

# SAW Filter 1189MHz BW50MHz SMD 1.1x0.9mm

MODEL NO.:TA2448A

REV. NO.:1.0

## A. MAXIMUM RATING:

1. Input Power Level: 13 dBm (2000h)
2. DC Voltage : 3 V
3. Operating Temperature: -20°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. ESD Machine Mode : 50V
6. ESD Human Body Mode : 100V
7. Moisture Sensitive Level (MSL): Level 2a

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

## B. ELECTRICAL CHARACTERISTICS:

Temperature range for specification :  $T_{spec} = -20^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

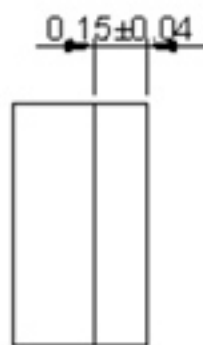
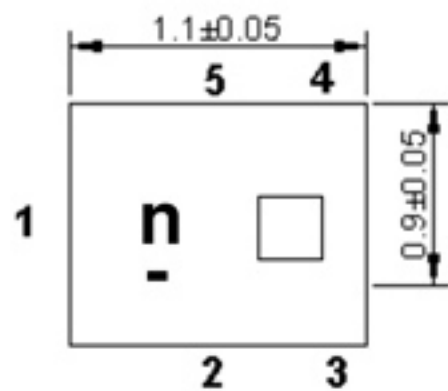
Terminating source impedance :  $Z_s = 50\ \Omega$

Terminating load impedance :  $Z_L = 50\ \Omega$

Item	Unit	Min.	Typ.	Max.
<b>Center Frequency</b> <b>Fc</b>	MHz	-	1189	-
<b>Insertion Loss</b> (1164~1189 MHz)	dB	-	1.5	2.3
<b>Insertion Loss</b> (1189~1214 MHz)	dB	-	1.8	2.3
<b>Amplitude Ripple</b> (1164~1189 MHz)	dB <sub>p-p</sub>	-	0.3	1.3
<b>Amplitude Ripple</b> (1189~1214 MHz)	dB <sub>p-p</sub>	-	0.5	1.4
<b>VSWR</b> (1164~1214 MHz)		-	1.8	2.1
<b>Group Delay Deviation</b> (1189~1214 MHz)	ns	-	9	15
<b>Attenuation</b> (refer to 0 dB)				
100 ~ 814 MHz	dB	35	39	-
814 ~ 849 MHz	dB	33	39	-
849 ~ 980 MHz	dB	30	37	-
980 ~ 1010 MHz	dB	35	38	-
1010 ~ 1100 MHz	dB	33	36	-
1100 ~ 1130 MHz	dB	20	30	-
1250 ~ 1427 MHz	dB	25	32	-
1427 ~ 1463 MHz	dB	33	36	-
1710 ~ 2025 MHz	dB	33	38	-

2300 ~ 2690 MHz	dB	28	32	-
2690 ~ 3000 MHz	dB	25	30	-
3000 ~ 6000 MHz	dB	20	23	-
Temperature Coefficient	ppm/K	-	-36	-

