



## 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 Name: SAW Filter 1950MHz BW60MHz SMD1.4X1.1mm

TST Parts No.: TA1397A

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

Customer signature required

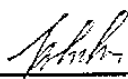
Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Andy Yu 

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

Date: \_\_\_\_\_ 03, 25, 2013

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 1950 MHz BW60MHz

MODEL NO.: TA1397A

Rev 2.0

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 0V
3. Operating Temperature: -20°C to +75°C
4. Storage Temperature: -30°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

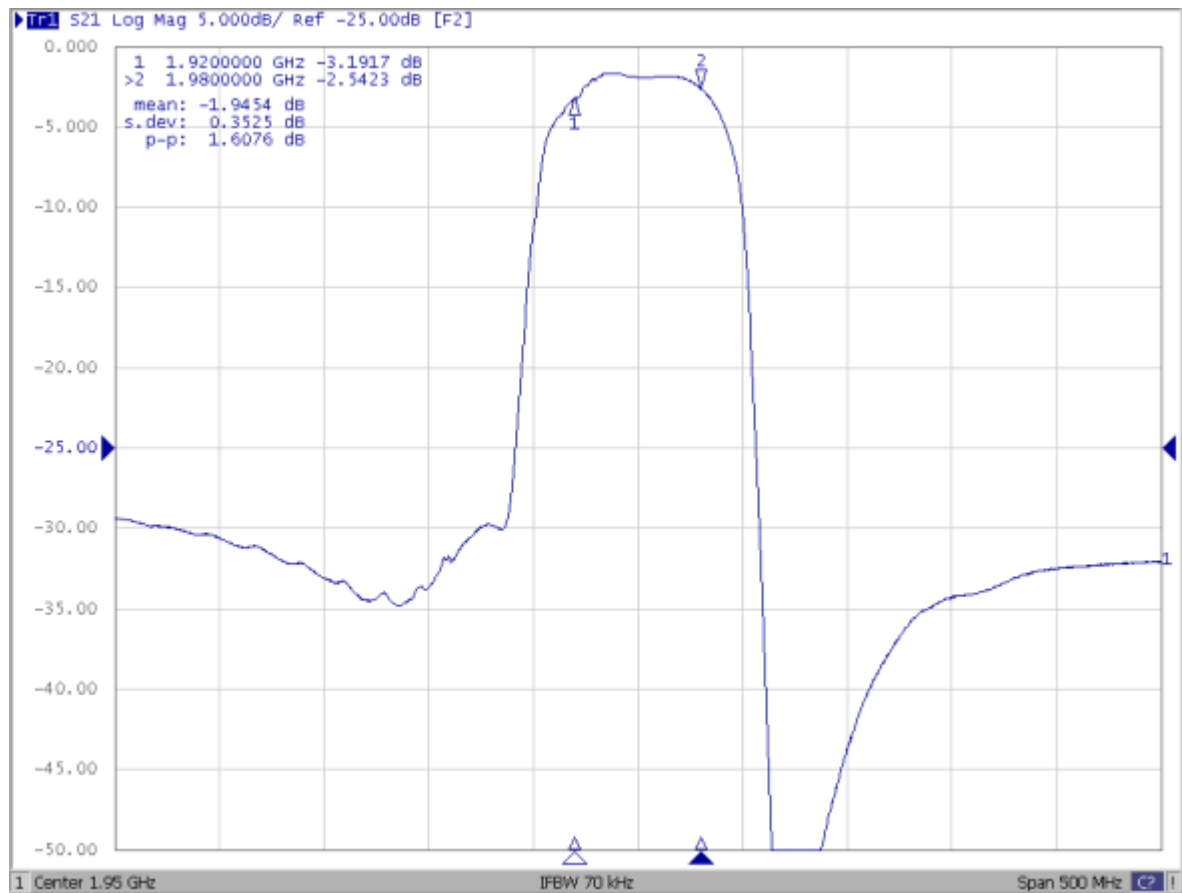
Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

