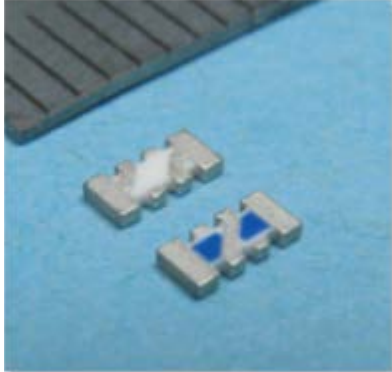


## For 1900MHz Band

## CHIP ANTENNA

### <外観 Visual>



### <特徴 Features>

- ・超小型 Very small (L:3.2×W:1.5×t:0.4mm)
- ・高利得 High gain
- ・無指向性 Omni-directional

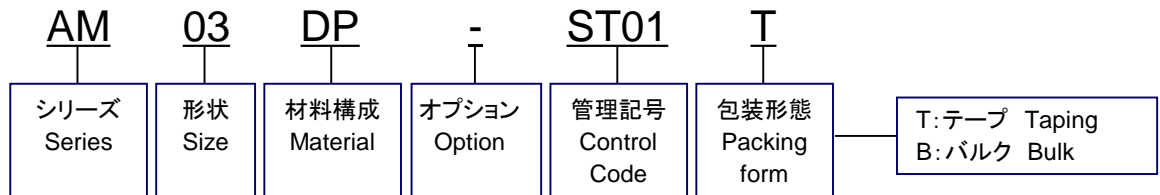
### <用途 Applications>

PHS機器、DECT 機器、その他...  
PHS & DECT systems, etc...

### <電気特性 Electric Specifications>

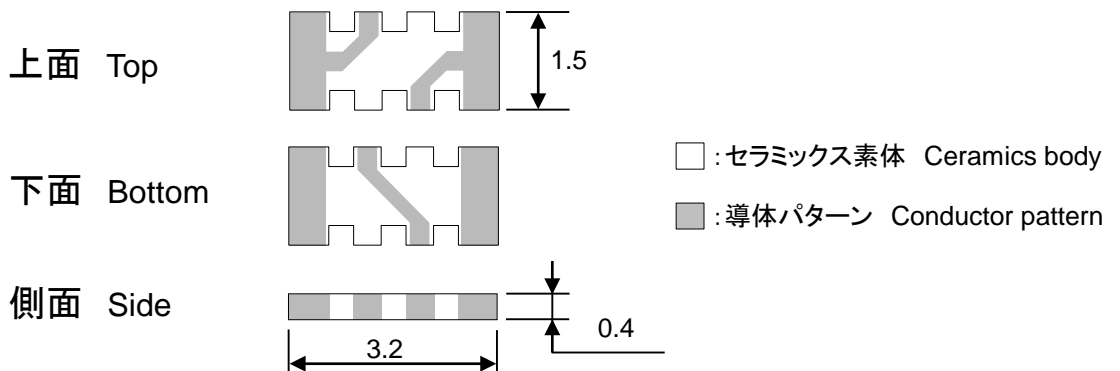
形名 Type	AM03DP-ST01
周波数範囲 Applicable Frequency Range *	1500~6000MHz
入カインピーダンス Input impedance	50Ω

### <形名構成 Part Numbering System>



### <寸法 Dimensions>

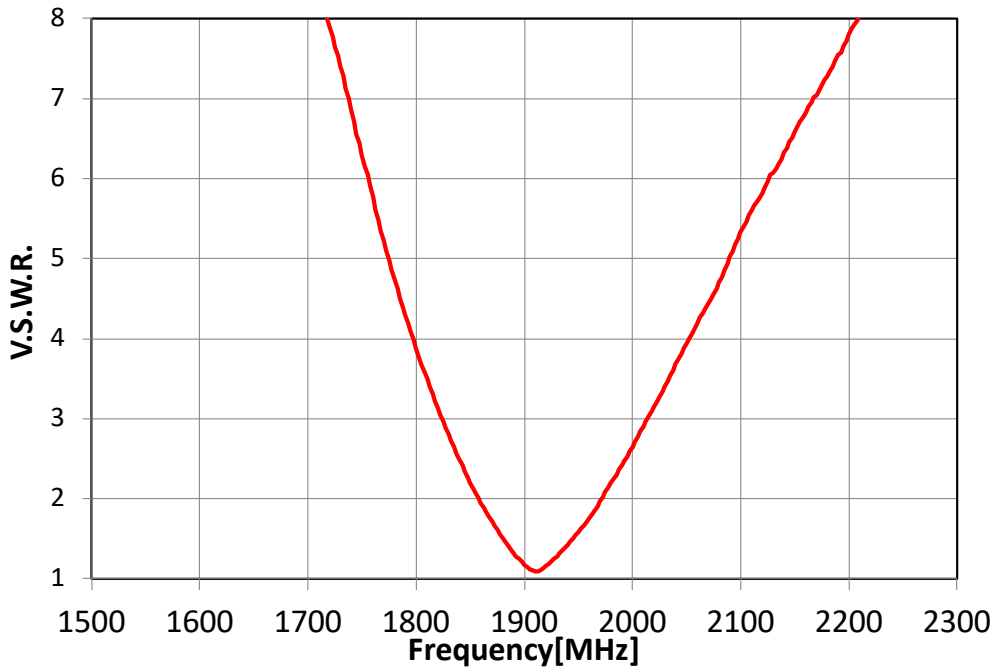
[単位 Units : mm]



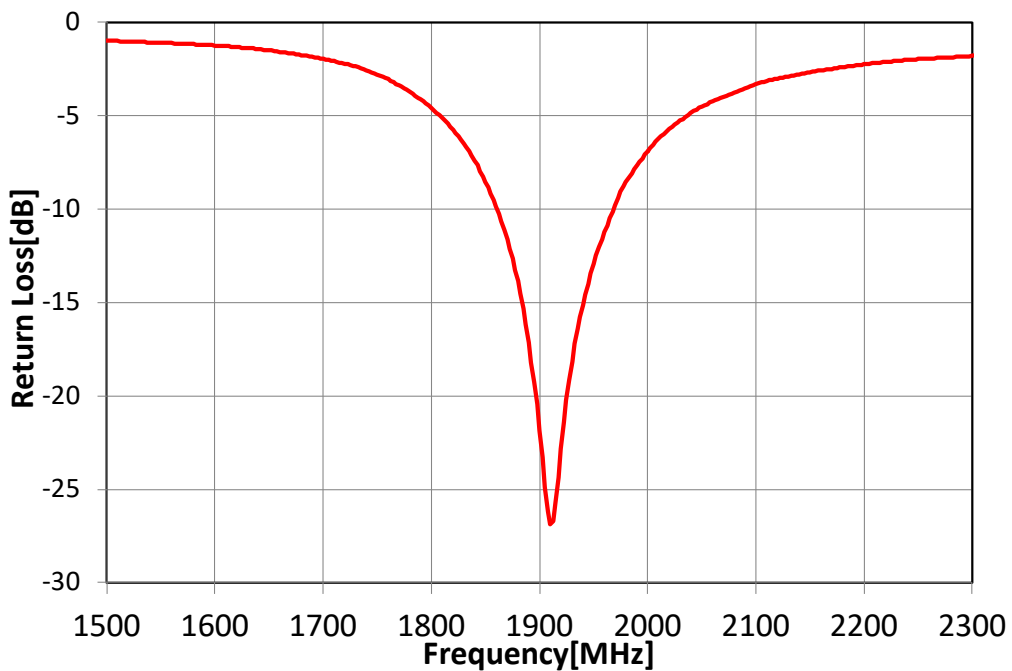
For 1900MHz Band

CHIP ANTENNA

< V.S.W.R. >



< Return Loss >



※これらの特性は代表特性であり、保証特性ではありません。

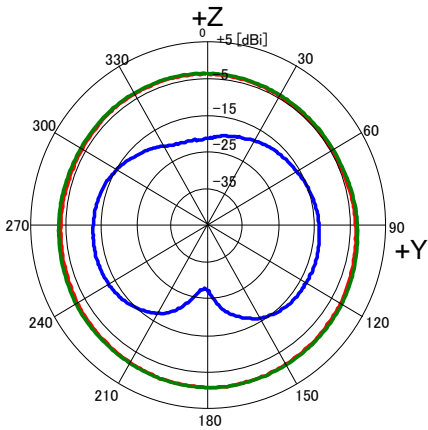
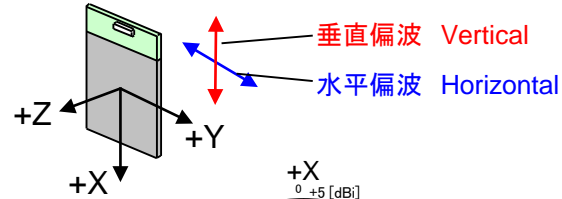
These characteristics are not guaranteed ones ,but typical ones.

