



# 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: SAW Filter 2441.75MHz (BW 83.5MHz) SMD 1.1X0.9mm

TST Parts No.:TA2104BTCA

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

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

Checked by:\_\_\_\_\_ Michael Yang *Michael*

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

Date:\_\_\_\_\_ 2021/08/02

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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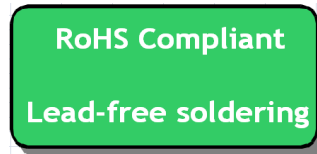
## SAW Filter 2441.75MHz (BW 83.5MHz) SMD 1.1x0.9x0.5mm(TC SAW)

MODEL NO.:TA2104BTCA

REV. NO.:2.0

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 3(MSL3)



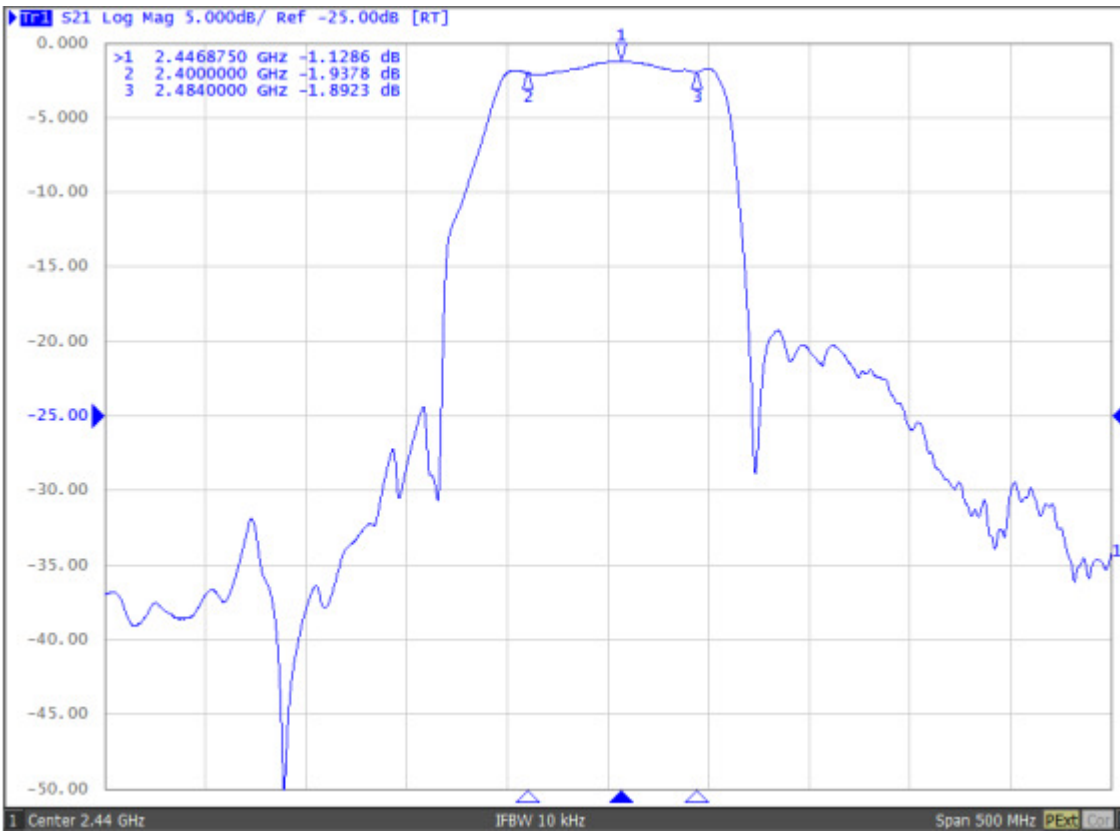
