

# 2DV Antenna specification

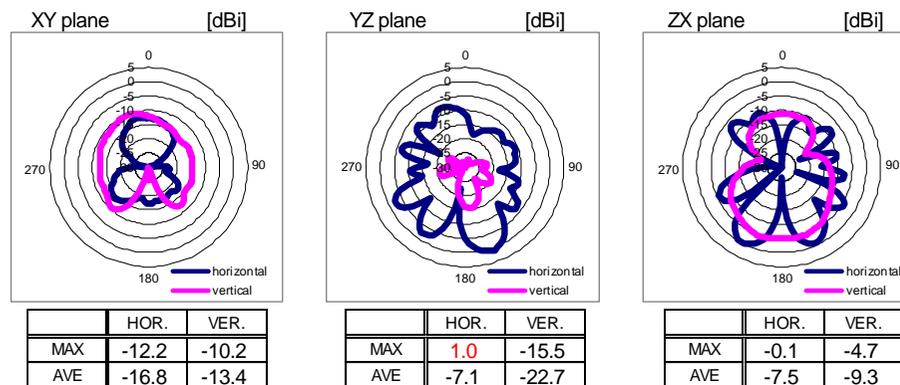


# 1. Antenna performance

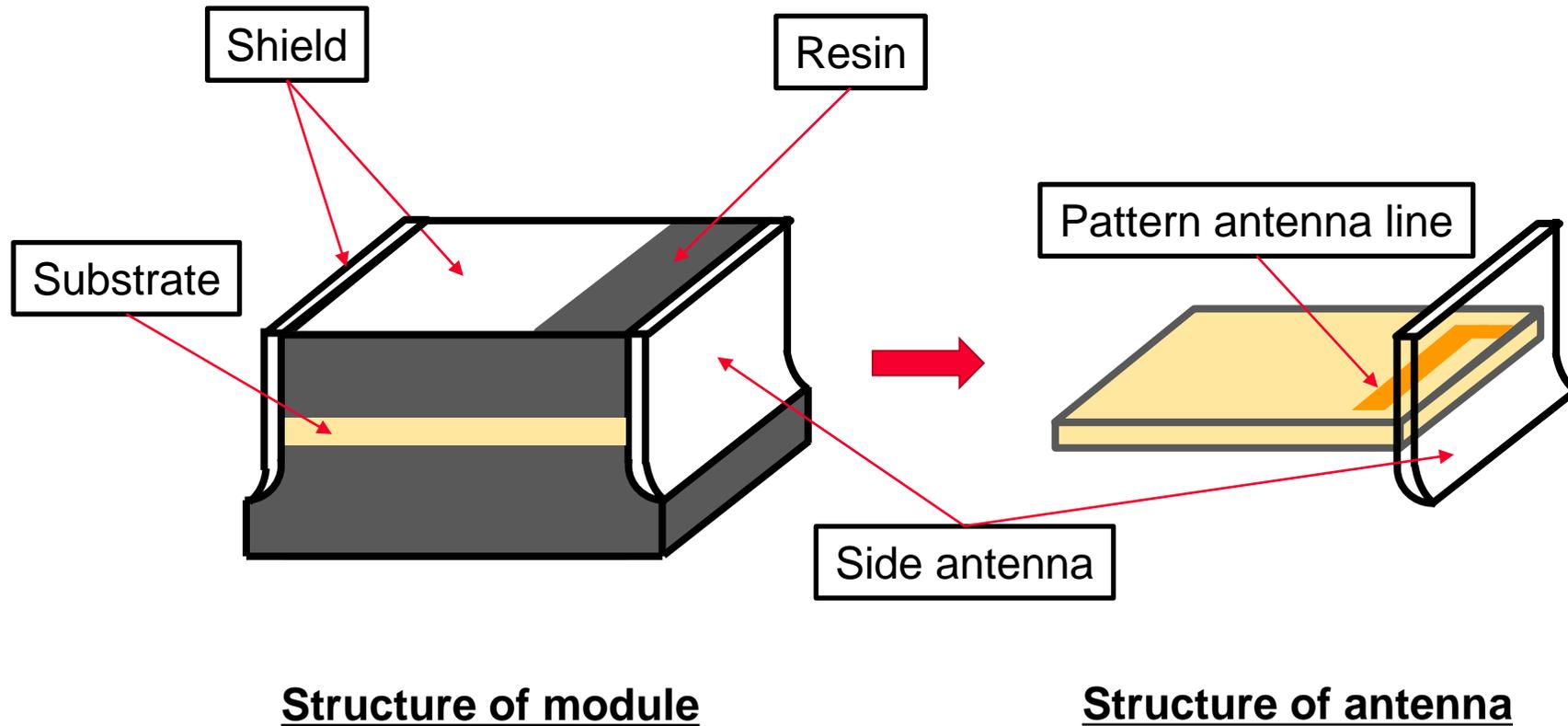
## 2DV

- Antenna P/N : Internal Trace Antenna monopole
- Type : Pattern Antenna monopole
- Antenna Gain : + 1.0 dBi
- Frequency : 2400-2484MHz