## For 1900MHz Band

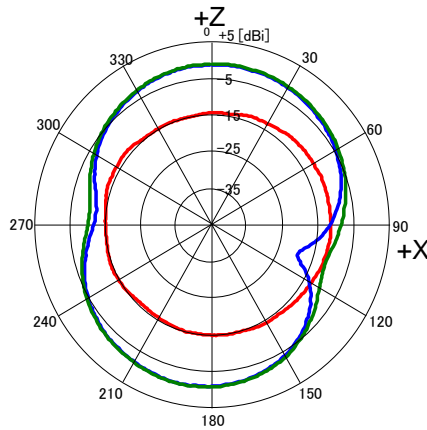
## CHIP ANTENNA

### < Radiation pattern >

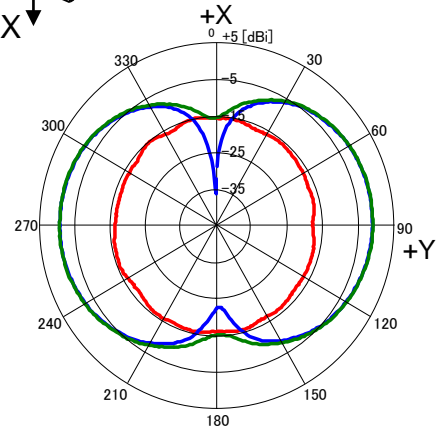
Frequency: 1900MHz



YZ Plane



ZX Plane



XY Plane

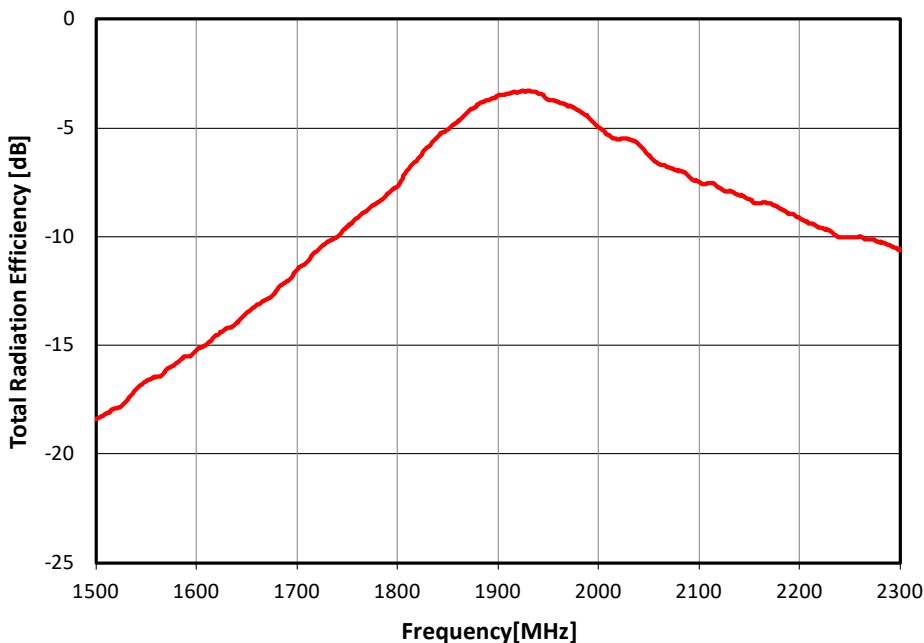
Polarization	YZ Plane		ZX Plane		XY Plane	
	AVE.	MAX.	AVE.	MAX.	AVE.	MAX.
Vertical [dBi]	-2.8	-0.6	-13.7	-11.5	-16.2	-15.1
Horizontal [dBi]	-15.5	-12.3	-3.9	-0.6	-4.1	-0.7
Power gain[dBi]	-2.5	-0.6	-3.5	-0.5	-3.8	-0.6

< 利得Gain @1900MHz >

平均 Average : -3.2dBi

最大 Maximum : -0.5dBi

### < Total Radiation Efficiency >

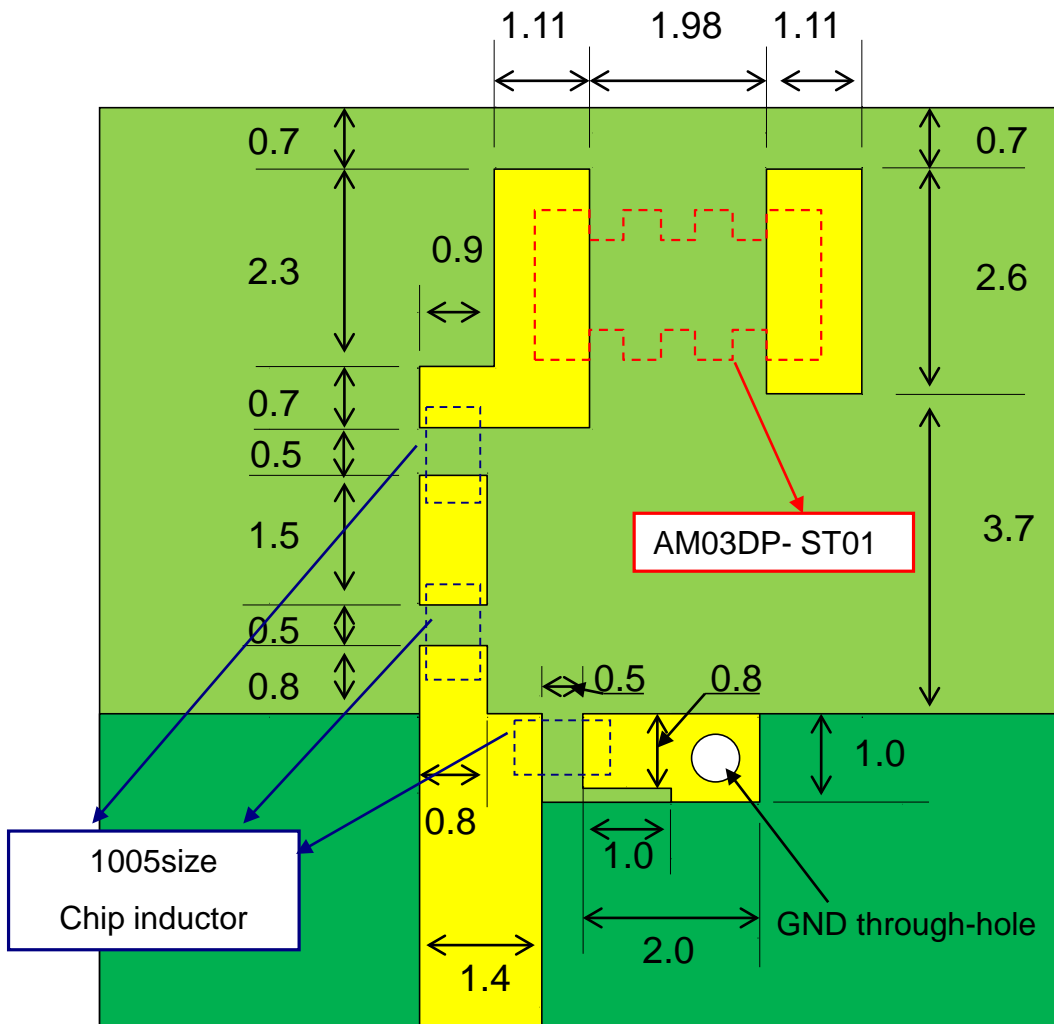


※これらの特性は代表特性であり、保証特性ではありません。

These characteristics are not guaranteed ones ,but typical ones.

