

# SAW Filter 1746.5MHz

MODEL NO.:TA2715AA1325

REV. NO.:1.0

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 3(MSL3)



Electrostatic Sensitive Device (ESD)

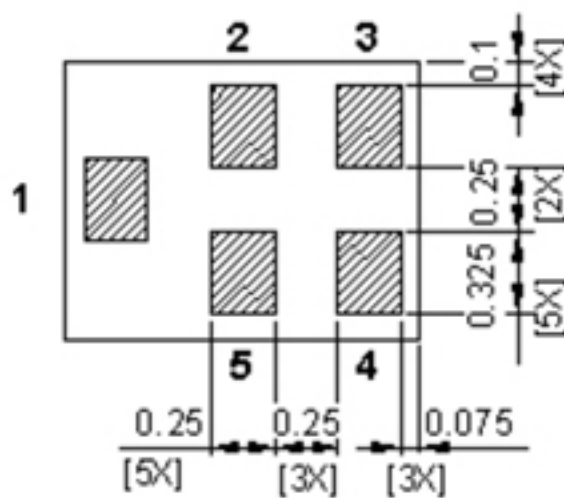
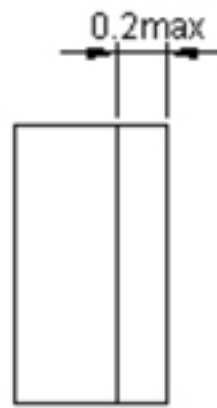
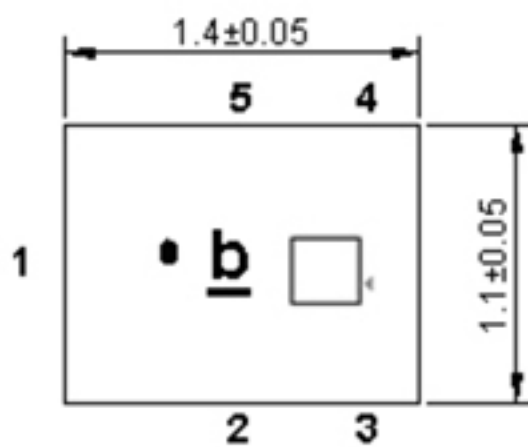
## B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single) :  $Z_s = 50 \Omega$

Terminating load impedance(single) :  $Z_L = 50 \Omega$

Item	Unit	Min	Type.	Max	Note
<b>Center Frequency</b> <b>Fc</b>	MHz	-	1746.5	-	
<b>Insertion Loss</b> (1710~1783 MHz) <b>IL</b>	dB		3	5	23 ~ 27°C
Amplitude ripple (1710~1783 MHz)			1.5	3.5	23 ~ 27°C
<b>VSWR</b> (1710~1783 MHz)			2.5	3.0	23 ~ 27°C
Attenuation					
800 ~ 1670      MHz	dB	25	30		23 ~ 27°C
1795 ~ 2000      MHz	dB	10	15		23 ~ 27°C
2000 ~ 3000      MHz	dB	20	25		
Temperature coefficient	ppm/°C			-36	
Package size	mm			1411	

