



# 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 Name: SAW Filter 866 MHz (BW 2MHz) SMD 1.4X1.1 mm

TST Parts No.: TA1812A

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

|                     |
|---------------------|
| Company: _____      |
| Division: _____     |
| Approved by : _____ |
| Date: _____         |

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

Approval by: \_\_\_\_\_ Bob Chau *Bob Chau*

Date: \_\_\_\_\_ 2015/10/12

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 866MHz

MODEL NO.:TA1812A

REV. NO.:1.0

### A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

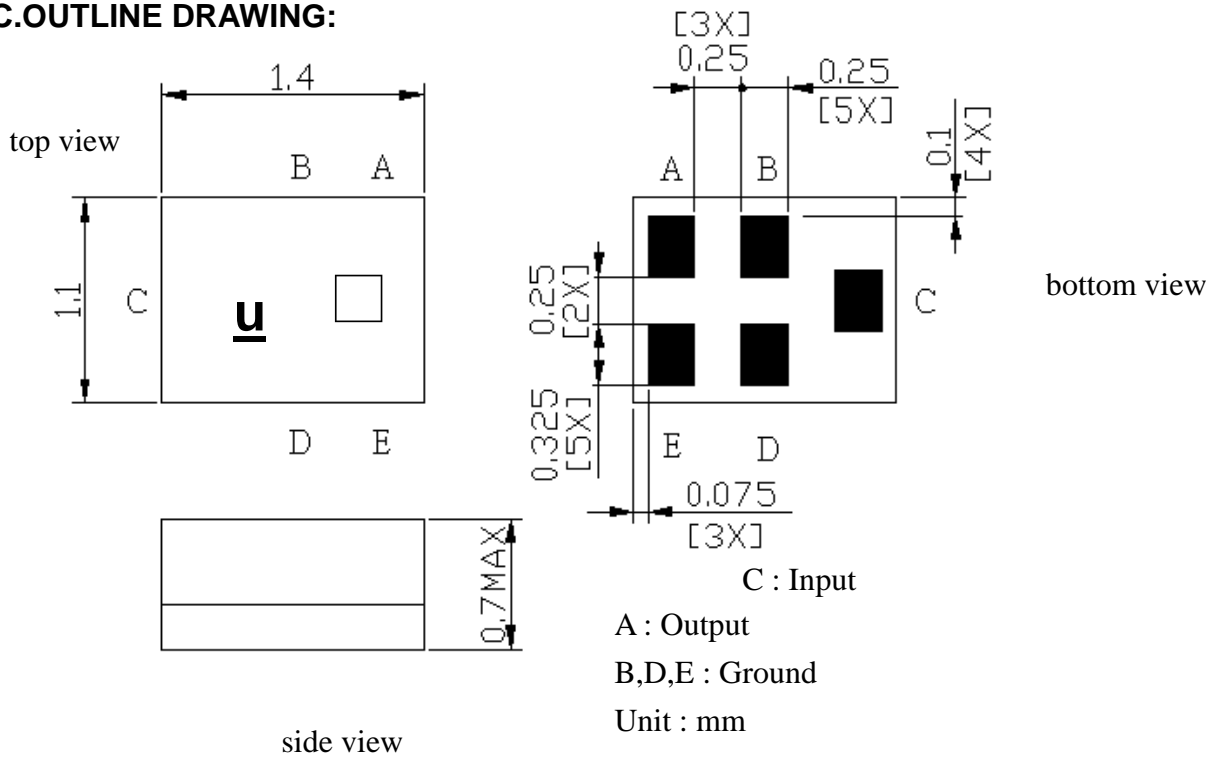
### B. ELECTRICAL CHARACTERISTICS:

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

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

| Item  | Unit | Min      | Type. | Max |
|---|------|----------|-------|-----|
| <b>Center Frequency</b> <b>Fc</b>             | MHz  | -        | 866   | -   |
| <b>Insertion Loss (865~867 MHz)</b> <b>IL</b> | dB   |          | 2.3   | 3.0 |
| Amplitude ripple(865~867 MHz)                 | dB   |          | 0.3   | 0.6 |
| <b>Attenuation</b>                            |      |          |       |     |
| 100 ~ 300    MHz                              | dB   | 45       | 50    |     |
| 300 ~ 845    MHz                              | dB   | 40       | 45    |     |
| 845 ~ 850    MHz                              | dB   | 35       | 40    |     |
| 878 ~ 883    MHz                              | dB   | 15       | 30    |     |
| 883 ~ 915    MHz                              | dB   | 35       | 40    |     |
| 915 ~ 945    MHz                              | dB   | 35       | 40    |     |
| 945 ~ 1200   MHz                              | dB   | 35       | 40    |     |
| 1200 ~ 2000 MHz                               | dB   | 30       | 35    |     |
| Package size                                  | mm   | SMD 1411 |       |     |