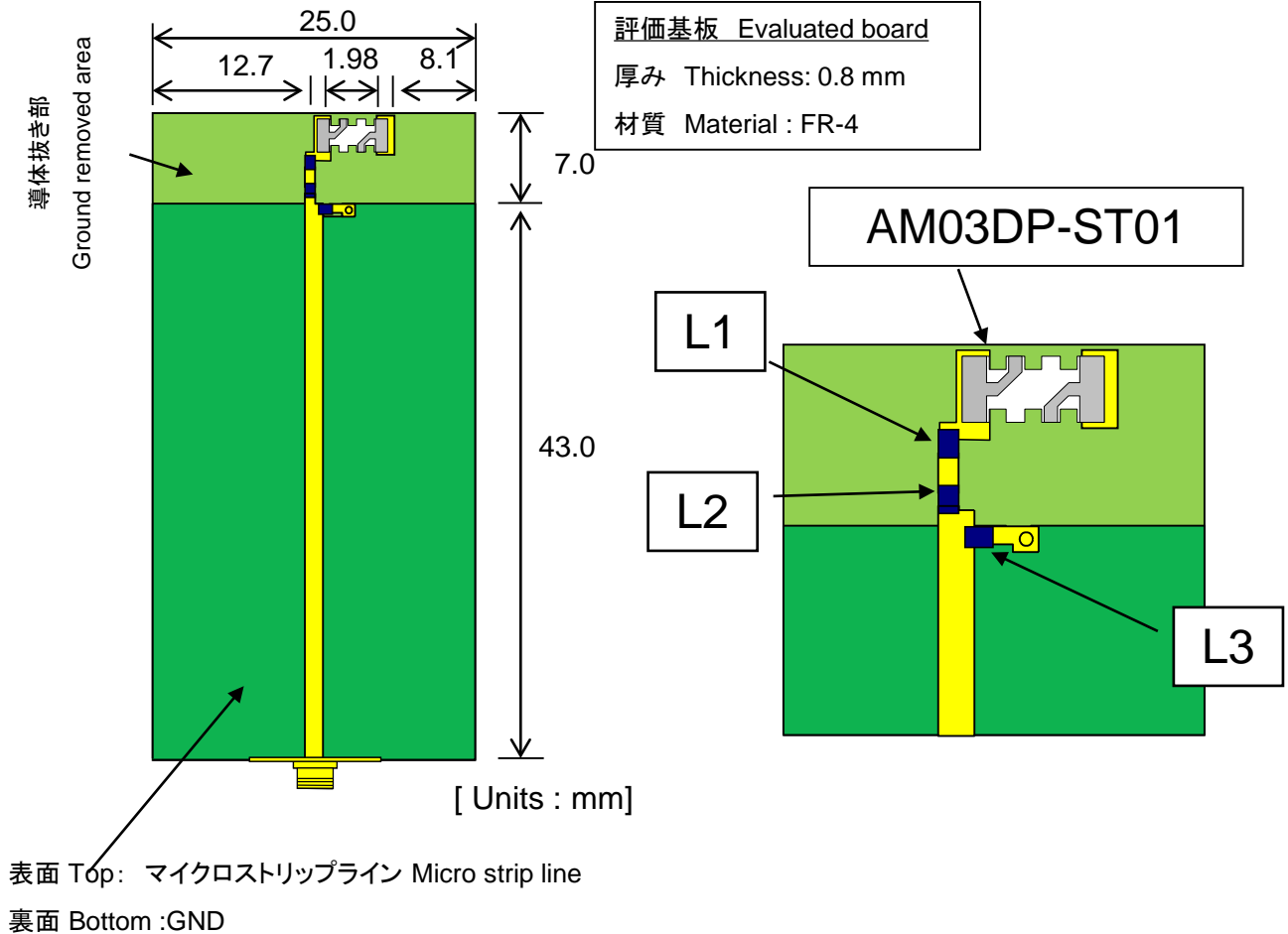
<推奨ランドパターン Recommended land pattern >

**- 特許取得済 Patented -**



[ Units : mm]

### <推奨調整回路、及び部品 Recommended matching circuit & chip components>



### 評価基板での最適定数

#### Optimal value of chip inductors Evaluated board sample board

チップインダクタ: 巻き線タイプ

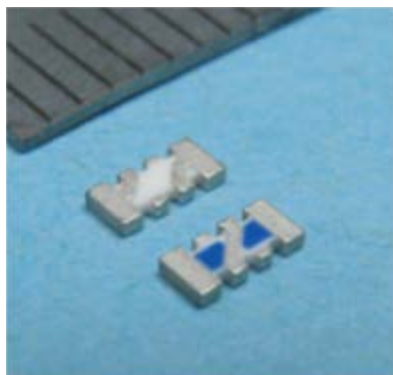
Chip inductor : Wire wound type

$f_0$ [MHz]	インダクタンス Inductance [nH]		
1900	L1	L2	L3
	2.9	16	3.9

## For 2442MHz Band

## CHIP ANTENNA

### <外観 Visual>



### <特徴 Features>

- ・超小型 Very small (L:3.2×W:1.5×t:0.4mm)
- ・高利得 High gain
- ・無指向性 Omni-directional

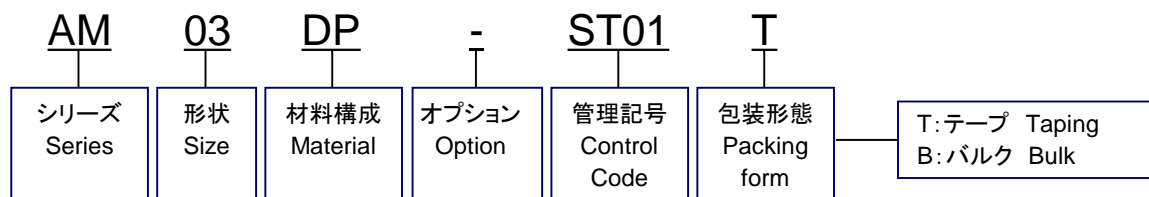
### <用途 Applications>

Bluetooth機器(ヘッドセット、ウェアラブル機器、車載機器)  
 Wi-Fi機器(無線ルーター、HEMS機器、車載機器)  
 2.4GHz小型無線モジュール、その他  
 Bluetooth device(Head set ,Wearable device ,Car device)  
 Wi-Fi device(Wireless router ,HEMS device ,Car device)  
 Small wireless module for 2.4GHz ,etc...

### <電気特性 Electric Specifications>

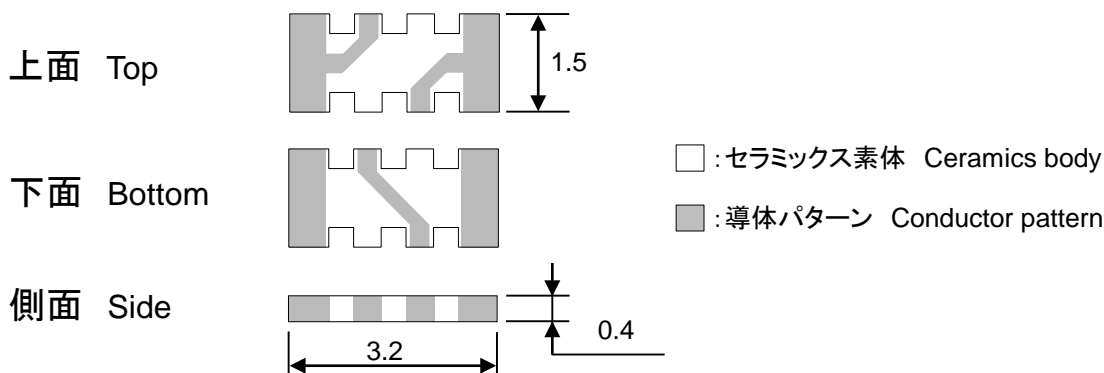
形名 Type	AM03DP-ST01
周波数範囲 Applicable Frequency Range *	1500~6000MHz
入カインピーダンス Input impedance	50Ω