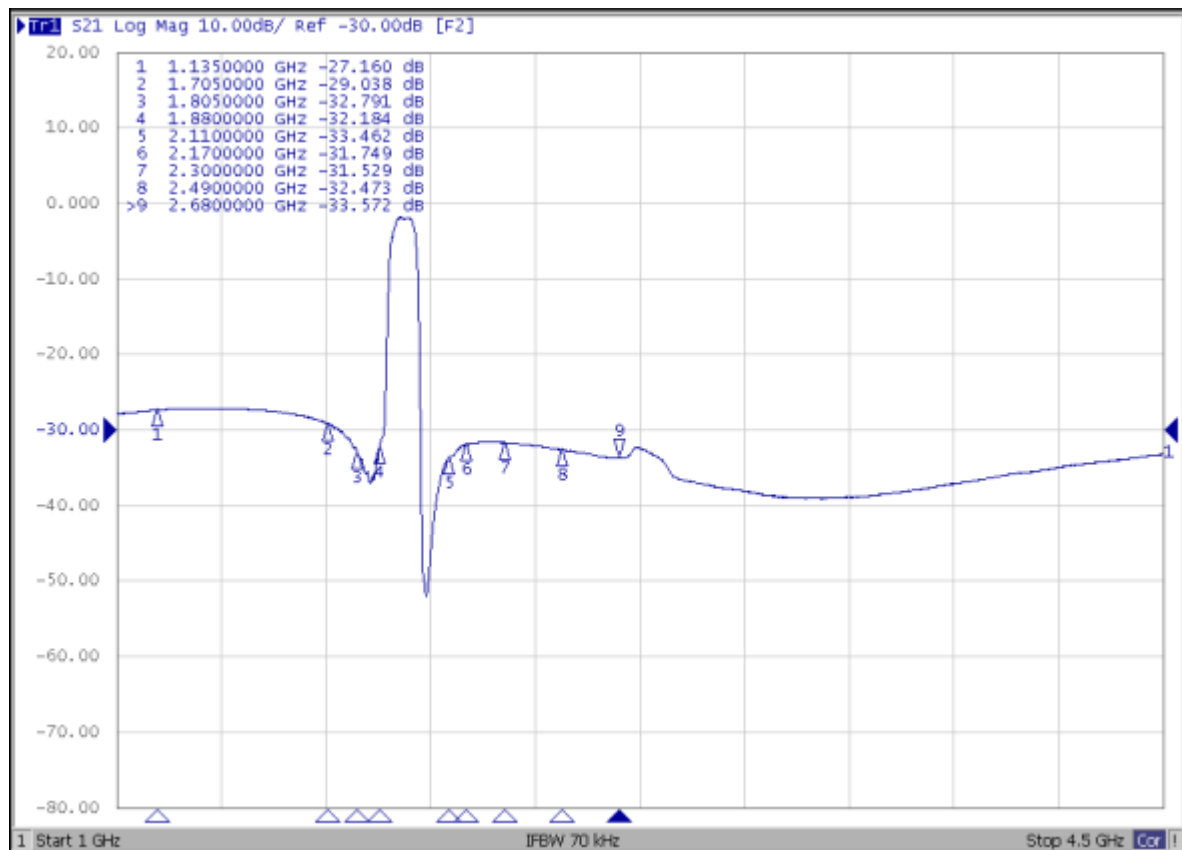
| Item                                           | Unit | Min.        | Type. | Max. | Note |
|------------------------------------------------|------|-------------|-------|------|------|
| Center Frequency <b>Fc</b>                     | MHz  | -           | 1950  | -    | -    |
| Insertion Loss within 1920 ~ 1980MHz <b>IL</b> | dB   | -           | 2.9   | 4.2  | -    |
| Amplitude ripple (1920 ~ 1980MHz)              | dB   | -           | 1.5   | 2.2  | -    |
| VSWR (1920 ~ 1980MHz)                          | dB   | -           | 1.95  | 2.6  | -    |
| Attenuation                                    |      |             |       |      |      |
| 1135 ~ 1145 MHz                                | dB   | 25          | 27    | -    | -    |
| 1705 ~ 1715 MHz                                | dB   | 25          | 29    | -    | -    |
| 1805 ~ 1880 MHz                                | dB   | 25          | 32    | -    | -    |
| 2110 ~ 2170 MHz                                | dB   | 30          | 33    | -    | -    |
| 2300 ~ 2360 MHz                                | dB   | 30          | 32    | -    | -    |
| 2490 ~ 2550 MHz                                | dB   | 30          | 32    | -    | -    |
| 2680 ~ 2740 MHz                                | dB   | 30          | 33    |      |      |
| 3060 ~ 3120 MHz                                | dB   | 30          | 43    |      |      |
| 3840 ~ 3960 MHz                                | dB   | 30          | 36    |      |      |
| Package size                                   | mm   | SMD 1.4x1.1 |       |      |      |