*HiQ Saw*

Electrostatic Sensitive Device

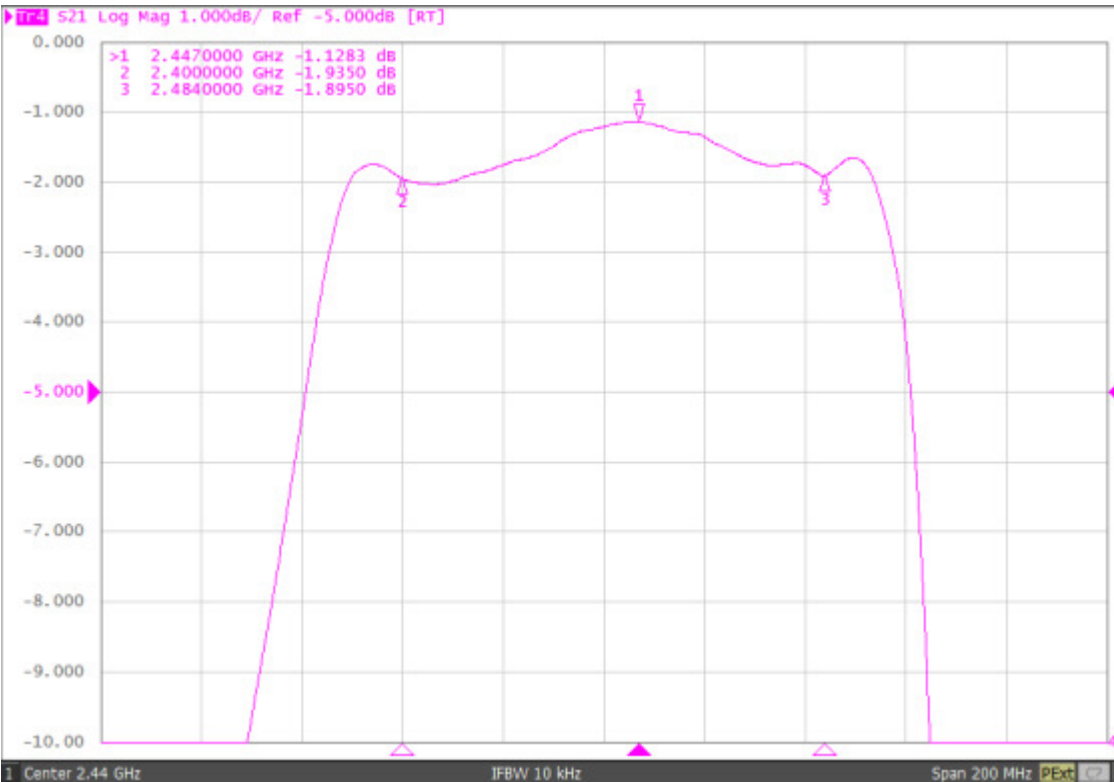
### B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min	Type.	Max
<b>Center Frequency</b> <b>Fc</b>	MHz	-	2441.75	-
<b>Insertion Loss</b> IL 2400 ~ 2483.5 MHz	dB		1.7	2.2
<b>Amplitude ripple</b> 2400 ~ 2483.5 MHz			0.7	1.2
<b>VSWR</b> 2400 ~ 2483.5 MHz			2.0	2.2
<b>Attenuation</b>				
0.1 – 960 MHz	dB	33	38	
1570 – 1990 MHz	dB	37	42	
2110 – 2170 MHz	dB	32	37	
2170 – 2300 MHz	dB	26	31	
2300 – 2320 MHz	dB	25	30	
2320 – 2345 MHz	dB	20	23	
2345 – 2365 MHz	dB	8	13	
2550 – 2800 MHz	dB	15	19	
2800 – 4000 MHz	dB	25	30	
4000 – 5000 MHz	dB	25	30	
Temperature coefficient	ppm/°C	-18		
Package size	mm	SMD 1.1x0.9		

