



AnJie
Electronics Co.

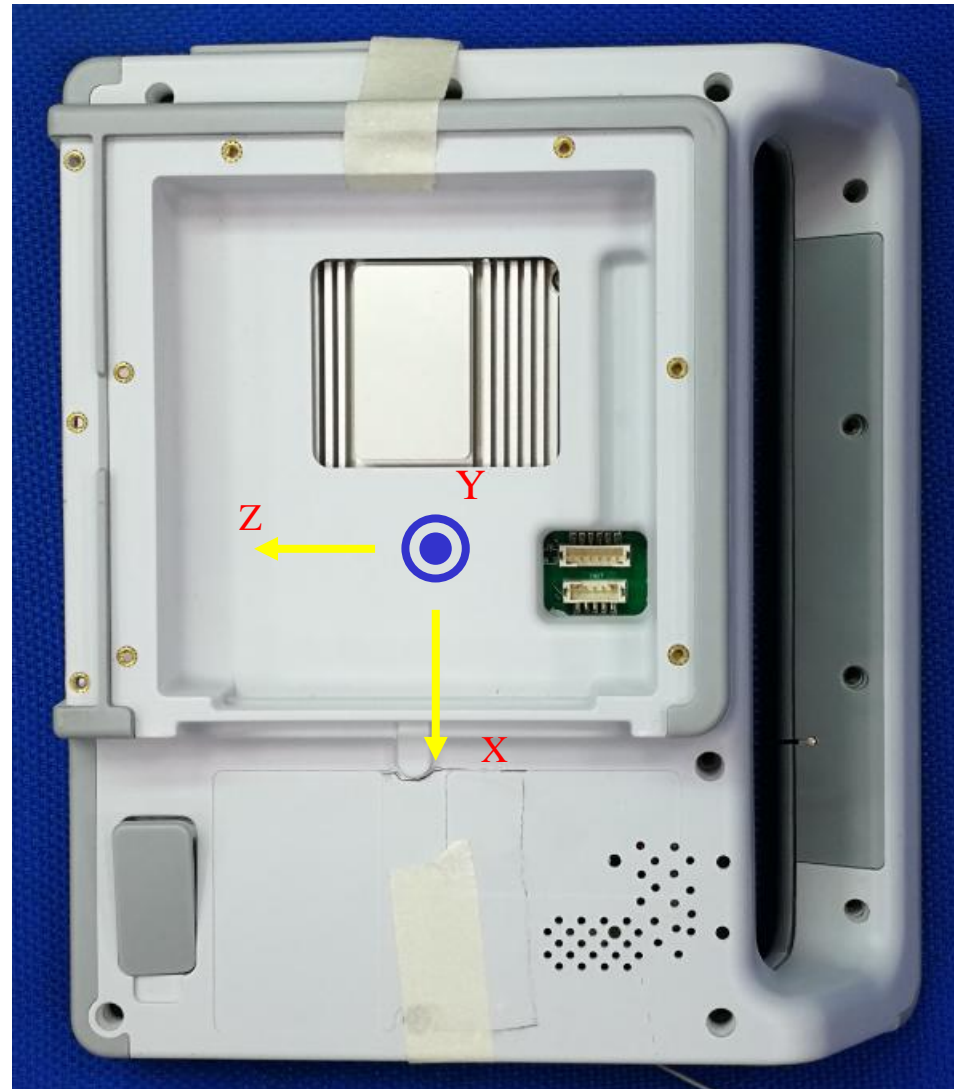
Evaluation Test Report of WIFI Internal Antenna