### C.FREQUENCY CHARACTERISTICS:

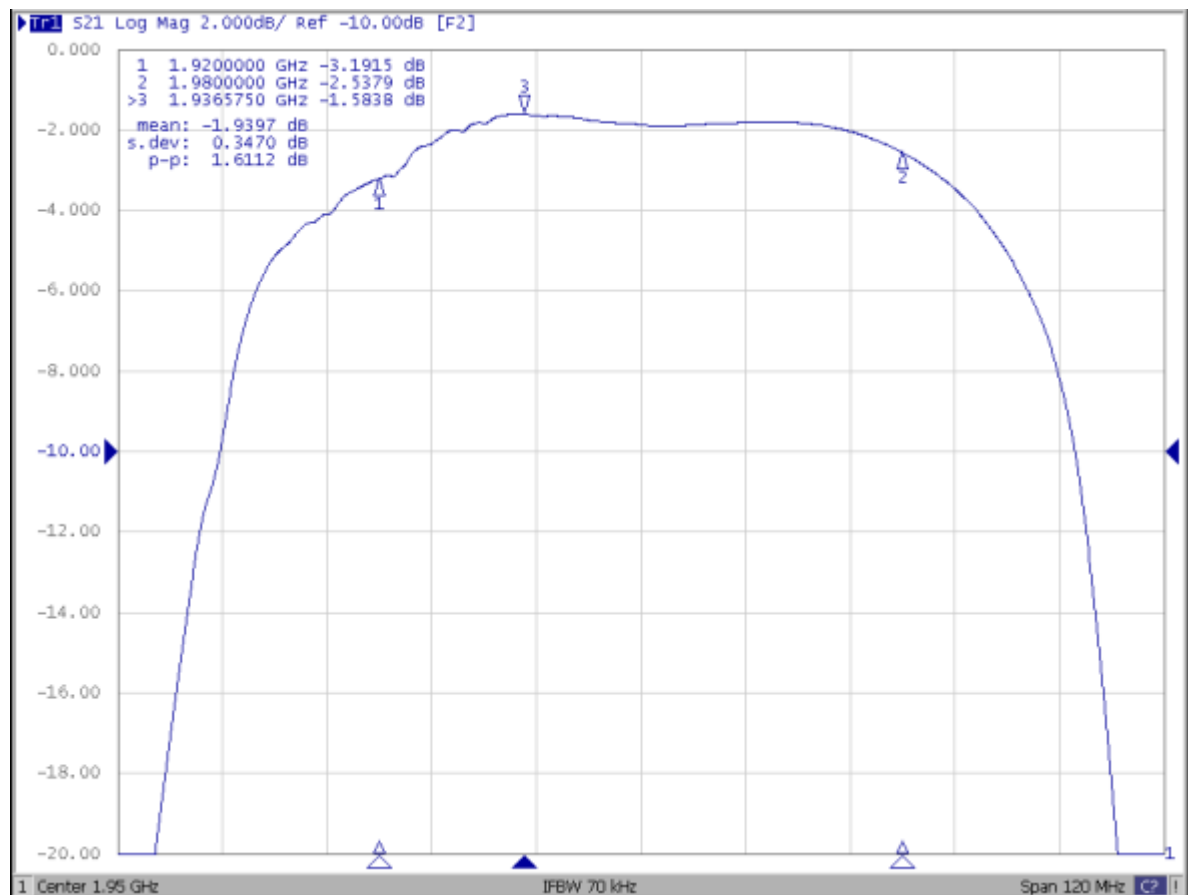
#### S21 response: (span 500MHz)