### C.OUTLINE DRAWING:

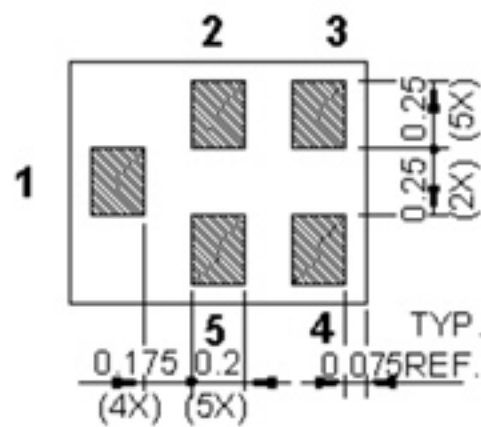


All tolerances are +/-0.05 mm unless otherwise specified

Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm



1 : Input

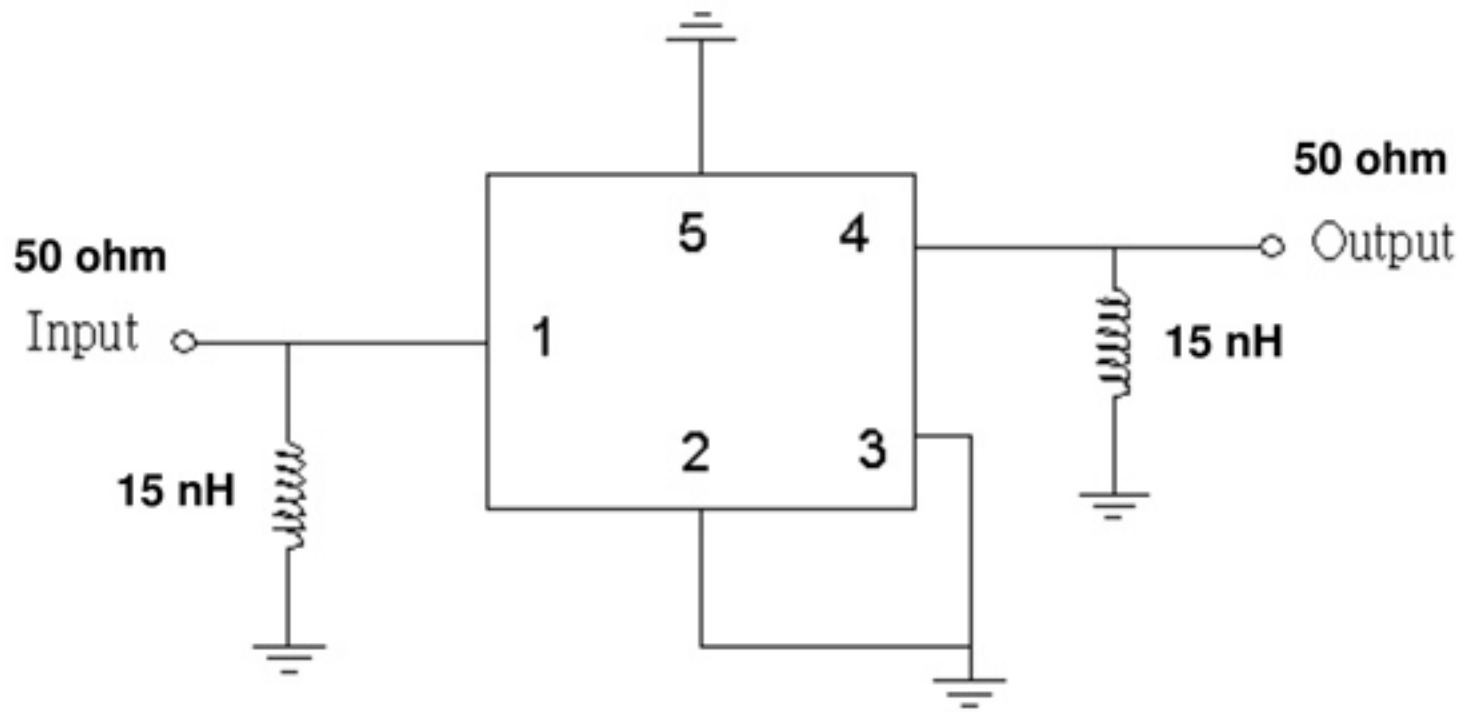
4 : Output

2, 3, 5 : Ground

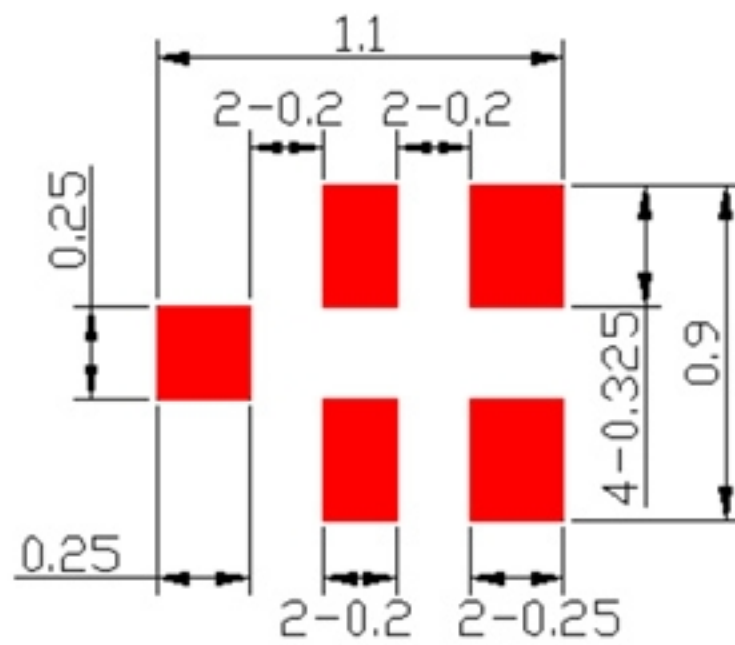
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

