



# 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

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## Product Specifications Approval Sheet

Product Description: SAW Filter 1176.5 MHz SMD 1.1X0.9 mm (BW=25MHz)

TST Parts No.: TA2471A

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

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

Checked by: \_\_\_\_\_ Bob Chau 

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

Date: \_\_\_\_\_ 2021/07/02

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 1176.5MHz BW25MHz SMD 1.1x0.9mm

MODEL NO.:TA2471A

REV. NO.:2.0

### A. MAXIMUM RATING:

1. Input Power Level: 13 dBm (2000h)
2. DC Voltage : 3 V
3. Operating Temperature: -20°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. ESD Machine Mode : 50V
6. ESD Human Body Mode : 100V
7. Moisture Sensitive Level (MSL): Level 2a



Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

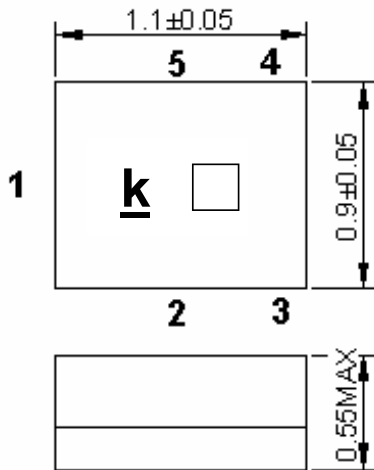
Temperature range for specification : Tspec = -20°C to +85°C

Terminating source impedance : Zs = 50 Ω

Terminating load impedance : ZL = 50 Ω

Item	Unit	Min.	Typ.	Max.
<b>Center Frequency</b> <b>Fc</b>	MHz	-	1176.5	-
<b>Insertion Loss</b> (1164~1189 MHz)	<b>IL</b> dB	-	1.8	2.4
<b>Amplitude Ripple</b> (1164~1189 MHz)	dB <sub>p-p</sub>	-	0.5	1.3
<b>VSWR</b> (1164~1189 MHz)		-	1.8	2.1
<b>Group Delay Deviation</b> (1164~1189 MHz)	ns	-	7	13
<b>Attenuation</b> (refer to 0 dB)				
100 ~ 814 MHz	dB	53	63	-
814 ~ 849 MHz	dB	53	62	-
849 ~ 980 MHz	dB	51	57	-
980 ~ 1010 MHz	dB	51	56	-
1010 ~ 1100 MHz	dB	50	54	-
1100 ~ 1130 MHz	dB	40	46	-
1250 ~ 1427 MHz	dB	25	50	-
1427 ~ 1463 MHz	dB	45	50	-
1710 ~ 2025 MHz	dB	40	45	-
2300 ~ 2690 MHz	dB	38	42	-
2690 ~ 3000 MHz	dB	37	42	-
3000 ~ 6000 MHz	dB	17	22	-
Temperature Coefficient	ppm/K	-	-36	-

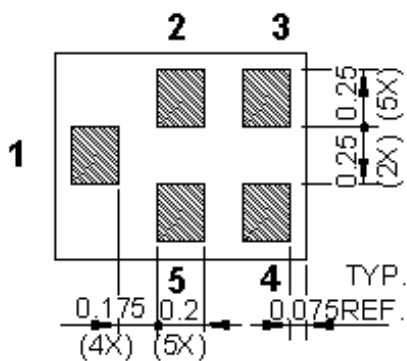
**C. OUTLINE DRAWING:**



All tolerances are +/-0.05 mm unless otherwise specified  
 Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm

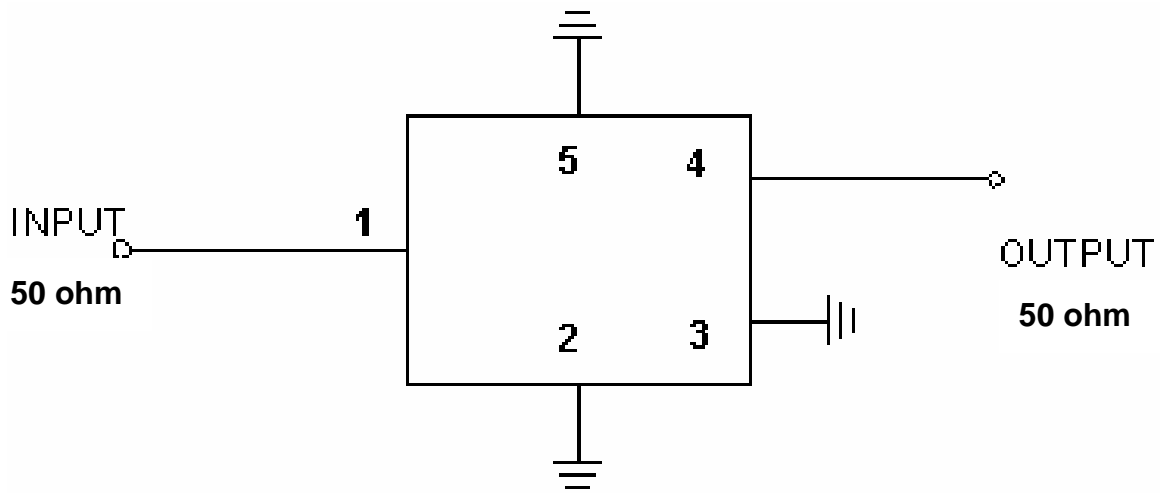


Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

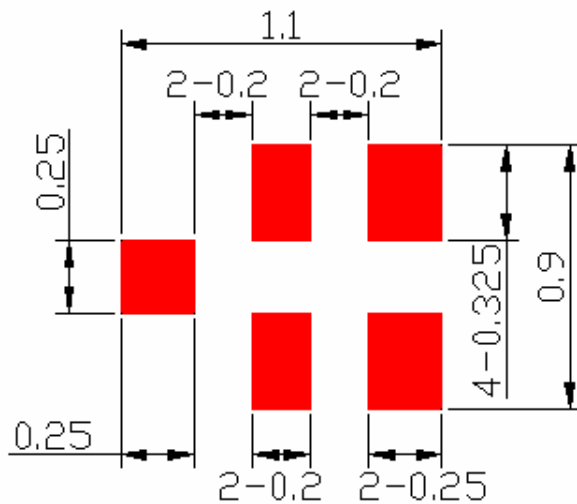
□ : Year/Month Code (Follow the table)


YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013 / 2021	A	B	C	D	E	F	G	H	J	K	L	M
2014 / 2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2016 / 2024	n	p	q	r	s	t	u	v	w	x	y	z
2017 / 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>
2018 / 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>
2019 / 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>
2020 / 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>

