



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Name: SAW Filter 869 MHz (BW 2MHz) SMD 1.4X1.1 mm

TST Parts No.: TA2093A

Customer Parts No.: _____

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2018/12/27

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 869MHz

MODEL NO.:TA2093A

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 6V
3. Operating Temperature: -40°C to +80°C
4. Storage Temperature: -40°C to +80°C
5. Moisture Sensitive Level (MSL): Level 3

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

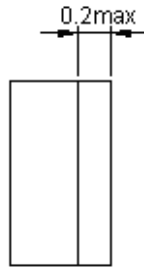
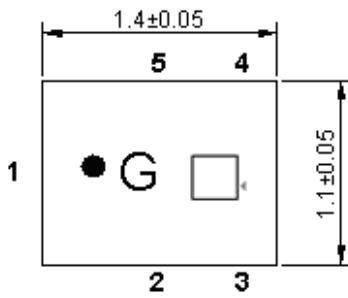
Terminating source impedance (single) : $Z_s = 50 \Omega$

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

Item	Unit	Min	Type.	Max
Center Frequency Fc	MHz	-	869.	-
Insertion Loss (868~870 MHz) IL	dB		3.0	3.5
VSWR (868~870 MHz)			1.5	2.0
Amplitude ripple (868~870 MHz)			0.5	1.2
Attenuation				
50 ~ 791 MHz	dB	45	50	
791 ~ 835 MHz	dB	45	50	
835 ~ 848 MHz	dB	43	48	
848 ~ 862 MHz	dB	30 ¹⁾	35	
880 ~ 883 MHz	dB	35	45	
883 ~ 1000 MHz	dB	49	54	
Package size	mm	SMD 1.4x1.1		

1) **30dB** for -40°C to +40°C

C.OUTLINE DRAWING:

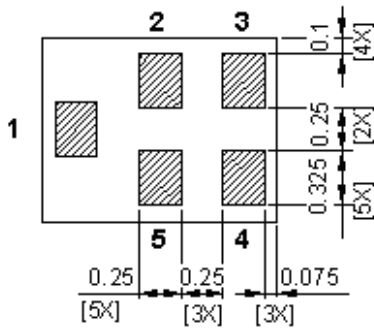


All tolerances are +/-0.05 mm unless otherwise specified

Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm

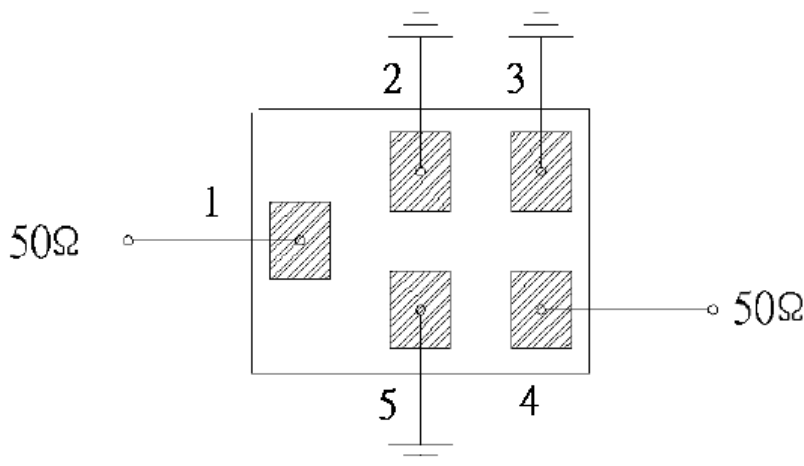


Pin-No.Ⓟ	SymbolⓅ	FunctionⓅ
1Ⓟ	INⓅ	InputⓅ
2Ⓟ	GNDⓅ	GroundⓅ
3Ⓟ	GNDⓅ	GroundⓅ
4Ⓟ	OUTⓅ	OutputⓅ
5Ⓟ	GNDⓅ	GroundⓅ