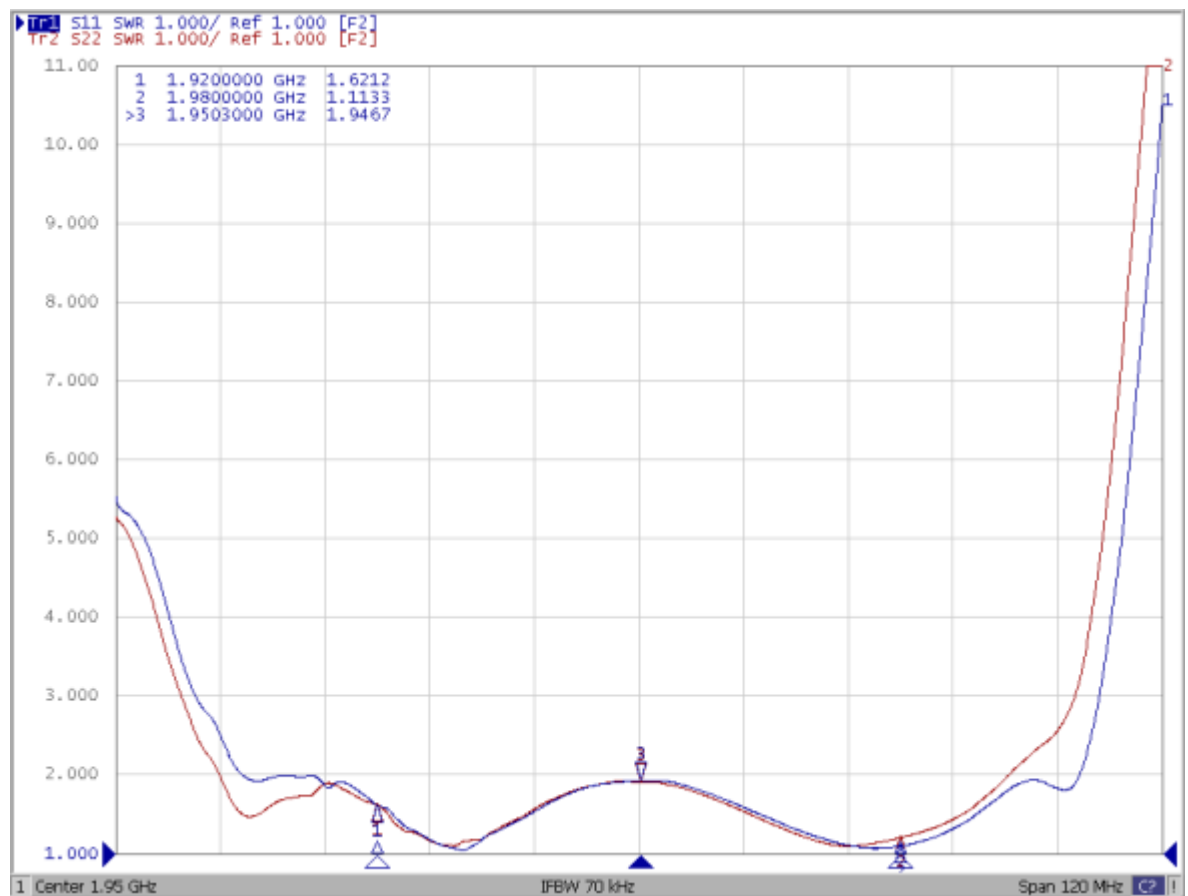
#### S21 response: (span 3GHz)