**D. MEASUREMENT CIRCUIT:**

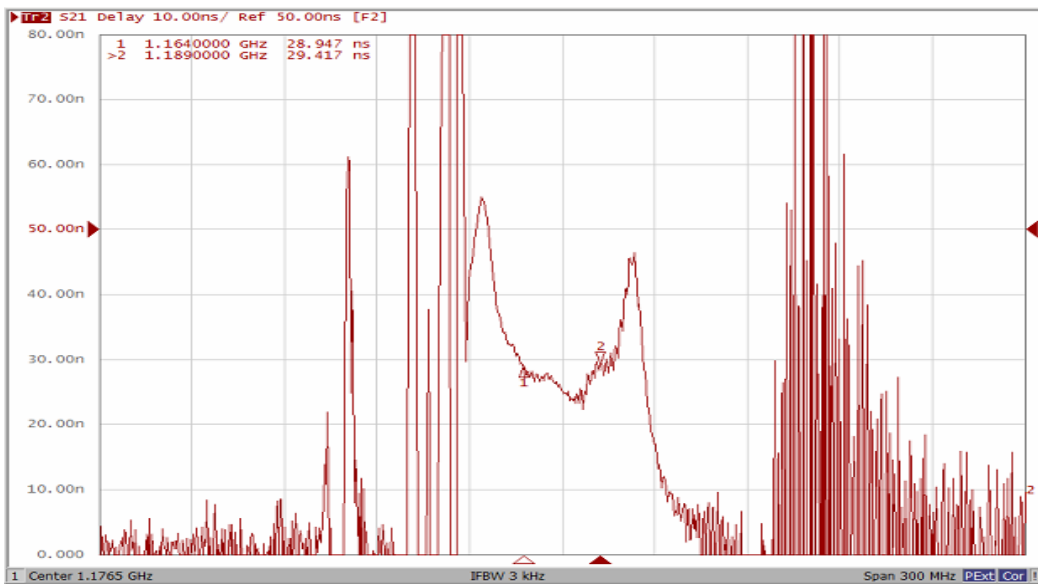
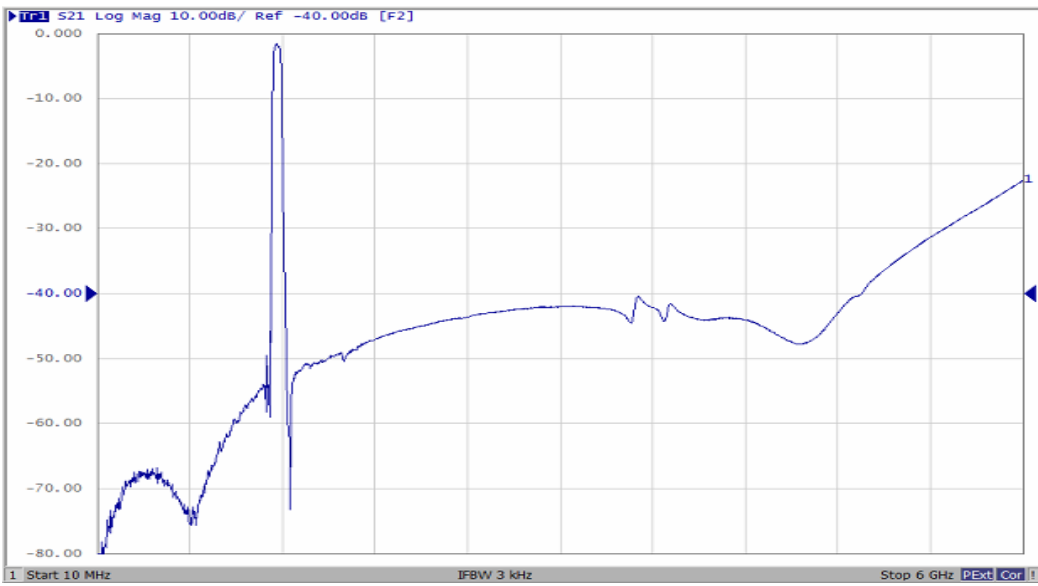


