



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Product Specifications Approval Sheet

Product Description: 935.1MHz 0.125MHz BW SMD 3.8 x 3.8 mm SAW IF Filter

TST Parts No.: TB1333A

Customer Parts No.: \_\_\_\_\_

Customer signature required

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Kazuma Lee 

Approval by: \_\_\_\_\_ Andy Yu 

Date: \_\_\_\_\_ 06 / 01 / 2019

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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SAW Filter 935.1MHz 0.125MHz BW (SMD 3.8×3.8 mm)

MODEL NO.: TB1333A

REV. NO.1

## A. MAXIMUM RATING:

1. Operating temperature range: -40℃ to 85℃
2. Storage temperature range: -40℃ to 85℃
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant  
Lead free  
Lead-free soldering

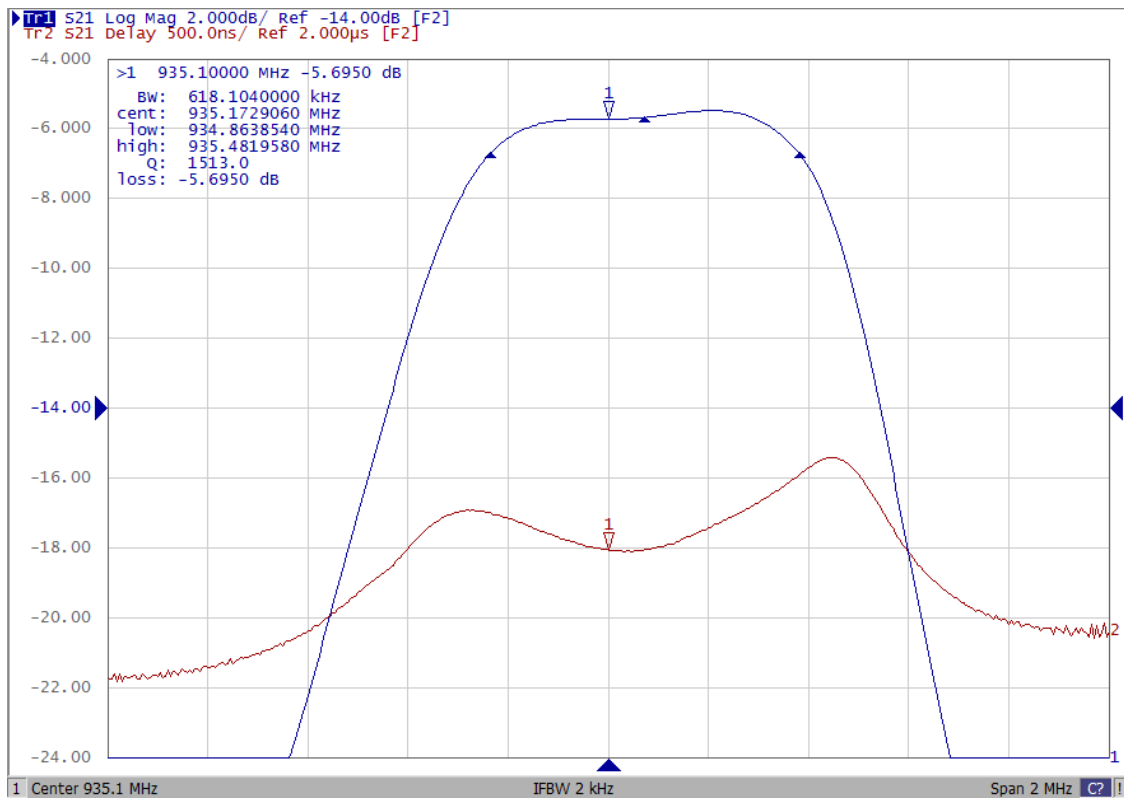
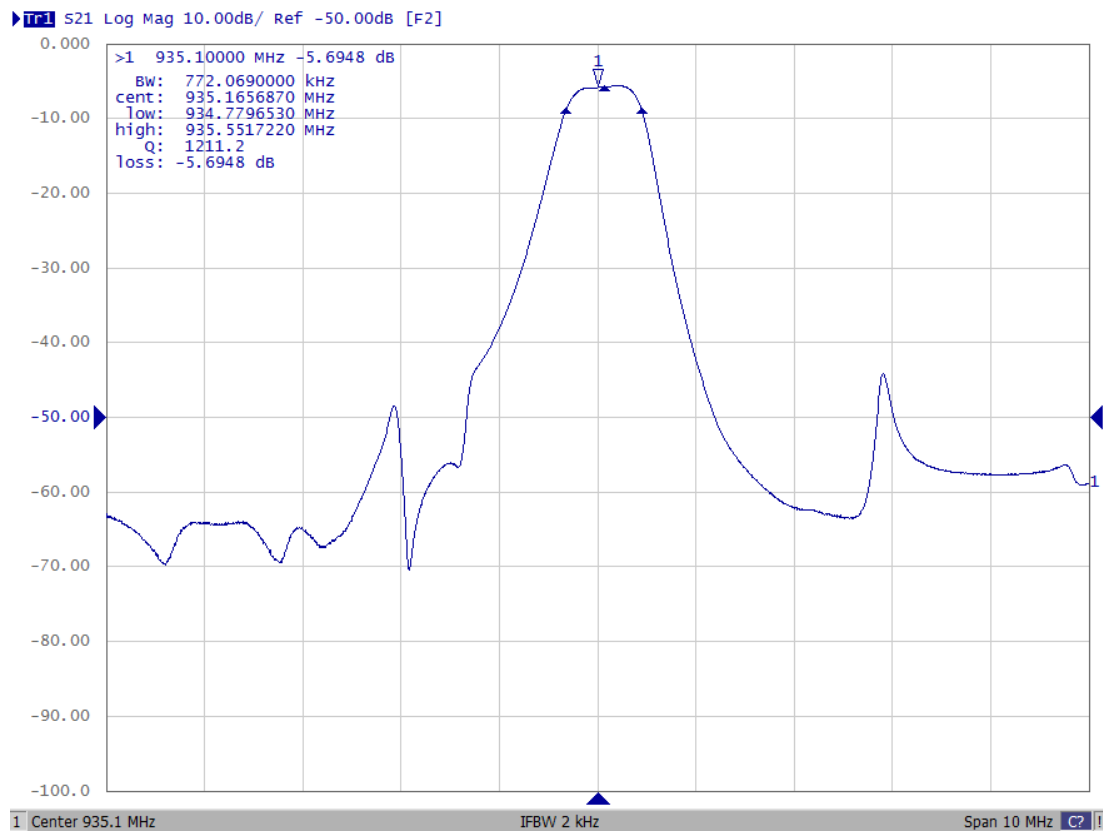
Electrostatic Sensitive Device