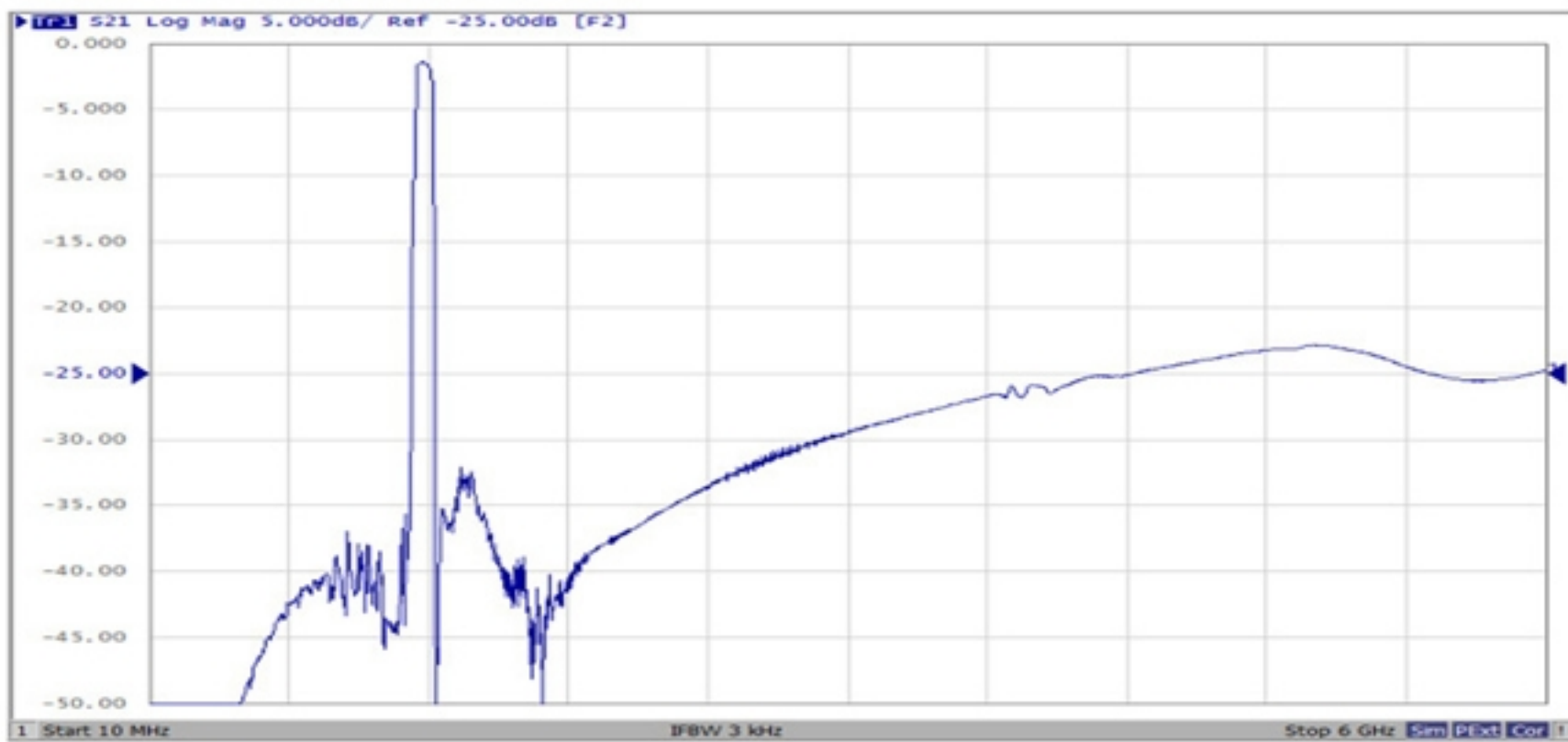