### C.OUTLINE DRAWING:



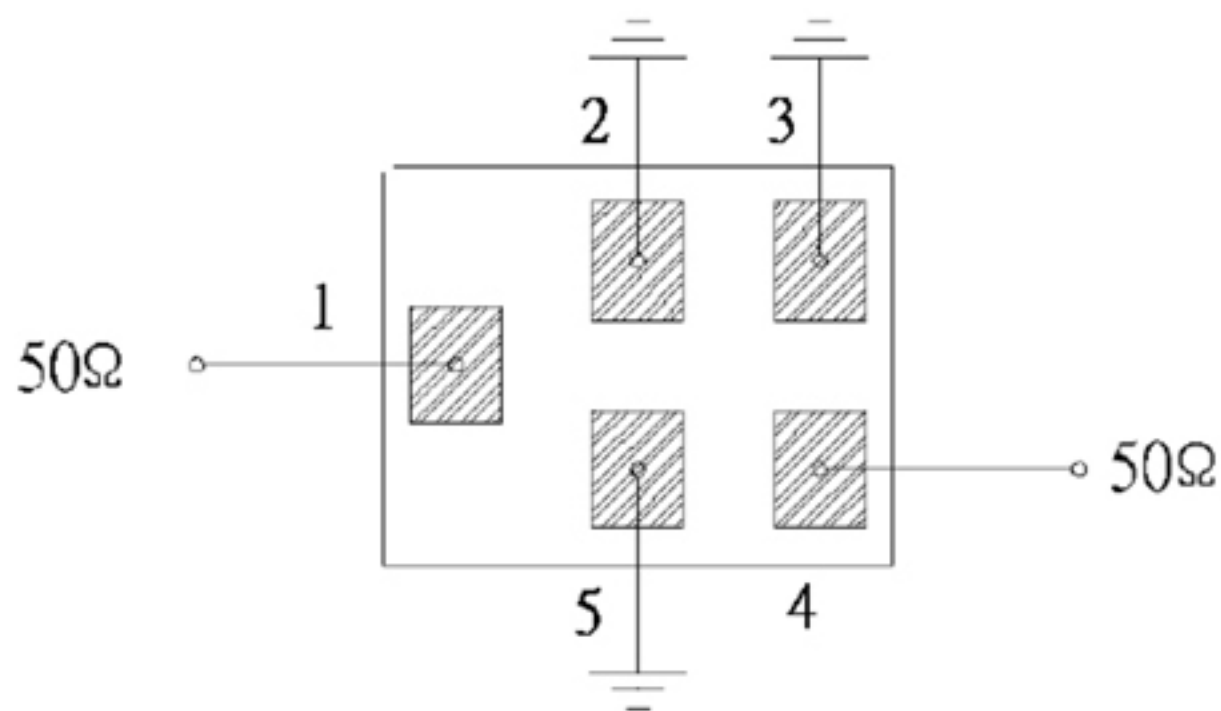
All tolerances are +/-0.05 mm unless otherwise specified  
 Coplanarity : 0.1 mm max.  
 1 to 5 : Pin No.  
 Unit : mm

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

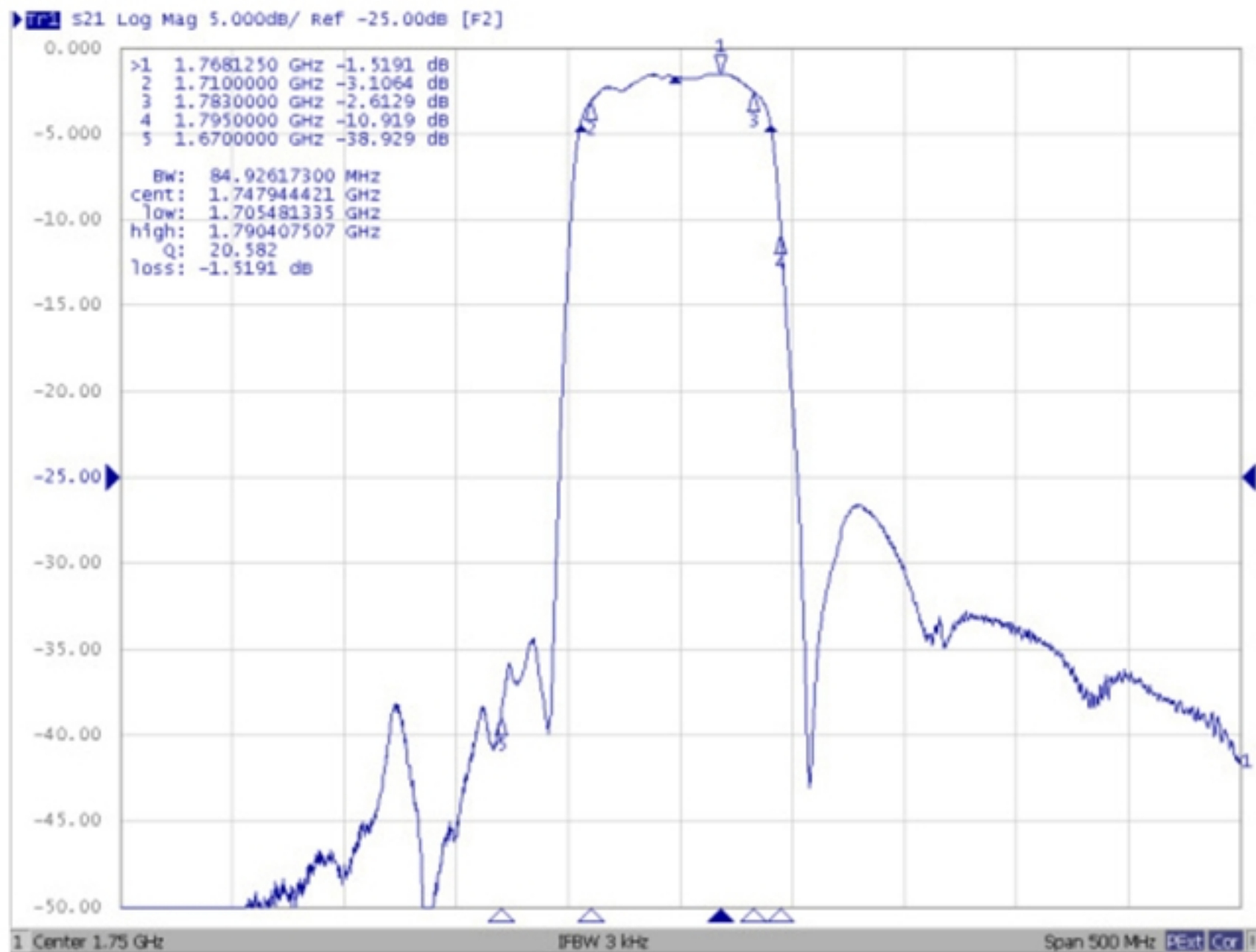
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
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>