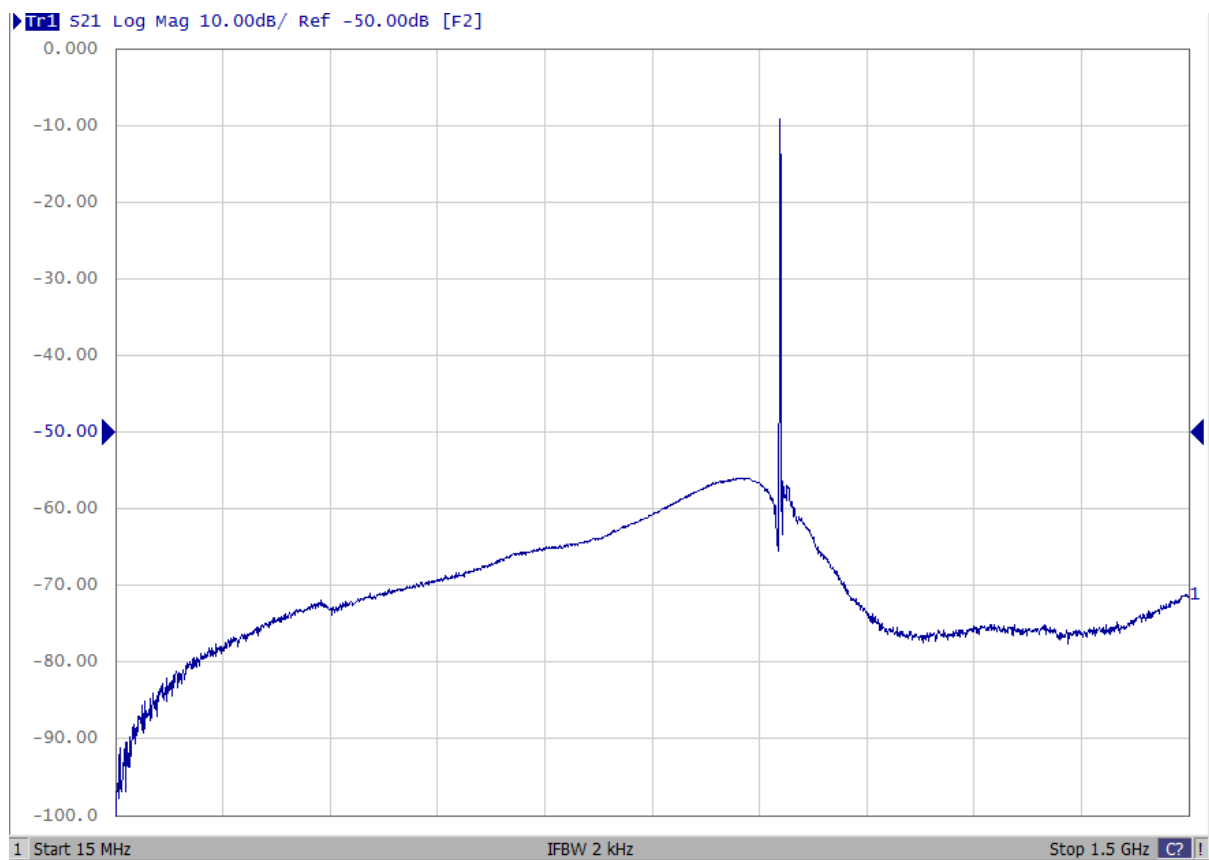
