

A. MAXIMUM RATING:

1. Input power : 10dBm
2. Maximum DC Voltage: 5V
3. Operating temperature range: -30 °C to +85 °C
4. Storage temperature range: -30 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:(Filter1) ($f_{T0}=1842.5$ MHz)

Parameters Description		Unit	Minimum	Typical	Maximum	Note
Insertion Loss(*1)		1805~ 1880 MHz	dB	-	2.4	3.6
Ripple		1805~ 1880 MHz	dB		0.8	2.0
VSWR	Input	1805~ 1880 MHz	-	-	1.6	2.0
	Output		-	-	1.9	2.3
Attenuation:						
1 ~ 1710 MHz		dB	15	24	-	-
95 MHz		dB	50	89	-	-
824 ~ 849 MHz		dB	39	52	-	-
832 ~ 862 MHz		dB	38	52	-	-
880 ~ 915 MHz		dB	37	50	-	-
1615 ~ 1690 MHz		dB	15	24	-	-
1710 ~ 1785 MHz		dB	15	34	-	-
		dB	28	-	-	@ 23 to 27 ° C
1712.5 ~ 1782.5 MHz		dB	20	35	-	-
1785 ~ 1790 MHz		dB	1	25	-	-
1920 ~ 1980 MHz		dB	34	37	-	-
1920 ~ 6000 MHz		dB	12	27	-	-
2400 ~ 2500 MHz		dB	32	48	-	-
2500 ~ 2570 MHz		dB	28	47	-	-
3515 ~ 3610 MHz		dB	28	42	-	-
3610 ~ 3760 MHz		dB	28	42	-	-
3760 ~ 6000 MHz		dB	12	27	-	-

4900 ~ 5950 MHz	dB	12	28	-	-
5225 ~ 5415 MHz	dB	18	35	-	-
5415 ~ 5640 MHz	dB	14	32	-	-

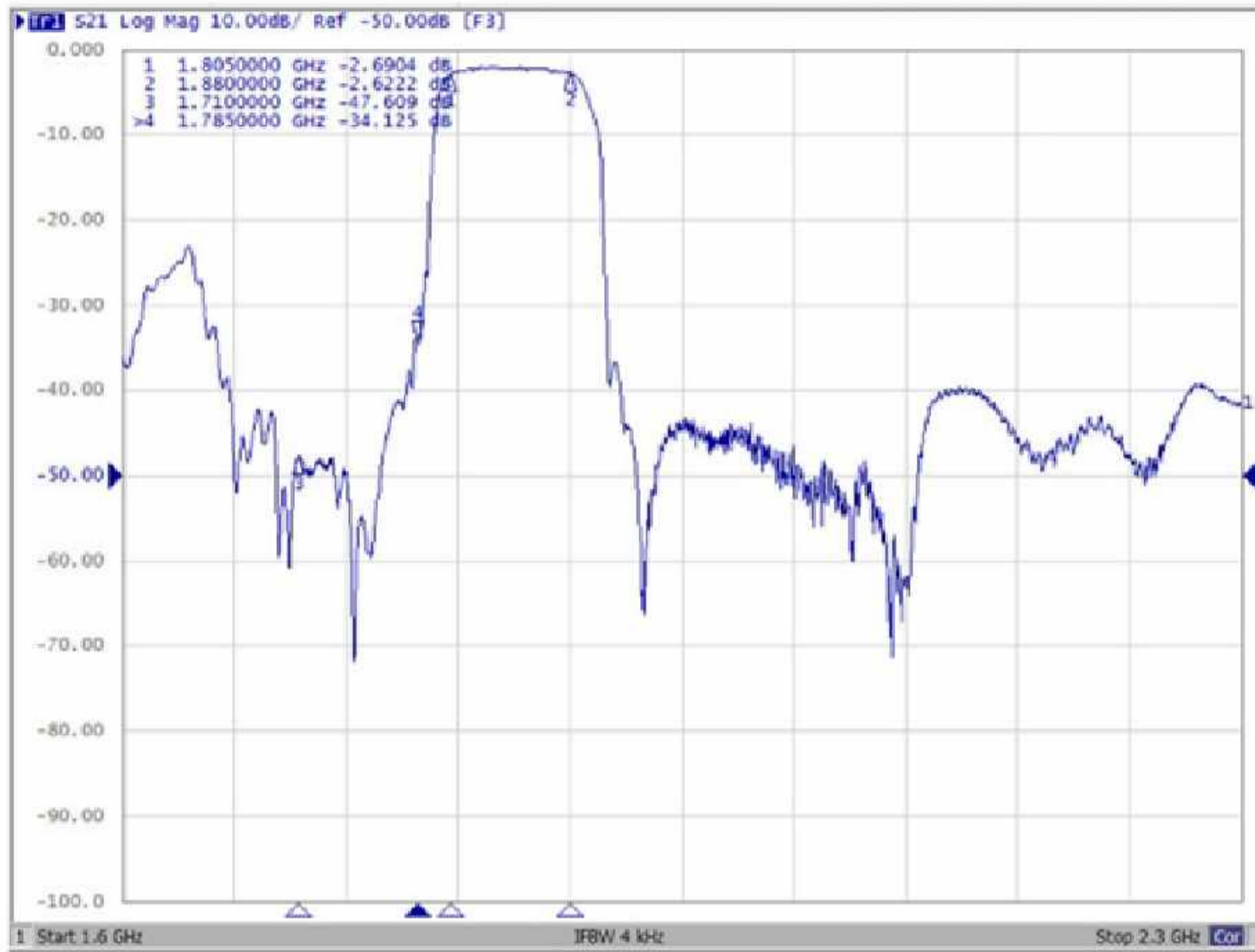
(*1) Specification of insertion loss excludes loss that comes from the test board.

(Filter2) ($f_{T0}=2140$ MHz)