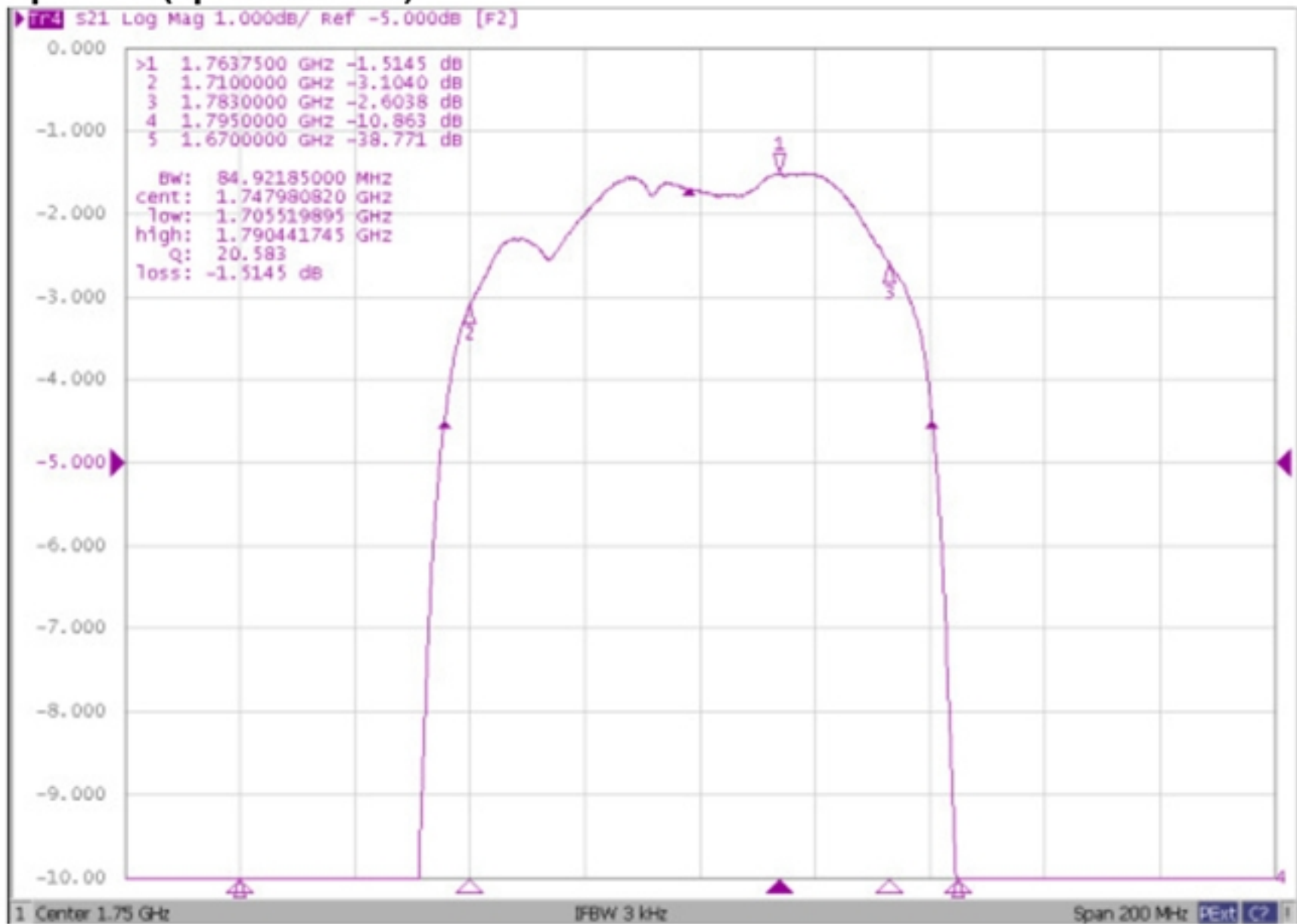
### D. MEASUREMENT CIRCUIT:



