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 Web: www.taisaw.com

Product Specifications Approval Sheet

Product Description: 149.64MHz 48MHz BW SMD 5.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB1208A

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Bruno Huang Bruno Huang

Approved by: Kazuma Lee Kazuma Lee

Date: 2022/02/11

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 149.64MHz 48MHz BW (SMD 5.0×5.0 mm)

MODEL NO.: TB1208A REV. NO.2.0

A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 85°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 soldering

Electrostatic **S**ensitive **D**evice

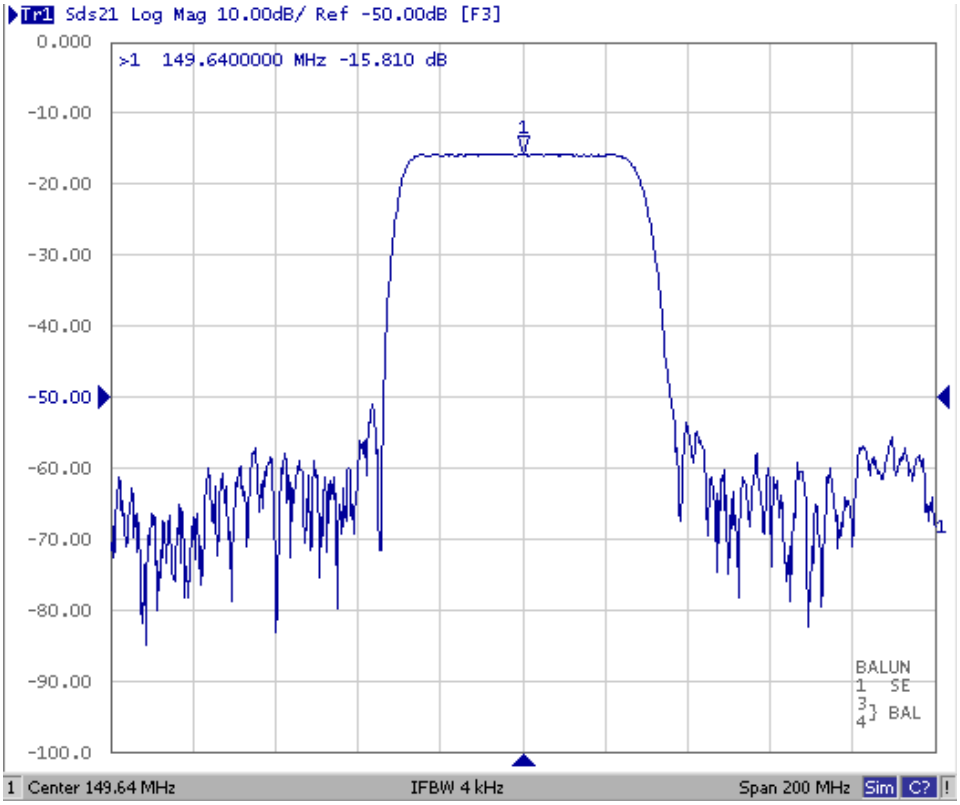
B. CHARACTERISTICS:

Ambient Temperature: 25°C

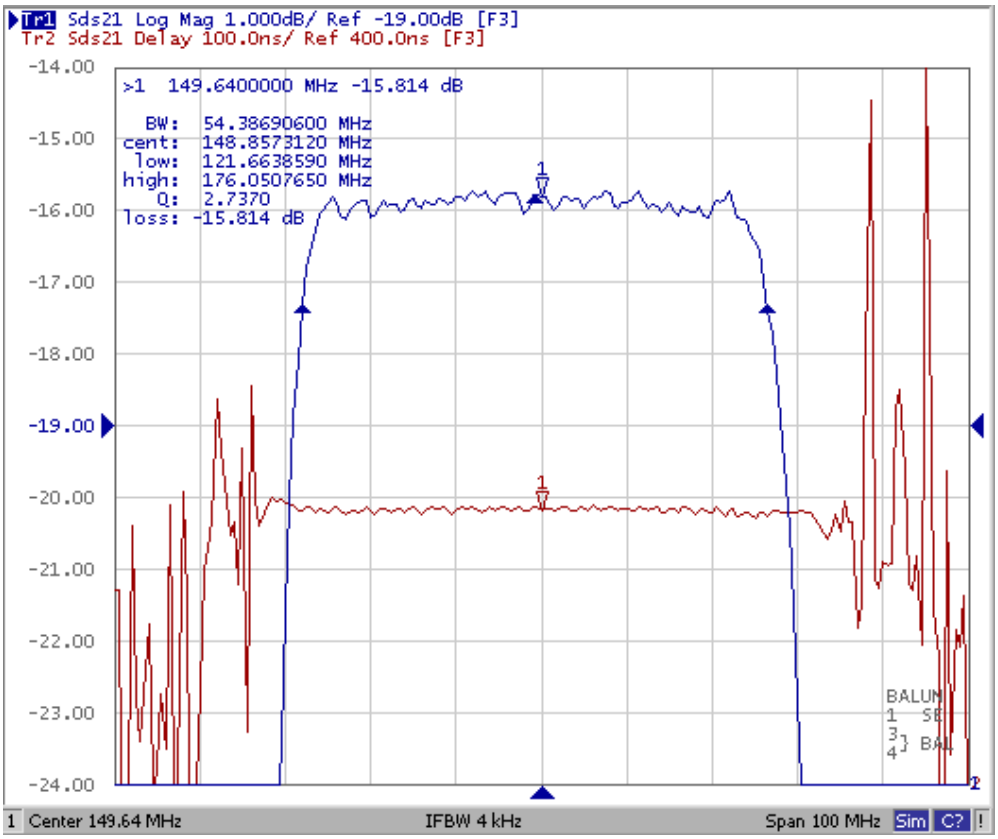
Item	Unit	Min.	Typical	Max.
Center frequency, **Fc**	MHz	-	149.64	-
Insertion Loss, **IL**	dB	-	15.6	17.0
1.5dB Lower Bandedge	MHz	-	121.70	125.22
1.5dB Upper Bandedge	MHz	174.06	176.10	-
Passband Flatness Fc+/- 19.54MHz				
Room Temperature(25°C)	dB	-	0.5	0.7
Over Temperature(-40~+85 °C)	dB	-	0.7	1.2
Passband Ripple Fc+/- 24.42MHz	dB		0.6	1.2
Absolute Group Delay at Fc	us	-	0.28	-
Group Delay Variation Fc+/- 24.42MHz	ns	-	20	80
Group Delay Linearity	ns	-	3	15
Group Delay Linearity Matching	ns	-	-	2.5
Attenuation (Reference level from minimum Insertion loss)				
10 ~ 105MHz	dB	35	40	-
105 ~ 115MHz	dB	25	35	-
188MHz ~ 198MHz	dB	25	35	-
198MHz ~ 1000MHz	dB	35	40	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance (Single ended)	Ohm	-	50	-
Load Impedance (Differential)	Ohm	-	200	-