### <形名構成 Part Numbering System>



### <寸法 Dimensions>

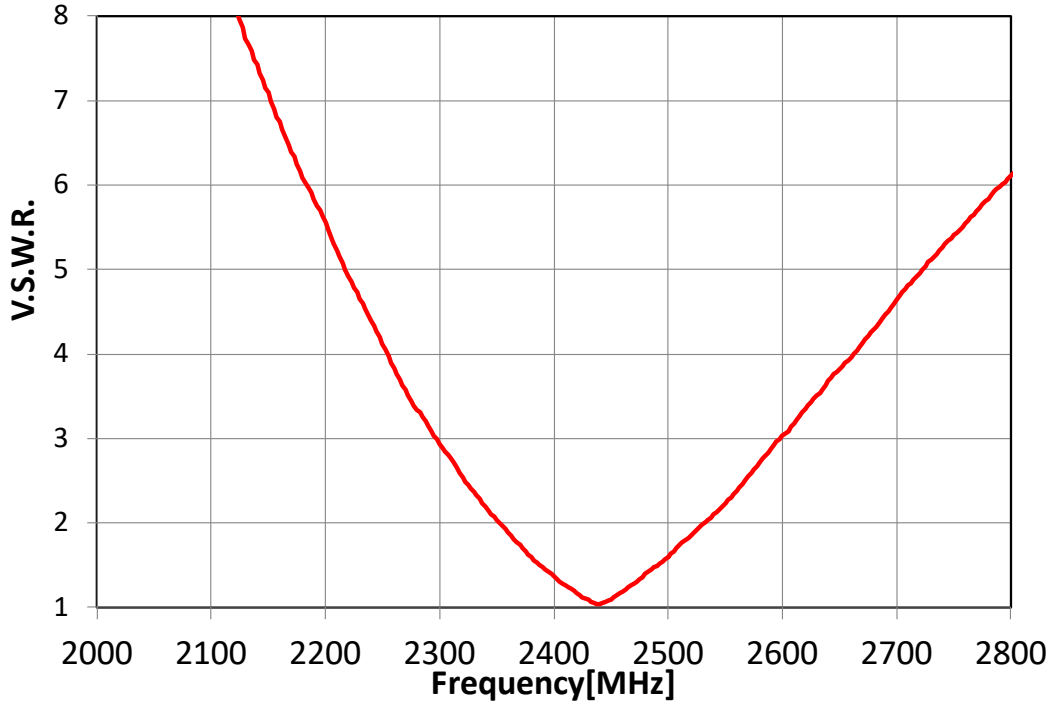
[単位 Units : mm]



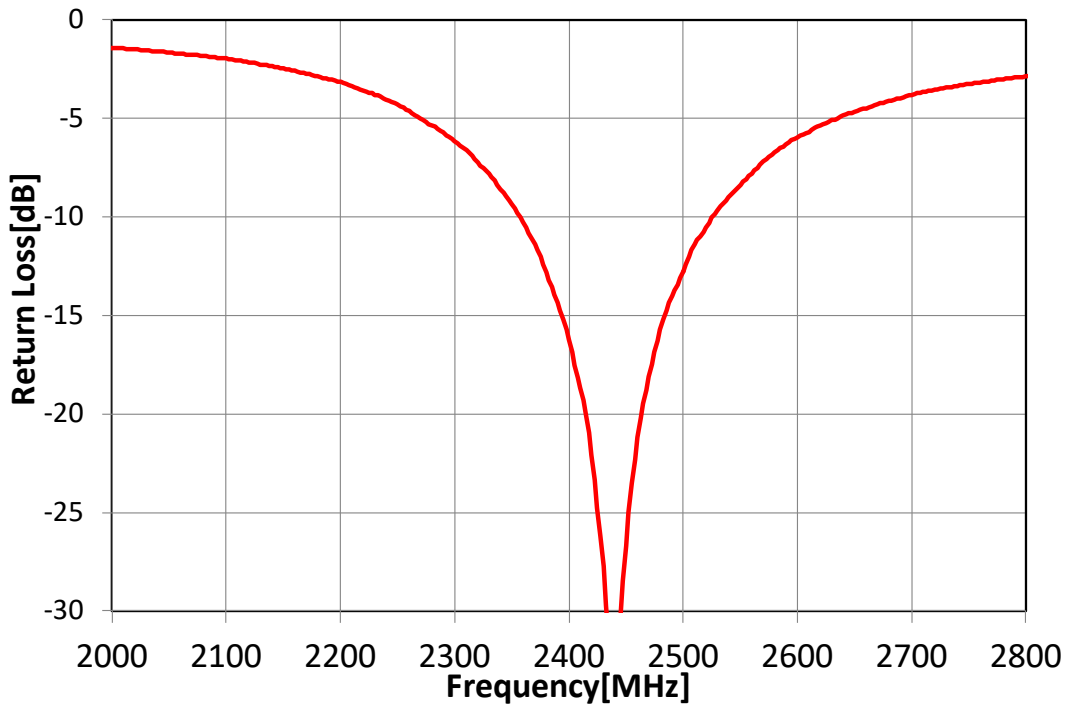
For 2442MHz Band

CHIP ANTENNA

< V.S.W.R. >



< Return Loss >



※これらの特性は代表特性であり、保証特性ではありません。

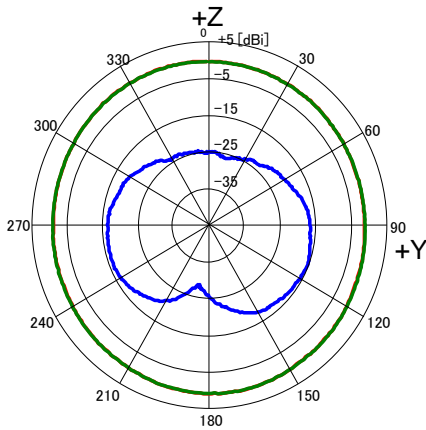
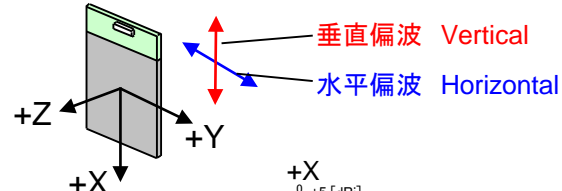
These characteristics are not guaranteed ones ,but typical ones.

## For 2442MHz Band

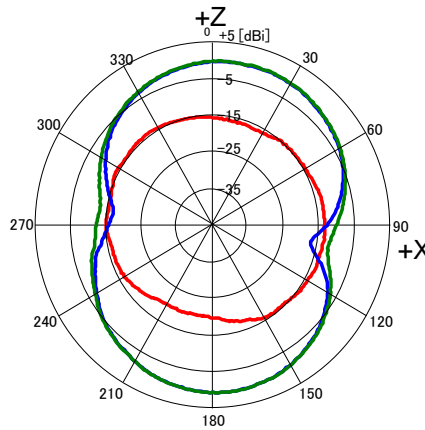
## CHIP ANTENNA

### < Radiation pattern >

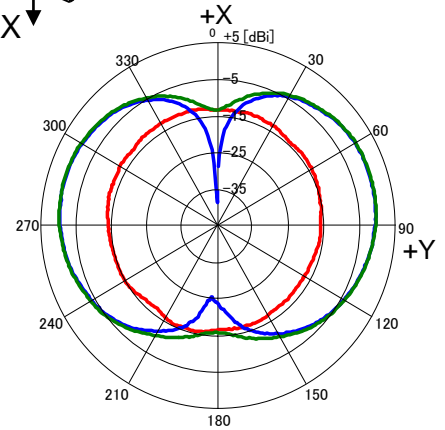
Frequency: 2442MHz



YZ Plane



ZX Plane

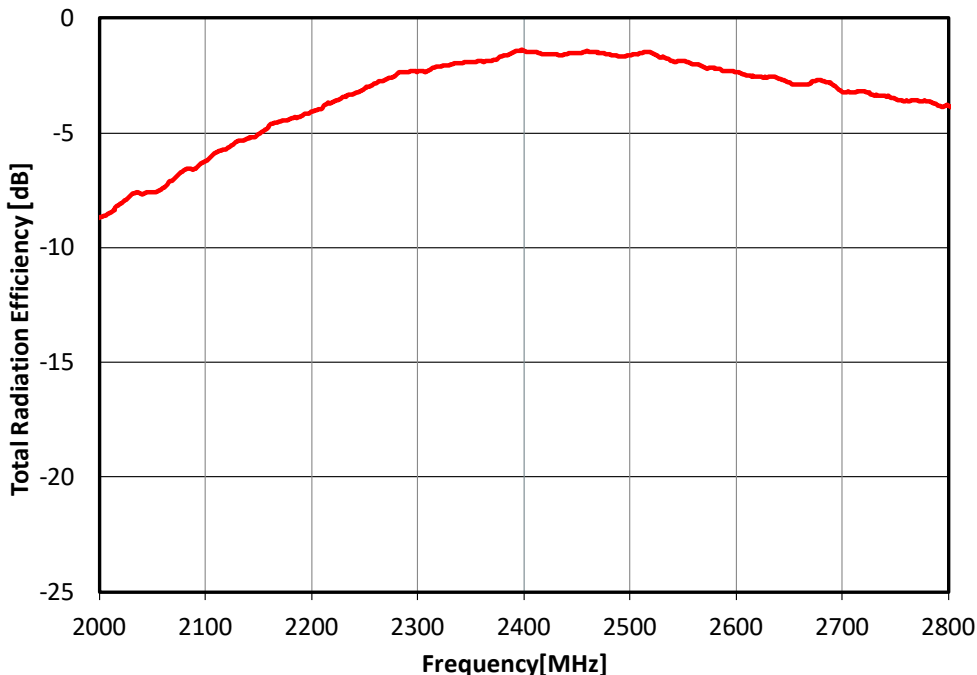


XY Plane

Polarization	YZ Plane		ZX Plane		XY Plane	
	AVE.	MAX.	AVE.	MAX.	AVE.	MAX.
Vertical [dBi]	-0.3	1.2	-15.5	-13.3	-14.6	-12.7
Horizontal [dBi]	-18.9	-15.3	-3.1	0.9	-3.8	0.0
Power gain[dBi]	-0.3	1.2	-2.9	0.9	-3.4	0.2