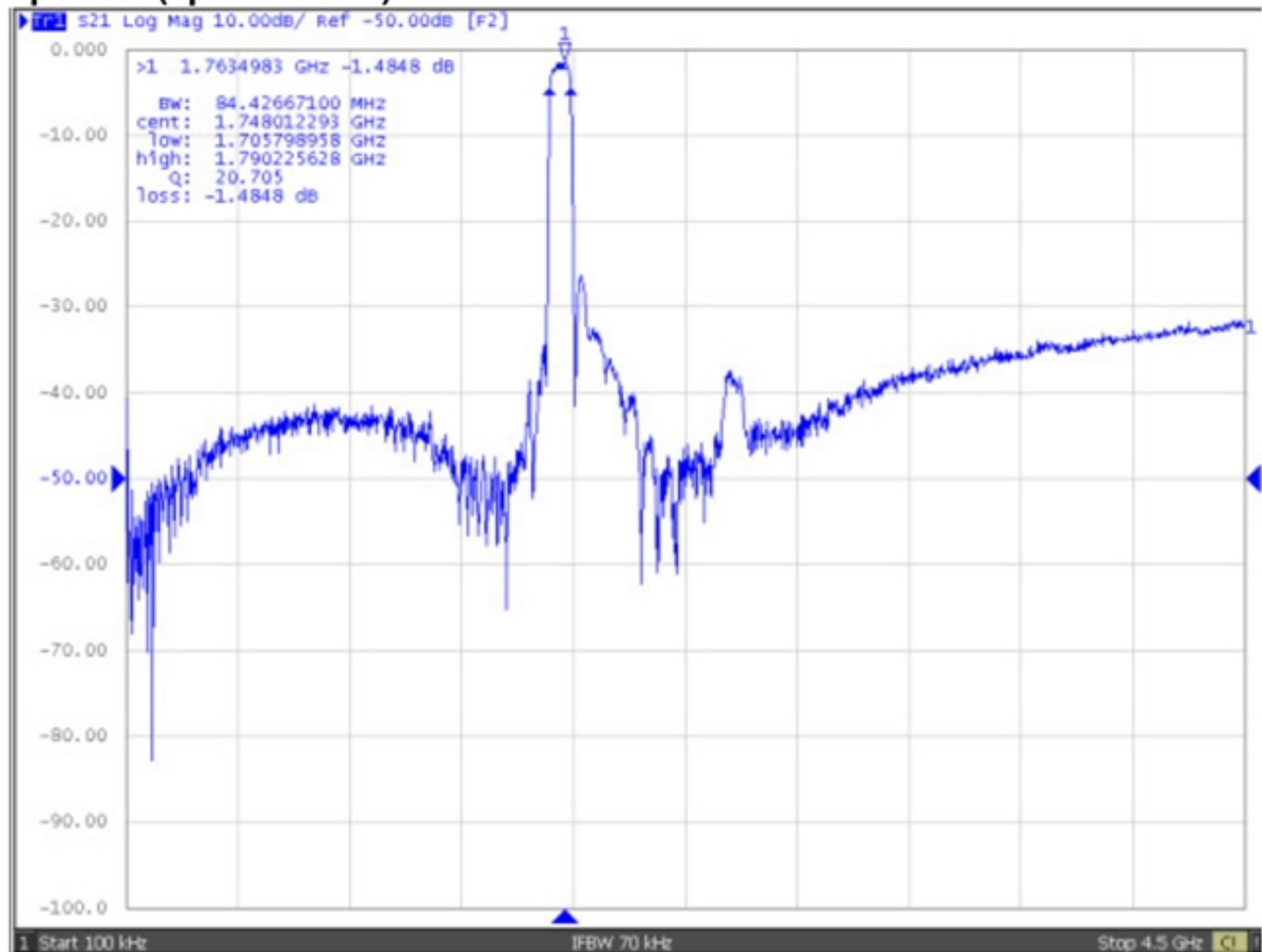
### E. Frequency Characteristics: S21 response: (span 400MHz)



