



# TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Description: 38.2 MHz 5MHz BW SMD 75.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB1328A

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

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

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

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

Date: \_\_\_\_\_ 04 / 11 / 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.



# TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales3@mail.taisaw.com](mailto:tstsales3@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

SAW Filter 38.2MHz 5MHz BW (SMD 7.0×5.0 mm)

MODEL NO.: TB1328A

REV. NO.1

## A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 80°C
2. Storage temperature range: -40°C to 85°C
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

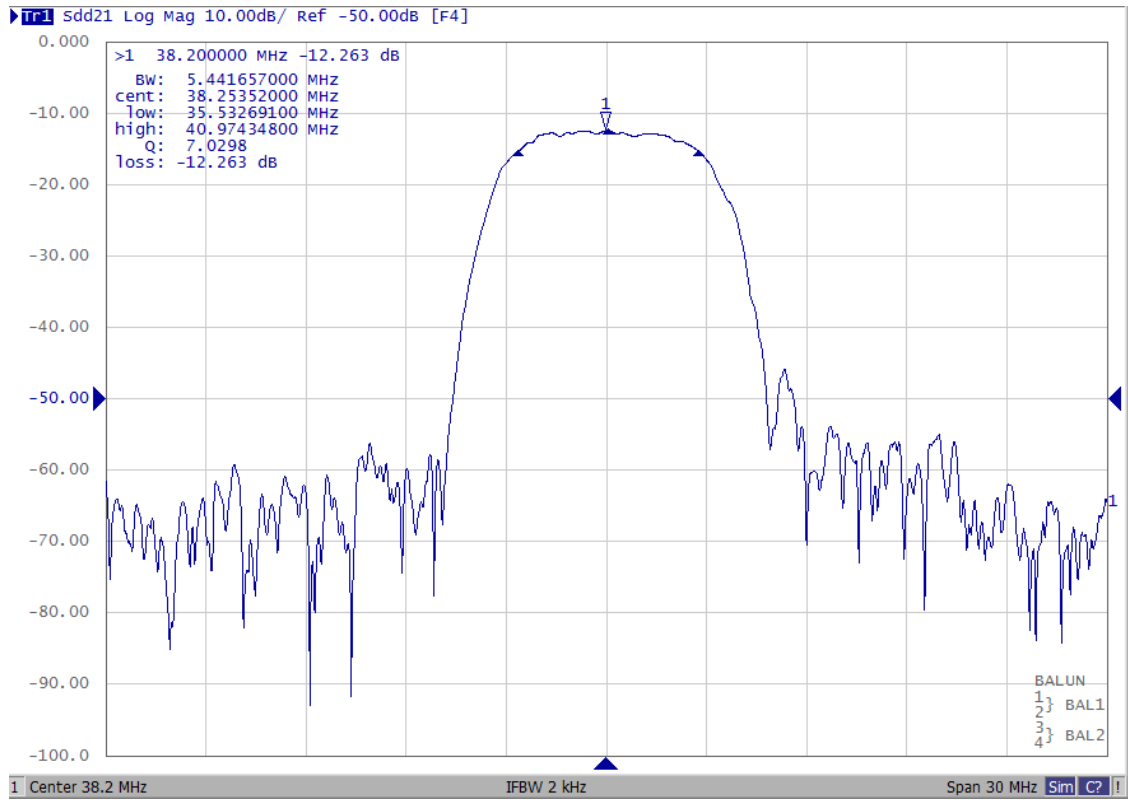
Electrostatic Sensitive Device

## B. ELECTRICAL CHARACTERISTICS:

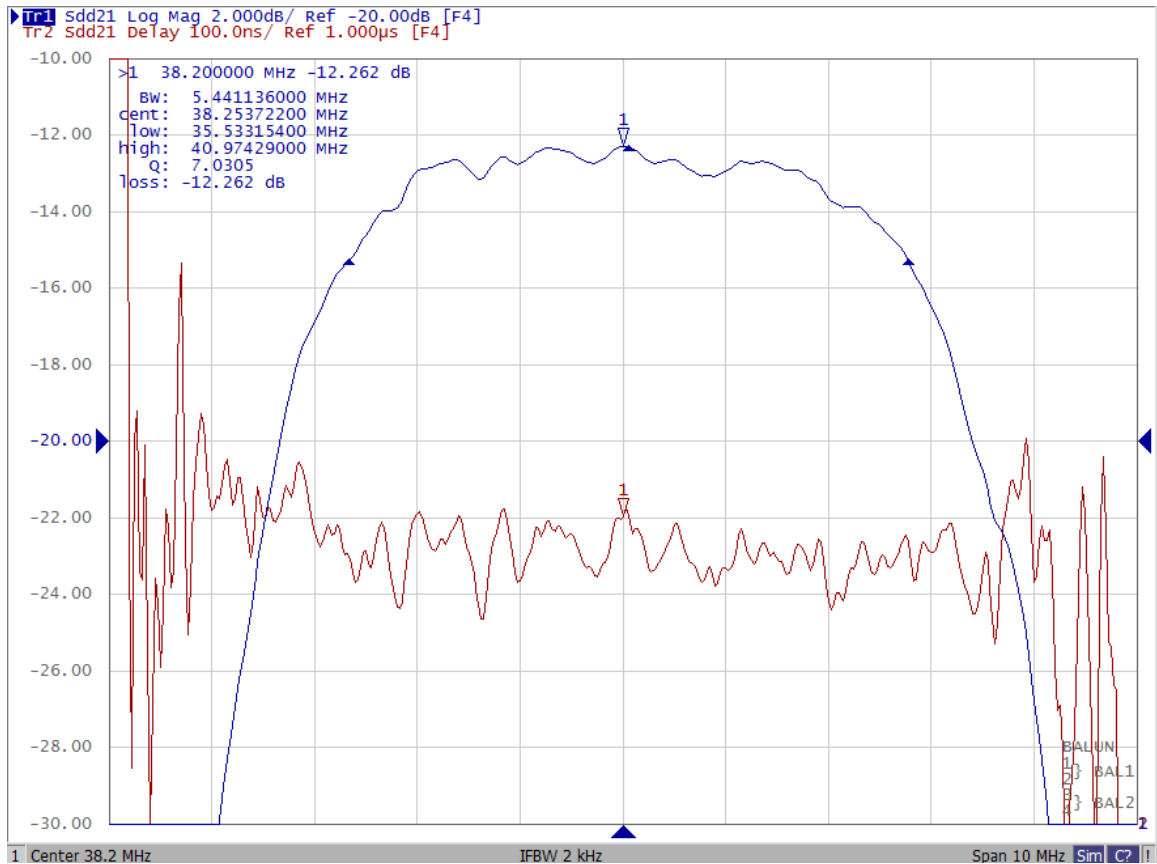
Item	Unit	Min.	Type.	Max.
Center frequency, <b>Fc</b>	MHz	-	38.2	-
Insertion Loss, <b>IL</b>	dB	-	12.0	13.0
3dB Bandwidth	MHz	5.0	5.4	-
30dB Bandwidth	MHz	-	9.0	11.0
Passband Ripple Fc±/± 1.5MHz	dB	-	0.9	1.3
Attenuation (Reference level from minimum Insertion loss )				
DC ~ 12.5MHz	dB	40	48	-
67.5MHz ~ 72.5MHz	dB	40	48	-
87.5MHz ~ 92.5MHz	dB	40	47	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance(Differential)	Ohm	-	200	-
Load Impedance(Differential)	Ohm	-	200	-