Project :SA47

Date 2021/03/30

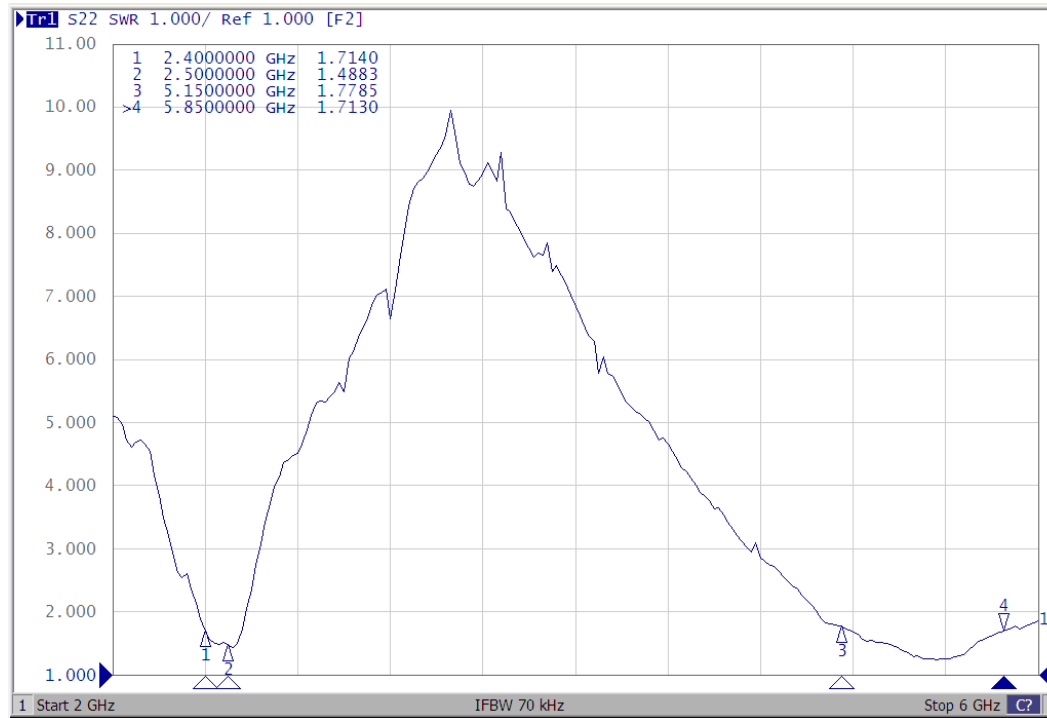
FCC ID: M82-DMSSA47
IC: 9404A-DMSSA47
Model : 501-00407-00
Antenna Type: PIFA Antenna