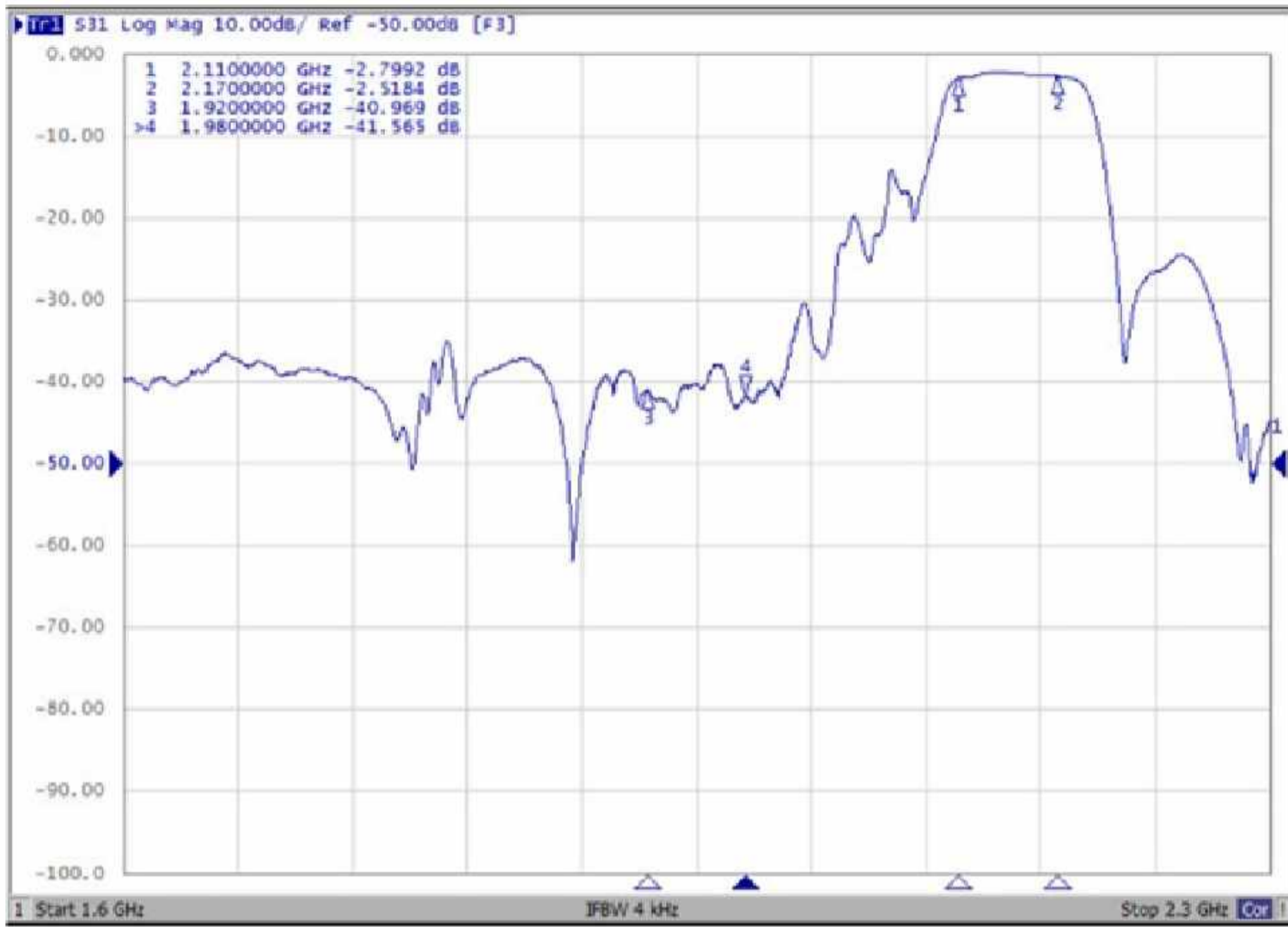
Parameters Description		Unit	Minimum	Typical	Maximum	Note
Insertion Loss(*1)	2110 ~ 2170 MHz	dB	-	2.4	3.0	
Ripple	2110 ~ 2170 MHz	dB	-	0.7	1.8	
VSWR	Input	-	-	1.7	2.2	
	Output	-	-	1.8	2.2	
Attenuation:						
10 ~ 1920 MHz		dB	24	34	-	-
190 MHz		dB	50	82	-	-
400 MHz		dB	50	69	-	-
699 ~ 716 MHz		dB	48	59	-	-
777 ~ 787 MHz		dB	40	56	-	-
810 ~ 830 MHz		dB	45	56	-	-
814 ~ 849 MHz		dB	40	56	-	-
824 ~ 849 MHz		dB	44	56	-	-
880 ~ 915 MHz		dB	40	54	-	-
898 ~ 925 MHz		dB	43	54	-	-
1710 ~ 1785 MHz		dB	35	40	-	-
1730 ~ 1920 MHz		dB	28	35	-	-
1920 ~ 1980 MHz		dB	35	38	-	-
2015 ~ 2075 MHz		dB	10	14	-	-
2185 ~ 6000 MHz		dB	1	3	-	-
2400 ~ 2500 MHz		dB	33	42	-	-
4030 ~ 4150 MHz		dB	26	36	-	-
4220 ~ 4340 MHz		dB	26	35	-	-
4340 ~ 6000 MHz		dB	15	23	-	-
4900 ~ 5950 MHz		dB	15	24	-	-

(*1) Specification of insertion loss excludes loss that comes from the test board.