### C. FREQUENCY CHARACTERISTICS:

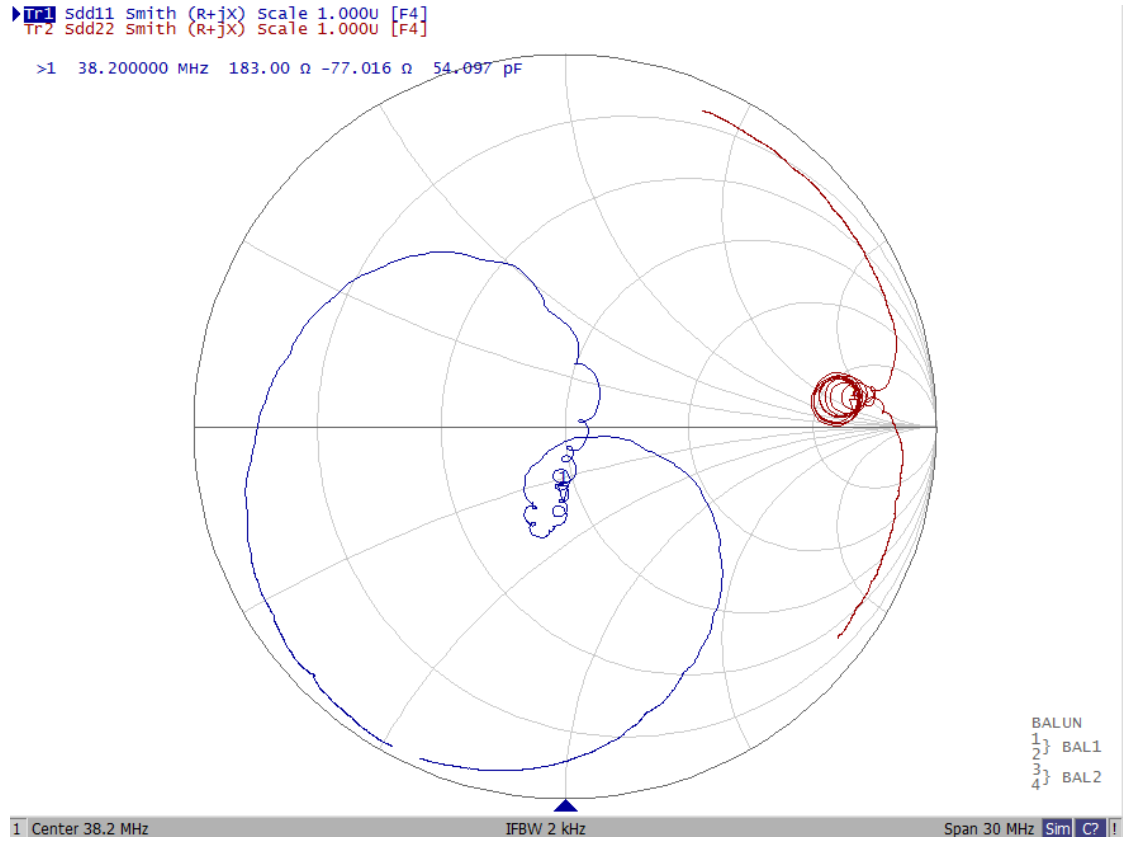
#### (1) Narrow band Response:



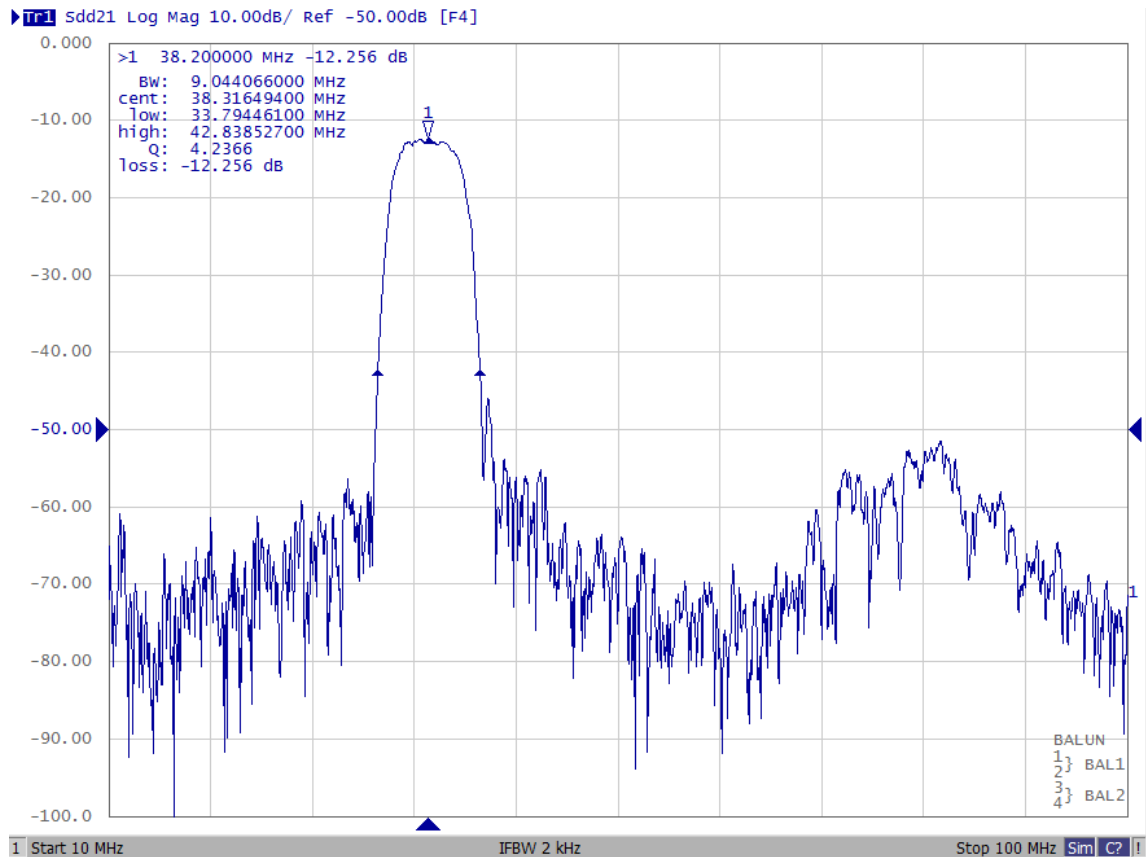
#### (2) Pass band Response and Group Delay Response:



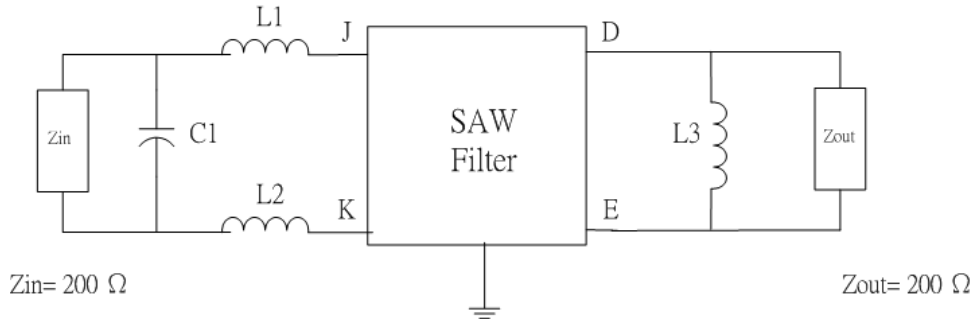
### (3) Impedance:



### (4) Wide Band Response:

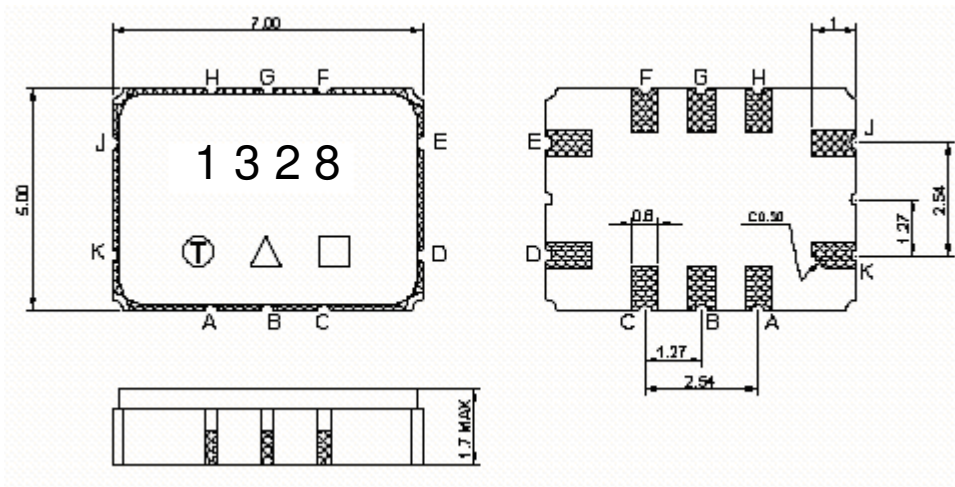


**D. MATCHING CIRCUIT:**



**$L1=L2=680\text{nH}+150\text{nH}$   $C1=30\text{pF}$   $L3=680\text{nH}+680\text{nH}$**

**E. OUTLINE DRAWING:**



- Pin J –RF Input
- Pin K –RF balance Input or to be ground
- Pin D –RF output
- Pin E –RF balance Output or to be ground
- Pin A, B, C, F, G, H - Ground

