



# 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 413 MHz SMD 5.0x5.0 mm (BW= 2 MHz)

TST Part No.: TA1614A

Customer Part No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ David Chang 張閔智

Approved by: \_\_\_\_\_ Bob Chau 張閔智

Date: \_\_\_\_\_ 2013/04/29

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 413 MHz

MODEL NO.:TA1614A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 15 dBm
2. DC Voltage : 3 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

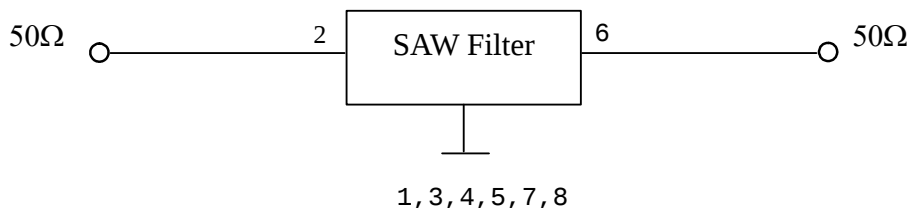
**Electrostatic Sensitive Device (ESD)**

### B. ELECTRICAL CHARACTERISTICS:

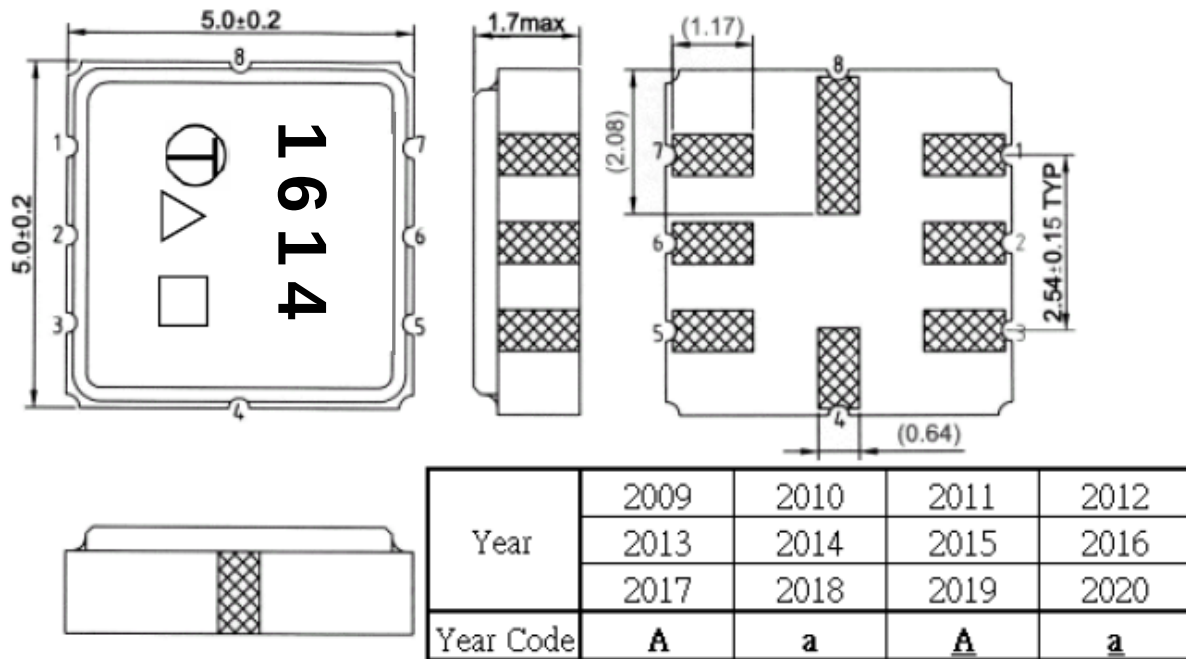
| Item                                           | Unit | Min. | Typ. | Max. |
|------------------------------------------------|------|------|------|------|
| Center frequency <b>Fc</b>                     | MHz  | -    | 413  | -    |
| Insertion Loss (412~414 MHz) <b>IL</b>         | dB   | -    | 1.8  | 3.0  |
| Amplitude Ripple (412~414 MHz)                 | dB   | -    | 0.3  | 1.5  |
| VSWR (412~414 MHz)                             | -    | -    | 1.4  | 2.2  |
| <b>Attenuation</b> (Reference level from 0 dB) |      |      |      |      |
| 10 ~ 400 MHz                                   | dB   | 55   | 57   | -    |
| 400 ~ 405 MHz                                  | dB   | 10   | 47   | -    |
| 425 ~ 430 MHz                                  | dB   | 20   | 38   | -    |
| 430 ~ 440 MHz                                  | dB   | 30   | 41   | -    |
| 440 ~ 800 MHz                                  | dB   | 50   | 59   | -    |
| 800 ~ 1000 MHz                                 | dB   | 45   | 56   | -    |
| Temperature Coefficient of Frequency           | ppm/ | -    | -36  | -    |