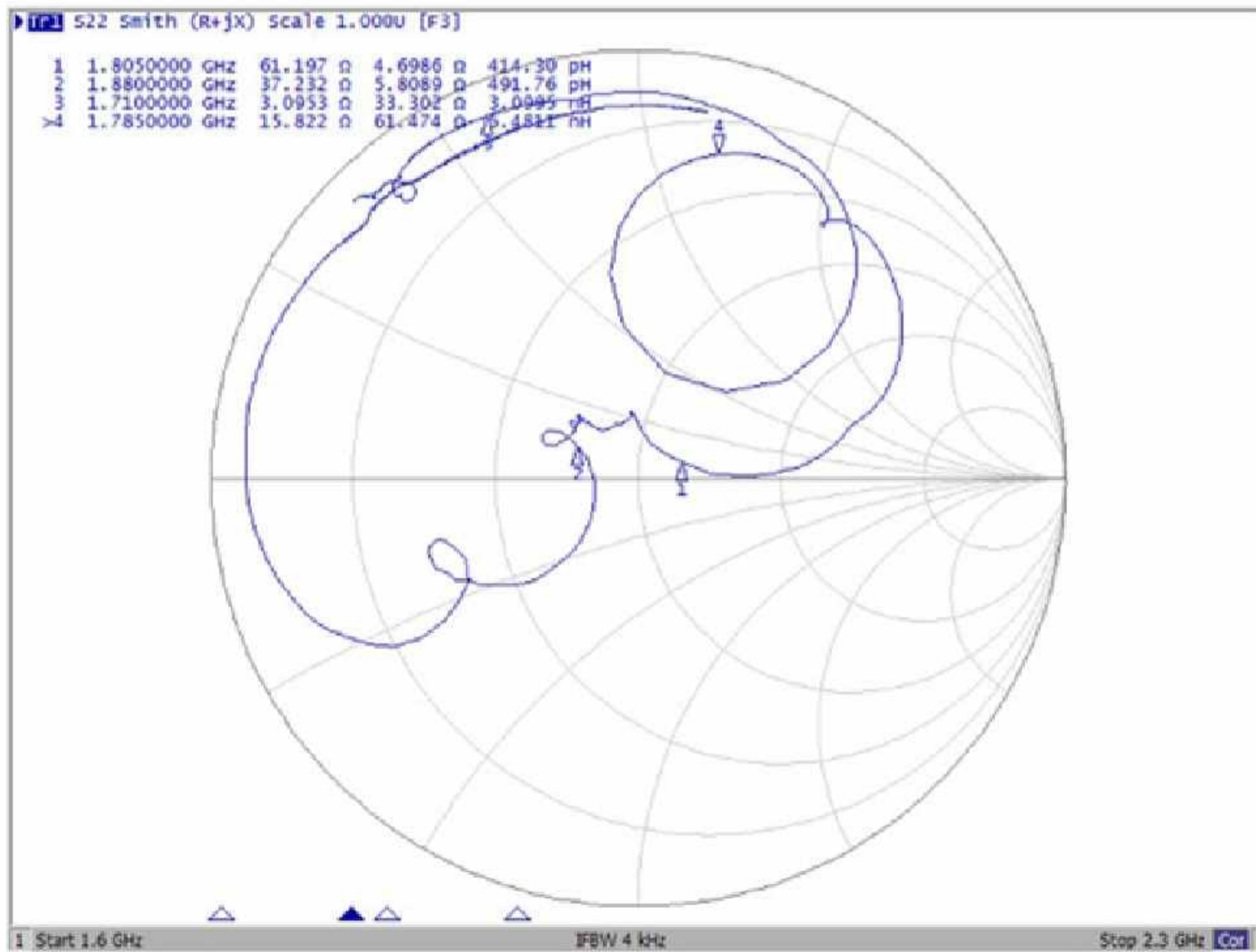
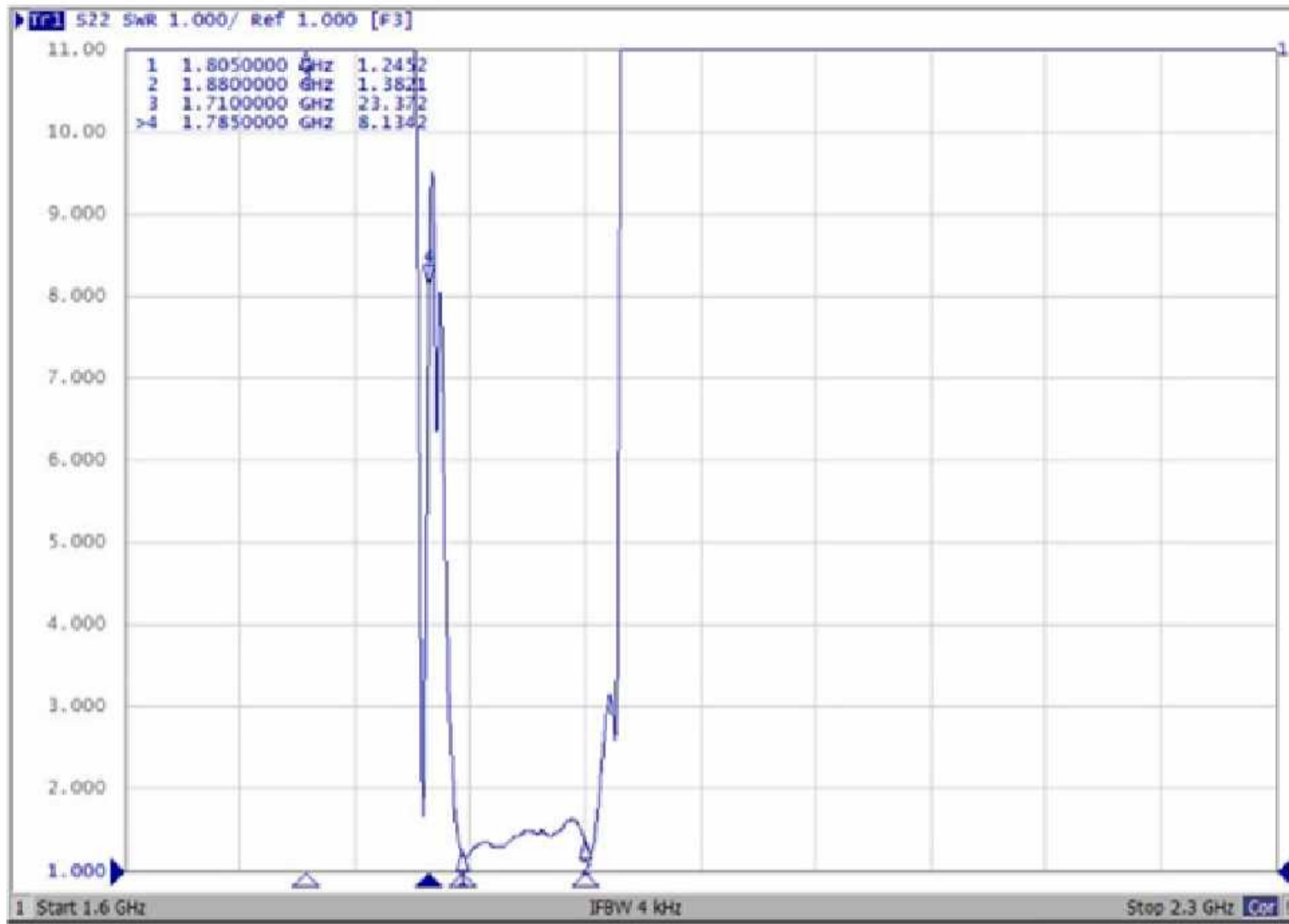
C. Frequency Characteristics: Passband (Filter1)