Antenna Configuration

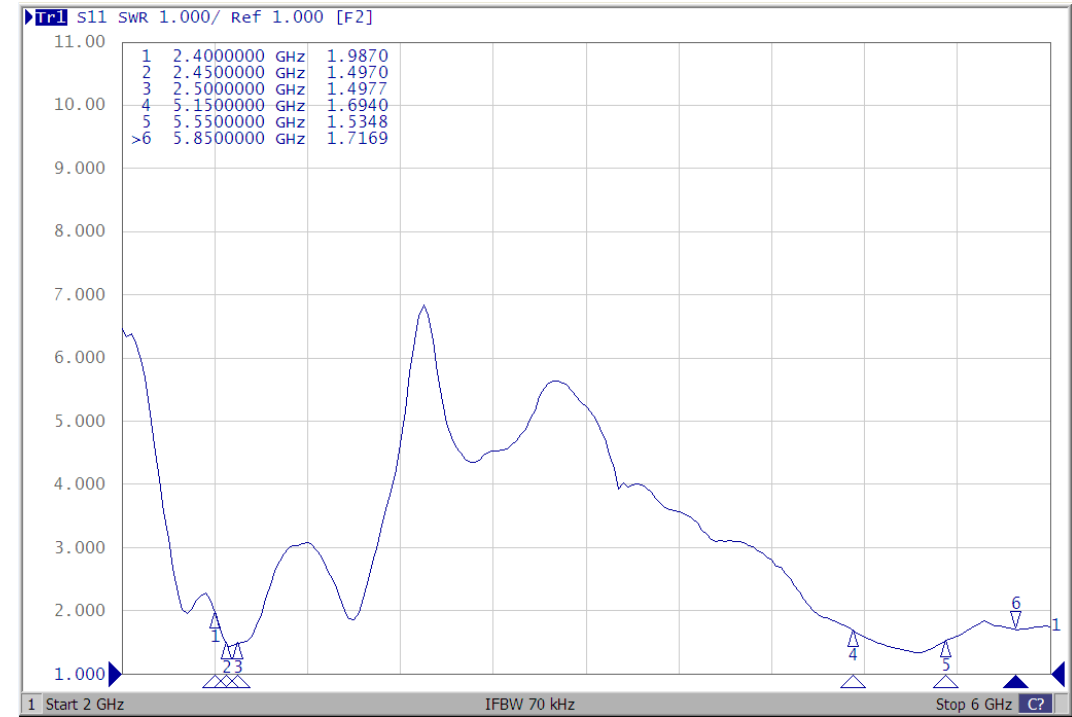


SWR / Return Loss Test Data

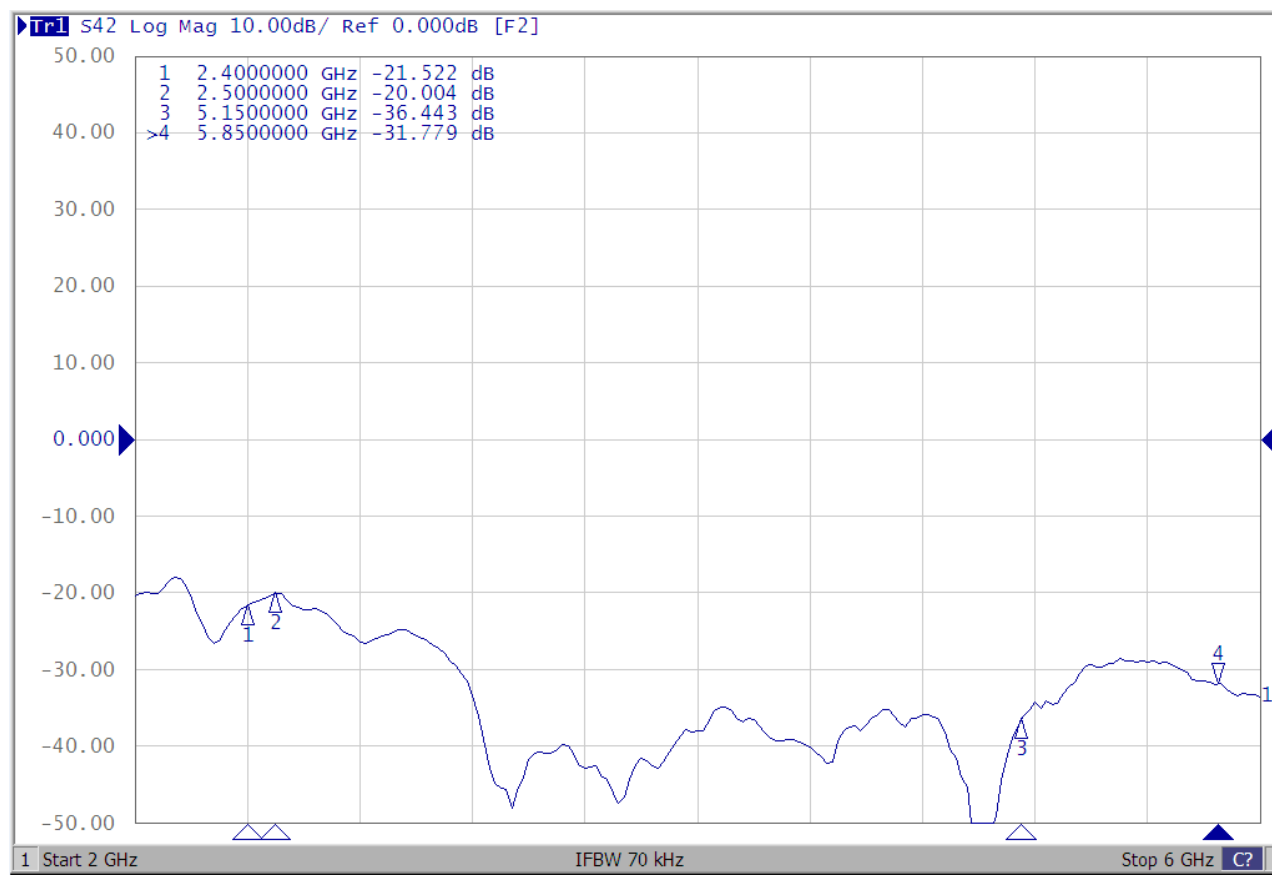
Black



Gray

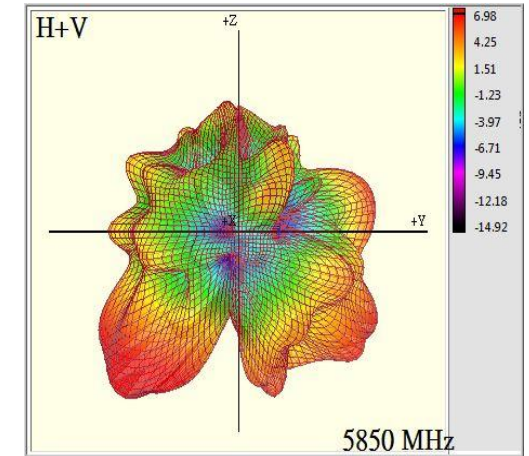
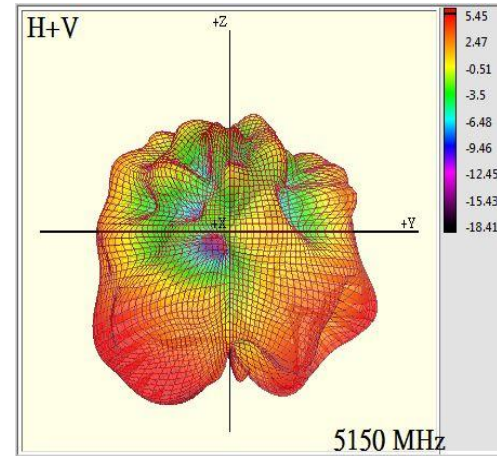