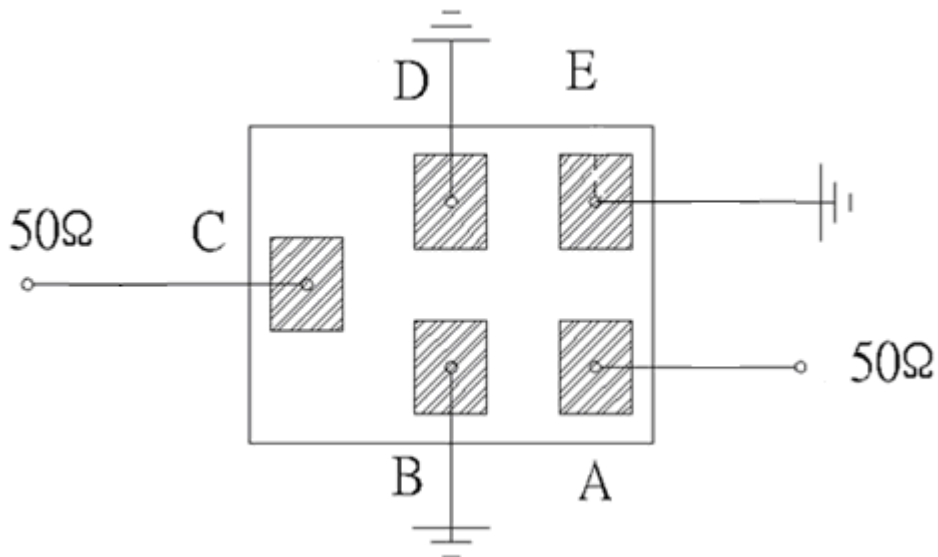
**C. OUTLINE DRAWING:**



□ : Year/Month Code (Follow the table)

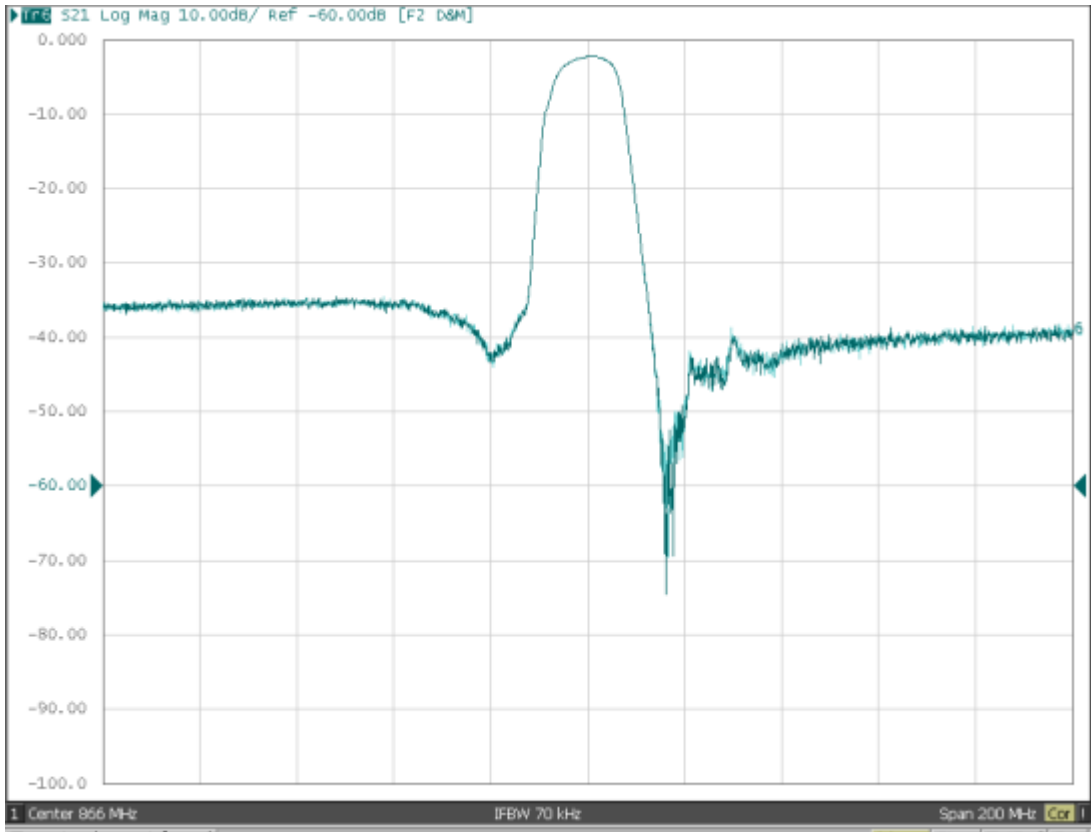
| YEAR/Month | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2013       | 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>j</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:**