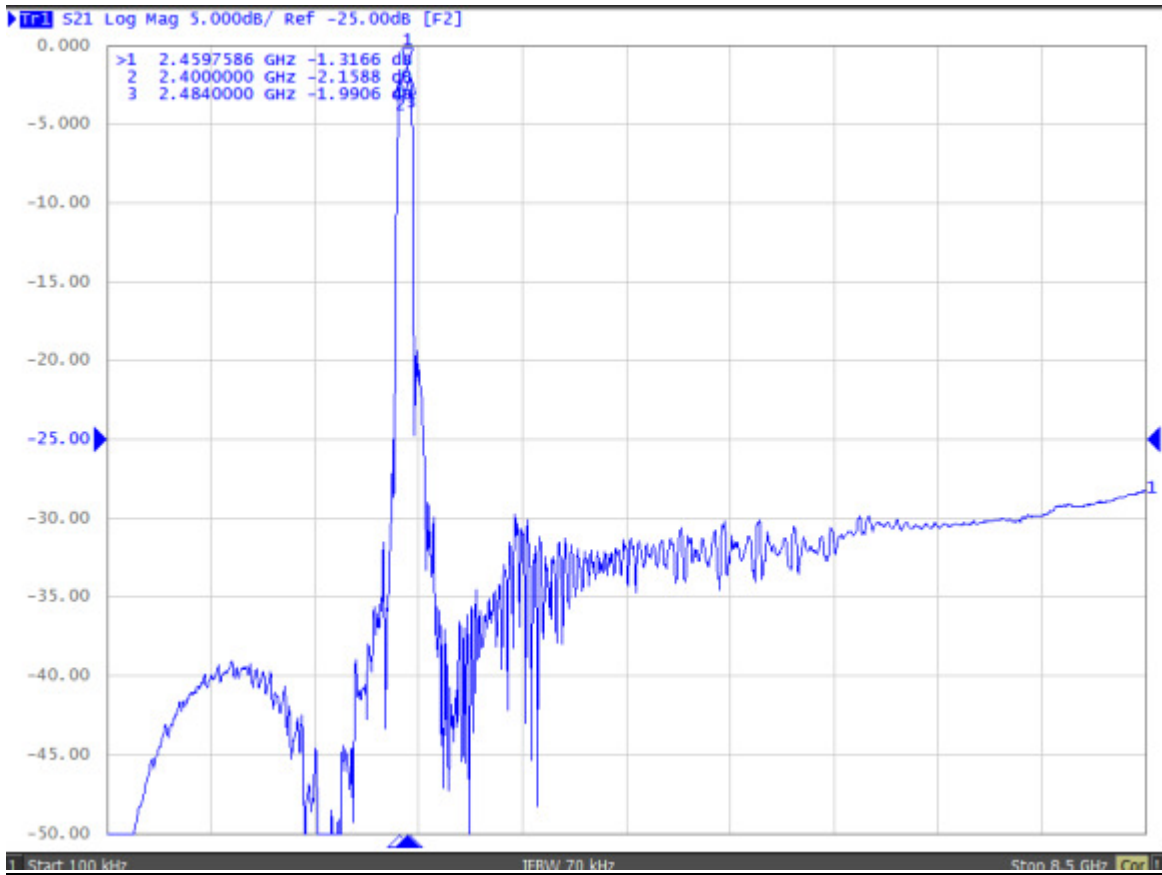
**C.FREQUENCY CHARACTERISTICS:**  
**S21 response: (span 500MHz)**



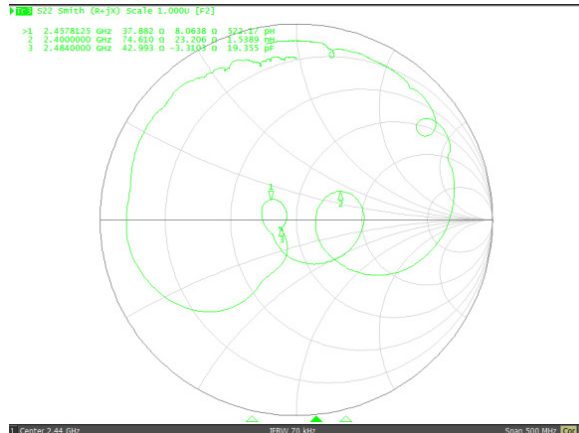
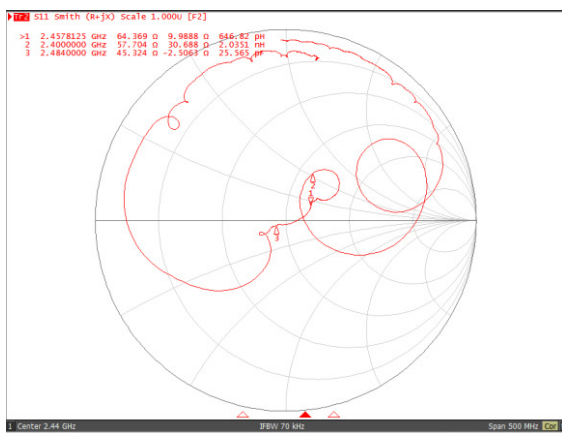
**S21 response: (span 200MHz)**



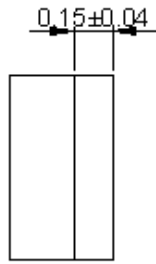
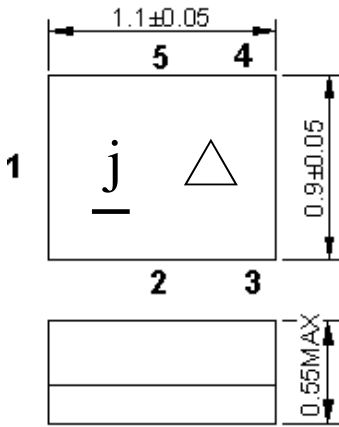
### S21 response: (span 8.5GHz)