LINEAR POLARIZATION		XY-plane		YZ-plane		ZX-plane		Total Efficiency [dB]
		hor.	ver.	hor.	ver.	hor.	ver.	
2400 MHz	MAX.	-14.1	-12.7	-1.8	-19.6	-2.8	-7.8	-9.6
	AVE.	-18.6	-16.4	-9.8	-26.1	-10.4	-11.7	
2442 MHz	MAX.	-12.2	-10.5	<b>0.3</b>	<b>-16.7</b>	<b>-0.7</b>	<b>-5.4</b>	<b>-7.5</b>
	AVE.	<b>-16.9</b>	<b>-14.0</b>	<b>-7.6</b>	<b>-23.6</b>	<b>-8.2</b>	<b>-9.8</b>	
2484 MHz	MAX.	-12.2	-10.2	<b>1.0</b>	-15.5	-0.1	-4.7	-6.9
	AVE.	-16.8	-13.4	-7.1	-22.7	-7.5	-9.3	

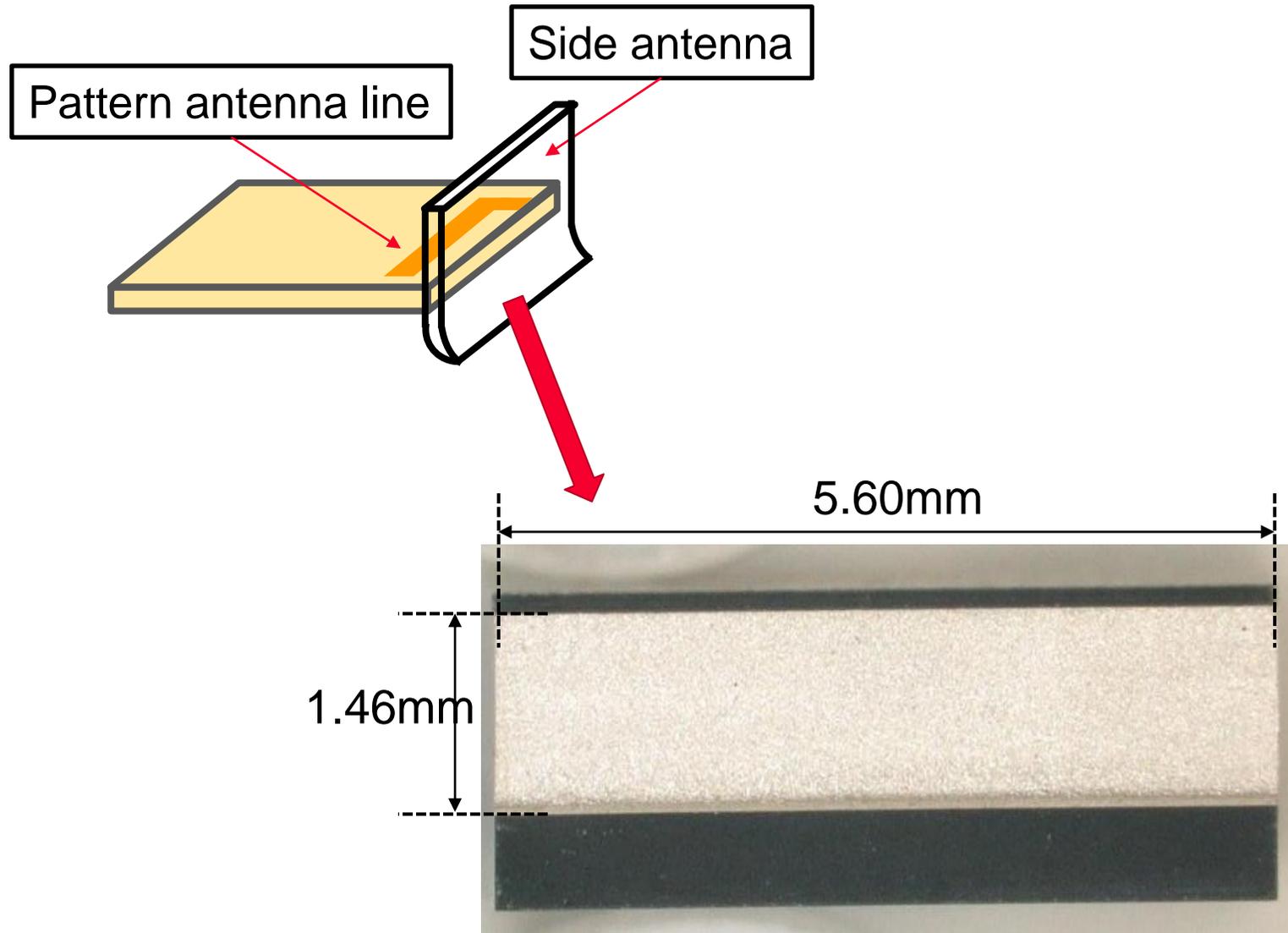


## 2. Antenna structure



The antenna consists of chips on the surface of the board, an electrode line, and a wall surface.

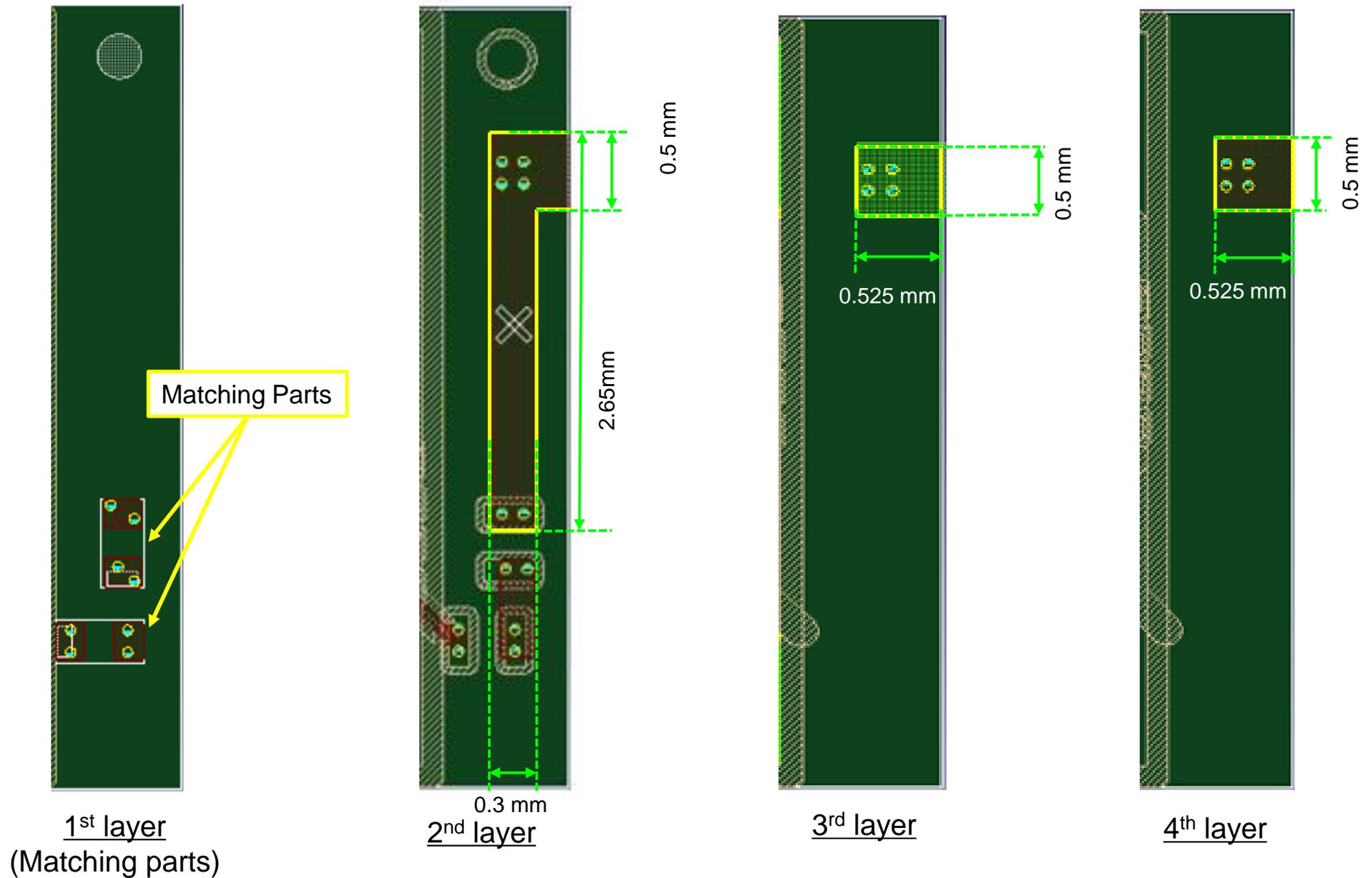
### 3. Antenna Size (Dimension)