C. FREQUENCY CHARACTERISTICS:

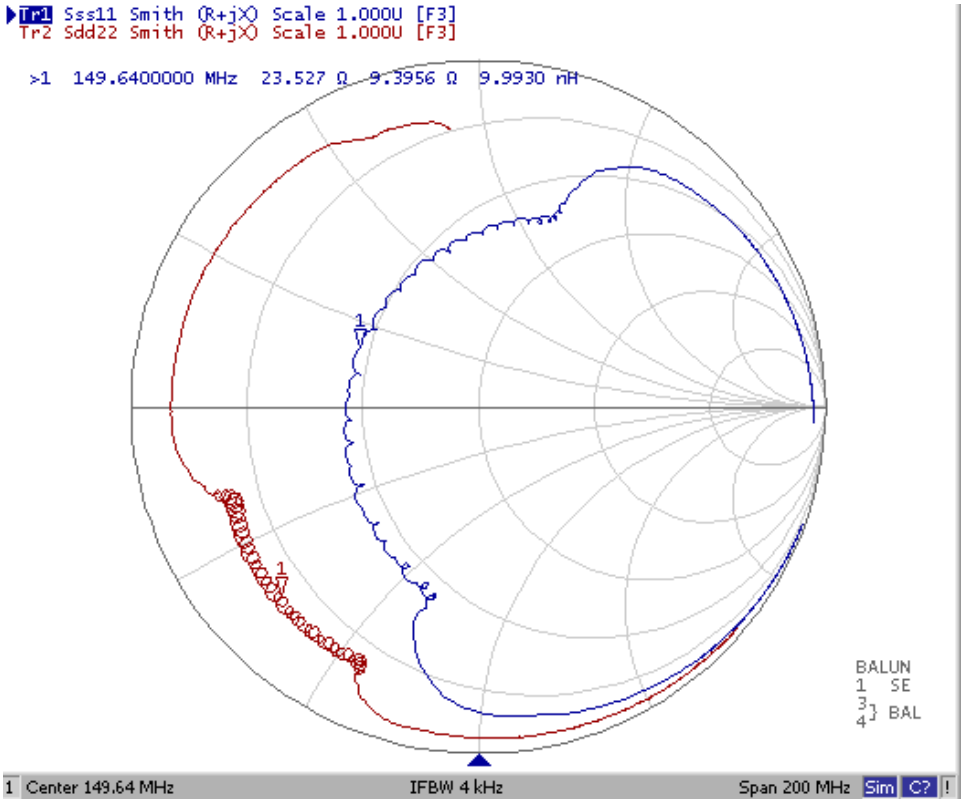
(1) Narrow Band Response:



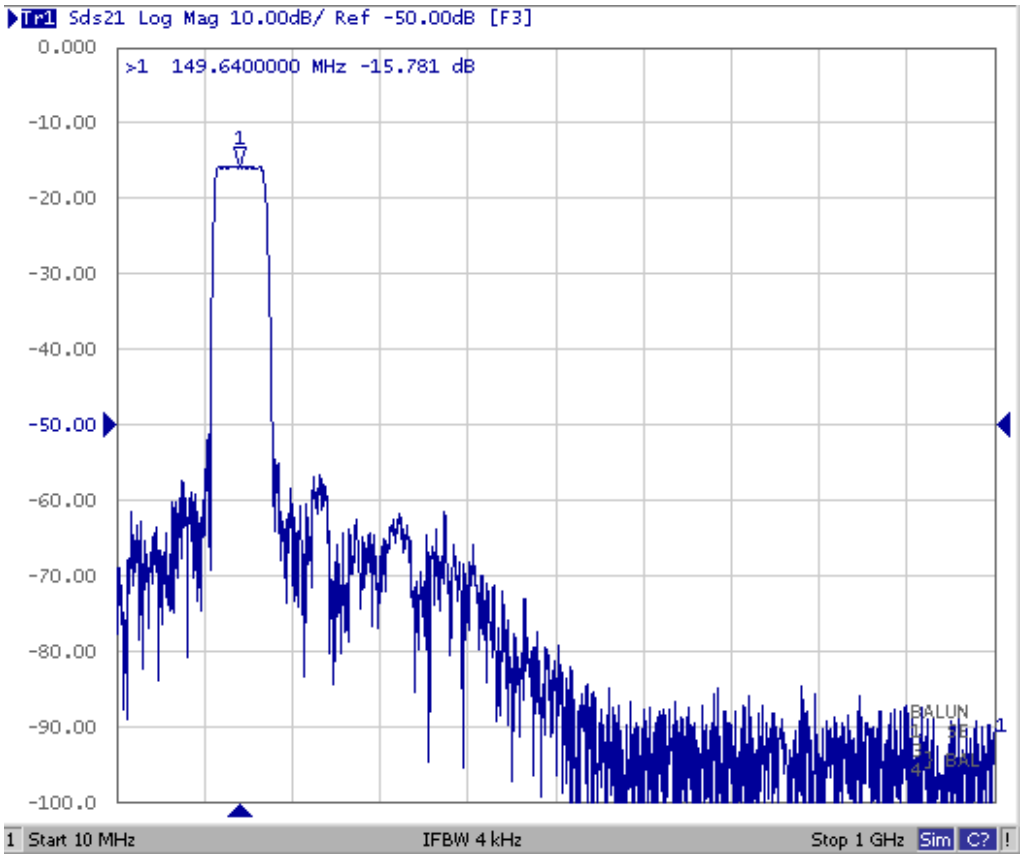
(2) Pass Band Response and Group Time Delay response:



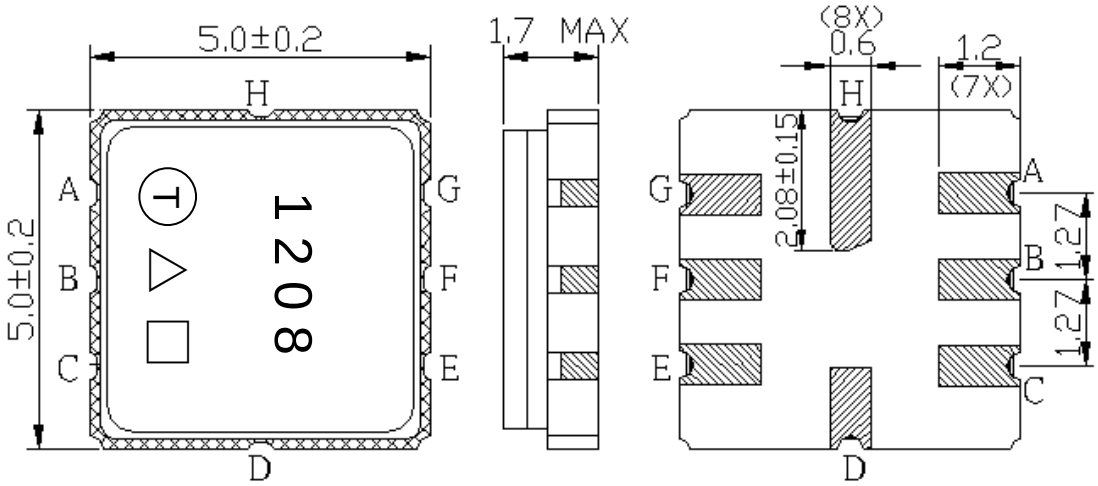
(3) Smith Chart:



(4) Wide Band Response:



D. OUTLINE DRAWING:



#A –Input

#B –Input Return

#E – Output

#F – Output Return

#C,D,G,H – Ground

□ : Week Code

Unit : mm

△ : Product / Year Code

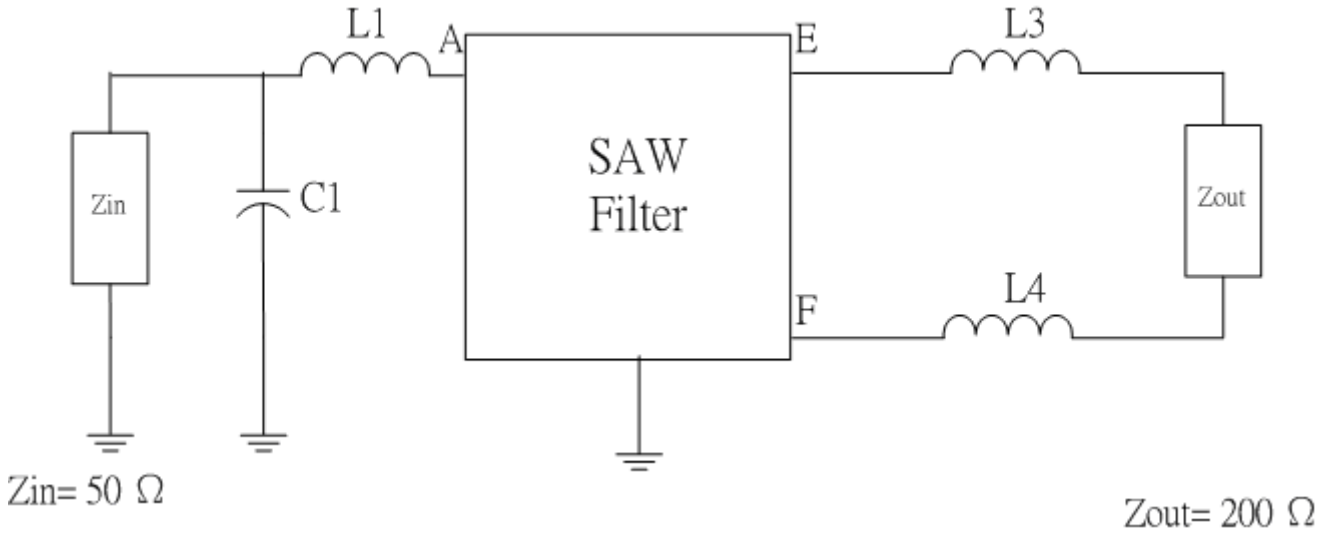
△ : Product / Year Code- 4year cycle

Year	2017 2021	2018 2022	2019 2023	2020 2024
Product Code	B	b	B	b

□ : Week Code Table

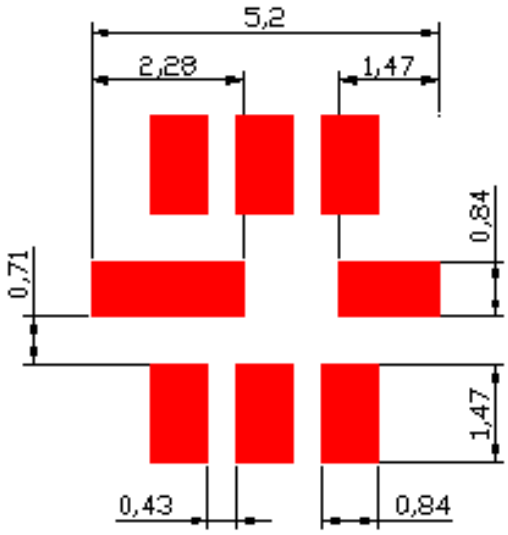
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	**WK15**	**WK16**	**WK17**	**WK18**	**WK19**	**WK20**	**WK21**	**WK22**	**WK23**	**WK24**	**WK25**	**WK26**
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	**WK28**	**WK29**	**WK30**	**WK31**	**WK32**	**WK33**	**WK34**	**WK35**	**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