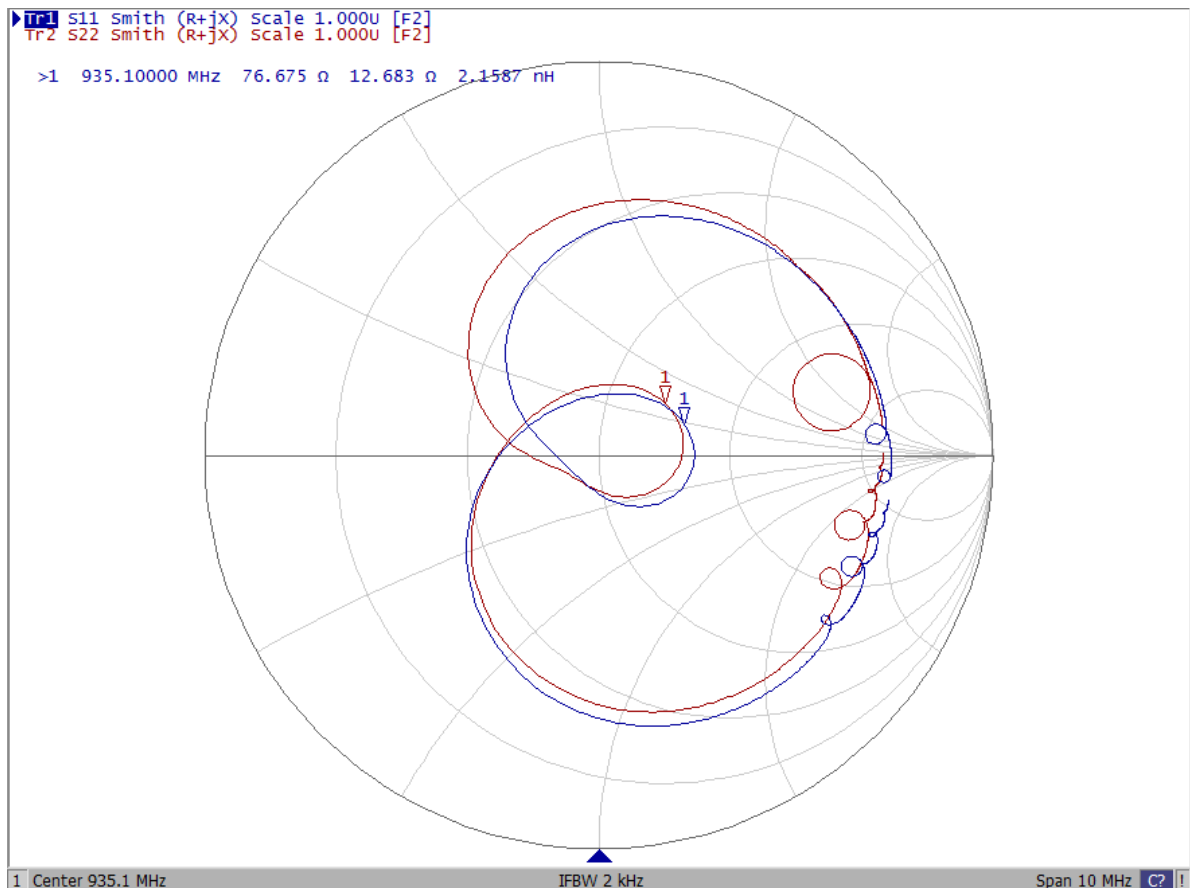
## B. ELECTRICAL CHARACTERISTICS:

1. Ambient Temperature: 25℃

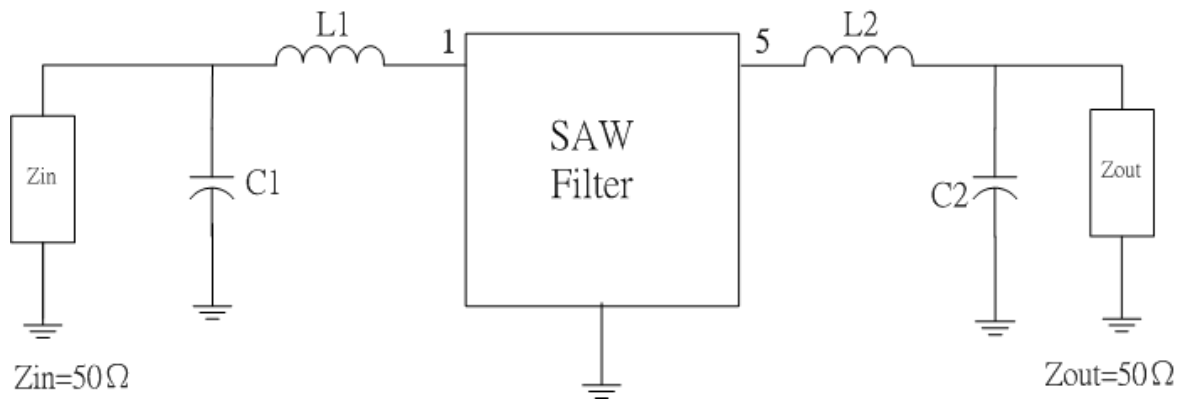
Item	Unit	Min.	Type.	Max.
Center frequency, <b>F<sub>c</sub></b>	MHz	-	935.1	-
Insertion Loss, <b>IL</b>	dB	-	5.7	8.0
-1dB bandwidth	KHz	-	680	-
-3dB bandwidth	KHz	125	770	1000
Passband Ripple F <sub>c</sub> +/- 80KHz	dB	-	0.2	3.0
Attenuation:(Reference level from 0dB)				
DC ~ 933.1MHz	dB	40	48	
937.1MHz ~ 939MHz	dB	35	44	
939MHz ~ 1500MHz	dB	40	55	
Temperature Coefficient	ppm/℃ <sup>2</sup>	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