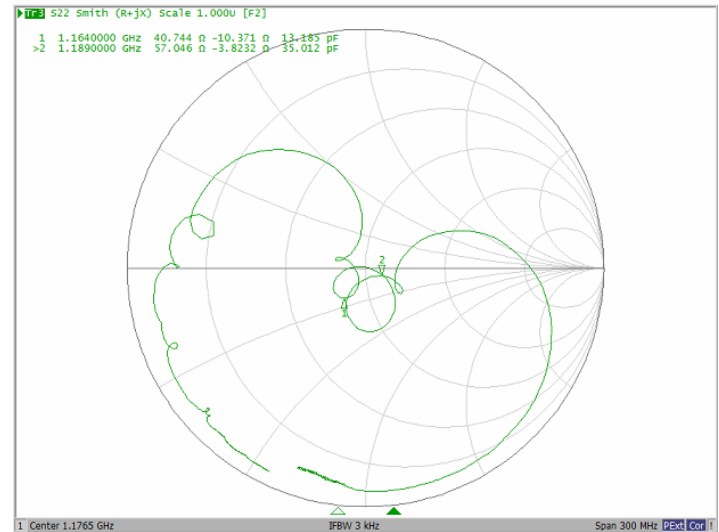
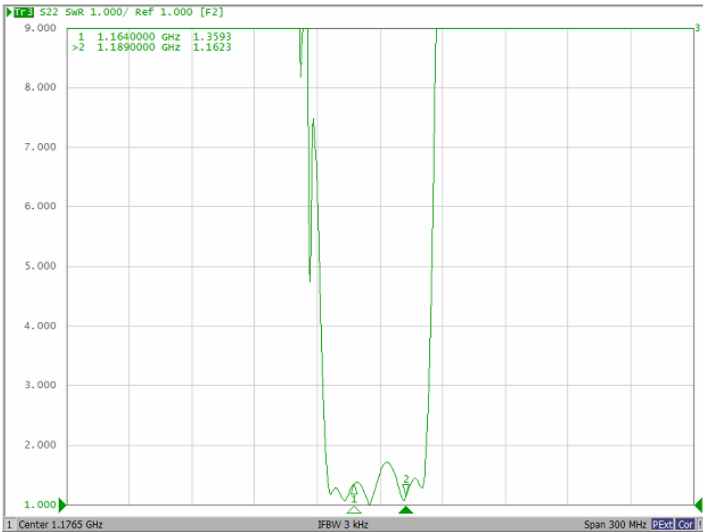
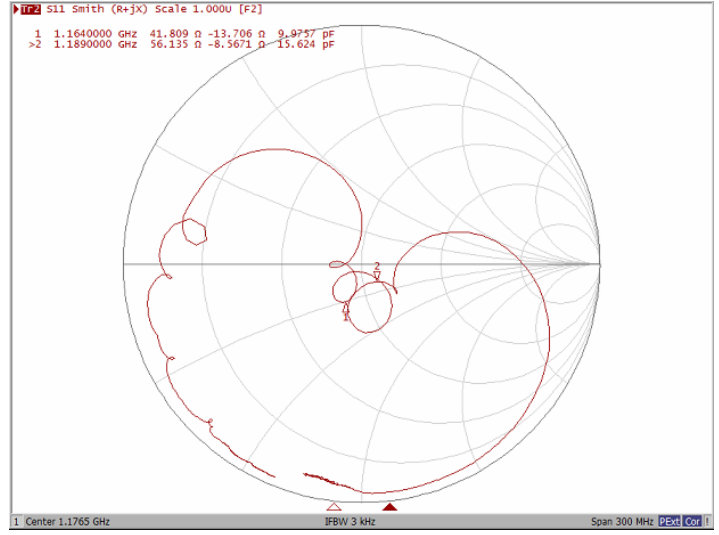
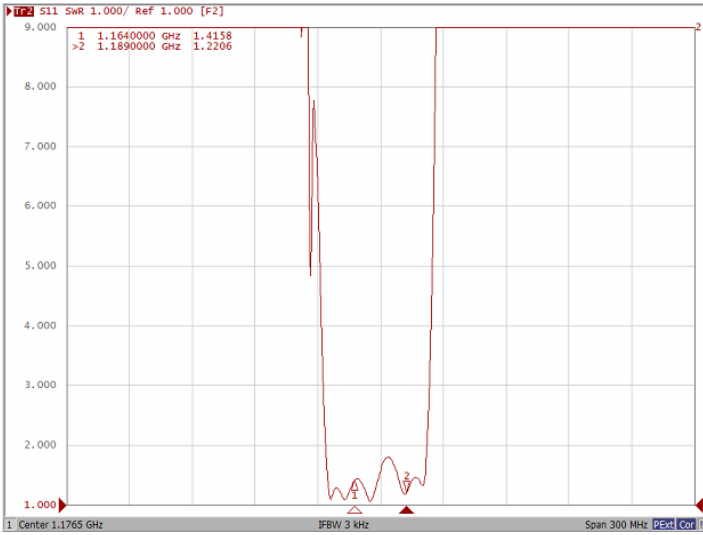
**E. PCB Footprint :**