Size of side-antenna

**Confidential**

# 4. Antenna Size (Dimension)



# Measurement Conditions for Antenna

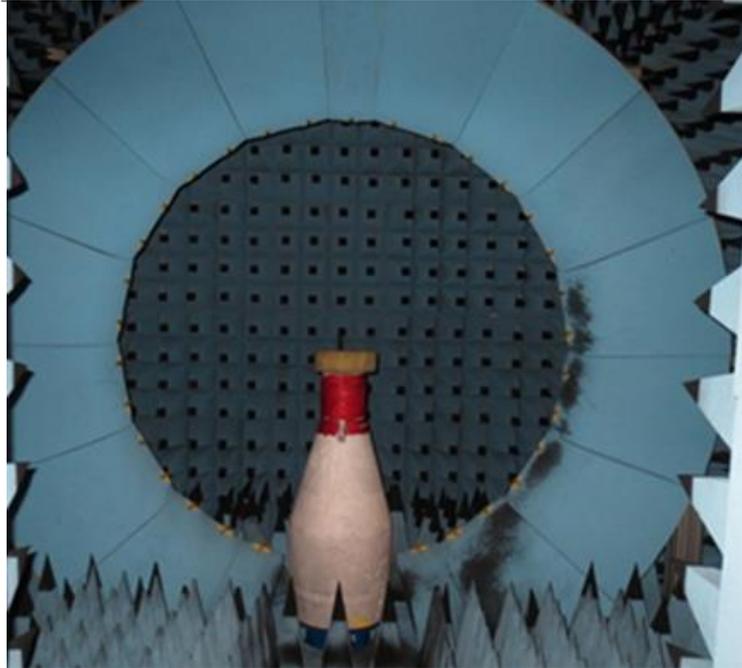
Kanazawa Murata Mfg. Co., Ltd  
Antenna Technical Support Section





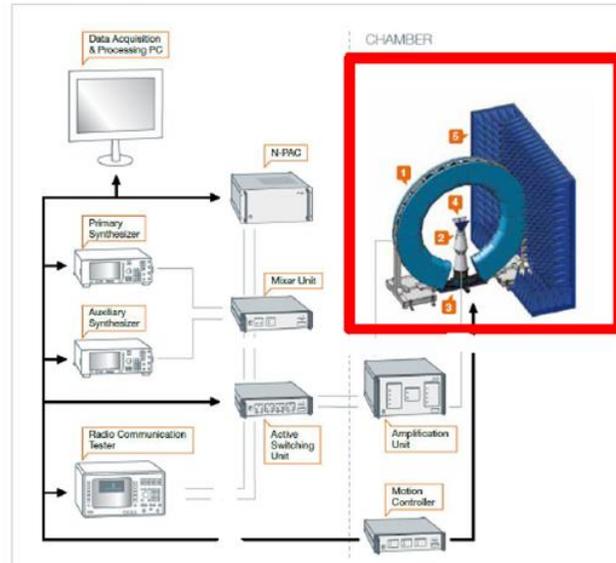
- Test method for antenna gain measurement:  
Standard antenna method (comparative method)
  - \* Comparing a measured antenna to a standard antenna with a known gain factor
- Equipment used for antenna gain measurement (model name, serial number, calibration date, etc.);
  - Measurement system  
Microwave Vision Group (former SATIMO) SG32 (details next page)
  - Equipment  
PAC (MW 000021H-0068)  
E4438C (MY45090139)  
E4428C (MY45280466)- Calibration date  
October 25, 2022
  - Antenna gain measurement date / Measurement person  
October 28, 2022 / Rie Ichimura

# Details of SG32



Anechoic chamber size		Approximately 3.5m x 3.5m x 3m (H)			
Frequency band		800~6000MHz (18~40GHz compatible with Option)			
Measurement time	Elevation 1 cut	Real time			
	Global surface measurement	< Approx. 20 seconds (when measuring 10 frequencies)			
Measurement uncertainty	Peak gain	< +/-0.75dB (1.0~6.0GHz)			
	Low gain	< +/-1.0dB (0.8~1.0GHz)			
Dynamic range		70dB			
Cross Polar Isolation		> 45dB			
DUT size	0.8 GHz	1.8 GHz	2.5 GHz	6 GHz	
	75 cm	75 cm	65 cm	30 cm	

## System overview



Peak gain variation is secured within  $\pm 0.75$  dB by system calibration.