□ : Week Code

Unit: mm

△ : Product / Year Code: 4 year cycle

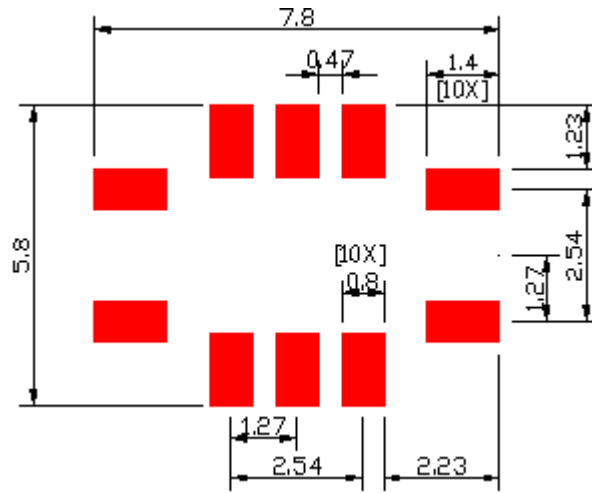
Product / Year Code

Year	2017 2021	2018 2022	2019 2023	2020 2024
Product Code	B	b	<u>B</u>	<u>b</u>

**Week Code Table**

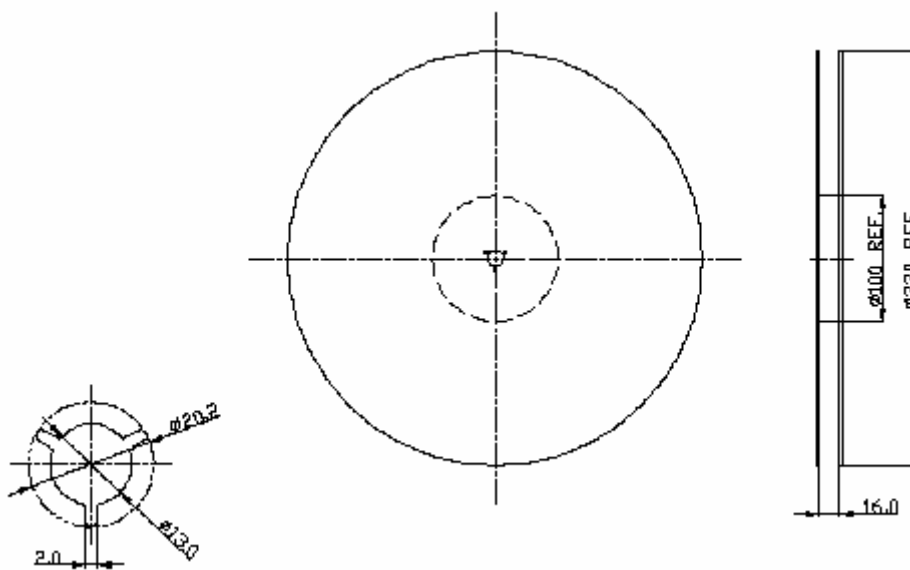
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

**F. PCB FOOTPRINT:**

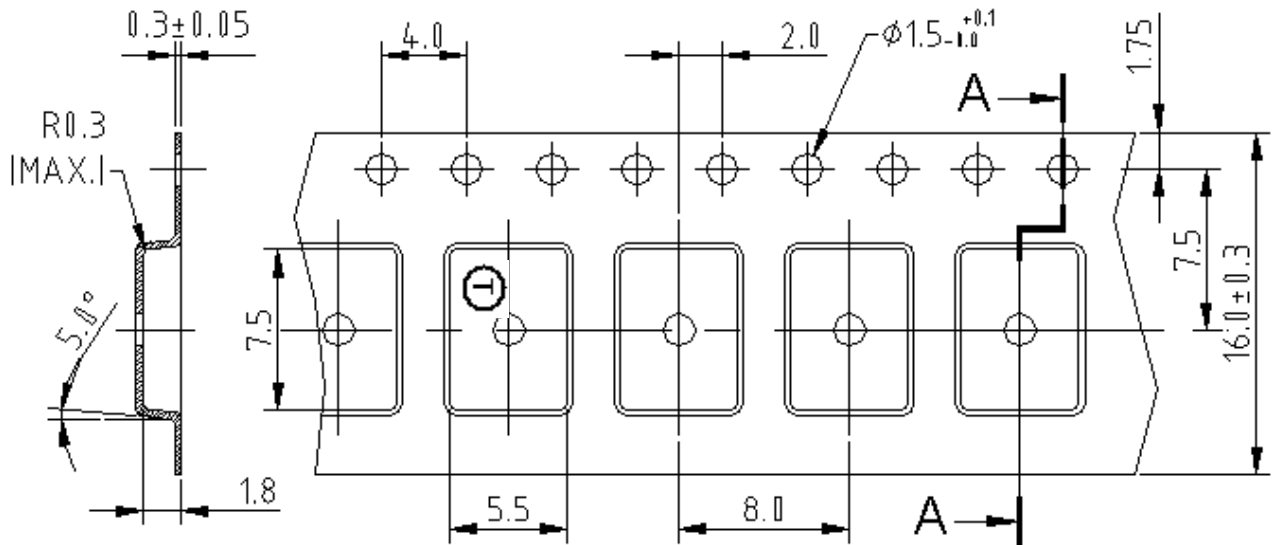


**G. PACKING:**

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



## 2. TAPE DIMENSION



### H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at  $150 \sim 180^\circ\text{C}$  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  $260^\circ\text{C} \pm 0/-5^\circ\text{C}$  peak (20~40sec).
4. Time: 2 times.