< 利得Gain @2442MHz >  
 平均 Average : -2.0dBi  
 最大 Maximum : 1.2dBi

### < Total Radiation Efficiency >



※これらの特性は代表特性であり、保証特性ではありません。

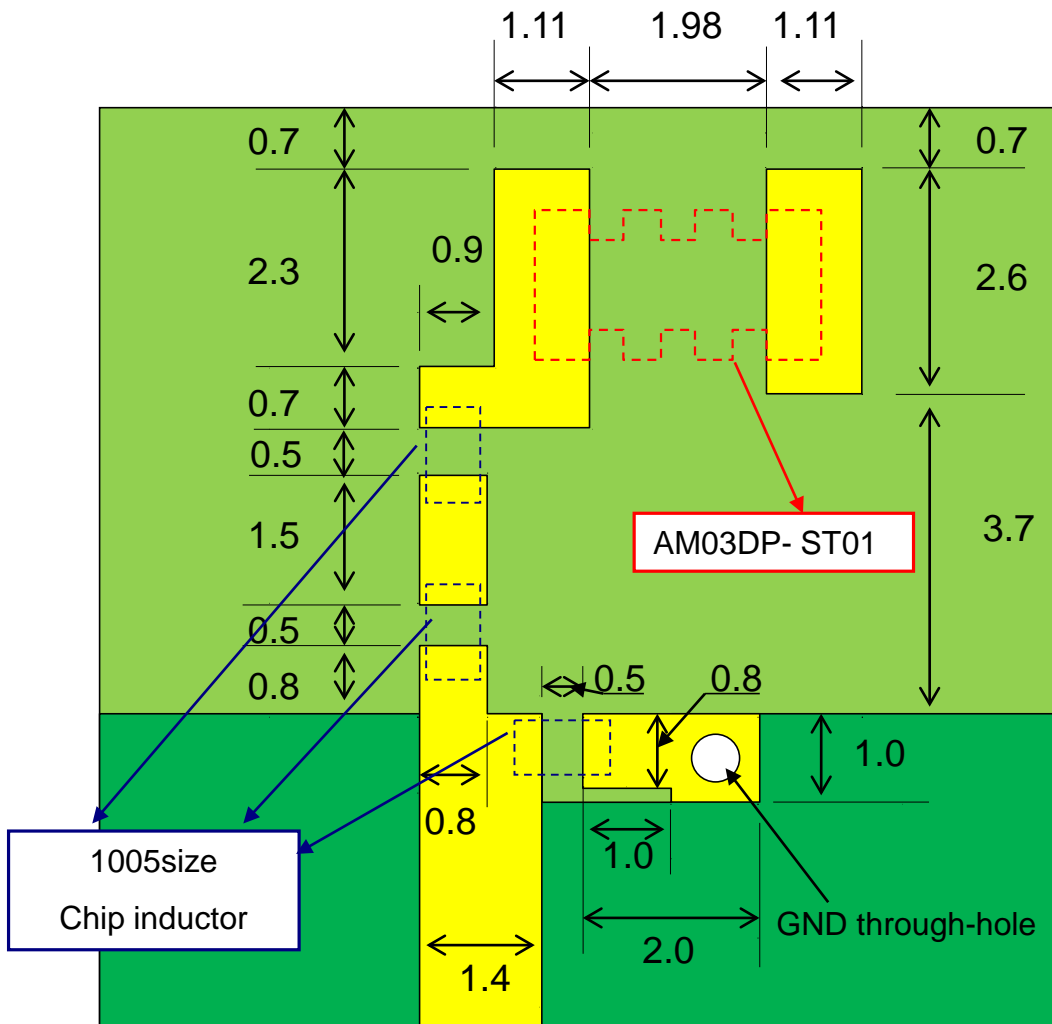
These characteristics are not guaranteed ones ,but typical ones.



**For 2442MHz Band** **CHIP ANTENNA**

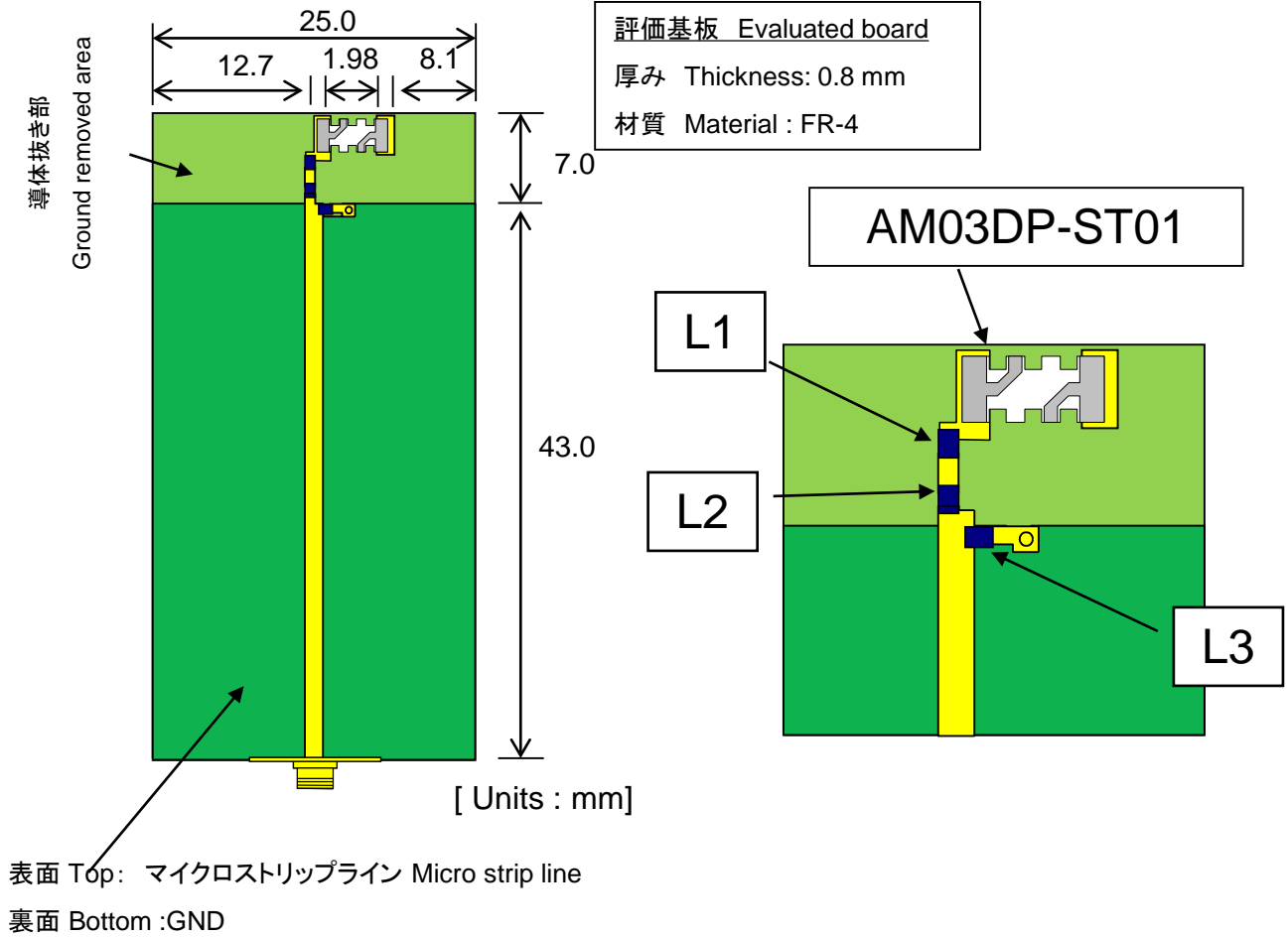
<推奨ランドパターン Recommended land pattern >

**- 特許取得済 Patented -**



[ Units : mm]