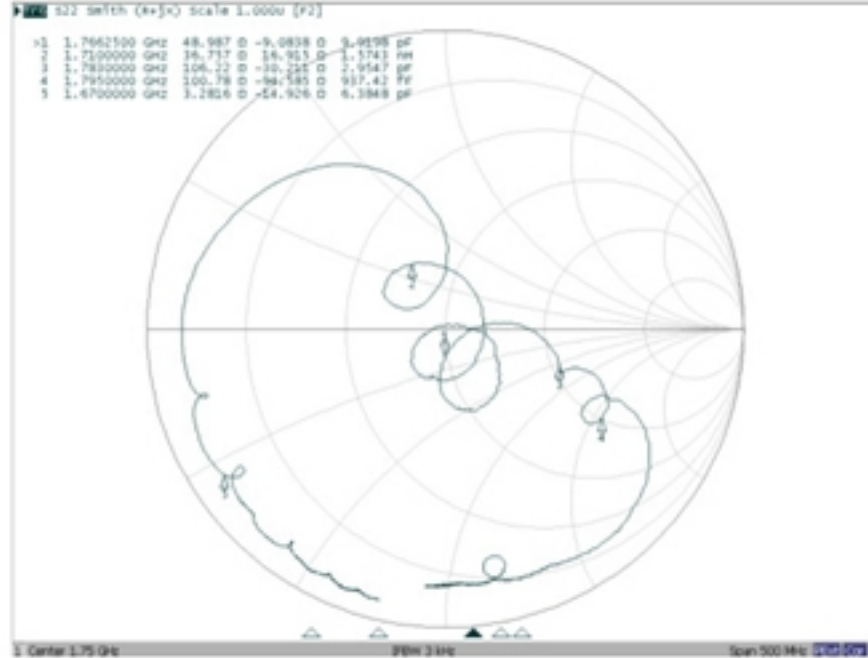
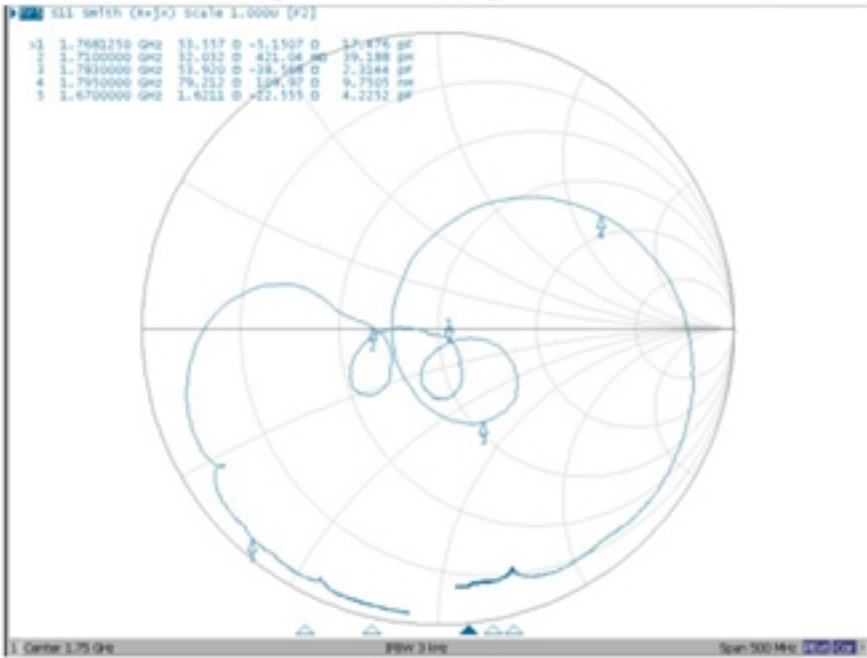
### S21 response: (span 200MHz)