 : Land Pattern  
Unit: mm

## F. Frequency Characteristics:

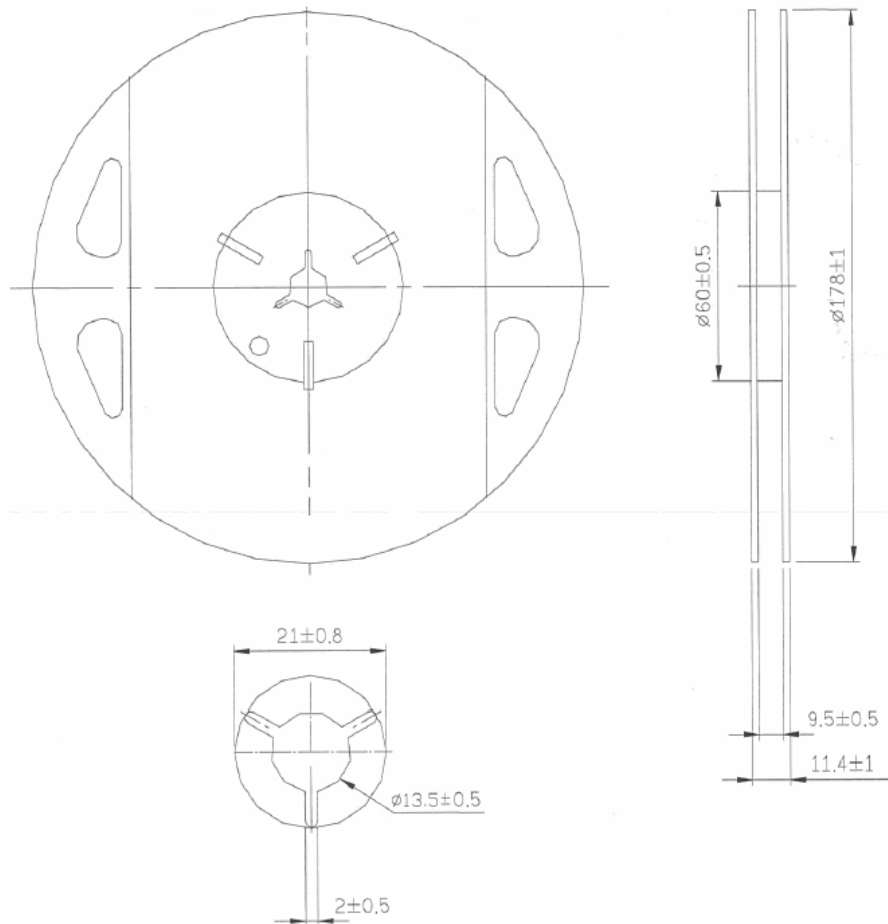




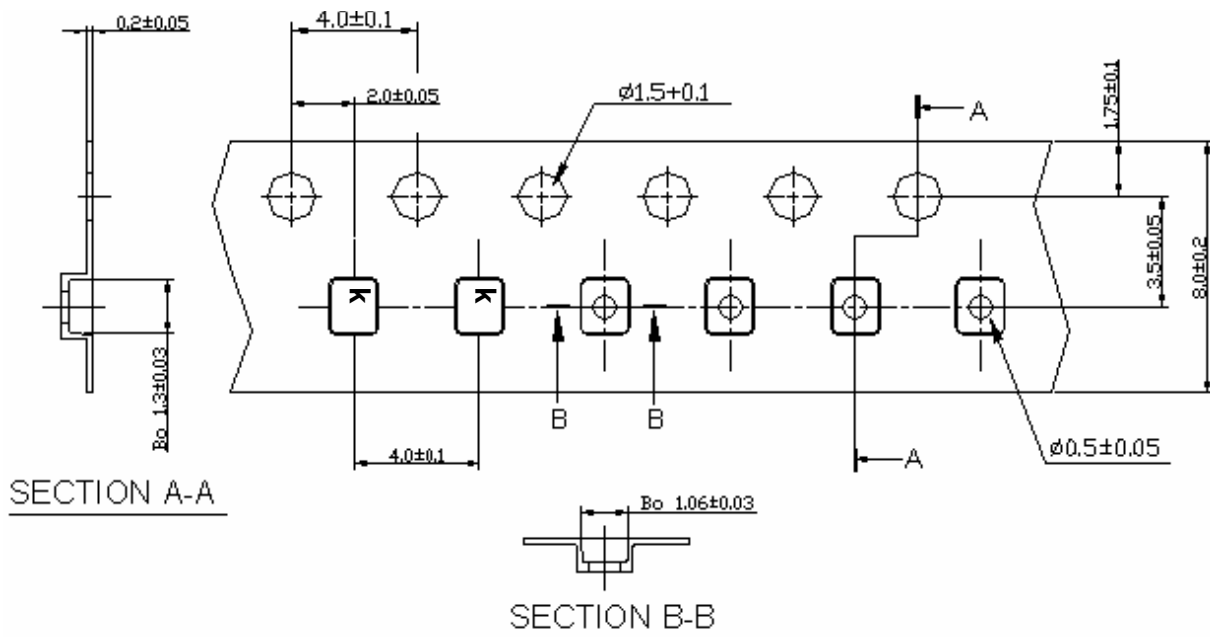
**G. PACKING:**

**1. REEL DIMENSION**

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



**2. TAPE DIMENSION**

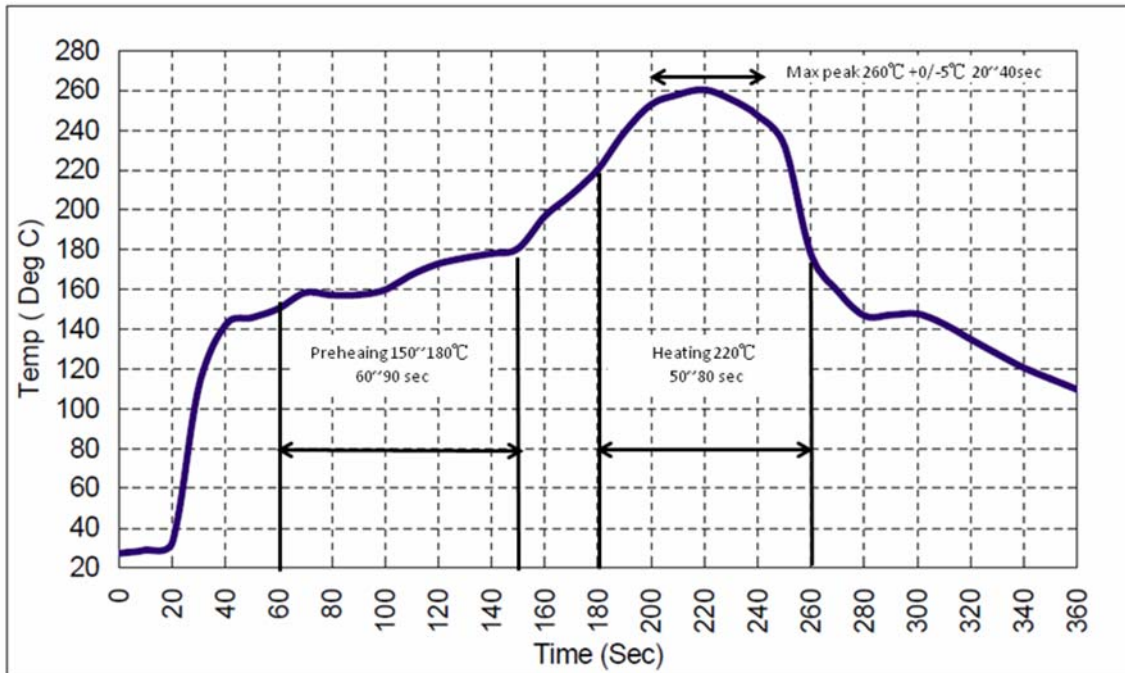


Direction of Feed



## 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 245~260°C peak (min. 10sec).
4. Time : 2 times.



## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View TA2471A](#) on WIN SOURCE
- ⊖ [TST - Tamsan](#) Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management