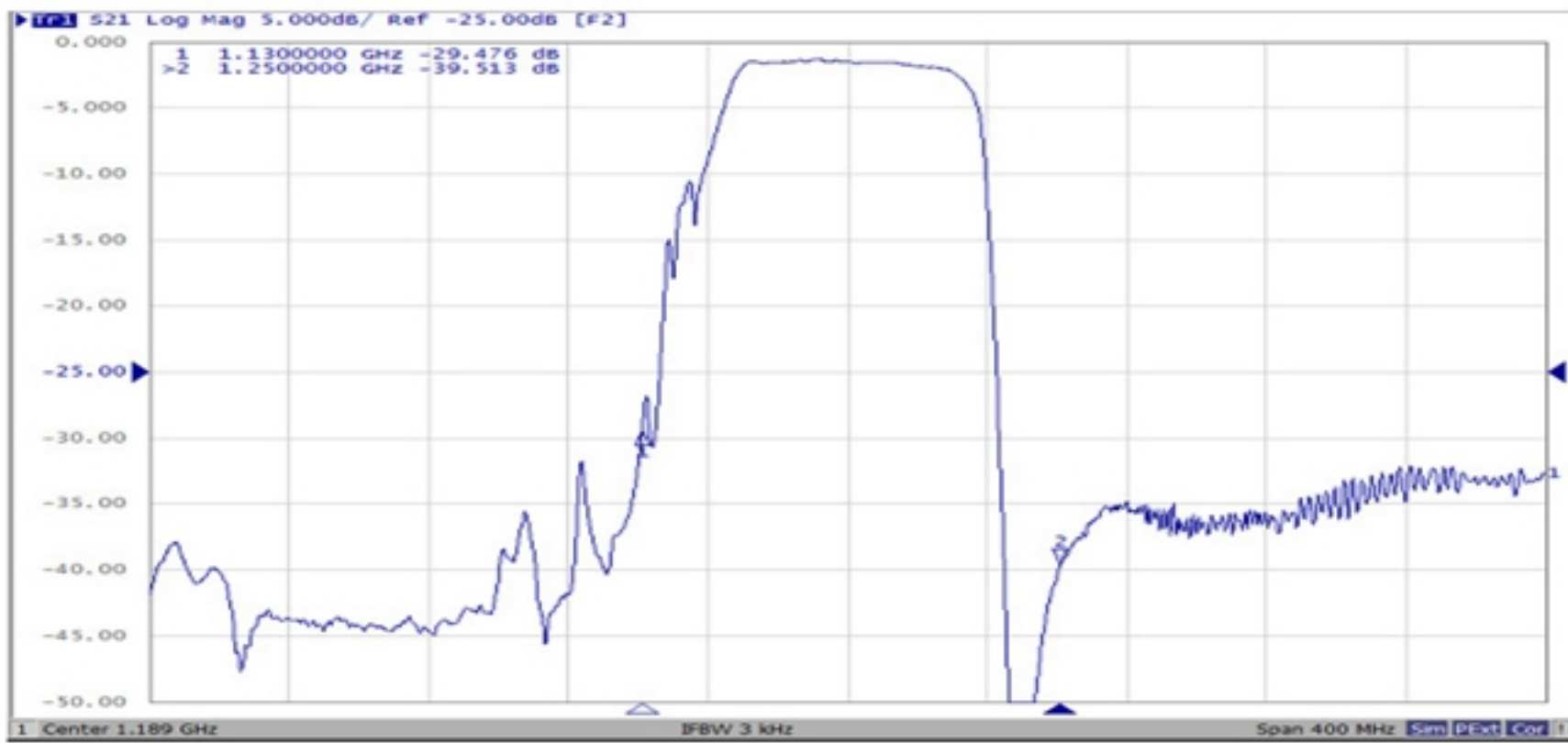