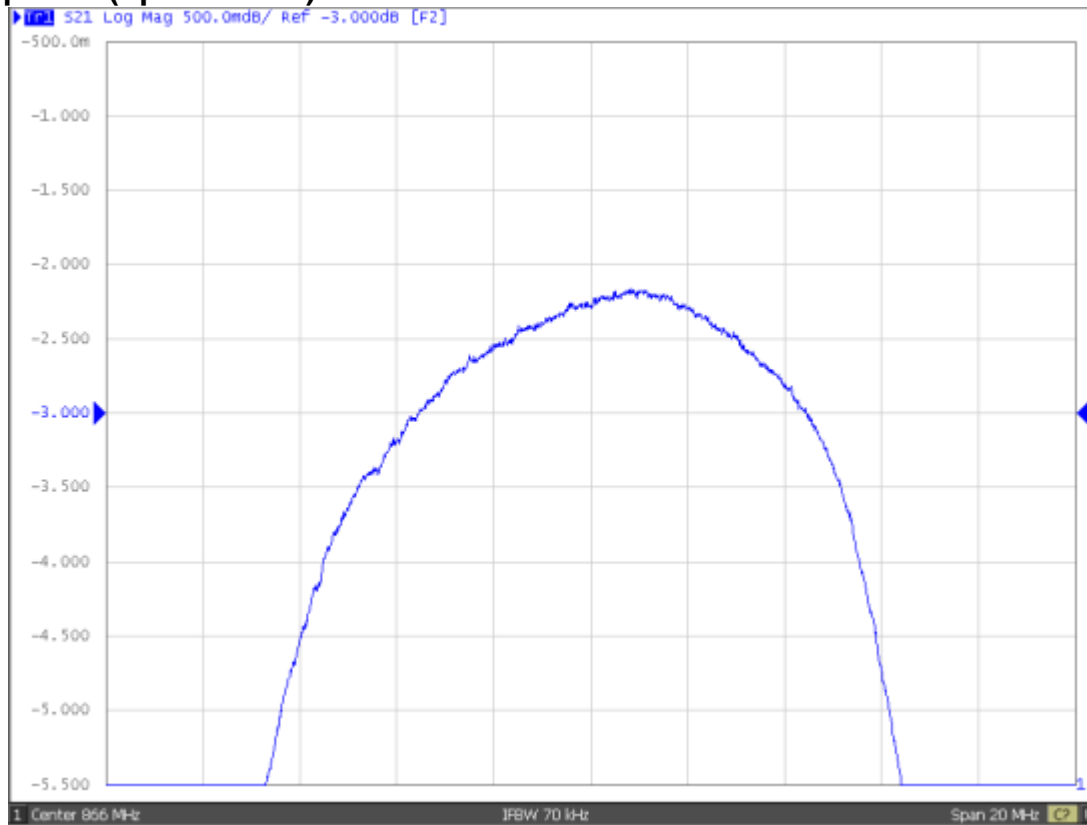


**D. Frequency Characteristics:**

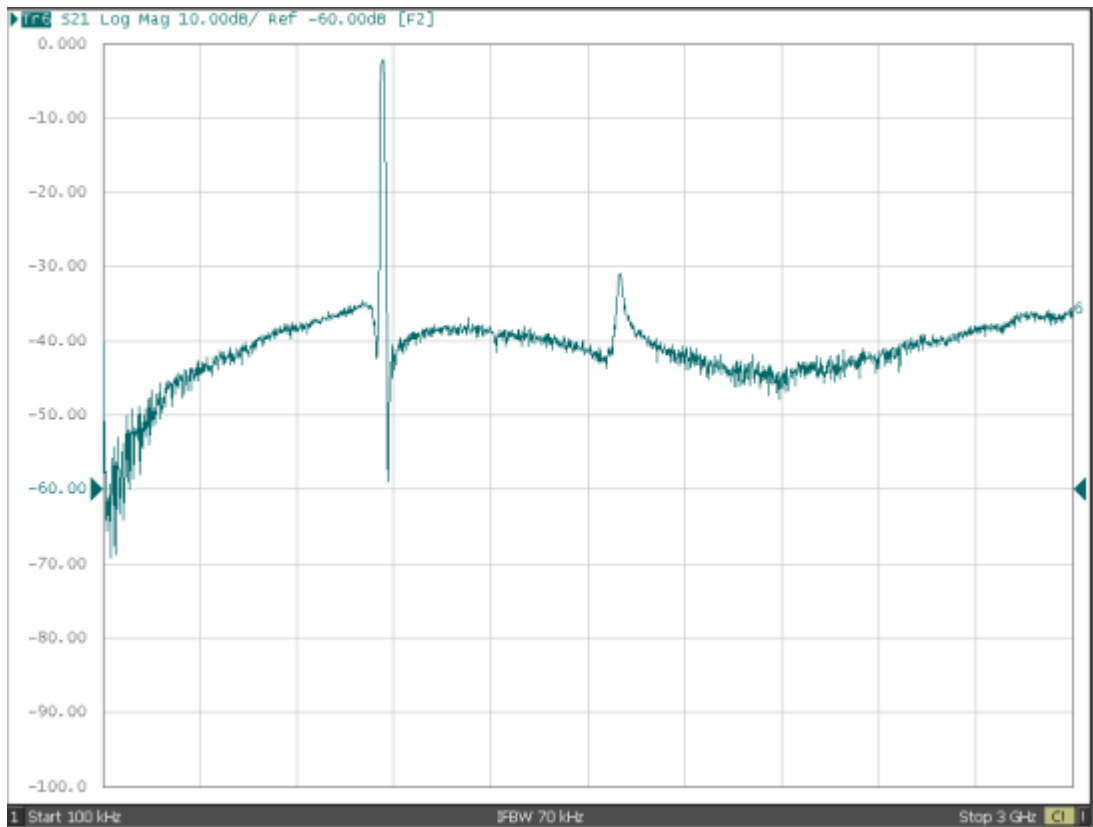