## C. FREQUENCY CHARACTERISTICS:



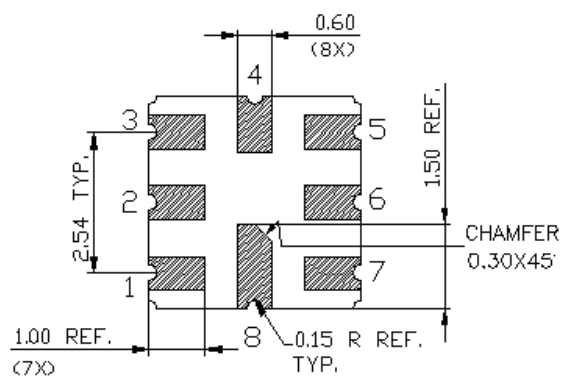
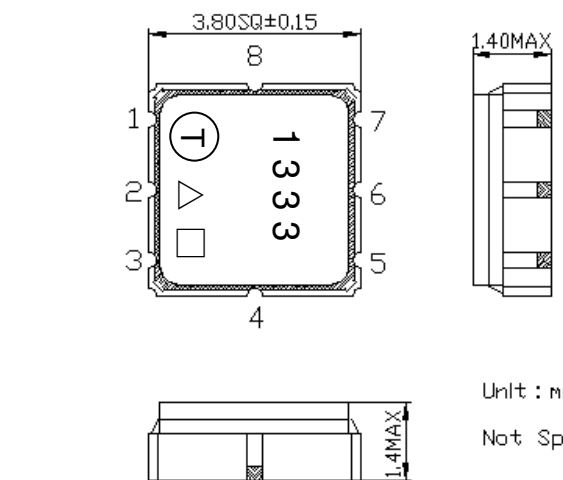