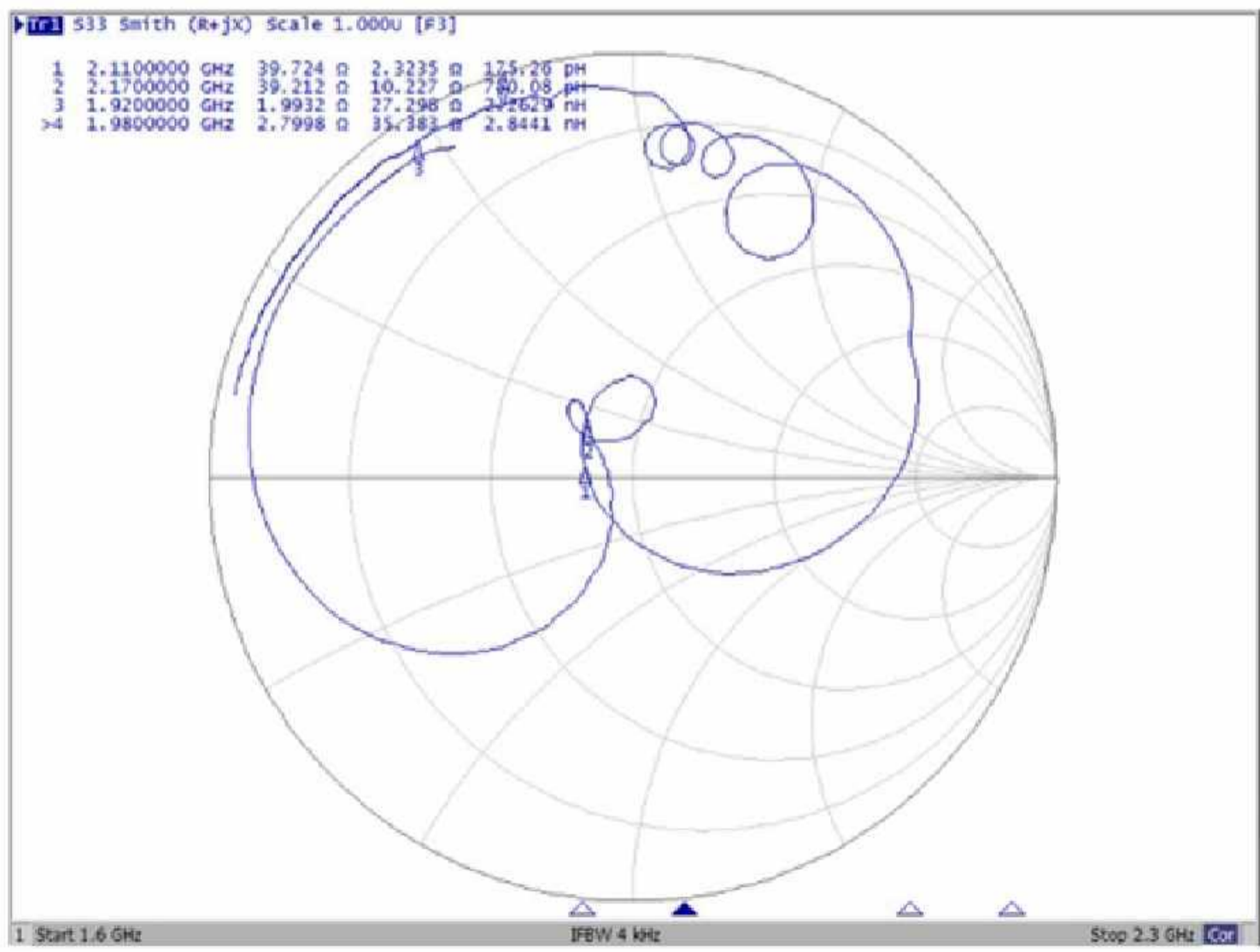
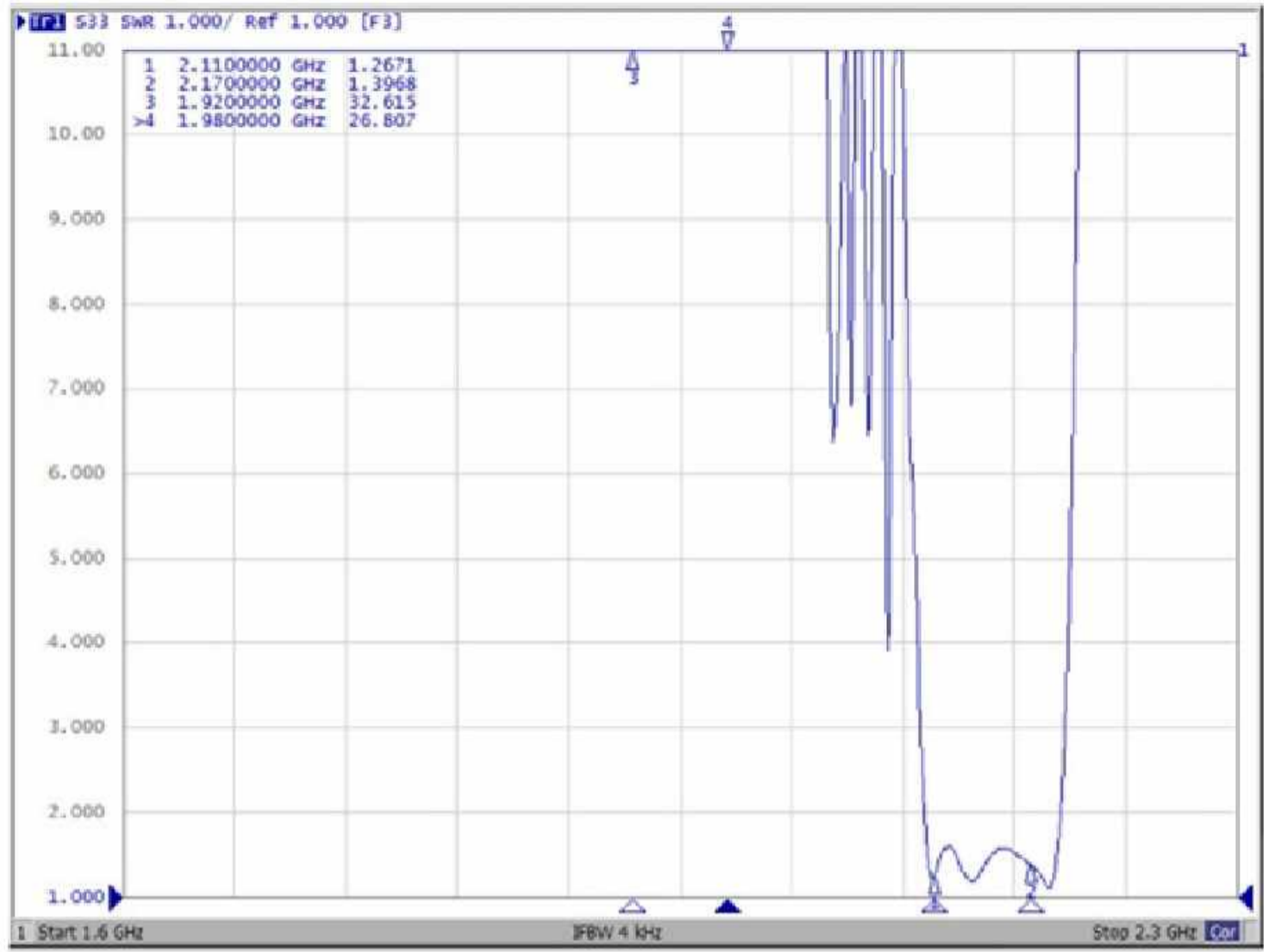
Passband (Filter2)



