

SAW Filter 1575.42 MHz

MODEL NO.: TA2707AA1322

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 15 dB_m
2. DC voltage: 3 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 3(MSL3)

RoHS Compliant

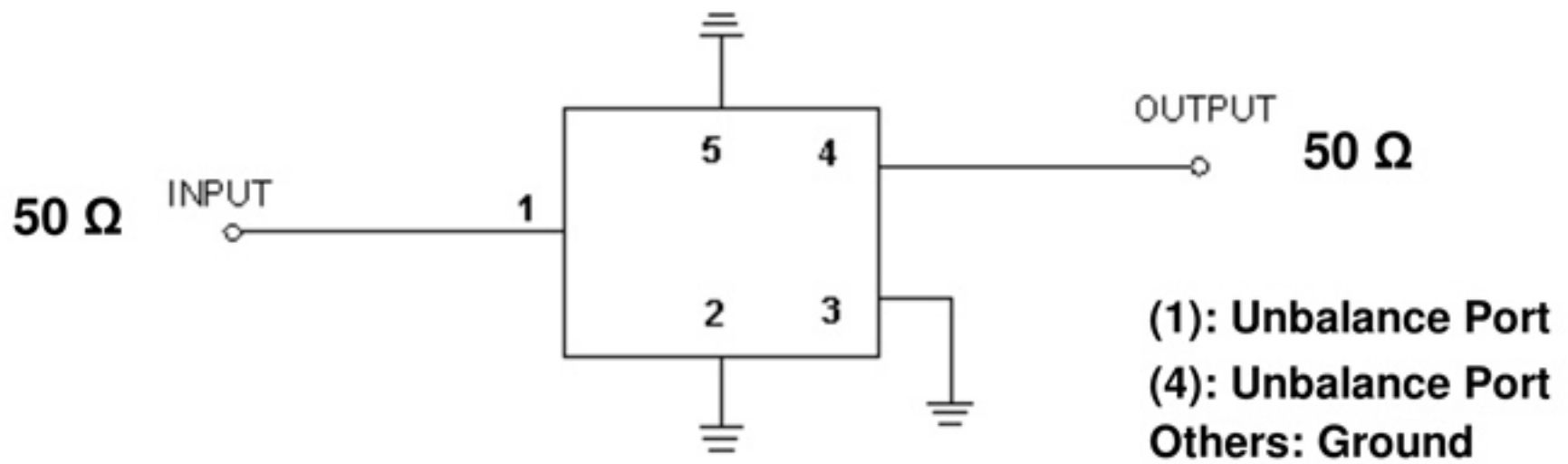
Lead-free soldering

Electrostatic Sensitive Device (ESD)