#### D. MATCHING CIRCUIT:



$$L1=L2=8.2nH+8.2nH \quad C1=C2=3.5pF$$

#### E. OUTLINE DRAWING:



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

□ : Week Code

Unit: mm

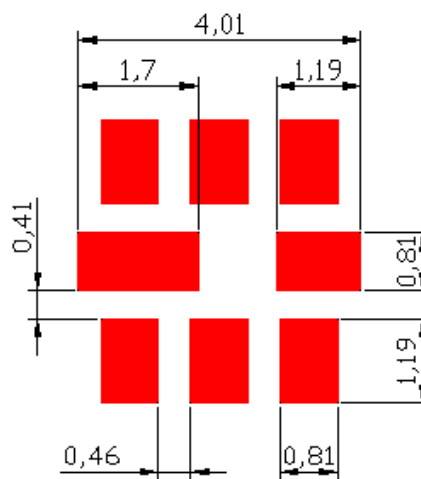
△ : Product / Year Code

Year	2019 2021	2020 2022
Product Code	B	b

Week Code Table

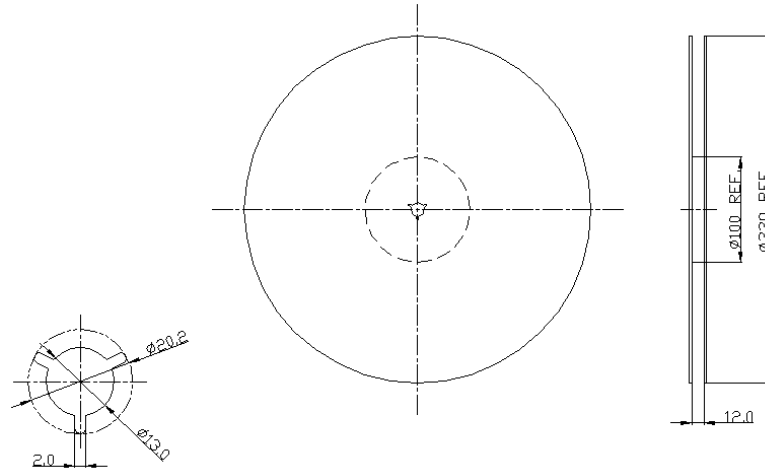
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A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

## F. PCB FOOTPRINT:

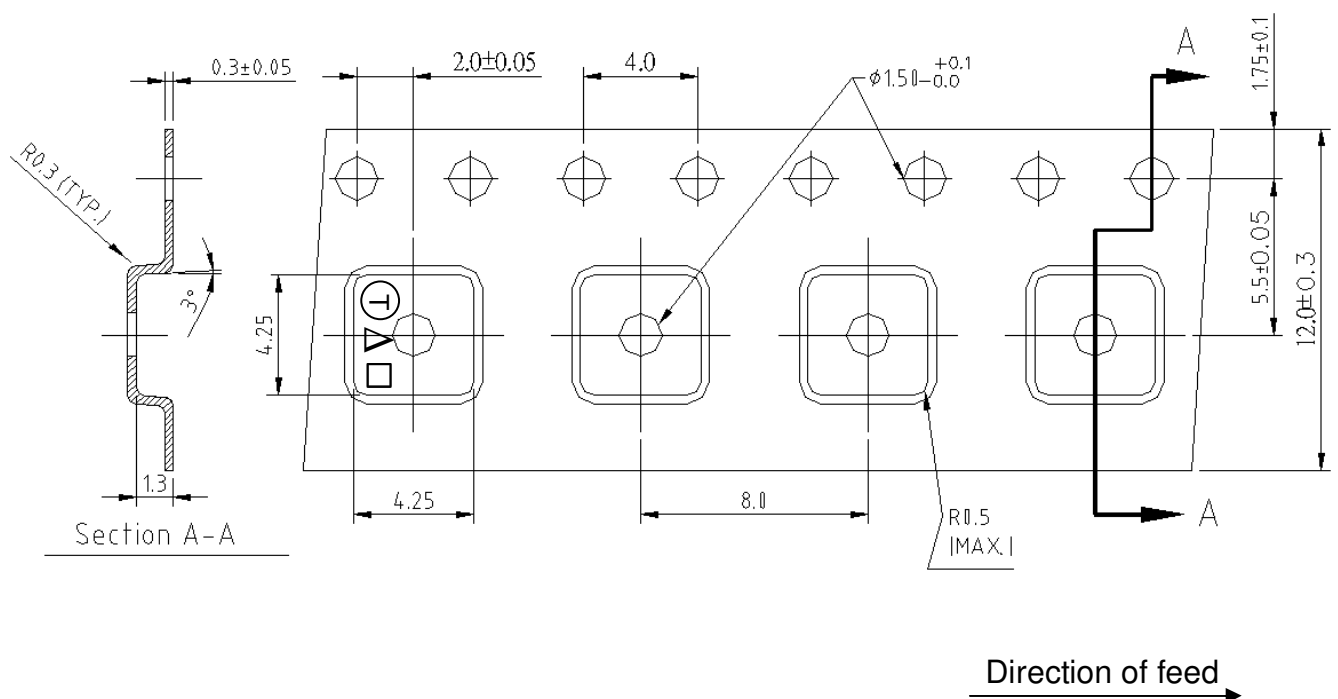


### G. PACKING:

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



## 2. TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°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.