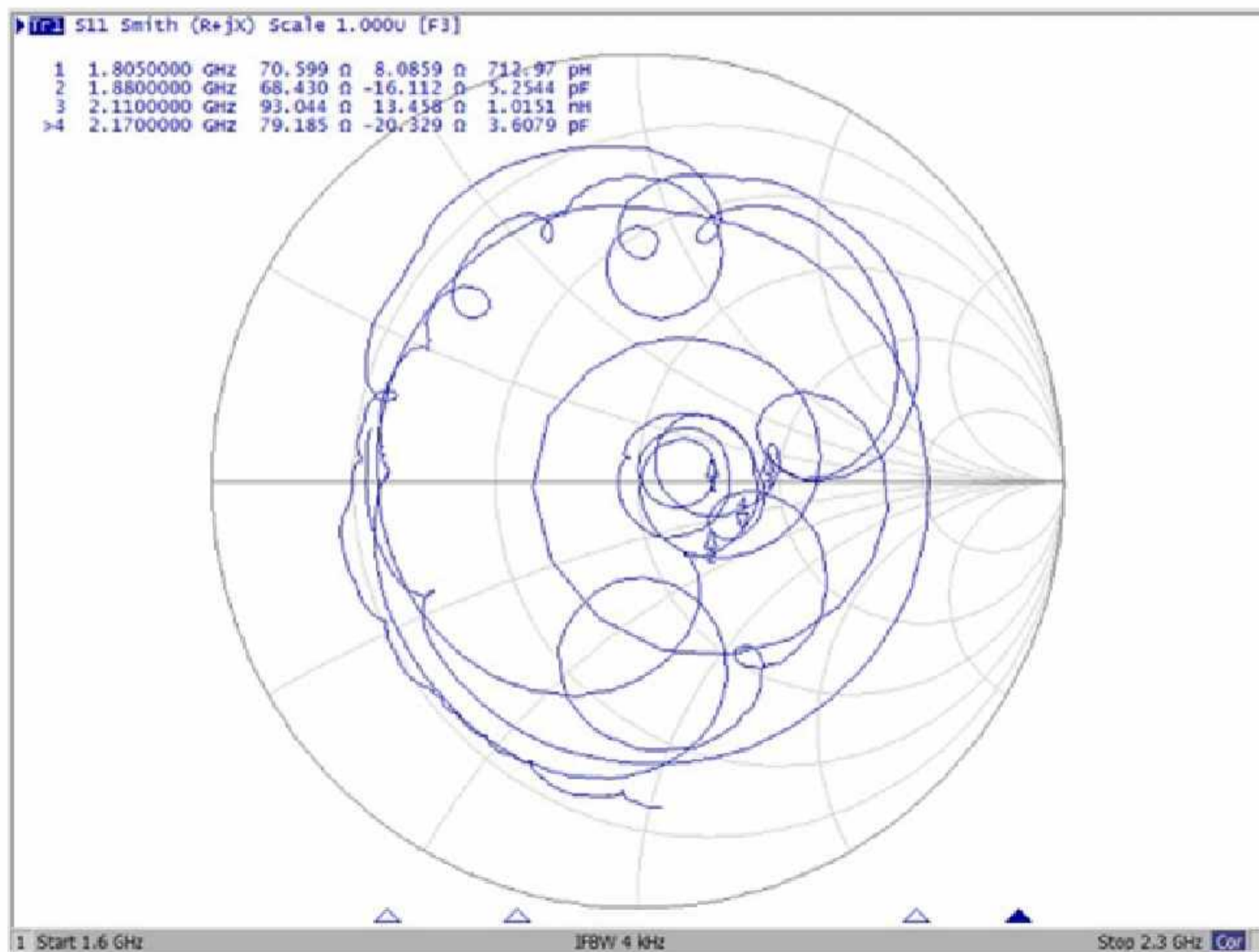
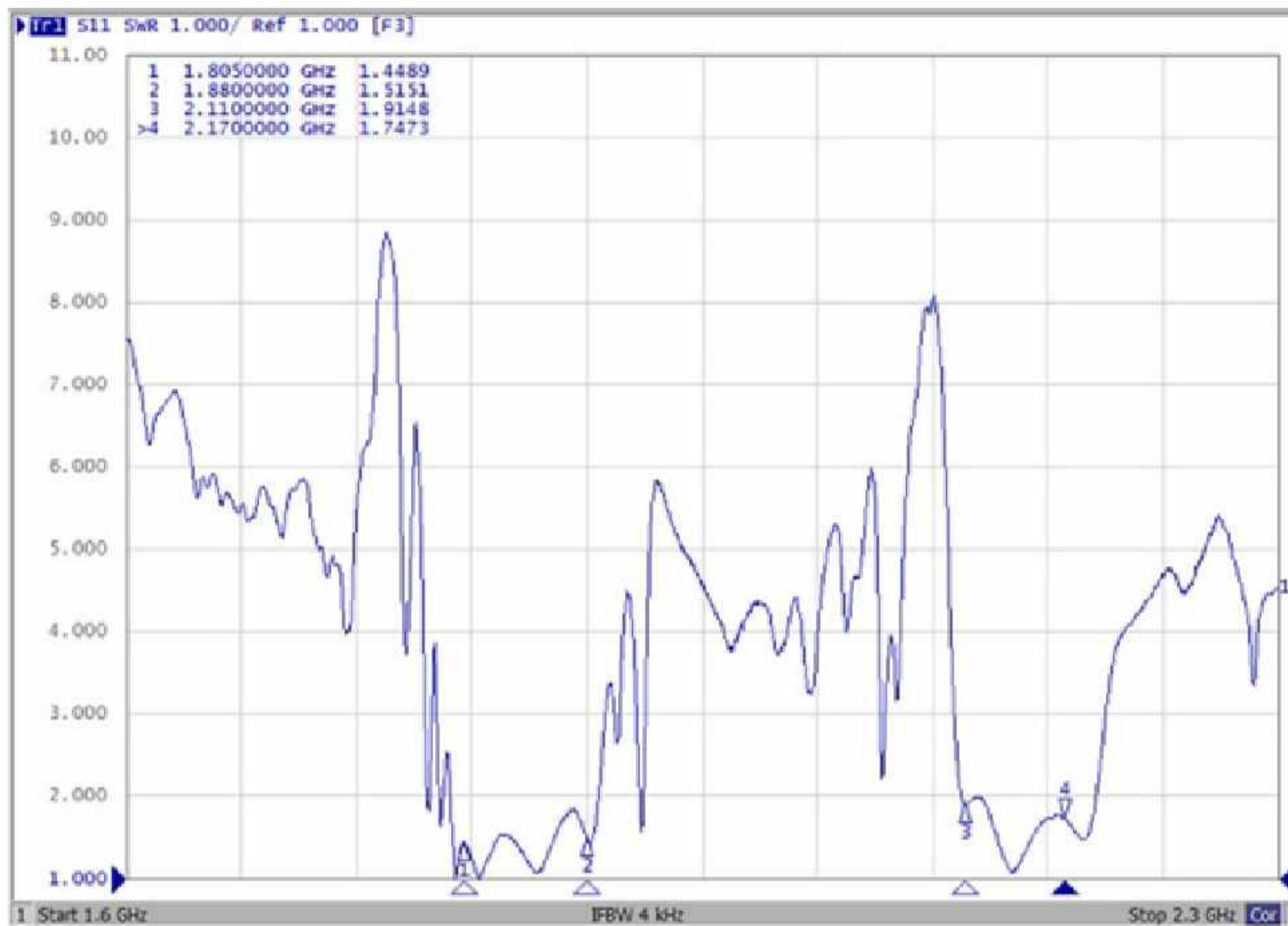
Output Port (Filter1)



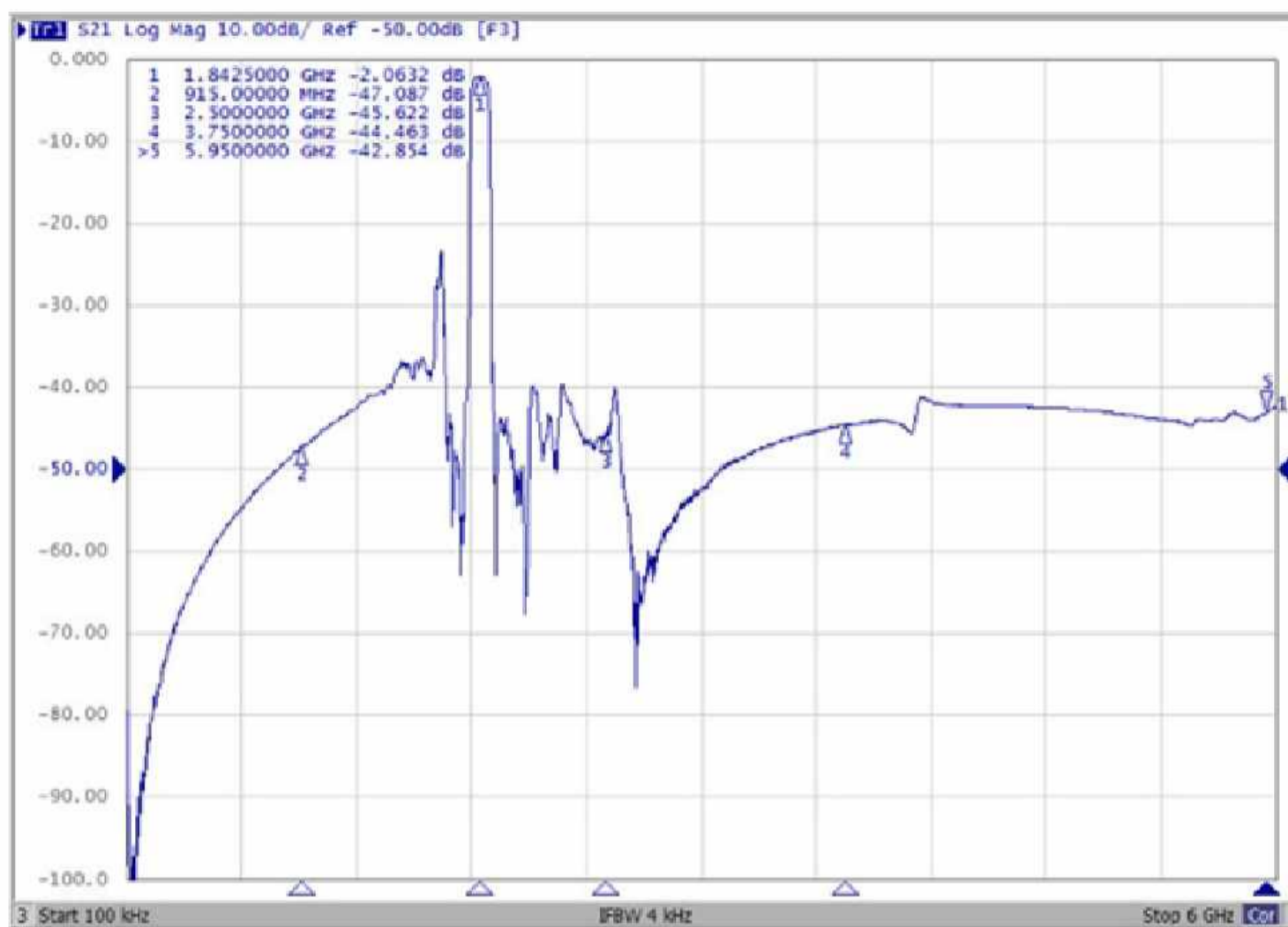
Output Port (Filter2)