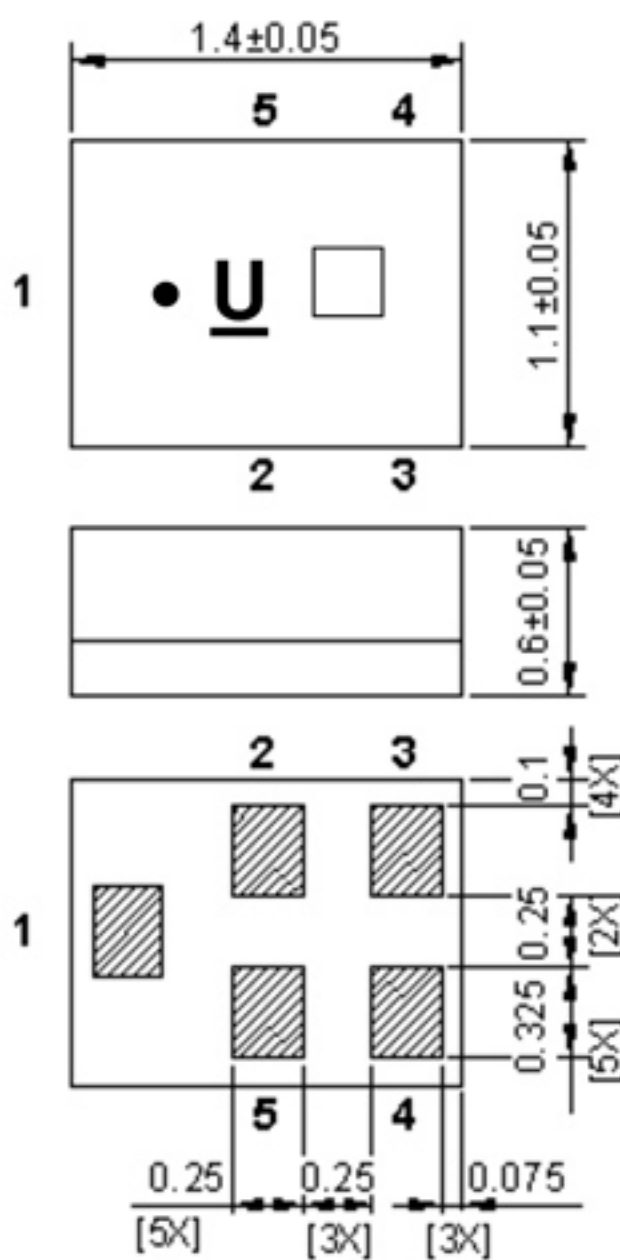
B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.	
Center frequency Fc	MHz	-	1575.42	-	
Insertion Loss (1574.42~1576.42 MHz) IL	dB	-	1.7	2.5	
Amplitude Ripple (1574.42~1576.42 MHz)	dB	-	0.1	1.0	
VSWR (1574.42~1576.42 MHz)	-	-	1.2	1.8	
Group Delay Ripple (1565.19~1585.65 MHz)	ns	-	11	35	
Attenuation (Reference level from 0 dB)					
D.C~1425 MHz	dB	30	44	-	
1425~1465 MHz	dB	35	47	-	
1465~1520 MHz	dB	30	47	-	
1520~1536 MHz (at 25°C only)	dB	38	43	-	
1615~1625 MHz (at 25°C only)	dB	40	52	-	
1625~1640 MHz	dB	52	56	-	
1640~1660 MHz	dB	50	58	-	
1660~1805 MHz	dB	40	48	-	
1805~1910 MHz	dB	30	48	-	
1910~2000 MHz	dB	30	48	-	
2000~4000 MHz	dB	25	38	-	
4000~6000 MHz	dB	15	32	-	
Temperature Coefficient of Frequency	ppm/°C	-	-36	-	

C. MEASUREMENT CIRCUIT:



D. OUTLINE DRAWING:



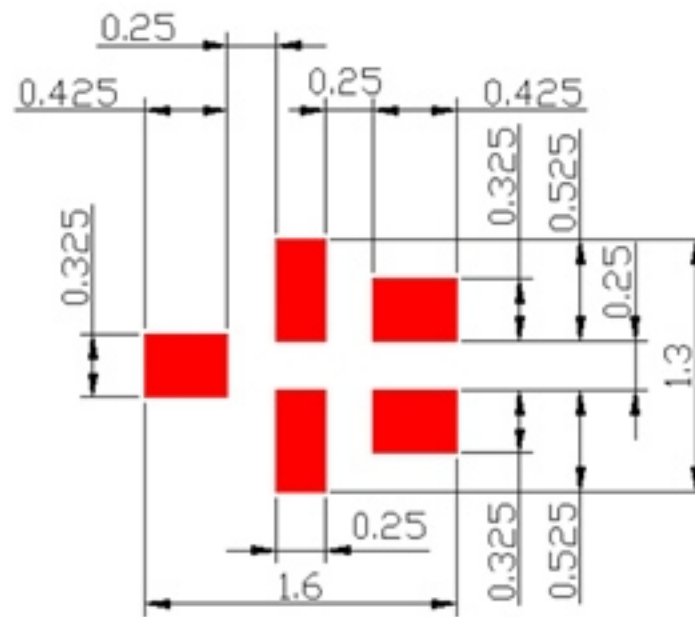
All tolerances are +/-0.05 mm unless otherwise specified
 Coplanarity : 0.1 mm max.
 1 to 5 : Pin No.
 Unit : mm

Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

□ : Year/Month Code (Follow the table)

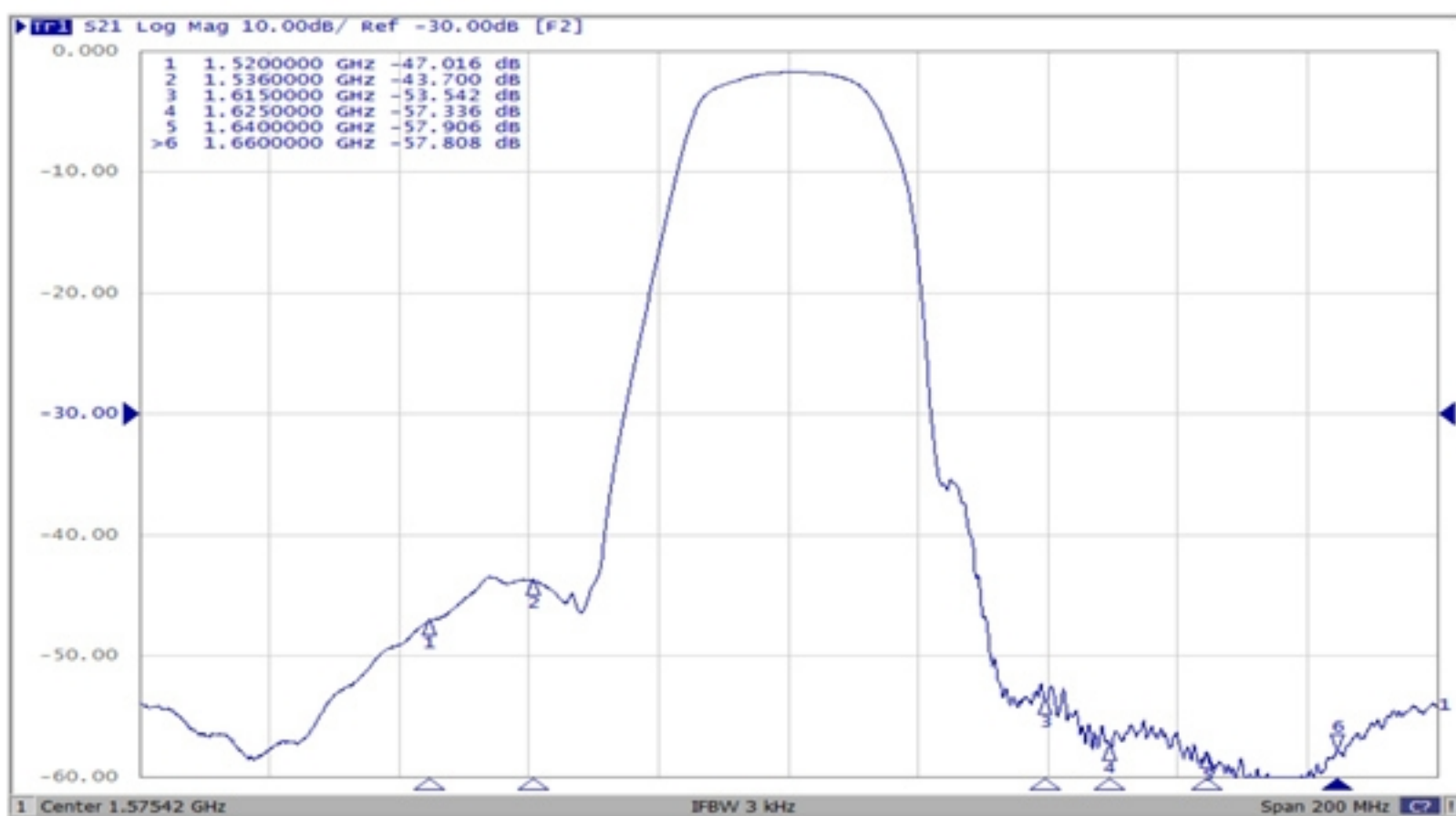
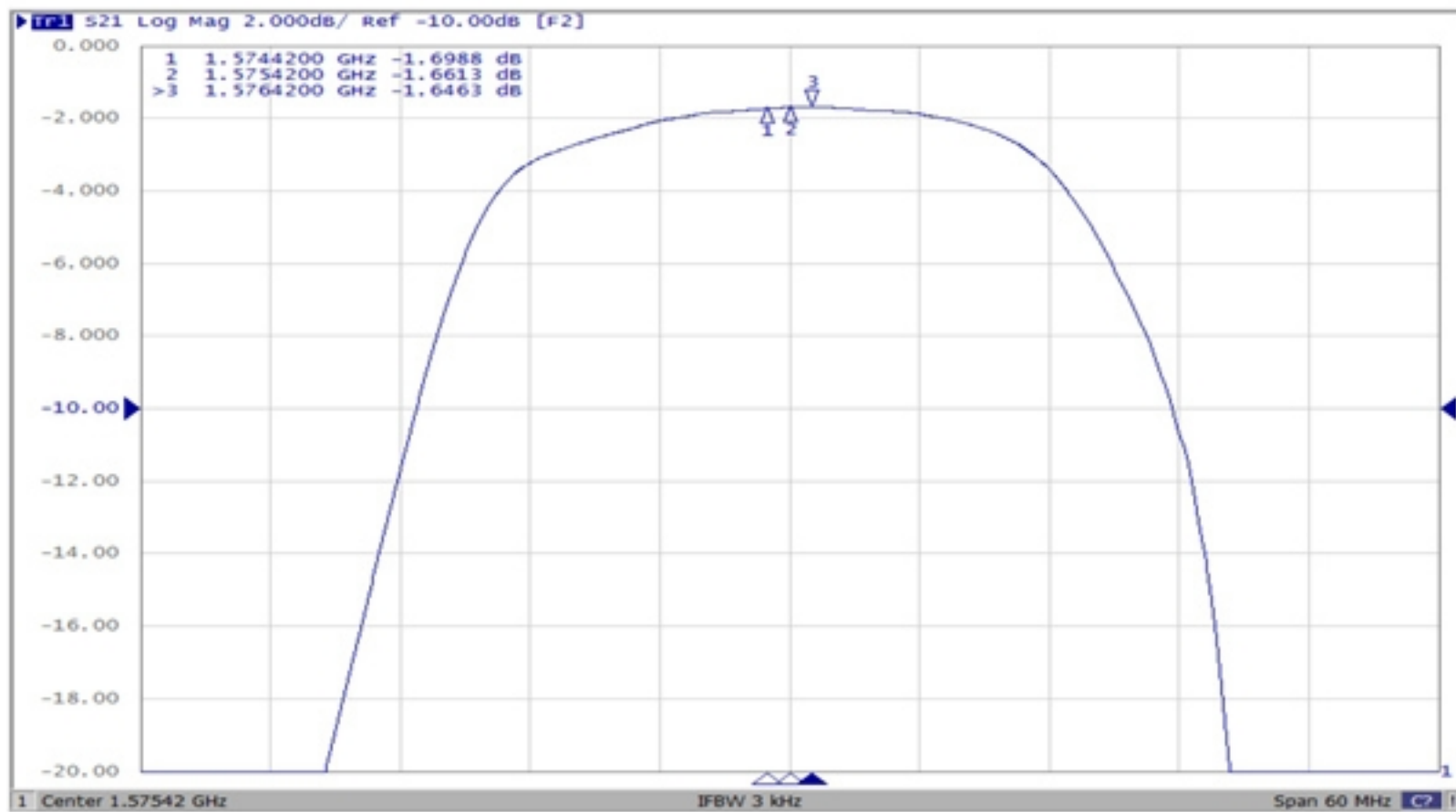
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	i	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m
2024	n	p	q	r	s	t	u	v	w	x	y	z

