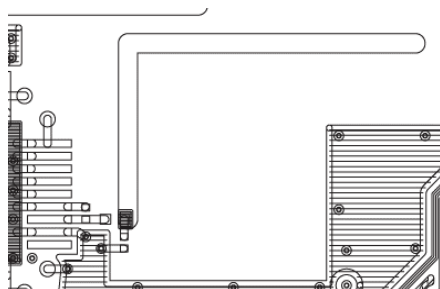
Plane	Gain [dBi]	Polarization	
		Phi(ϕ)	Theta(θ)
X-Y	Max	1.63	-20.47
	0 deg	-12.43	-29.13



Linear Polarization

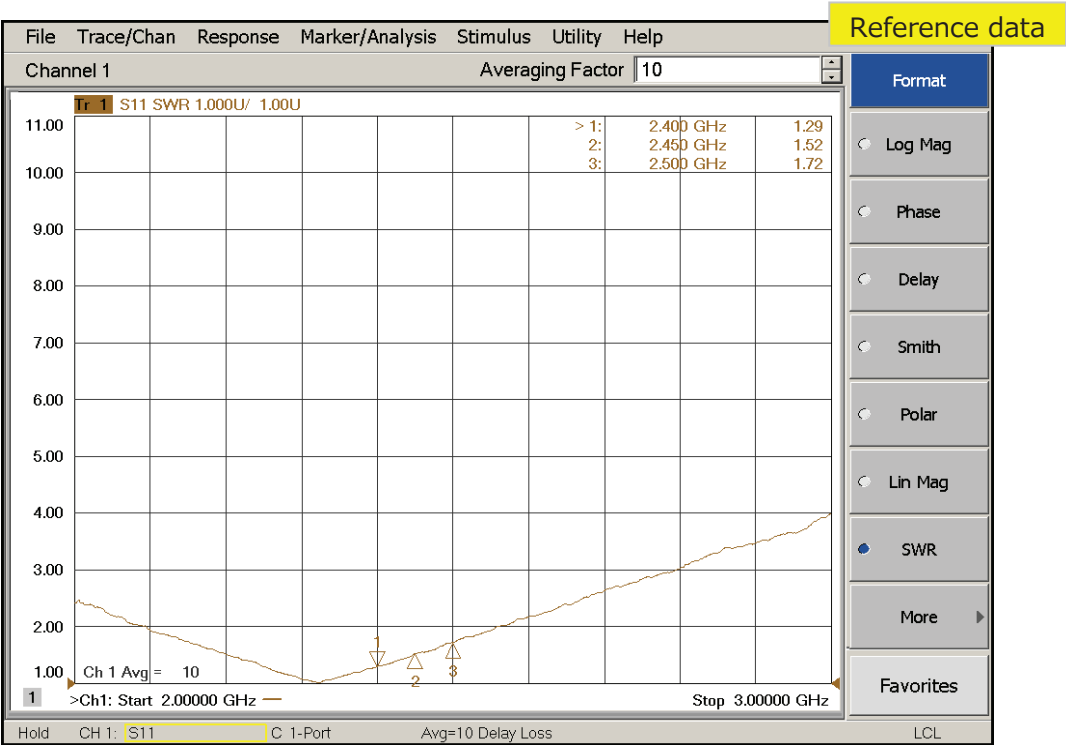
Whole Sphere Gain [dBi]			
Gain	Phi(ϕ)	Theta(θ)	Total
Max	1.63	0.70	1.65
Avg	-4.09	-7.30	-1.83

Measurement Direction for the antenna



					DSGD.			
					CHKD.	TITLE	ANTENNA	
						WM323	INFORMATION	
					APPD.			
					ALPSALPINE CO., LTD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.				

VSWR



Freq[MHz]	2400	2450	2500
VSWR	1.29	1.52	1.72

					DSGD.			
					CHKD.	TITLE	WM323	ANTENNA INFORMATION
					APPD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.	ALPSALPINE CO.,LTD.			

3. TEST INFORMATION

Test Equipment	Maker: Microwave Vision Group (MVG) Model Name: SG32 Calibration date: 31.03.2024
Test software	Satenv Ver 2.0.1.3 build47 SatMap Ver 1.3.2.1
Test date	26.04.2024
Test Operator	T. Noguchi

4. TEST METHOD

- 1) Calibration
 - Reference antenna measurement
 - Processing measured Reference Antenna Data
- 2) DUT measurement
 - DUT measurement
 - Processing measured DUT Data

					DSGD.			
					CHKD.	TITLE WM323	ANTENNA INFORMATION	
					APPD.			
SYMB.	DATA OR NO.	APPD.	CHKD.	DSGD.	ALPSALPINE CO.,LTD.			