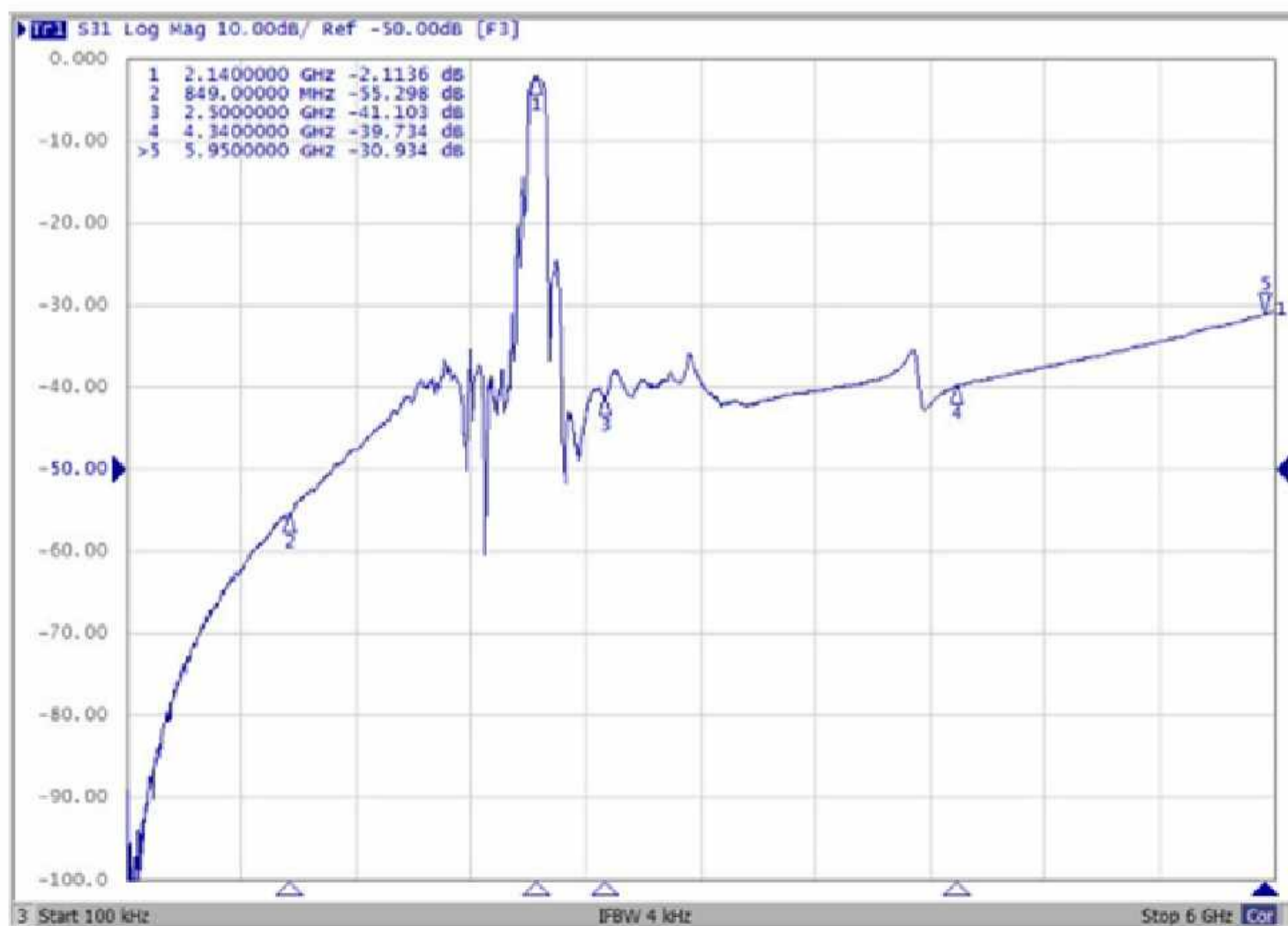
Input Port



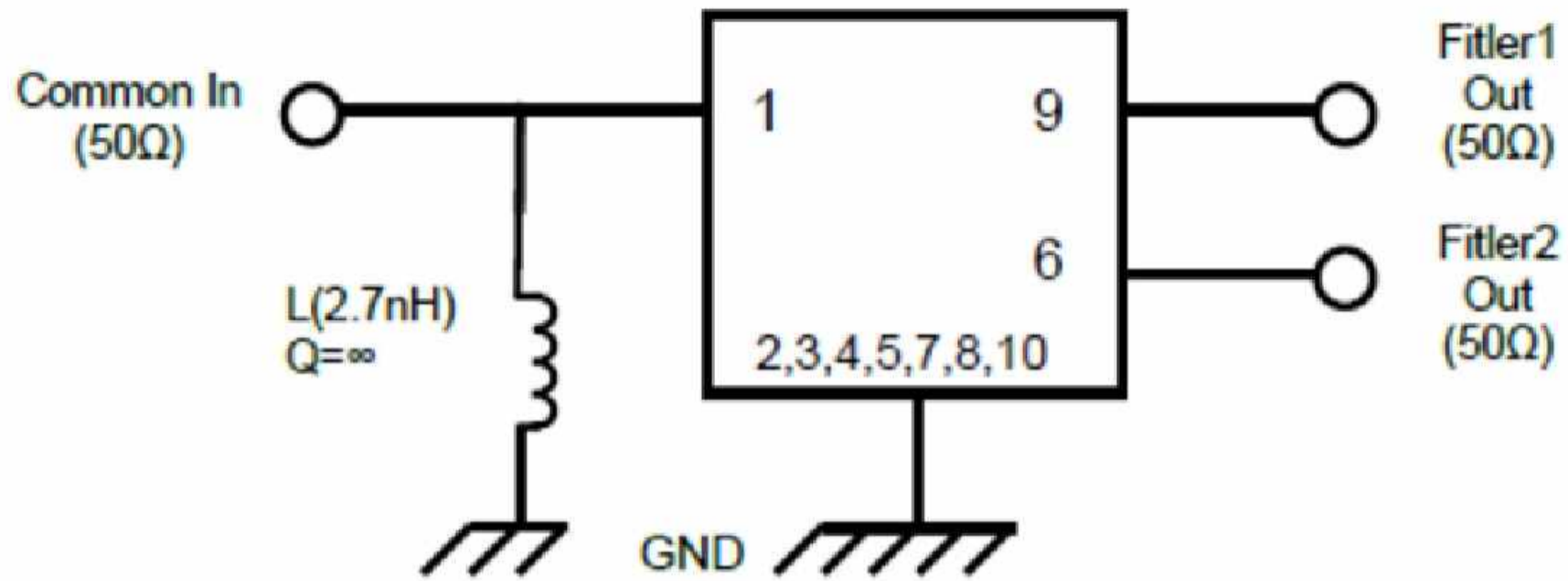
Wide span (Filter1)