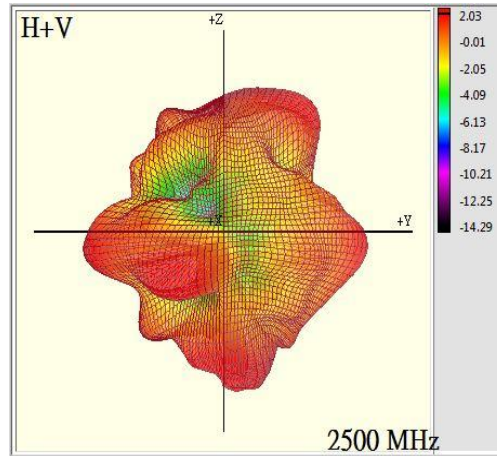
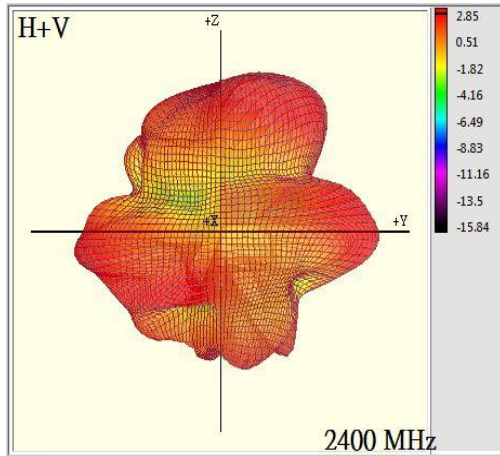


Isolation

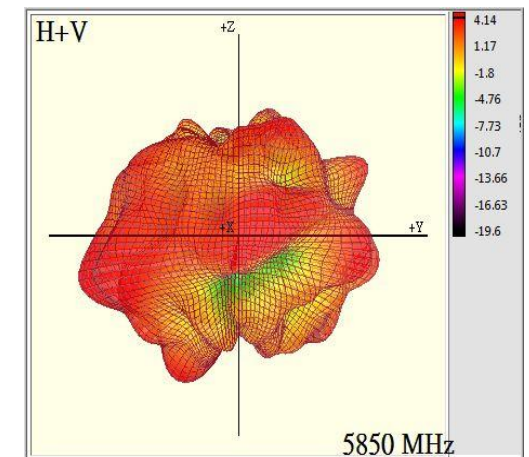
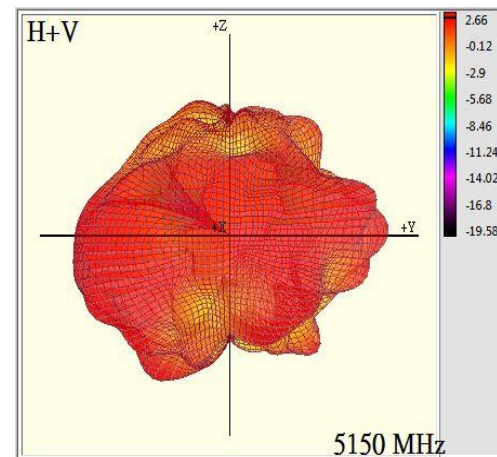
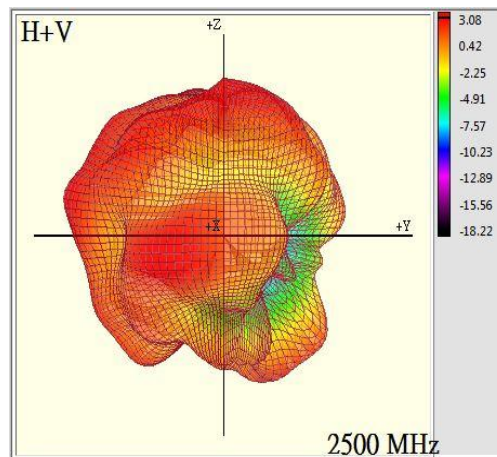
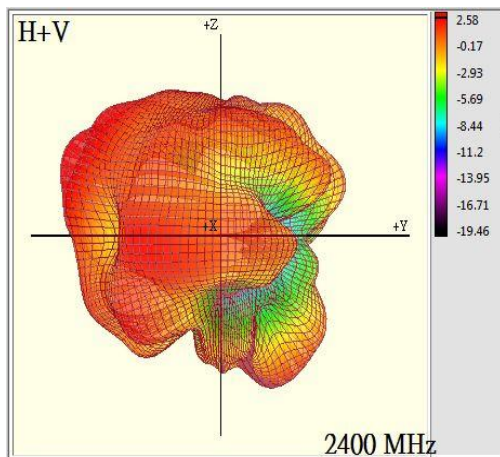