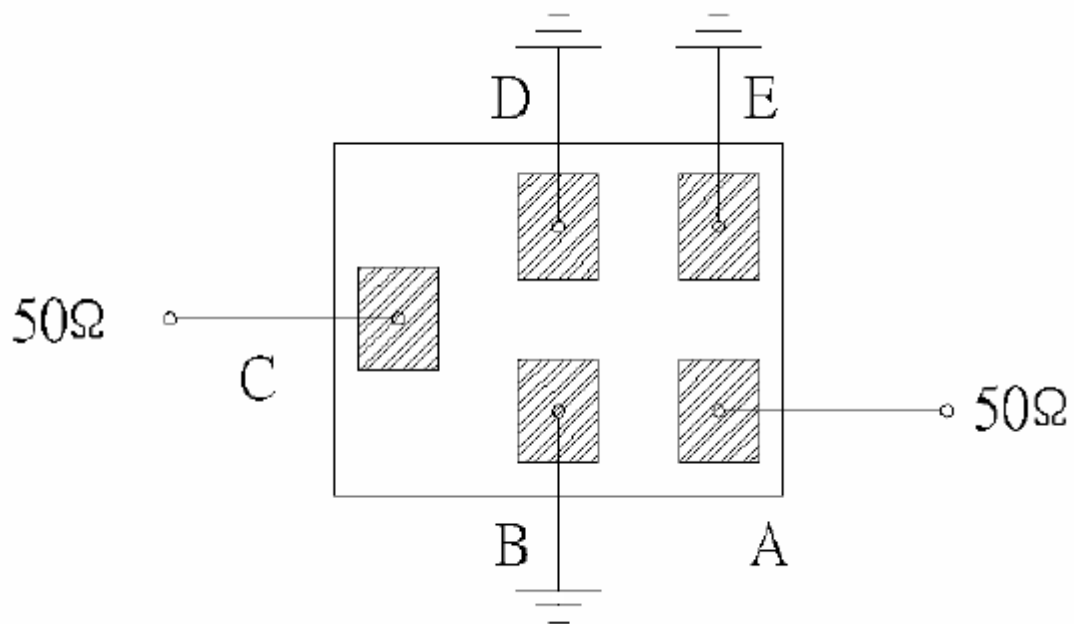
## S21 response: (span 120MHz)



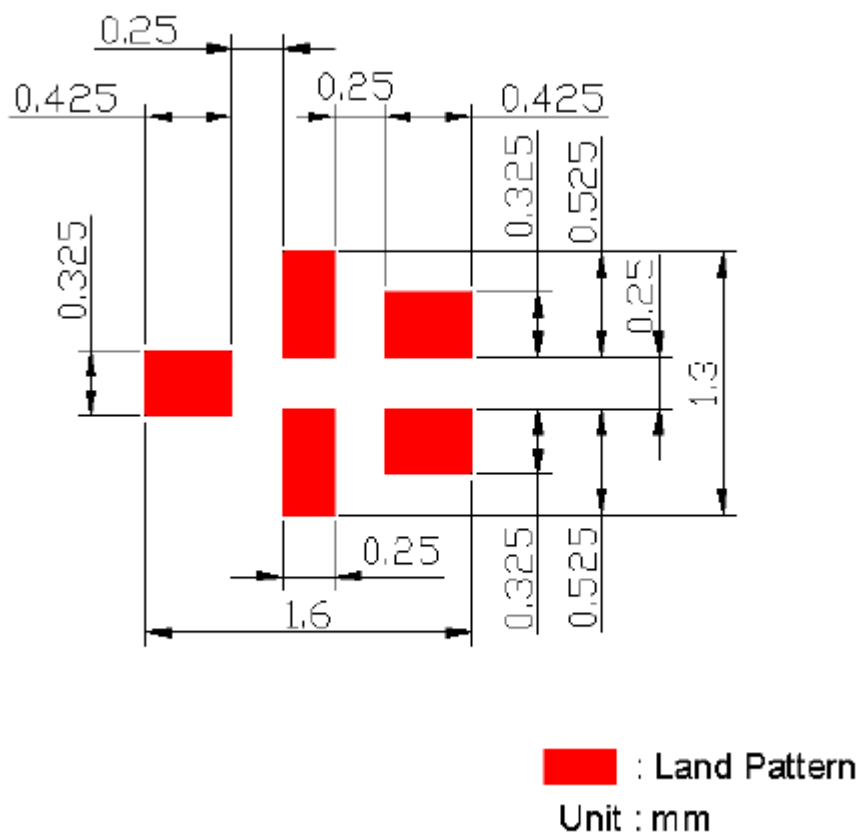
## S21 VSWR: (span 120MHz)