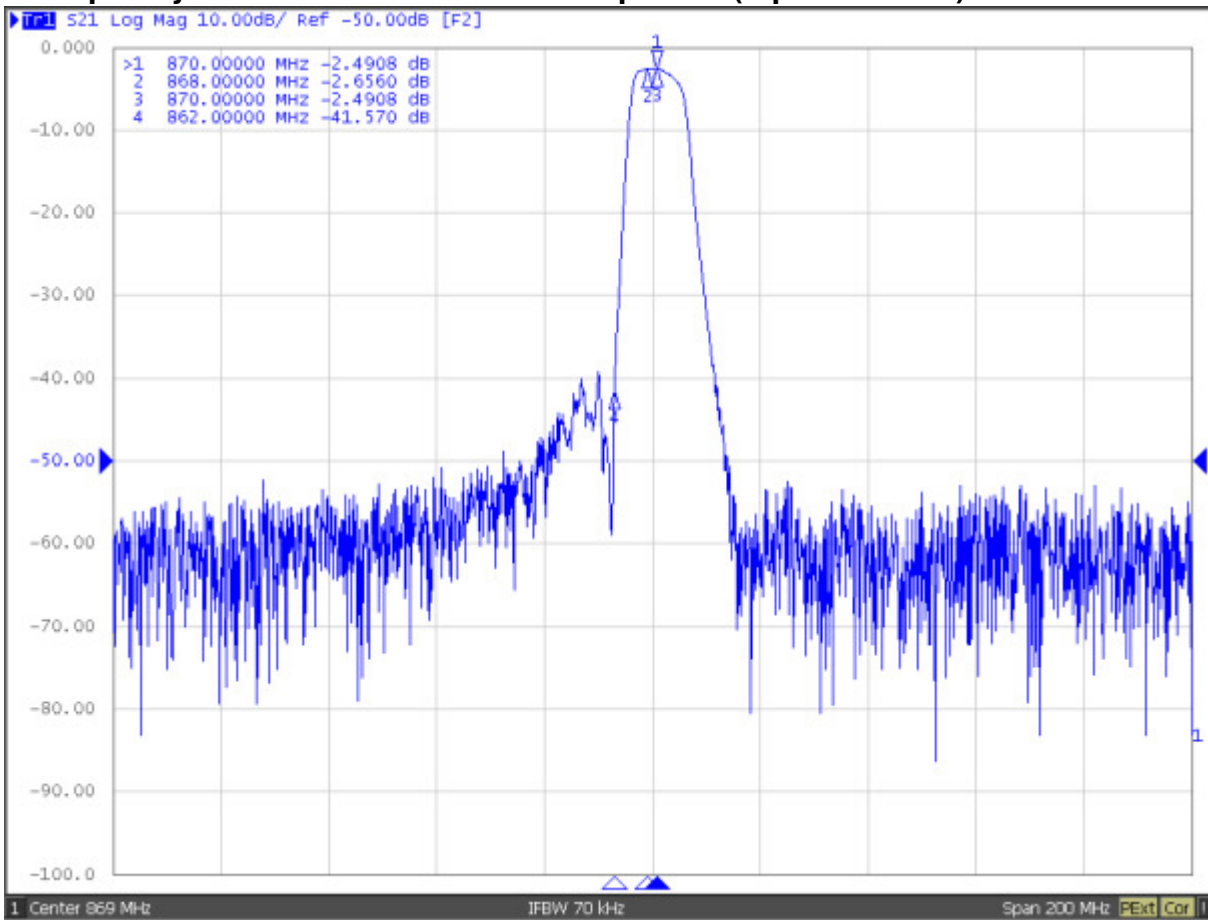
□ : Year/Month Code (Follow the table)