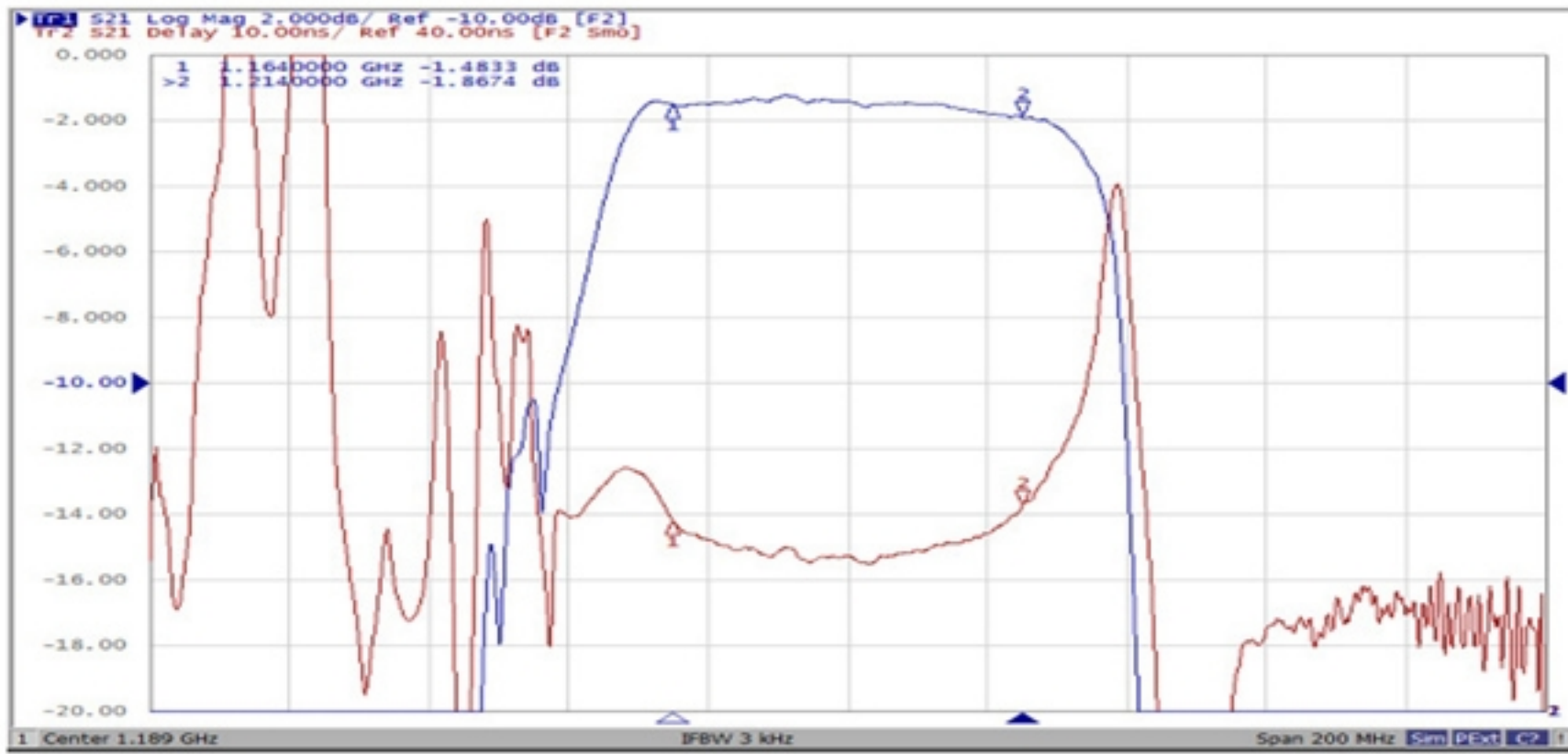
**D. MEASUREMENT CIRCUIT:**