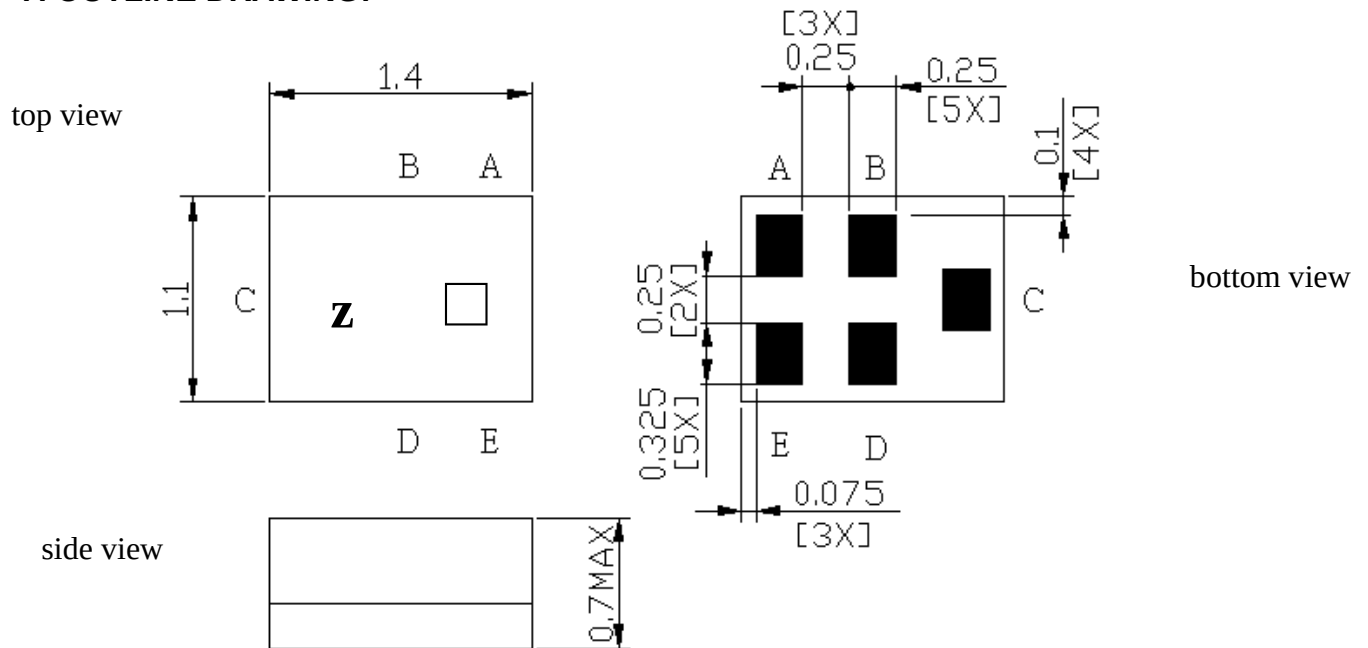
D. MEASUREMENT CIRCUIT:



E. PCB FOOTPRINT:



## F. OUTLINE DRAWING:



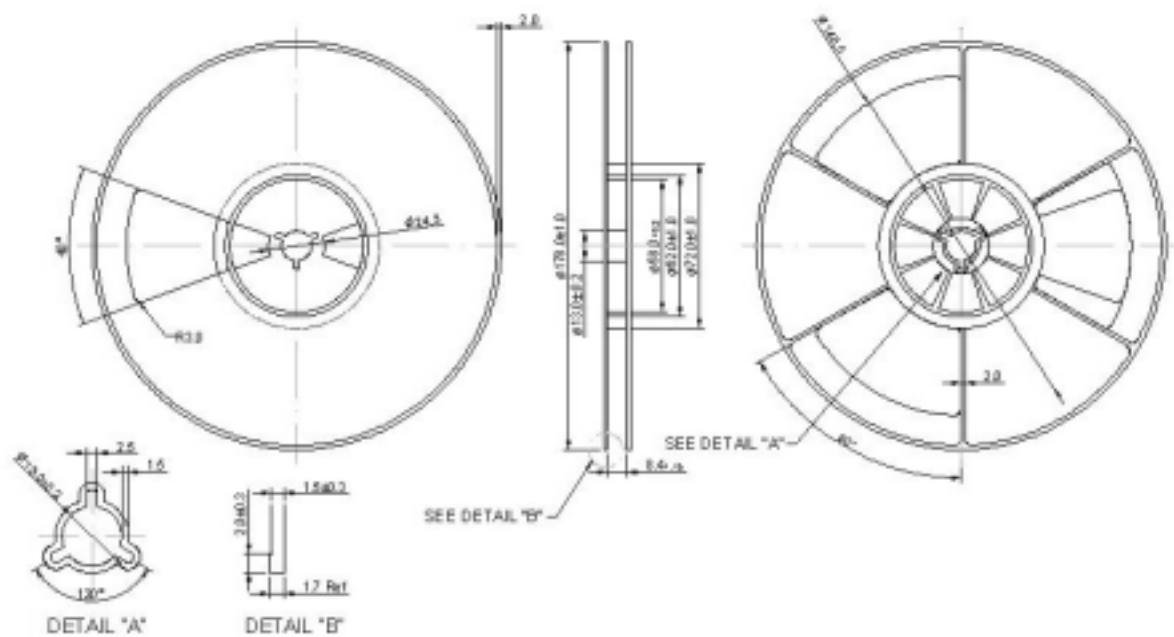
□ : Year/Month Code (Follow the table)