### <推奨調整回路、及び部品 Recommended matching circuit & chip components>



### 評価基板での最適定数

#### Optimal value of chip inductors Evaluated board sample board

チップインダクタ: 巻き線タイプ

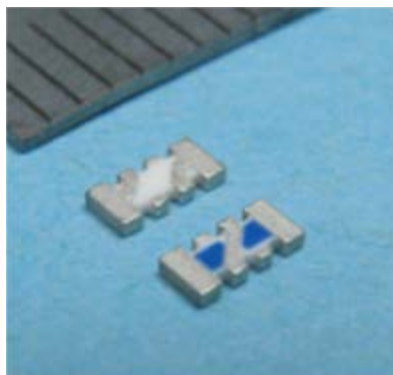
Chip inductor : Wire wound type

$f_0$ [MHz]	インダクタンス Inductance [nH]		
2442	L1	L2	L3
	2.9	8.7	2.4

## For 2.4GHz & 5GHz Dual band

## CHIP ANTENNA

### <外観 Visual>



### <特徴 Features>

- ・超小型 Very small (L:3.2×W:1.5×t:0.4mm)
- ・高利得 High gain
- ・無指向性 Omni-directional

### <用途 Applications>

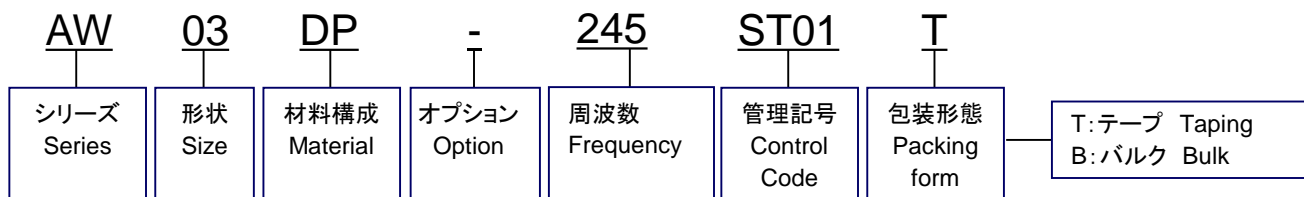
Wi-Fi機器(無線ルーター、HEMS機器、車載機器)  
 2.4GHz & 5GHz Dual band 小型無線モジュール、その他  
 Wi-Fi device(Wireless router ,HEMS device ,Car device)  
 Small wireless module for 2.4-5GHz Dual band ,etc...

(for 2.4GHz Single band (Wifi,Buletooth,Zigbee,etc.) Item No: AM03DP-ST01)

### <電気特性 Electric Specifications>

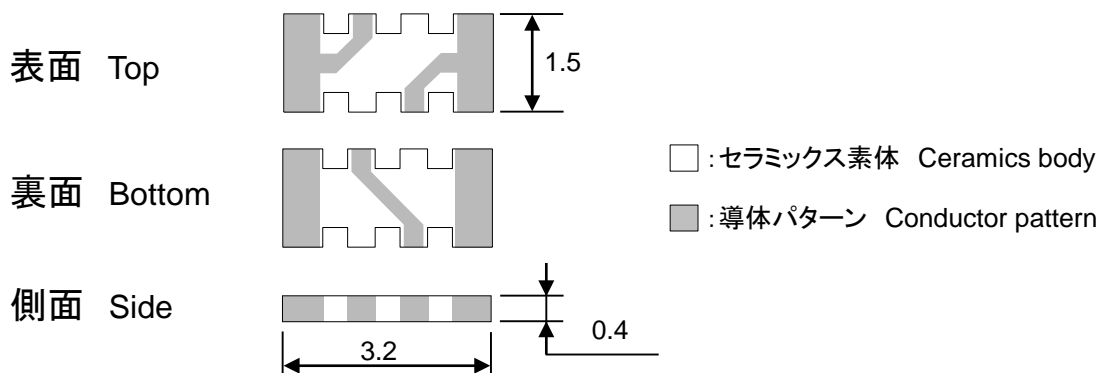
形名 Type	AW03DP-245ST01
周波数範囲 Applicable Frequency Range *	1500~6000MHz
入カインピーダンス Input impedance	50Ω

### <形名構成 Part Numbering System>



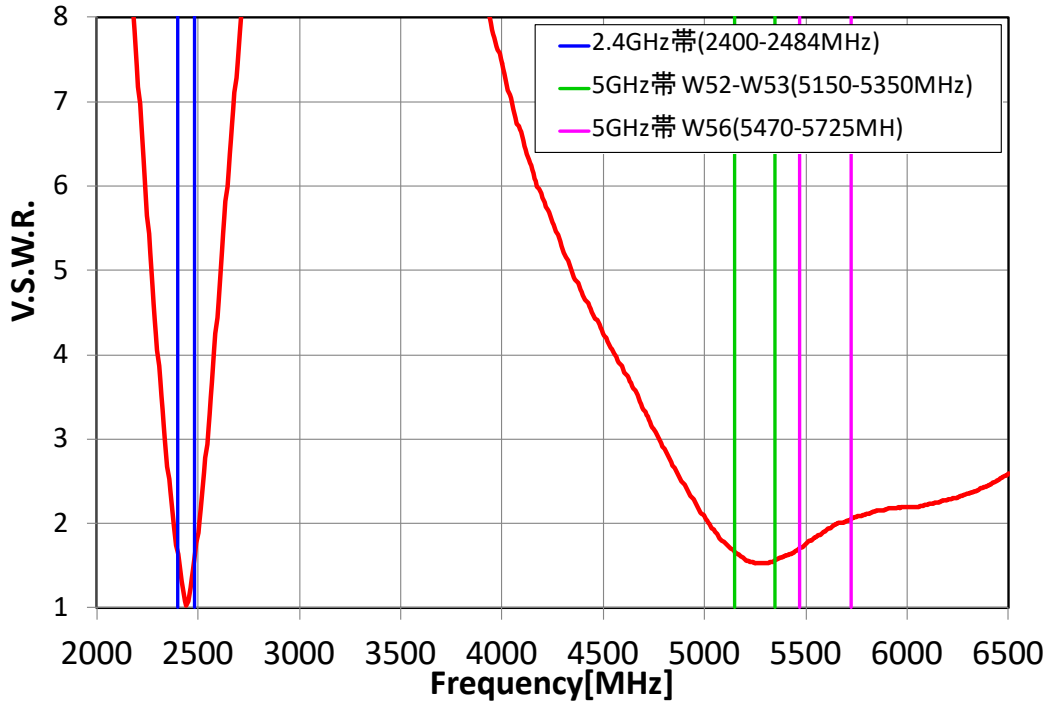
### <寸法 Dimensions>

[単位 Units : mm]