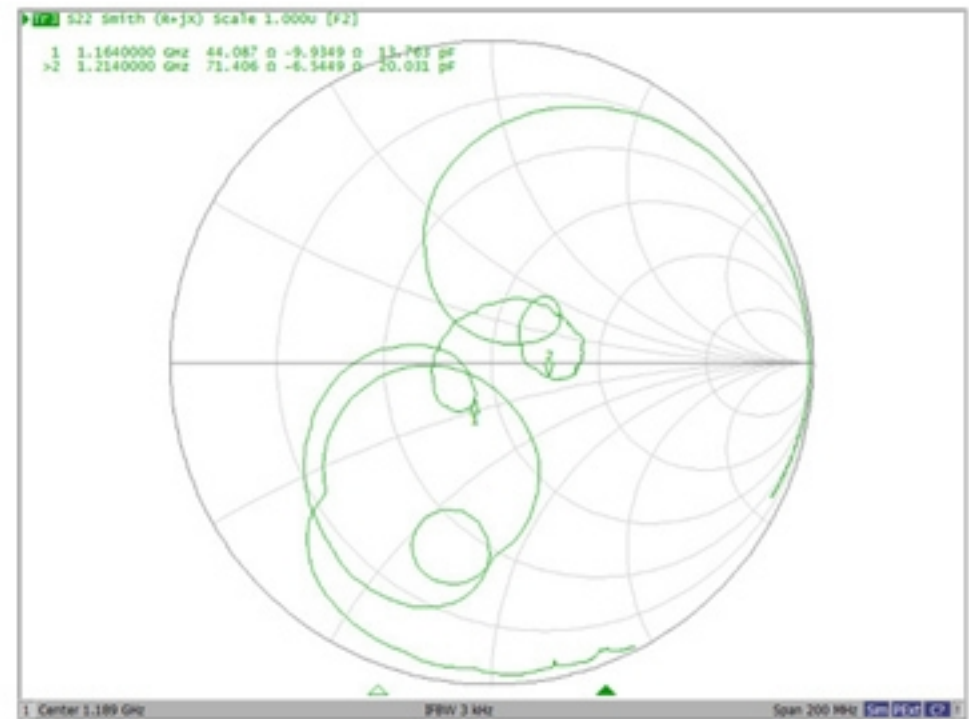
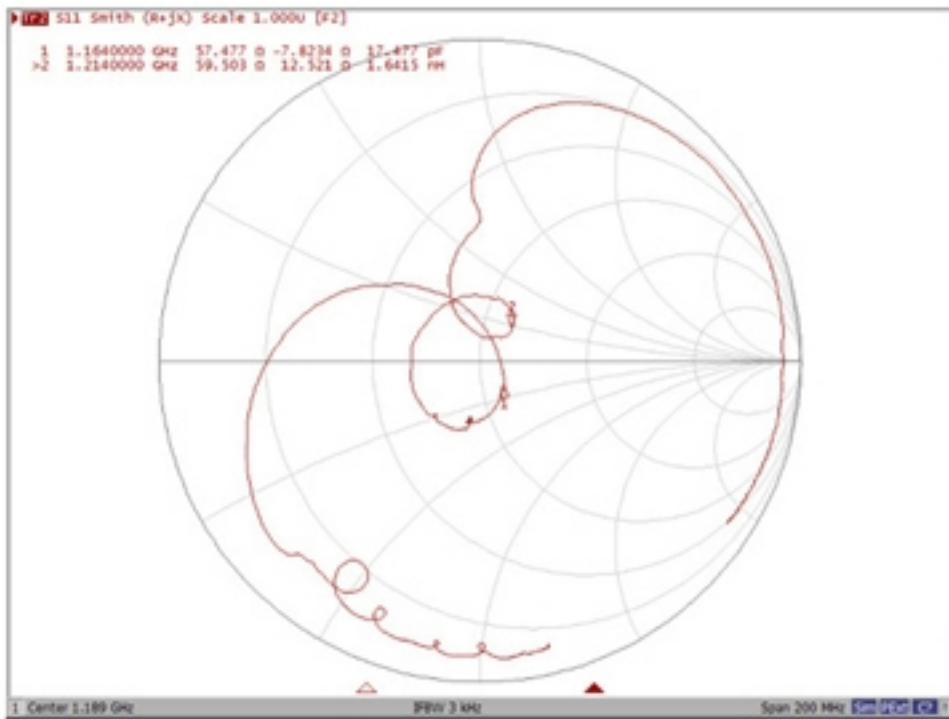
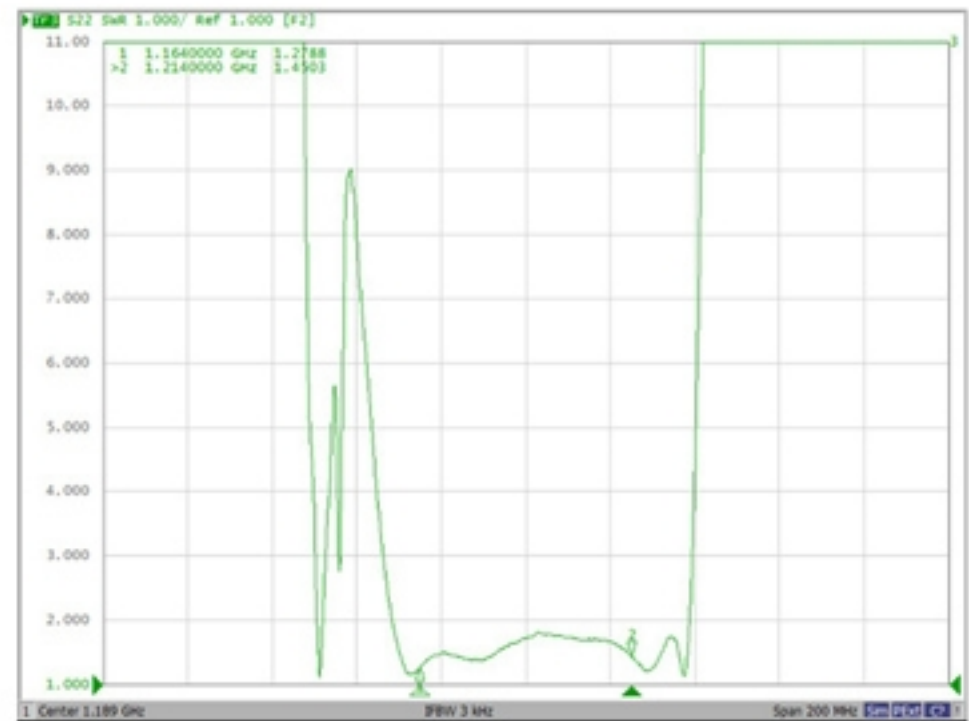
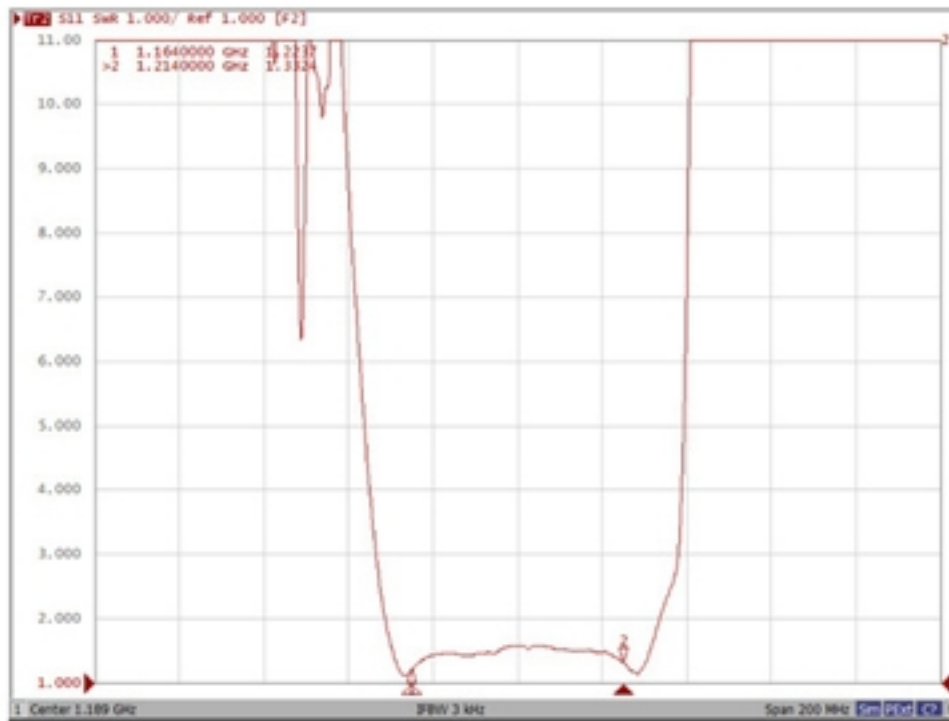


**E. PCB Footprint :**



## F. Frequency Characteristics:









### H. 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 245~260°C peak (min. 10sec).
4. Time : 2 times.