| 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>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> |

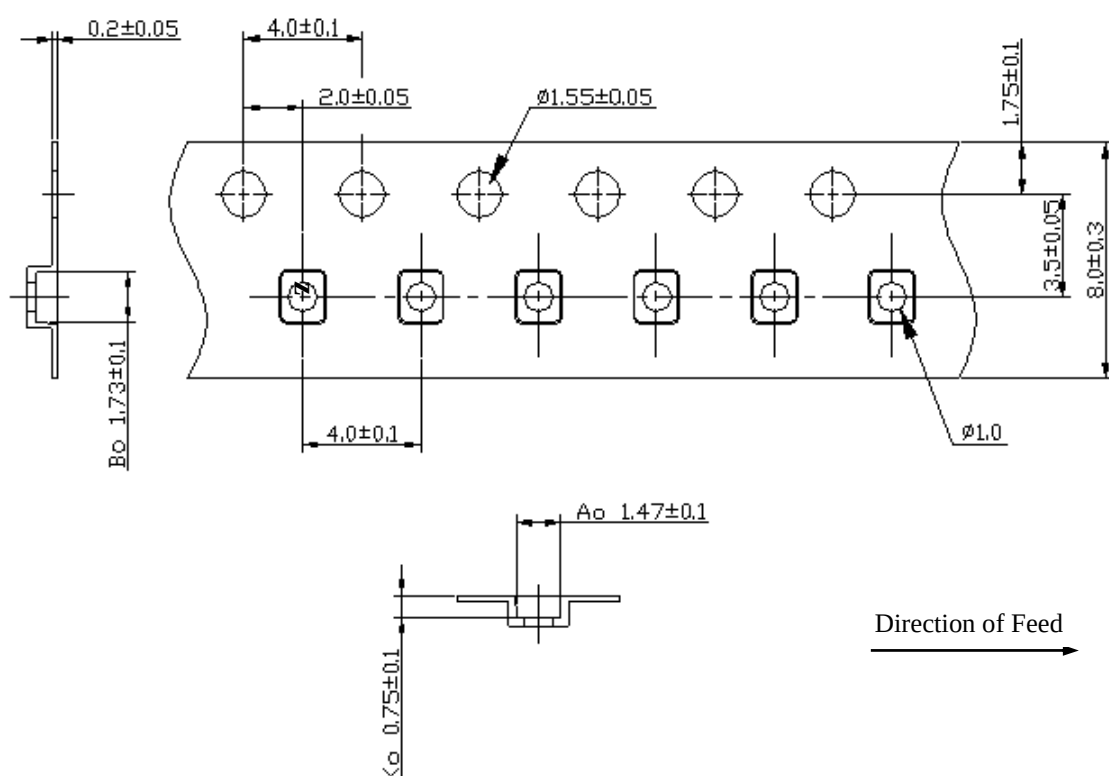
## G. PACKING:

### 1. REEL DIMENSION

(Reel Count : 7"=3000 )



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