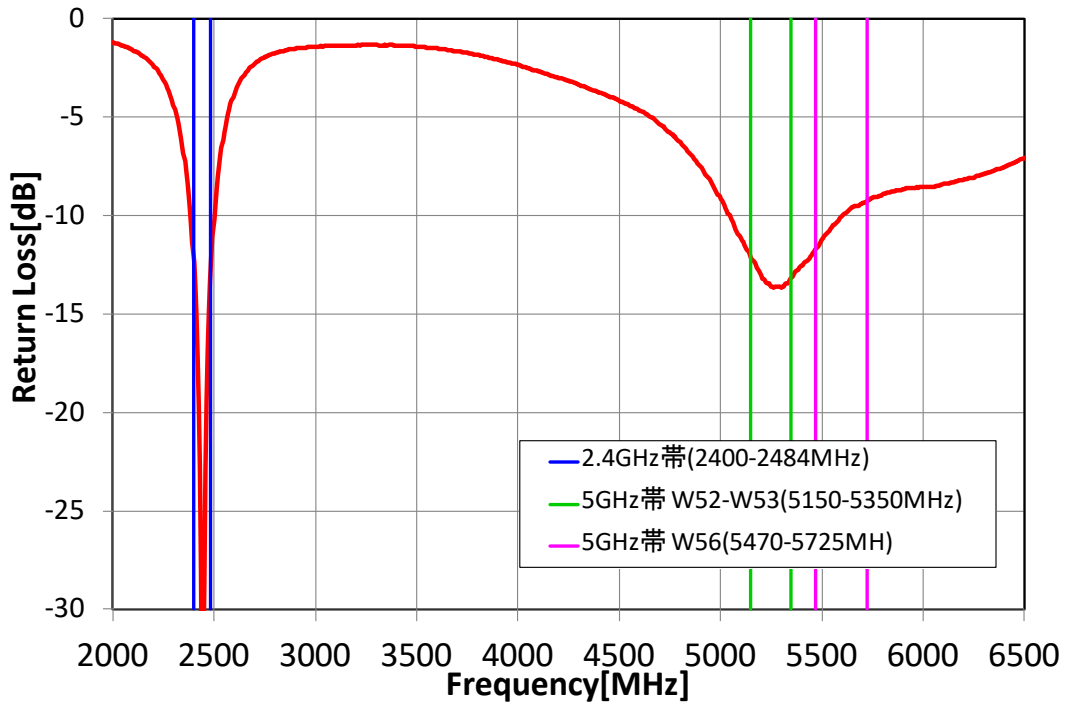


**For 2.4GHz & 5GHz Dual band CHIP ANTENNA**

**< V.S.W.R. >**



**< Return Loss >**



※これらの特性は代表特性であり、保証特性ではありません。

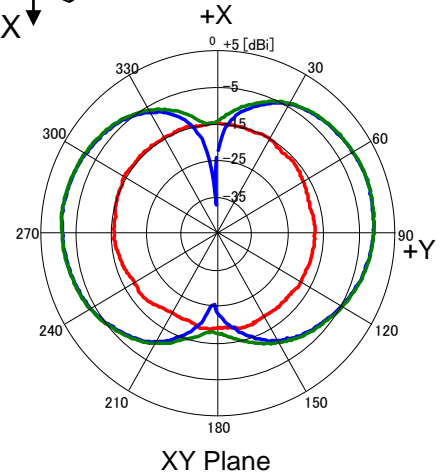
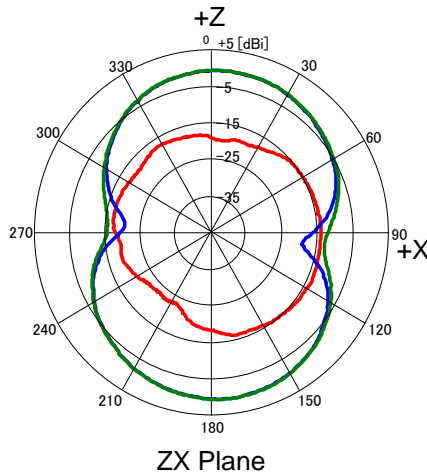
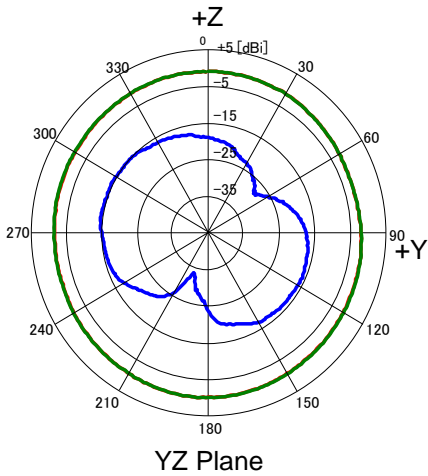
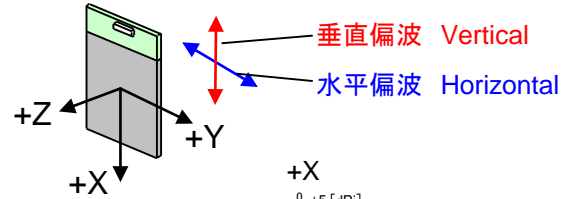
These characteristics are not guaranteed ones ,but typical ones.

## For 2.4GHz & 5GHz Dual band

## CHIP ANTENNA

### < Radiation pattern >

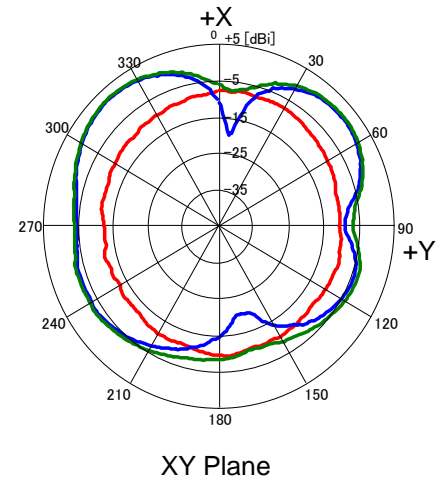
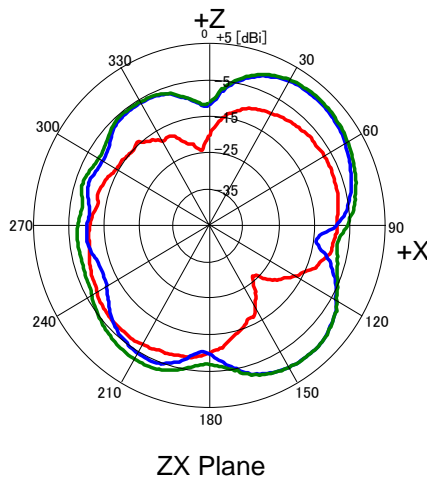
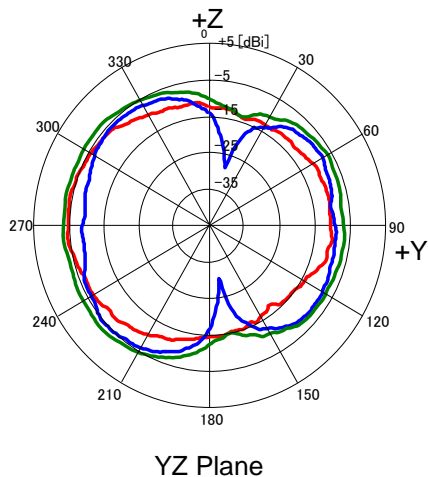
Frequency: 2442MHz



Polarization	YZ Plane		ZX Plane		XY Plane	
	AVE.	MAX.	AVE.	MAX.	AVE.	MAX.
Vertical [dBi]	-1.1	0.2	-16.9	-13.9	-16.7	-14.4
Horizontal [dBi]	-17.9	-14.2	-3.4	0.7	-4.3	-0.5
Power gain[dBi]	-1.1	0.2	-3.2	0.8	-4.0	-0.5

< 利得Gain @2442MHz >  
 平均 Average : -2.6dBi  
 最大 Maximum : 0.8dBi

Frequency: 5400MHz



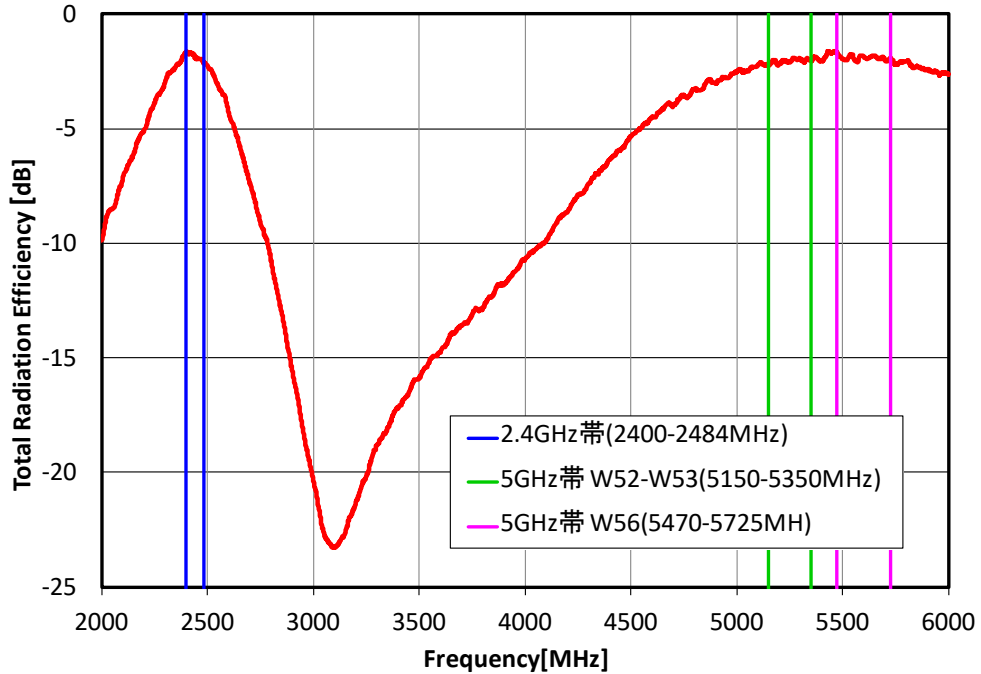
Polarization	YZ Plane		ZX Plane		XY Plane	
	AVE.	MAX.	AVE.	MAX.	AVE.	MAX.
Vertical [dBi]	-9.4	-4.5	-10.5	-6.7	-9.9	-7.5
Horizontal [dBi]	-8.7	-4.7	-3.9	1.3	-3.2	1.9
Power gain[dBi]	-6.0	-3.0	-3.1	1.7	-2.4	2.2