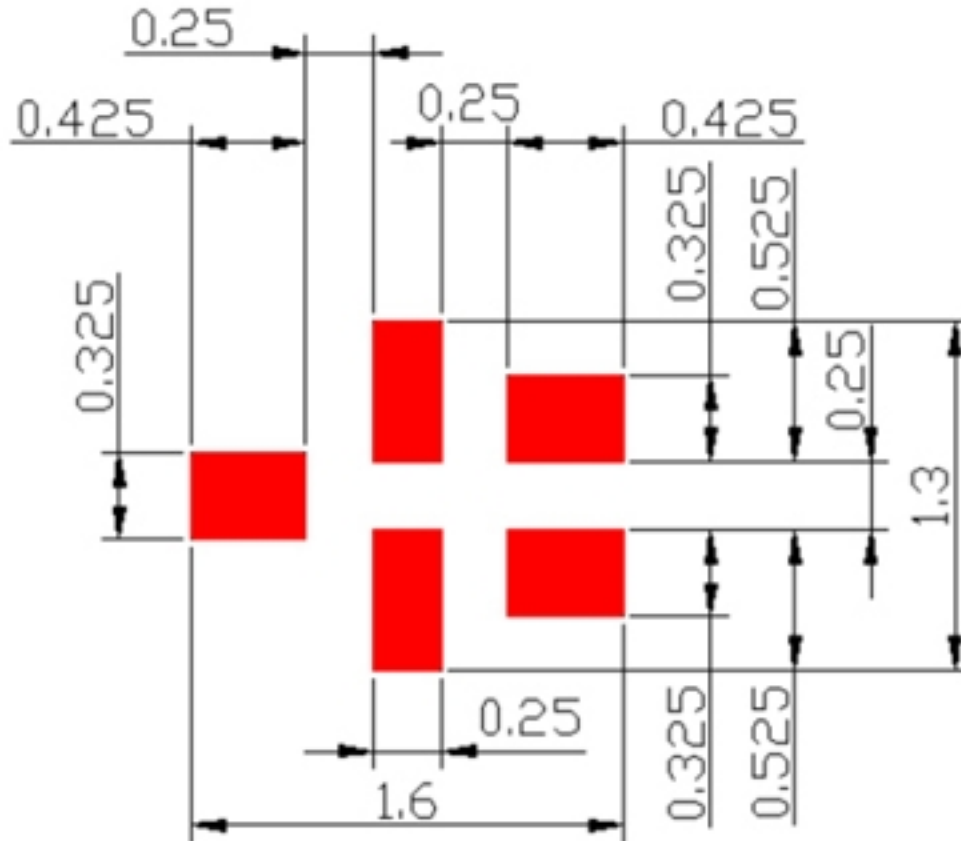
### S21 response: (span 4.5GHz)