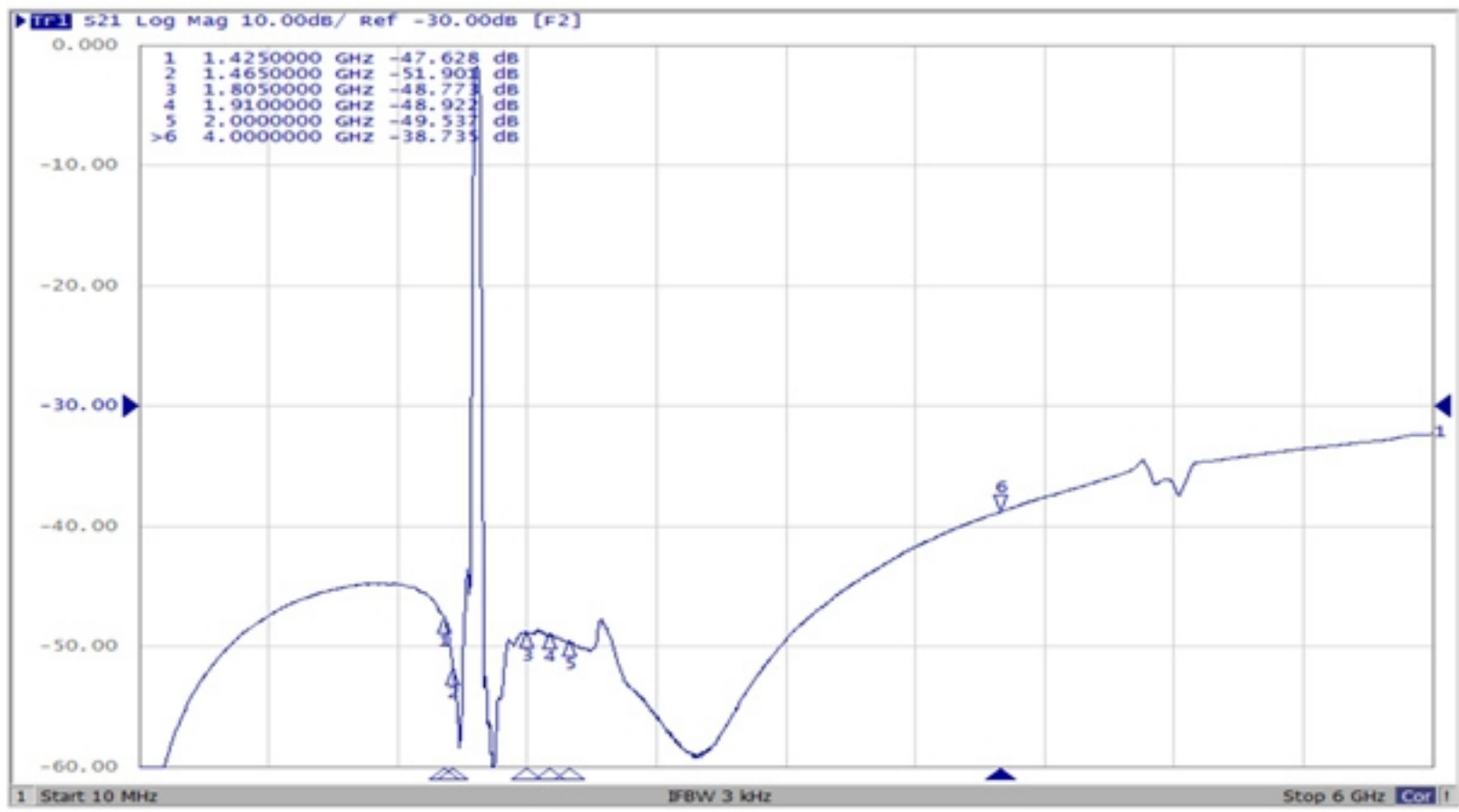
E. PCB Footprint:



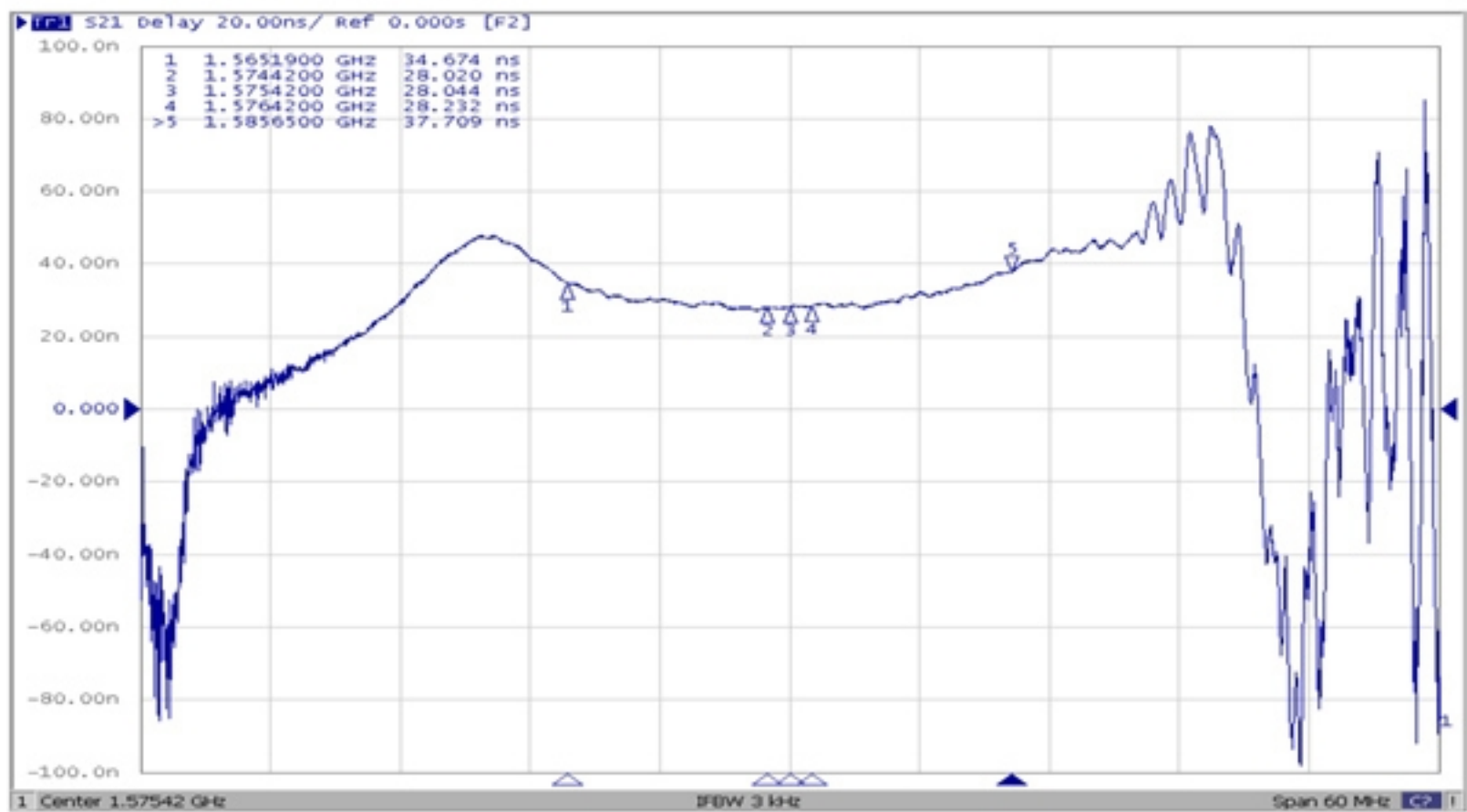
■ : Land Pattern
Unit : mm