< 利得Gain @5400MHz >  
 平均 Average : -3.5dBi  
 最大 Maximum : 2.2dBi

## For 2.4GHz & 5GHz Dual band

## CHIP ANTENNA

### <Total Radiation Efficiency >



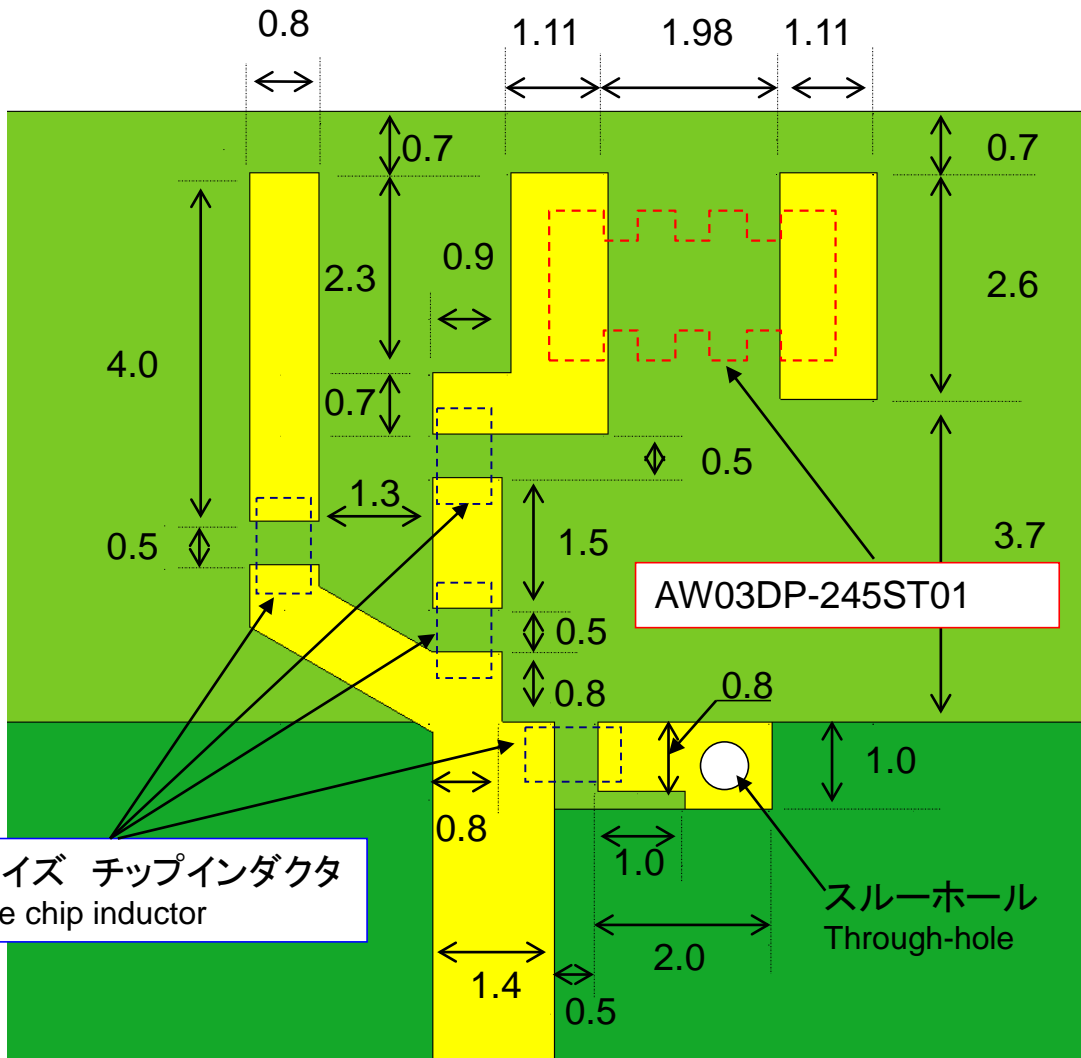
※これらの特性は代表特性であり、保証特性ではありません。

These characteristics are not guaranteed ones ,but typical ones.

**For 2.4GHz & 5GHz Dual band CHIP ANTENNA**

<推奨ランドパターン Recommended land pattern >

**- 特許取得済 Patented -**



1005サイズ チップインダクタ  
1005 size chip inductor

AW03DP-245ST01

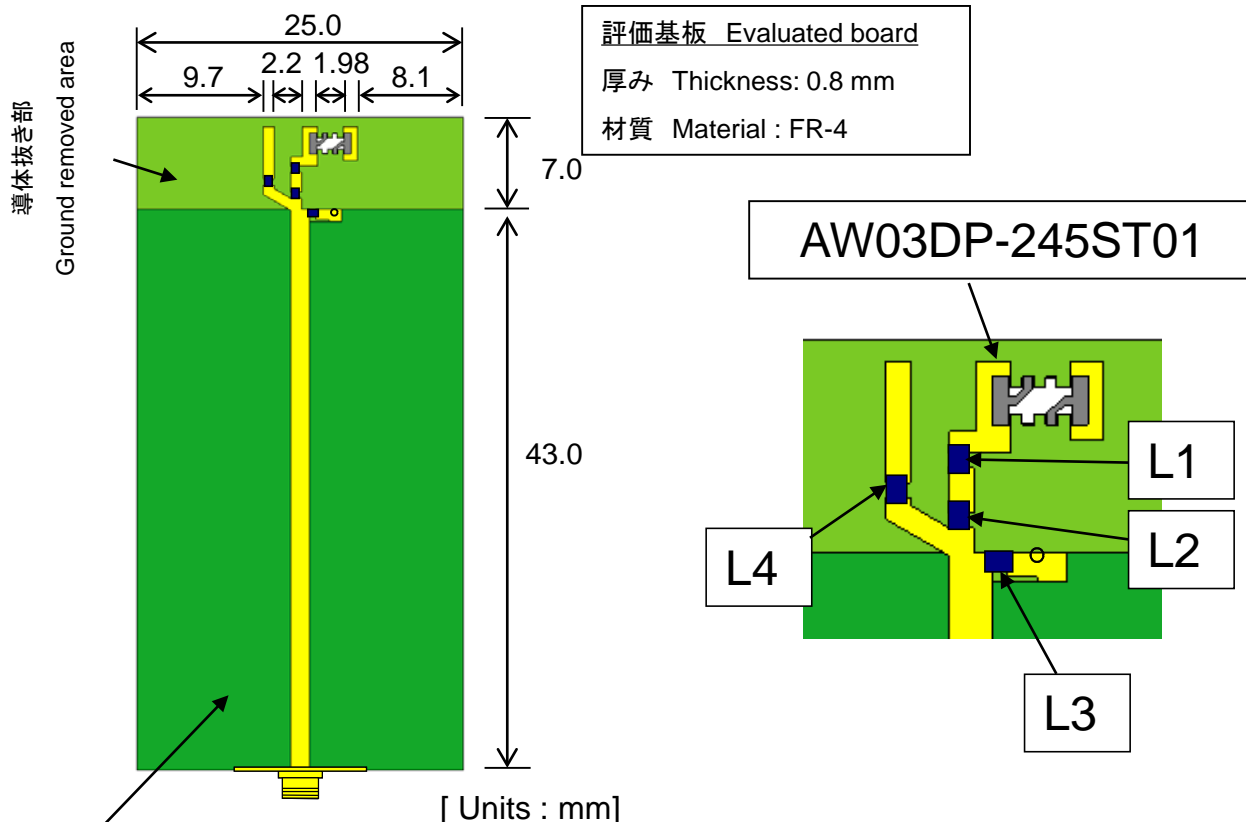
スルーホール  
Through-hole

[ 単位 Units : mm ]

For 2.4GHz & 5GHz Dual band

CHIP ANTENNA

<推奨調整回路、及び部品 Recommended matching circuit & chip components>



表面 Top: マイクロストリップライン Micro strip line

裏面 Bottom :GND

評価基板での最適定数

Optimal value of chip inductors Evaluated board sample board

チップインダクタ: 巻き線タイプ

Chip inductor : Wire wound type

f <sub>0</sub> [MHz]	インダクタンス Inductance [nH]			
	L1	L2	L3	L4
2442				
5400	2.4	8.2	2.5	2.4