### S11/S22 response:



**D. OUTLINE DRAWING:**

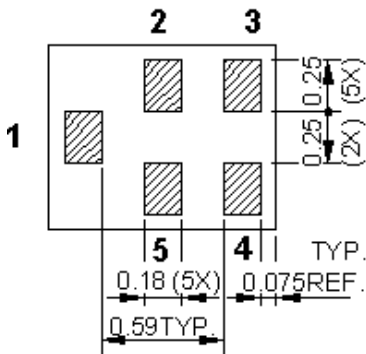


All tolerances are +/-0.05 mm unless otherwise specified

Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm

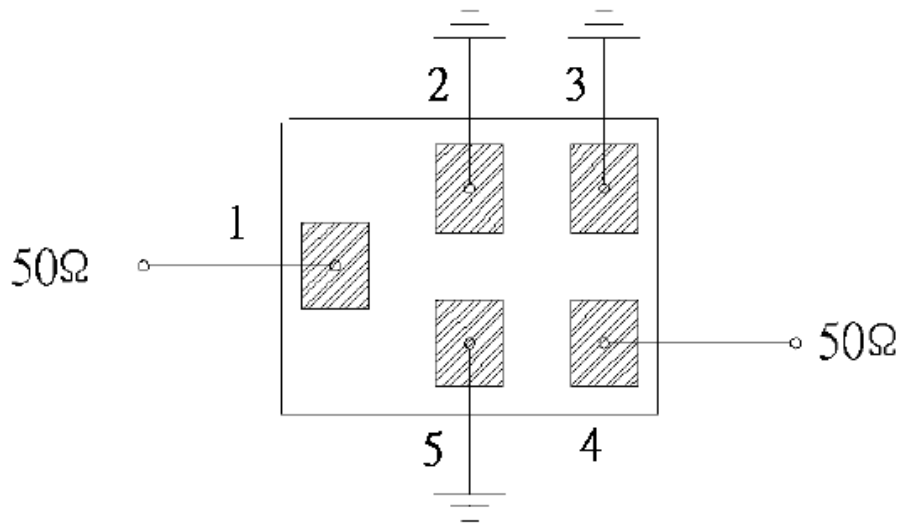


Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

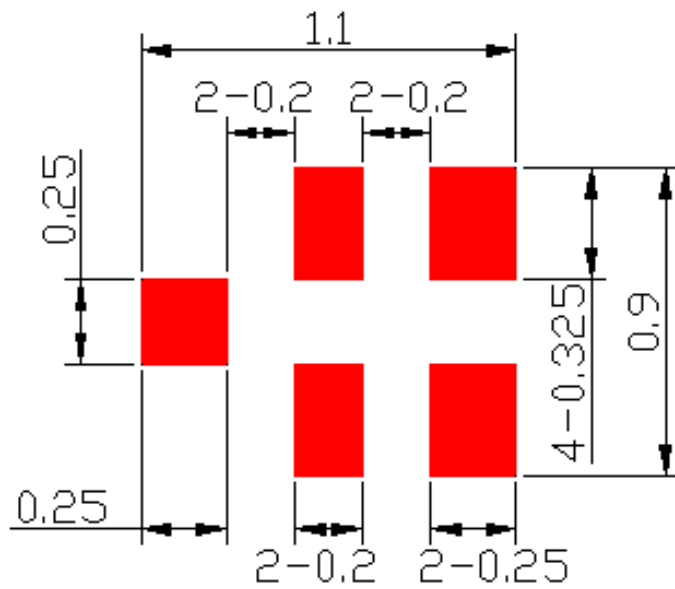
**Δ : Year/Month Code (Follow the table)**


YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m
2024	n	p	q	r	s	t	u	v	w	x	y	z
2025	<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>
2026	<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>
2027	<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>
2028	<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>