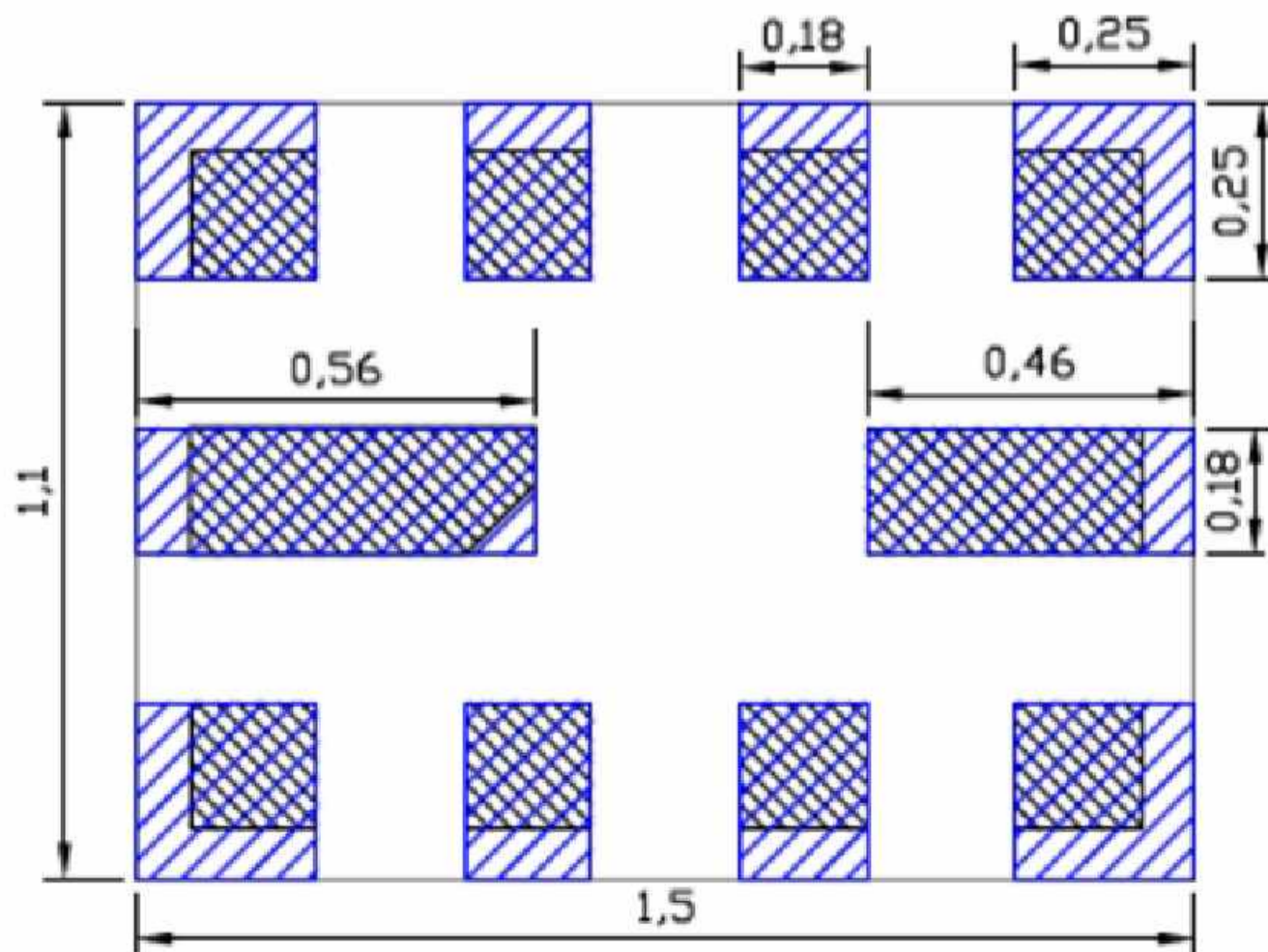
Wide span (Filter2)



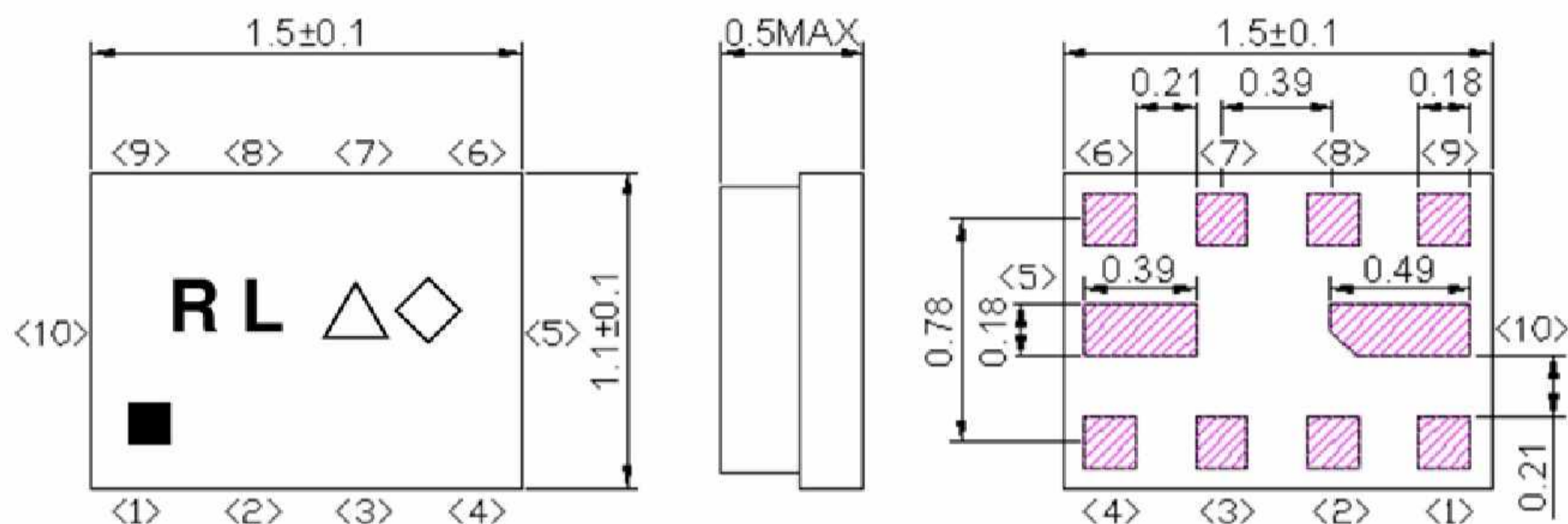
D. MEASUREMENT CIRCUIT:



D. FOOTPRINT:



E. OUTLINE DRAWING:



Not Specified Tolerance : ± 0.10 mm
 Coplanarity : 0.1 mm max.
 A to H : Pin No.
 Unit : mm

Marking name : **RL**

△: Date code(2020 May → s ,....., 2023 Dec→m.)