F. Frequency Characteristics:



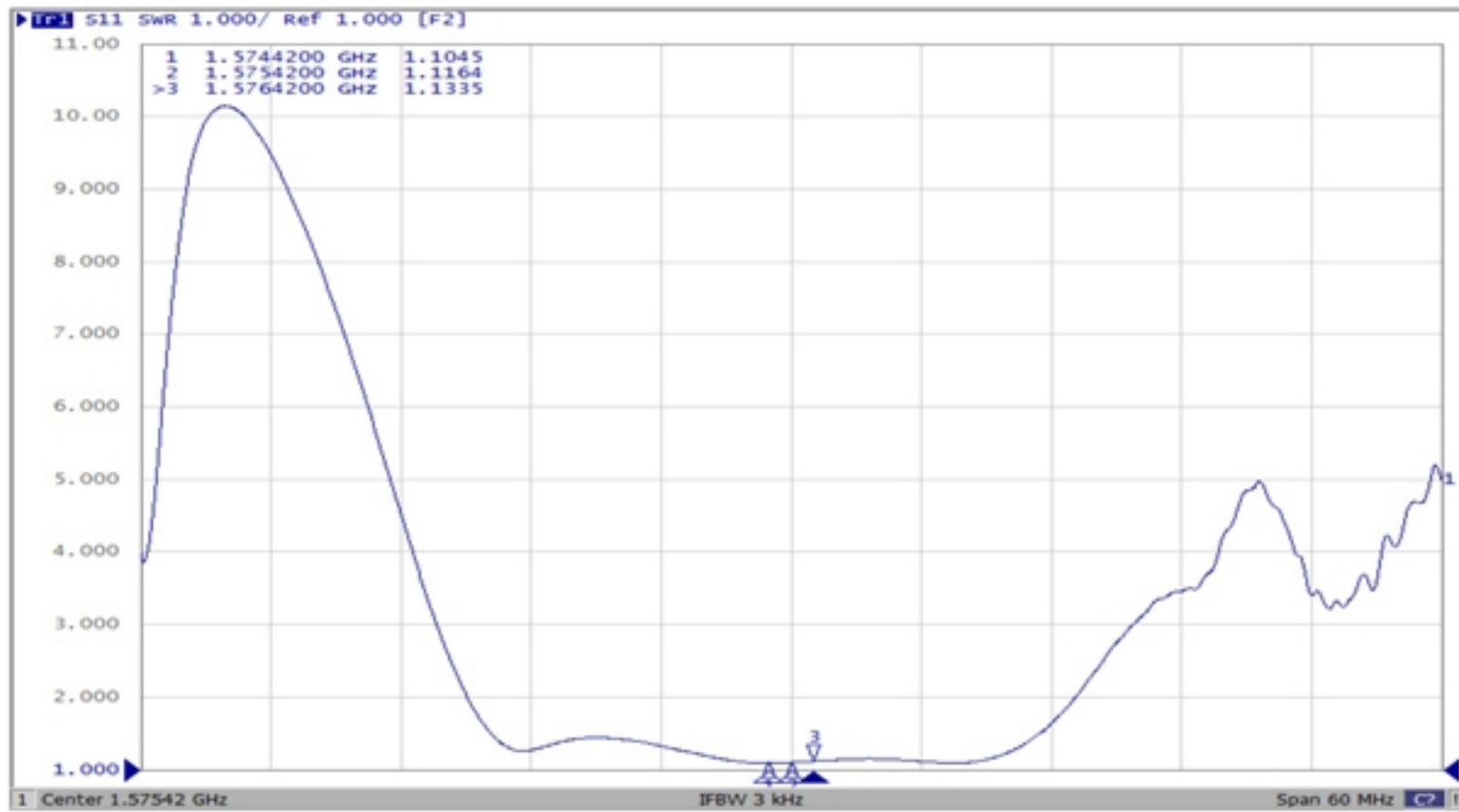


Group Delay:

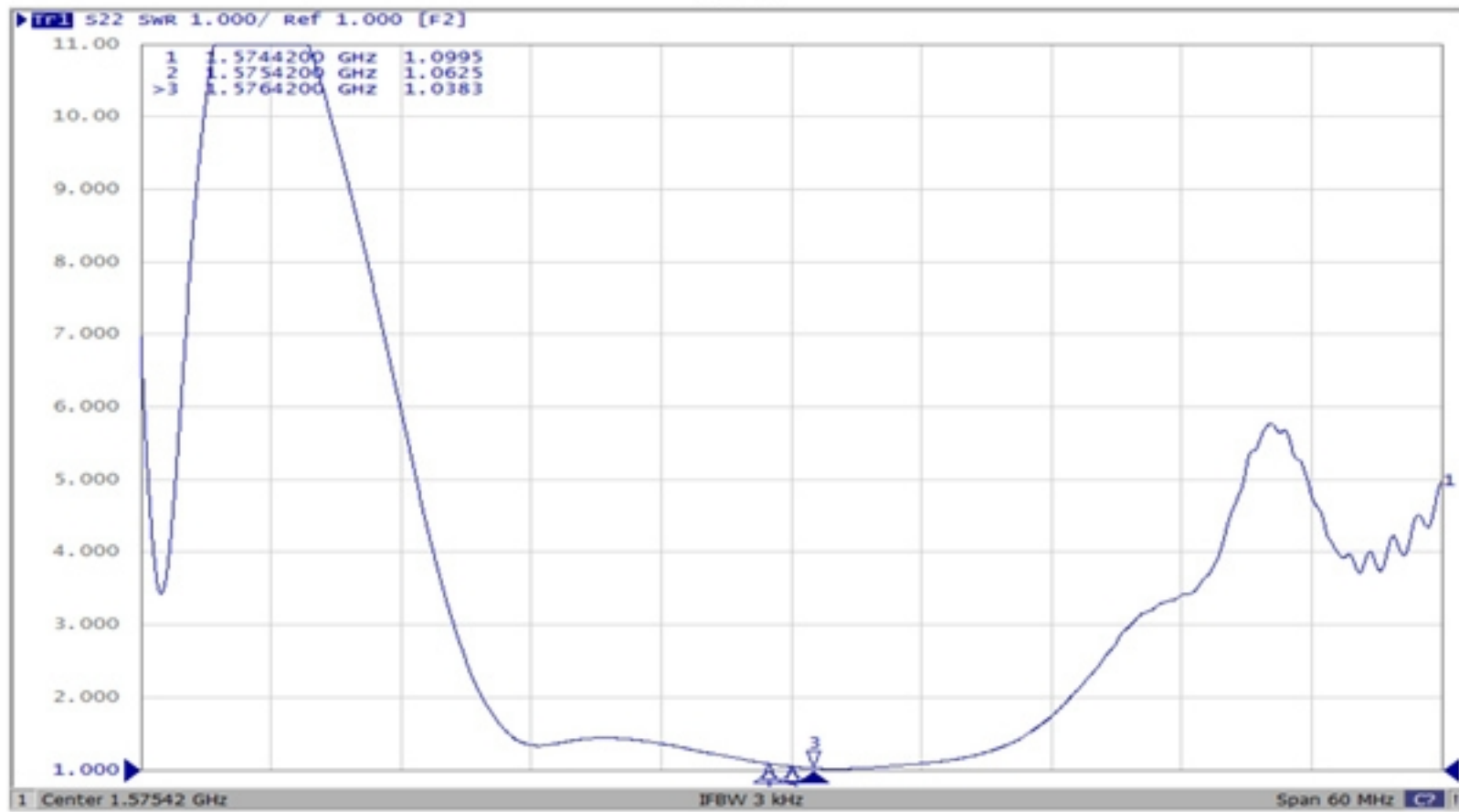


Reflection Functions:

S11



S22



H. Recommended Reflow Profile:

1. Preheating shall be fixed at $150\sim 180^{\circ}\text{C}$ 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 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ peak (20~40sec).
4. Time: 2 times.