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>

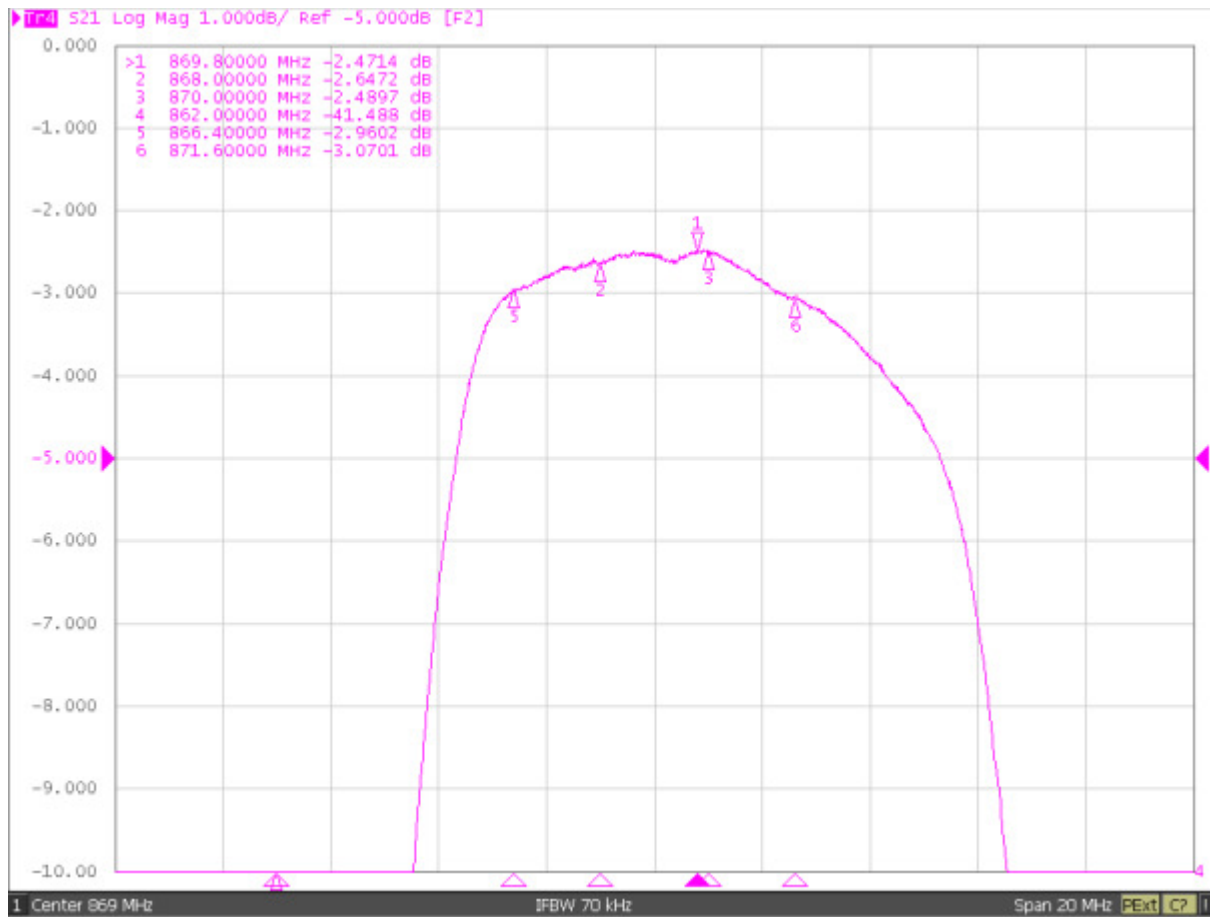
D. MEASUREMENT CIRCUIT:



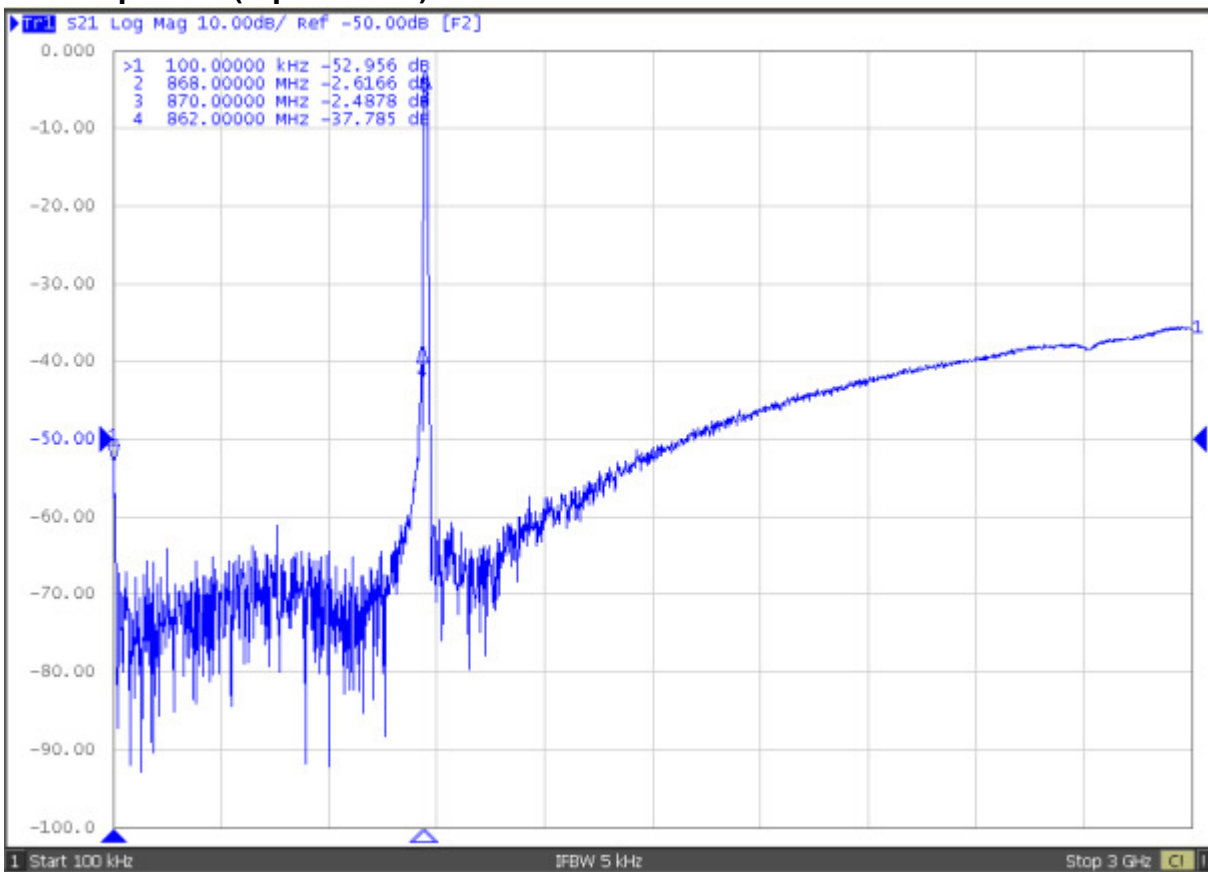
E. Frequency Characteristics: S21 response :(Span 200MHz)