**S21 response :( Span 200MHz)**



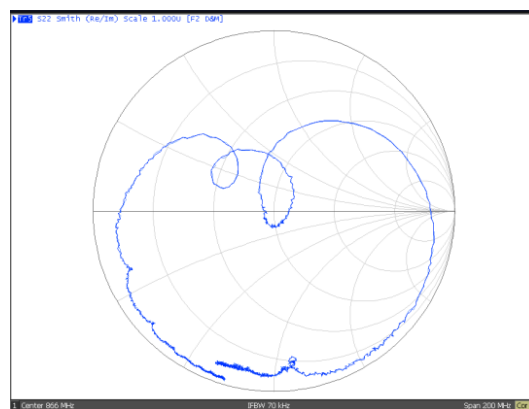
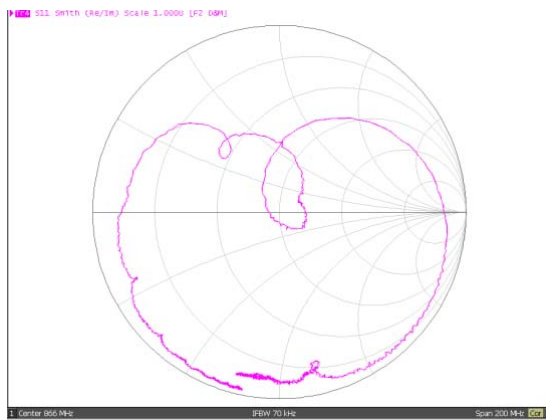
**S21 response:(Span 20MHz)**