Radiation Pattern

Black



Gray





Gain & Efficiency Test Data

Black

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.78	2.56	2.19	2.20	1.84	1.58	1.49	1.33	1.41	1.13	1.54
Directivity (dBi)	5.05	4.96	4.76	4.89	4.56	4.44	4.48	4.33	4.45	4.34	4.68
Efficiency (dB)	-2.27	-2.40	-2.57	-2.69	-2.72	-2.86	-2.99	-3.00	-3.04	-3.21	-3.14
Efficiency (%)	59.23	57.60	55.34	53.83	53.44	51.79	50.19	50.15	49.67	47.74	48.49

Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Gain (dBi)	2.35	2.48	2.20	1.46	3.46	2.16	3.50	3.96
Directivity (dBi)	4.43	4.48	4.22	3.60	5.12	4.65	5.45	5.92
Efficiency (dB)	-2.08	-2.00	-2.02	-2.14	-1.66	-2.49	-1.95	-1.96
Efficiency (%)	61.92	63.11	62.80	61.05	68.28	56.30	63.79	63.75



Gain & Efficiency Test Data

Gray

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.08	1.97	2.07	2.42	2.59	2.67	2.55	2.62	2.56	2.86	2.97
Directivity (dBi)	4.84	4.72	4.80	5.09	5.11	5.13	4.95	4.88	4.70	4.94	4.84
Efficiency (dB)	-2.76	-2.75	-2.73	-2.67	-2.52	-2.46	-2.40	-2.26	-2.14	-2.08	-1.87
Efficiency (%)	53.00	53.09	53.35	54.11	55.95	56.77	57.60	59.43	61.08	61.98	64.94

Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Gain (dBi)	1.66	2.34	2.48	2.12	2.61	2.04	3.14	2.92
Directivity (dBi)	4.32	4.82	4.71	4.45	4.55	4.75	5.26	5.33
Efficiency (dB)	-2.66	-2.48	-2.23	-2.33	-1.94	-2.71	-2.12	-2.41
Efficiency (%)	54.26	56.48	59.90	58.49	63.95	53.59	61.37	57.35

NO	DESCRIPTION	DESCRIPTION ; MAT'L ; Color	QTY	REMARK
A	PCB	FR4(Double Layer)0.5oz ; T=0.6mm ; 雙面綠漆	1	
B	Double Tape	3M9888T	1	
C	Cable	杜邦線UL3302 26AWG ; OD=1.0mm ; Yellow / Black / Red	1	
D	Connector	杜邦2.54-T(1*3) ; 材質 : PA66_Black ; 磷青銅_鍍錫端子	1	
E	Matching Cap	0402	6	
F	Conductive Fabric Tape	導電膠布(160mm*15mm*T=0.12) ; Black	1	