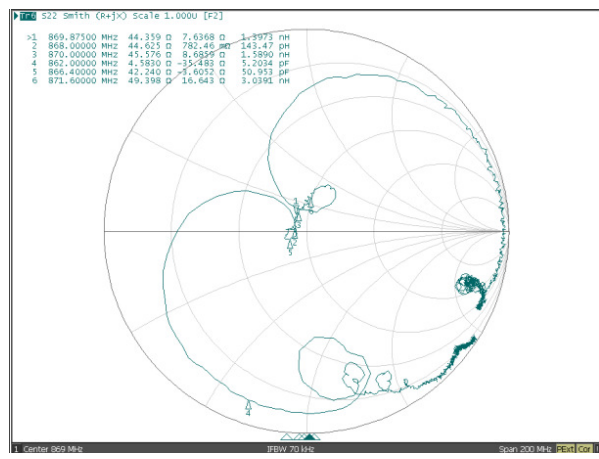
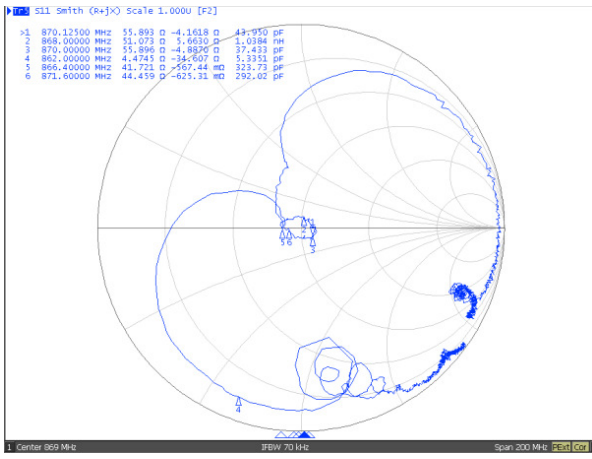
S21 response :(Span 20MHz)



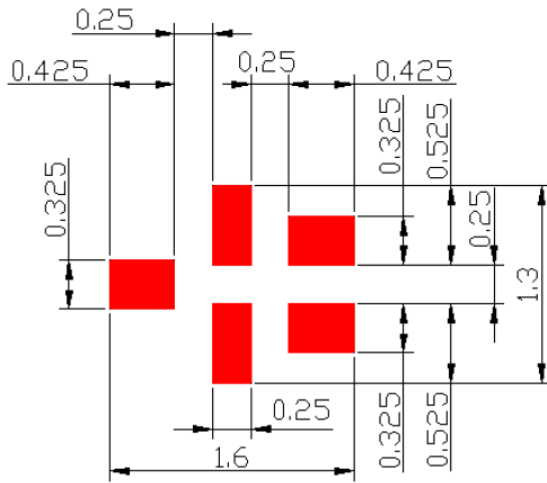
S21 response :(Span 3GHz)



S11/S22 response:



F. PCB Footprint:

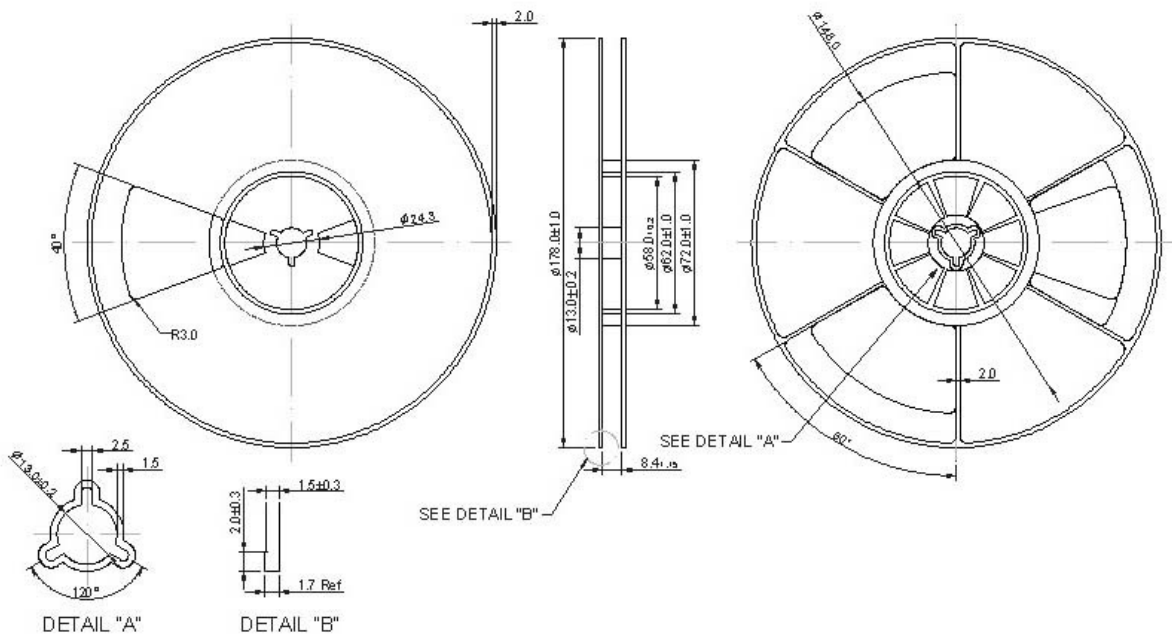


■ : Land Pattern

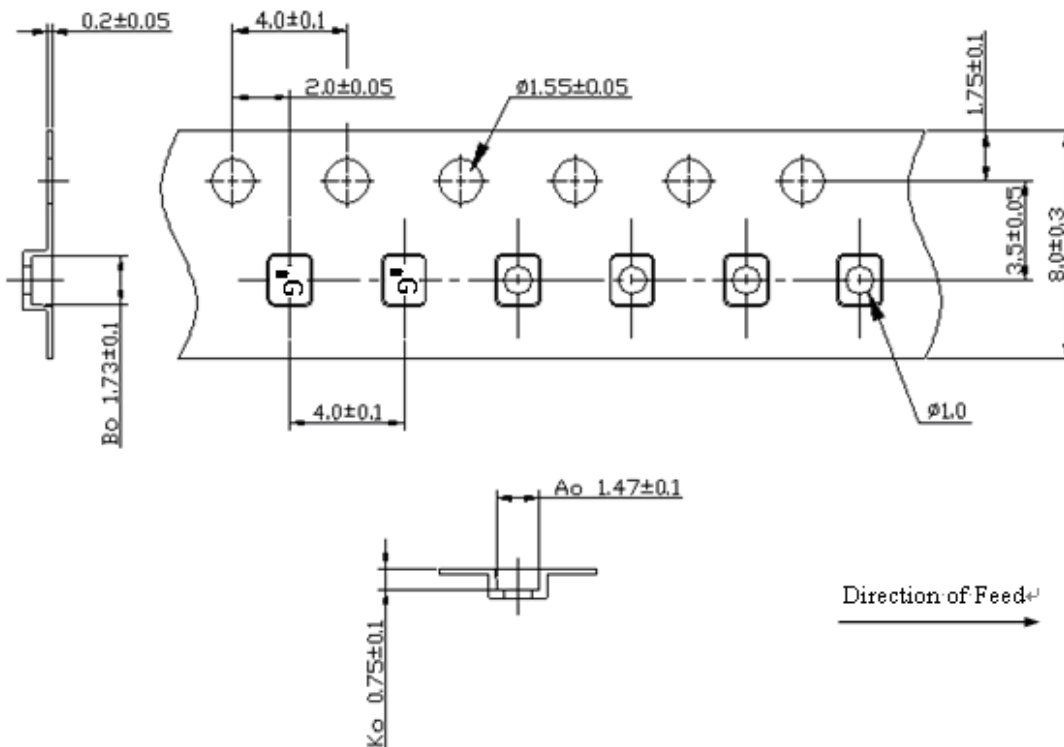
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



G. 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.