**S21 response :( 100KHz ~ 3GHz)**



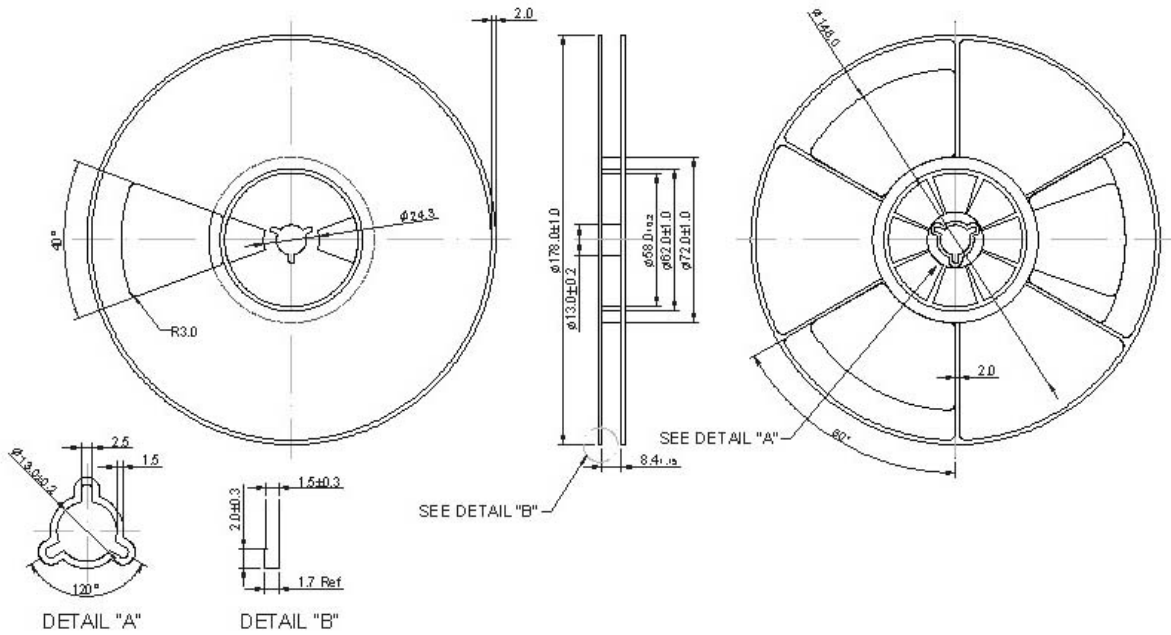
**S11/S22 response:**



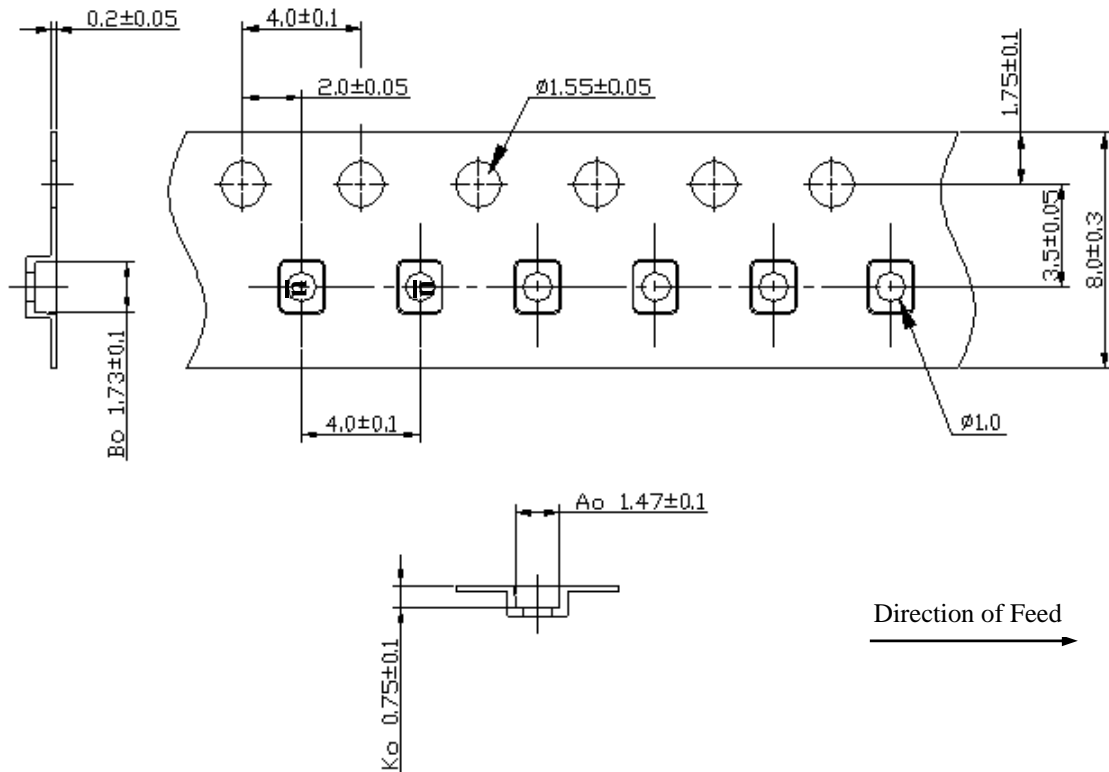
**F. PACKING:**

# 1. REEL DIMENSION

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



# 2. TAPE DIMENSION



# G. RECOMMENDED REFLOW PROFILE :

TAI-SAW TECHNOLOGY CO., LTD.

TST DCC  
Release document

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.