ELECTRICAL
Frequency :
13.56 MHz

A

A

B

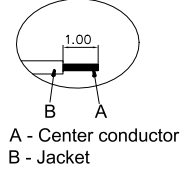
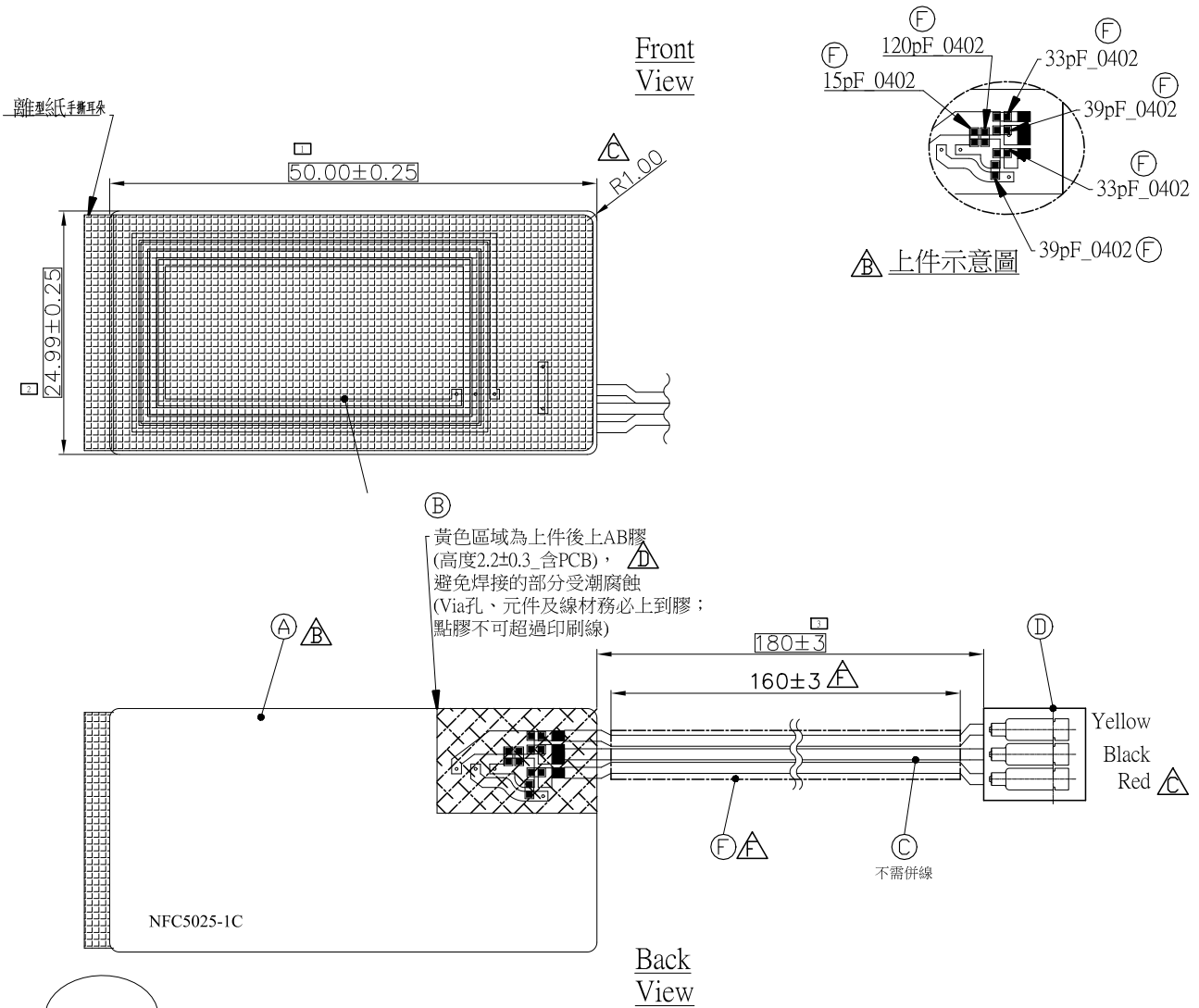
B

C

C

D

D



※標記□記號者, 為重點檢驗尺寸

△	熱縮套管改為導電膠布	2020.10.22	PIPI
△	增加標示頻段	2020.06.09	PIPI
△	變更點膠後高度及公差	2020.03.31	PIPI
△	增加R角; 增加熱縮套管; 增加線材標示及變更顏色	2020.01.30	PIPI
△	變更PATTERN及元件電容質、增加上膠區域印刷線	2019.12.17	PIPI
LTR	DESCRIPTION	DATE	REQ. BY

設計DR.	PIPI	2019.11.29	品名	版本 REV.
核准APPD.	Marco		ARTICLE	F
容許公差 TOLERANCE			RFNFC502518PFNBX01	
6 以下.....±0.2			單位 UNIT	比例 SCALE
6 以上~30.....±0.5			mm	****
30 以上~120.....±0.8			張數 SHEET	7
120 以上~315.....±1.2			☉	
315 以上~1000.....±2.0				
1000 以上~2000.....±3.0				

PSA 華新科技股份有限公司
WALSIN TECHNOLOGY CORPORATION

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E

E