### S11/S22 response: (span 400MHz)



### F. PCB Footprint:



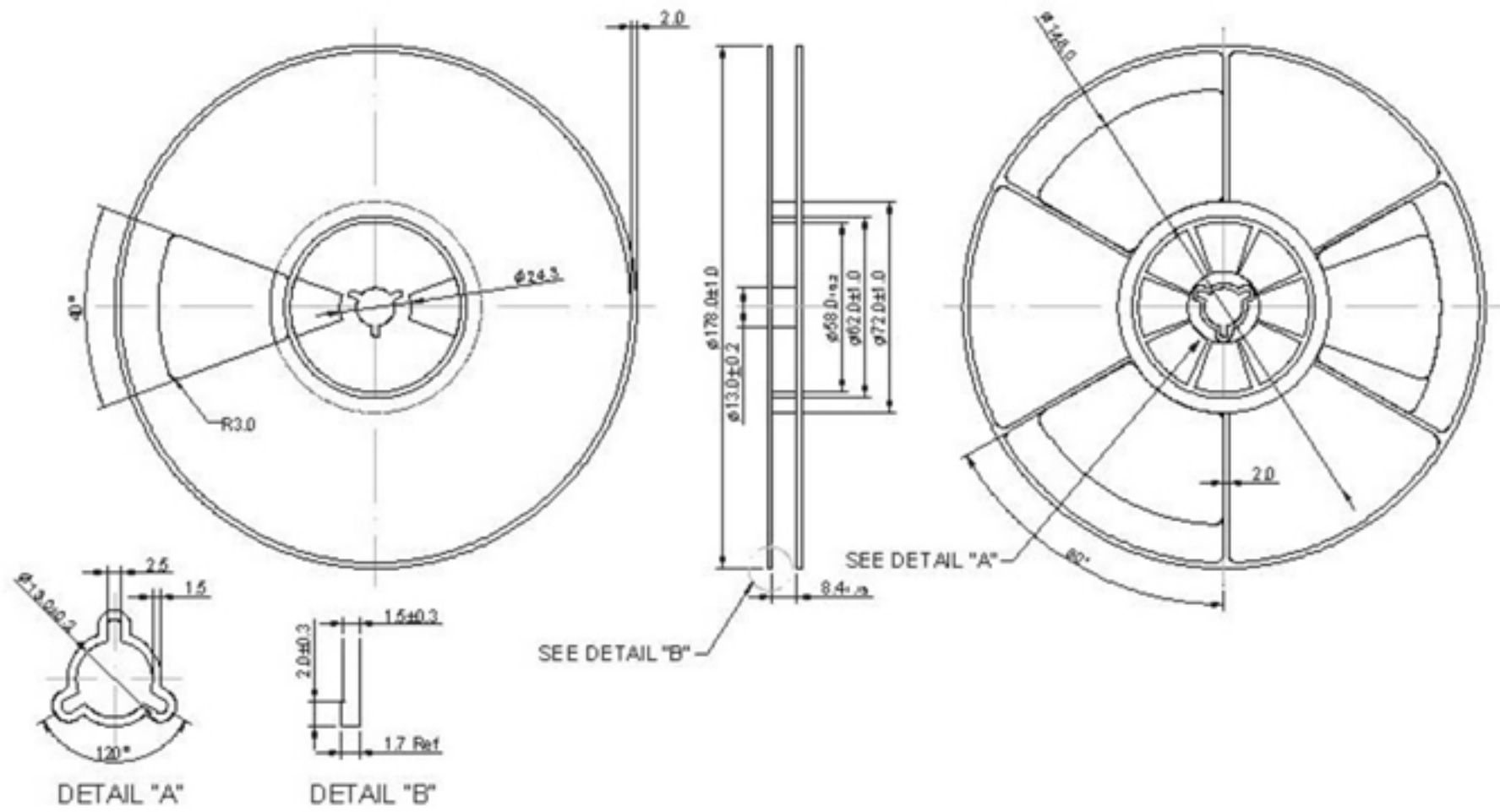
: Land Pattern



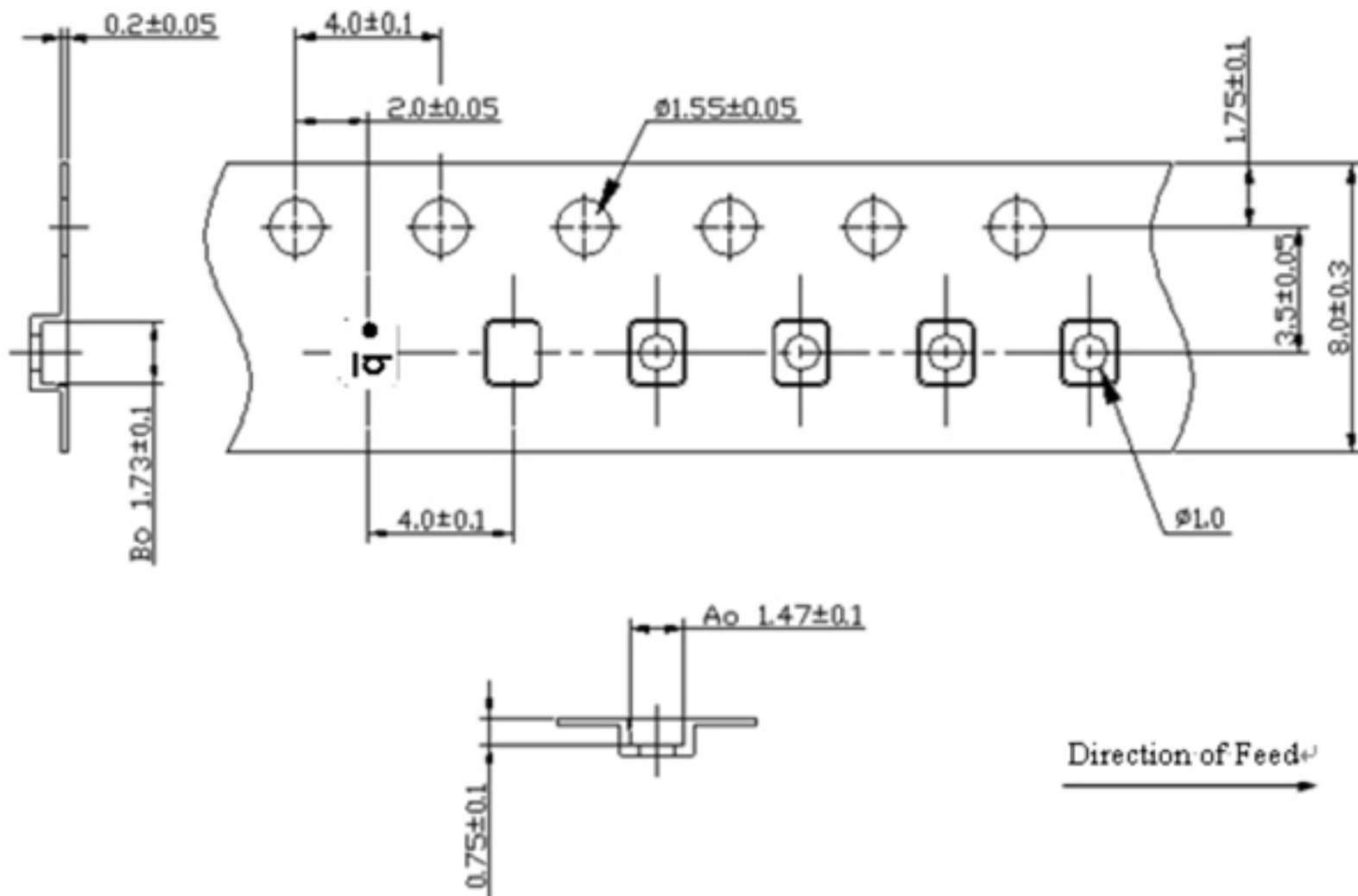
## G. PACKING:

### 1. REEL DIMENSION

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



### 2. TAPE DIMENSION



## 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  $150^{\circ}\text{C}$  shall be 30 seconds min.
3. Heating shall be fixed at  $220^{\circ}\text{C}$  for 50~80 seconds and at  $260^{\circ}\text{C} +0/-5^{\circ}\text{C}$  peak (20~40sec).
4. Time: 2 times.