**E. MEASUREMENT CIRCUIT:**



**F. FOOT PRINT :**

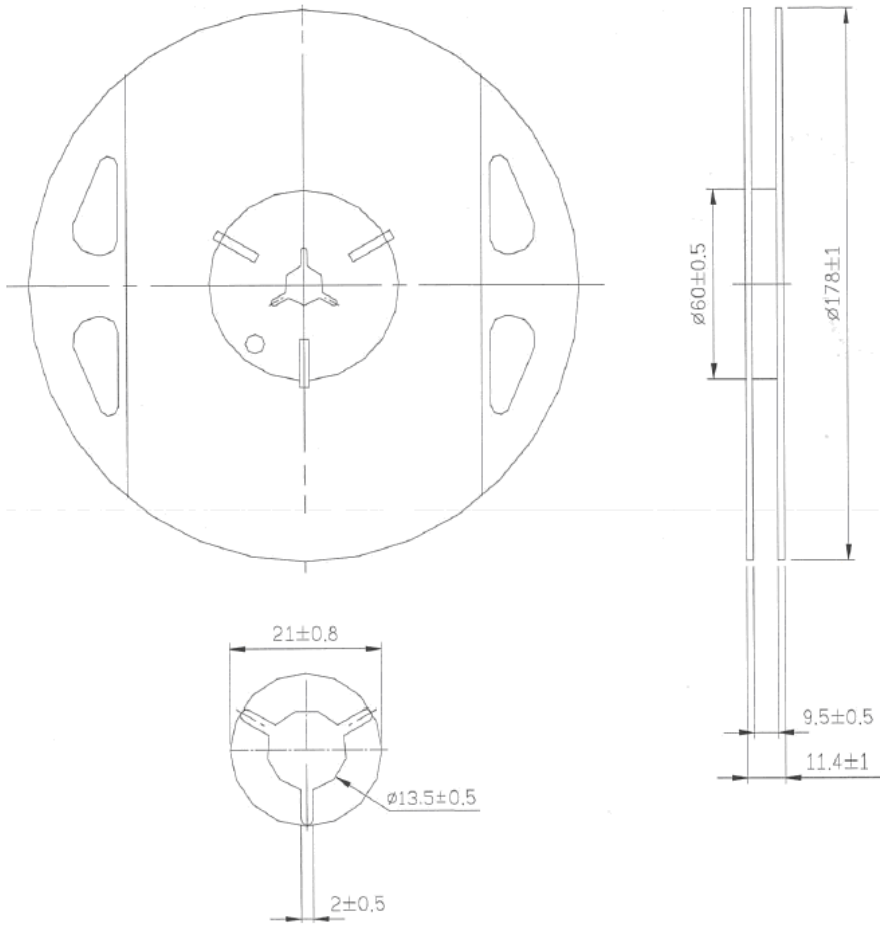


 : Land Pattern  
Unit: mm

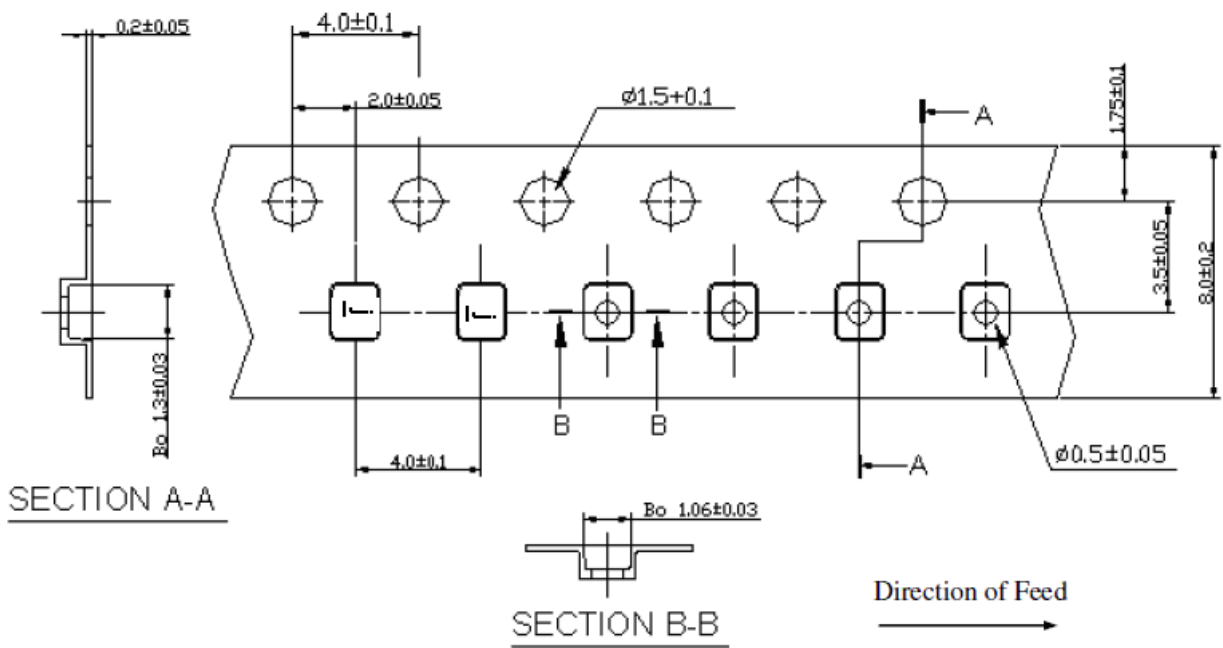
**G. PACKING:**

**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.