E. MATCHING CIRCUIT:



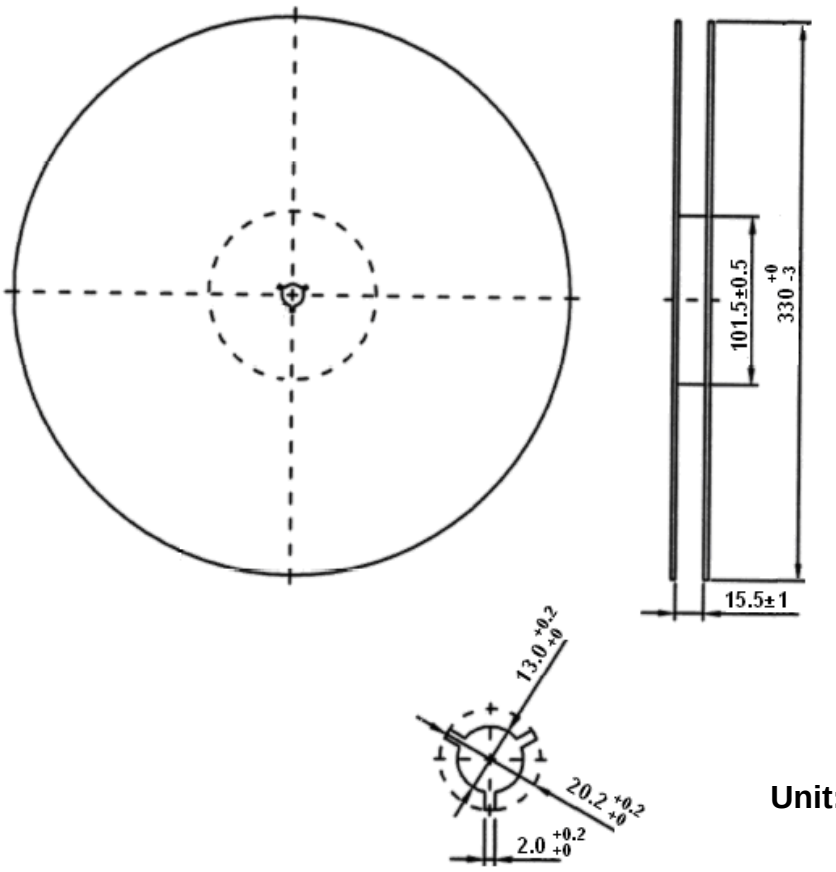
L1=150nH+22nH C1=1pF L2=L3=82nH

F. PCB FOOTPRINT:



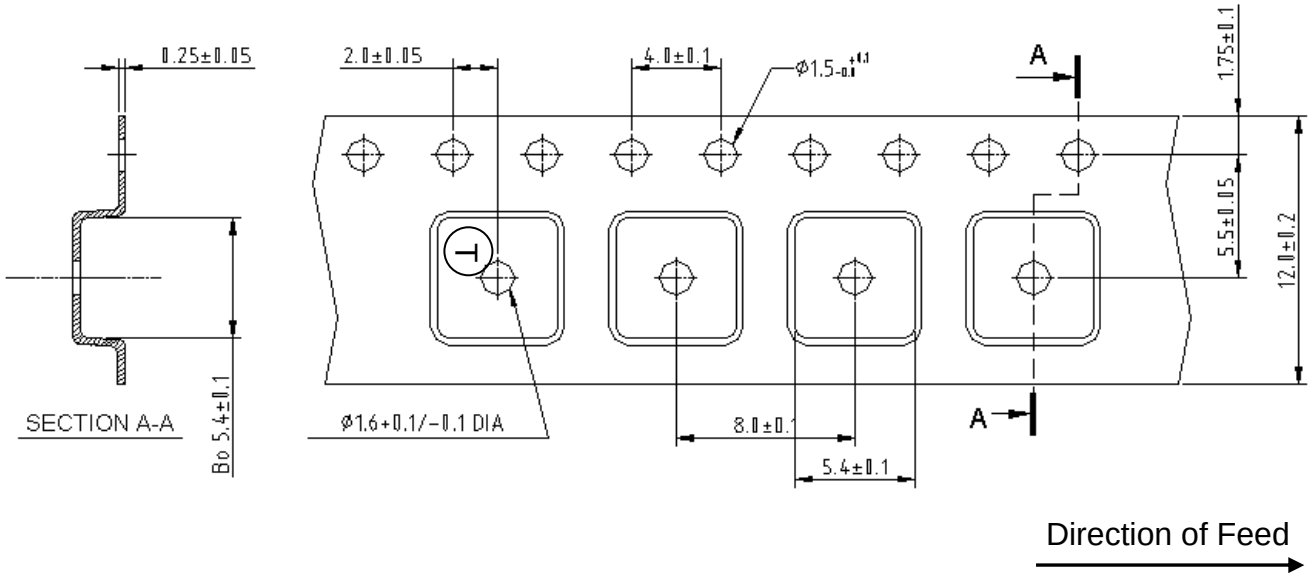
G. PACKING:

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



Unit: mm

2. TAPE DIMENSION:



H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.