◇: Lot Code.

Product Date Code. Follow below table. (4-year cycle)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	n	p	q	r	s	t	u	v	w	x	y	z
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m

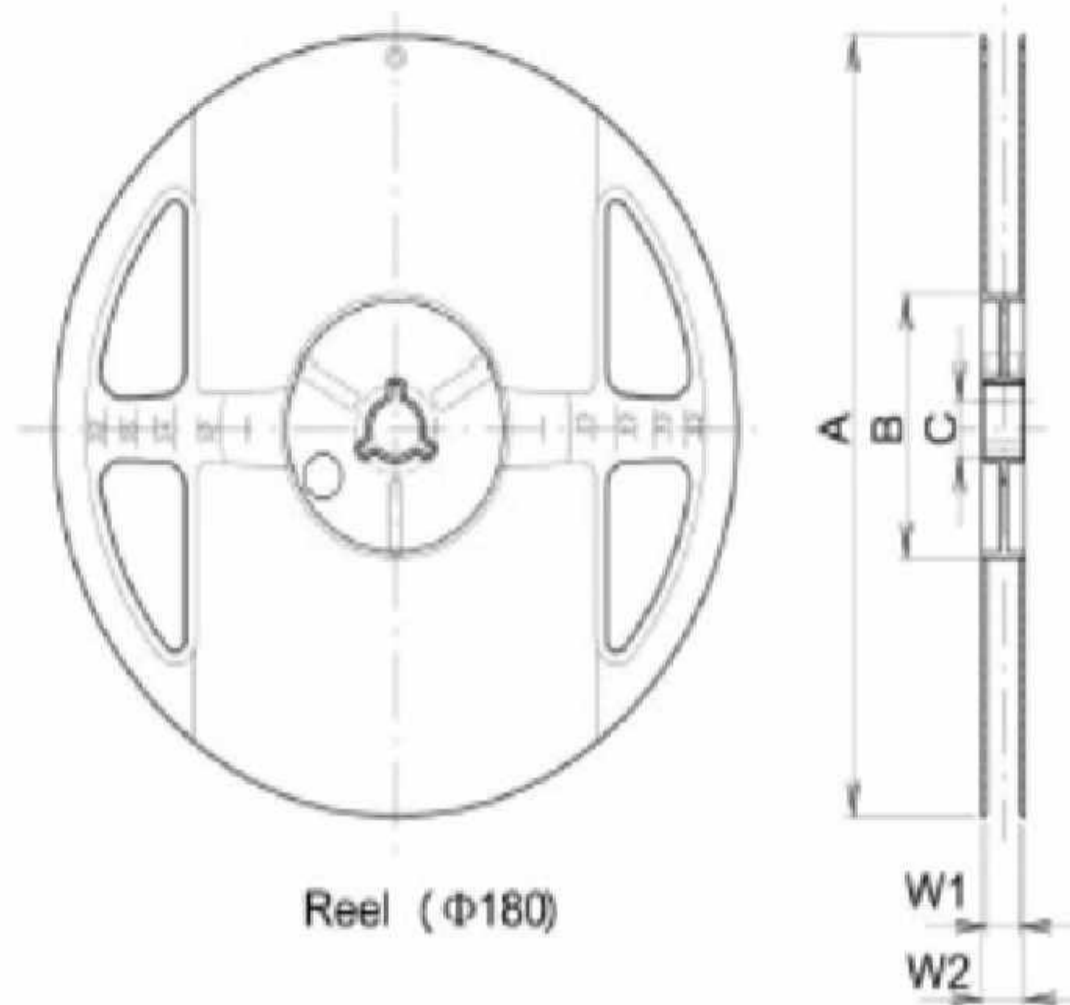
Pin assignment

Pin No.	Pin name	Description
1	In	Common Input
2	GND	Ground
3	GND	Ground
4	GND	Ground
5	GND	Ground
6	Out(Filter2)	Filter2 Output
7	GND	Ground
8	GND	Ground
9	Out(Filter1)	Filter1 Output
10	GND	Ground

F. PACKING:

1. REEL DIMENSION

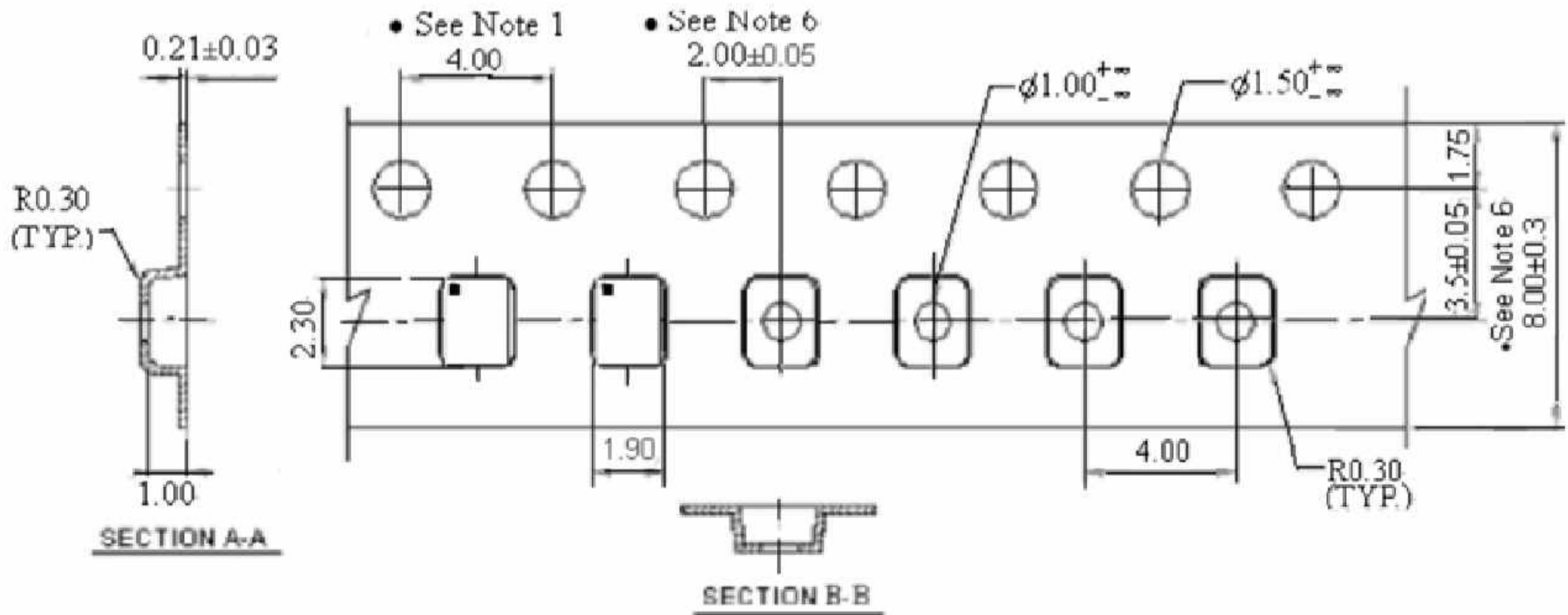
(Please refer to FR-75D10 for packing quantity)



Unit : mm

Series	Code	Quantity	A	B	C	W1	W2
CSSD1511	J	5000 pcs	180.0 +0.0/-1.5	60.0 +1.0/-0.0	13.0 ±0.2	9.0 +1.0/-0.0	11.4 ±1.0

2. TAPE DIMENSION



G. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