### C. MEASUREMENT CIRCUIT:

HP Network analyzer



#### D. OUTLINE DRAWING:



#2 : Input

#6 : Output

#4 、 8 : Case Ground

#1 、 3 、 5 、 7 : Ground

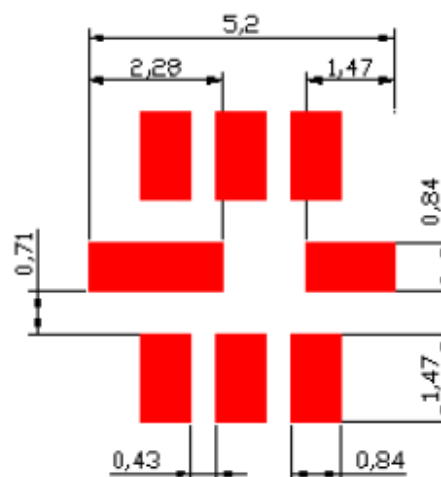
Δ : Year Code

□ : Data Code

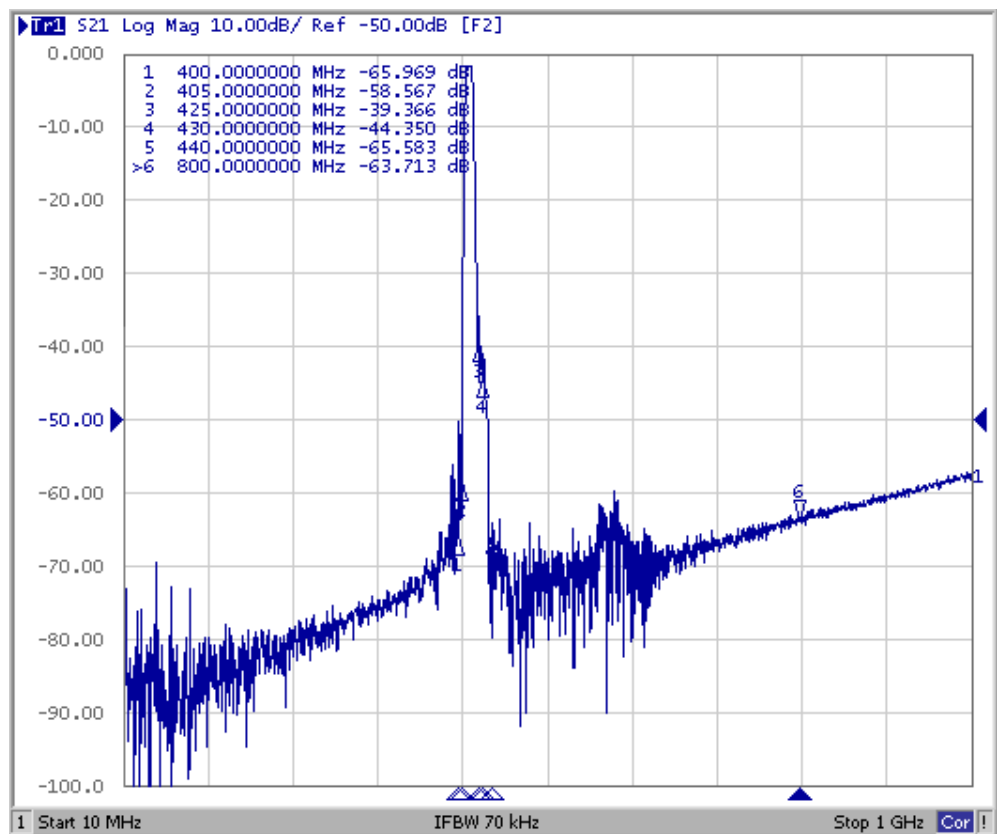
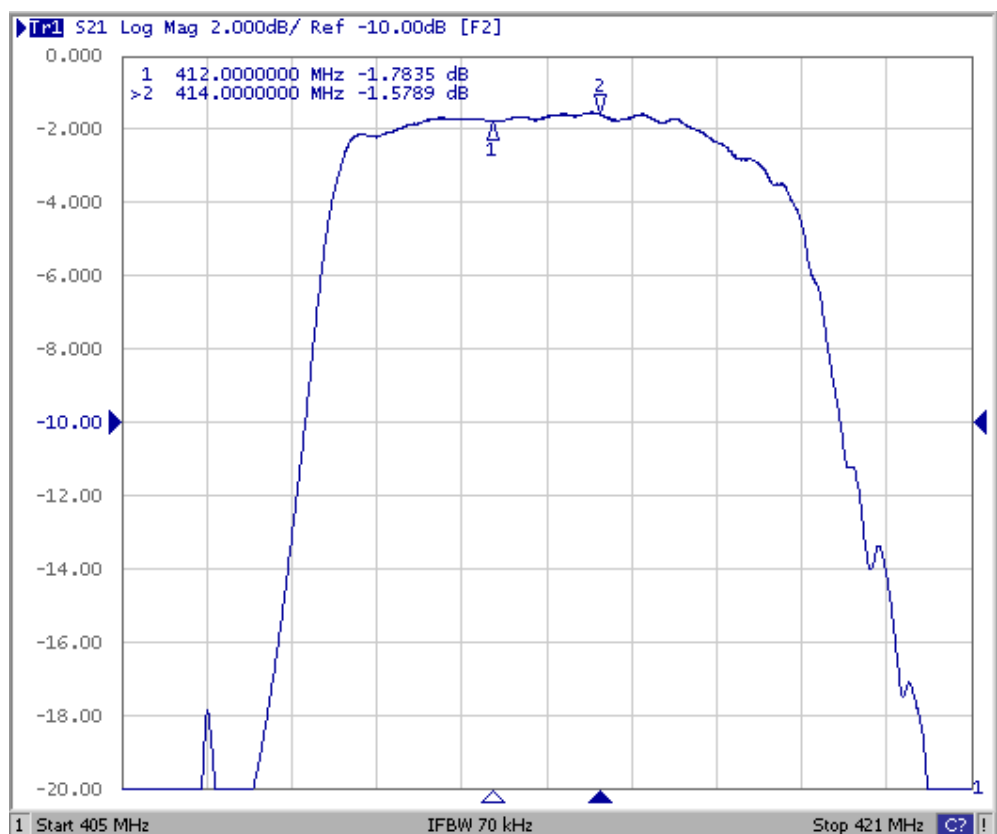
Date Code Table:

| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| A    | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    |
| WK14 | WK15 | WK16 | WK17 | WK18 | WK19 | WK20 | WK21 | WK22 | WK23 | WK24 | WK25 | WK26 |
| N    | O    | P    | Q    | R    | S    | T    | U    | V    | W    | X    | Y    | Z    |
| WK27 | WK28 | WK29 | WK30 | WK31 | WK32 | WK33 | WK34 | WK35 | WK36 | WK37 | WK38 | WK39 |
| a    | b    | c    | d    | e    | f    | g    | h    | i    | j    | k    | l    | m    |
| WK40 | WK41 | WK42 | WK43 | WK44 | WK45 | WK46 | WK47 | WK48 | WK49 | WK50 | WK51 | WK52 |
| n    | o    | p    | q    | r    | s    | t    | u    | v    | w    | x    | y    | z    |

#### E. PCB Footprint:

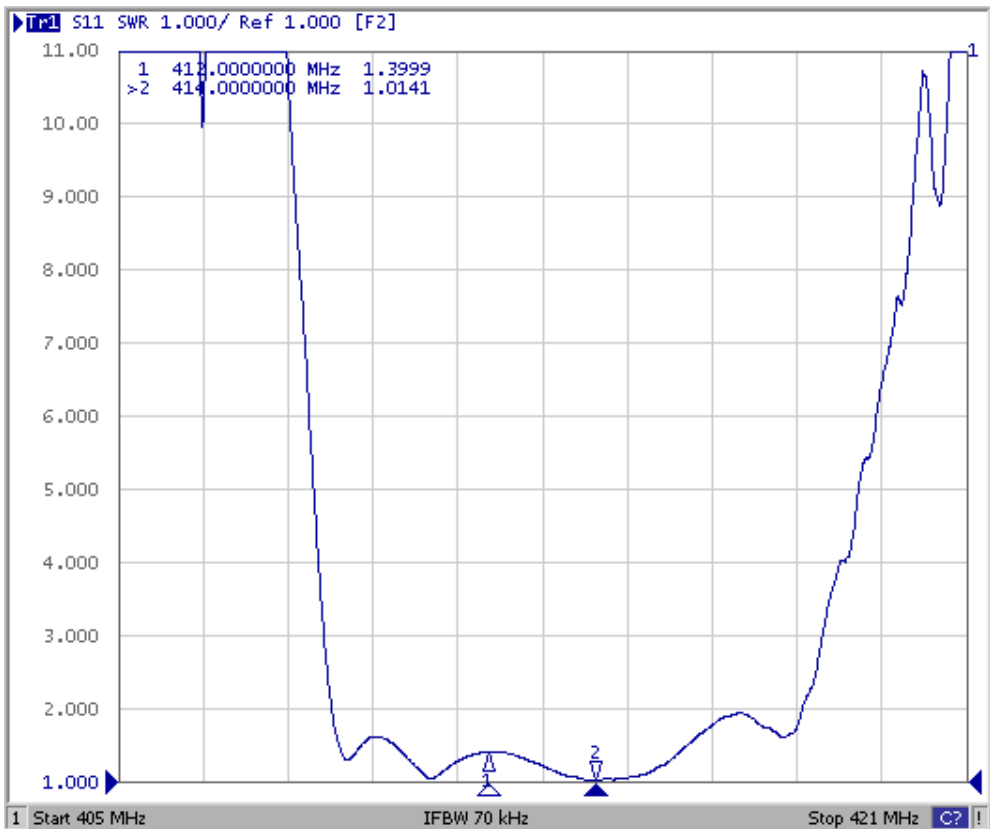


F. Frequency Characteristics:

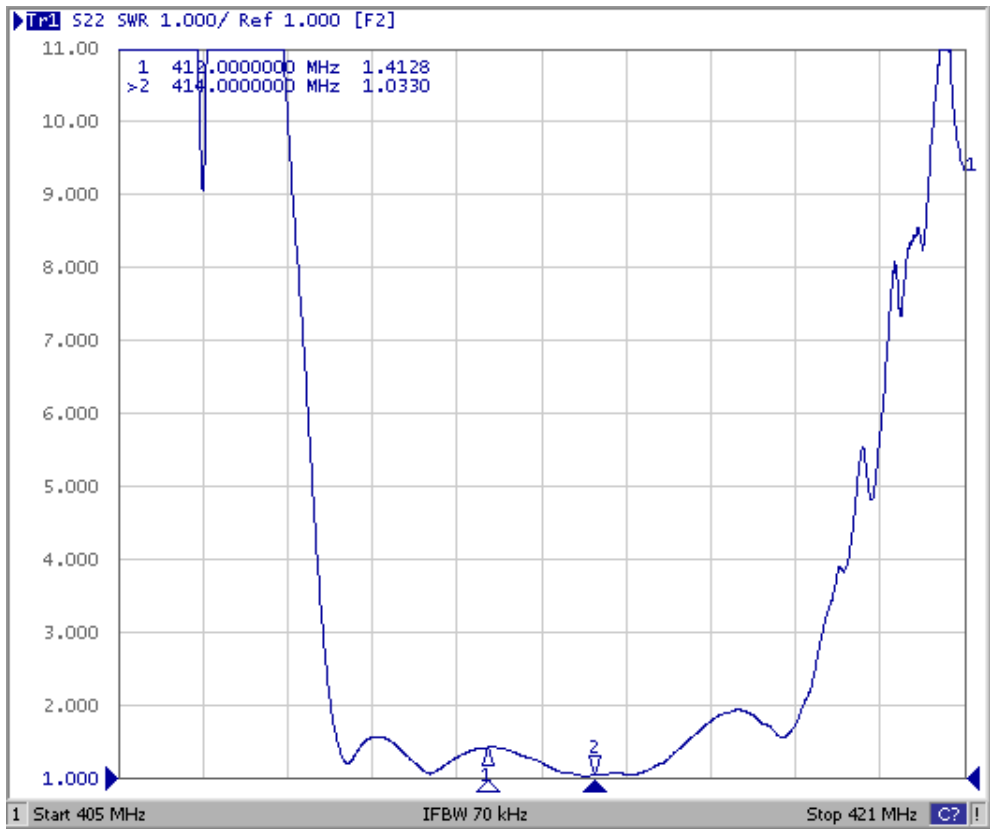


Reflection Functions:

S11



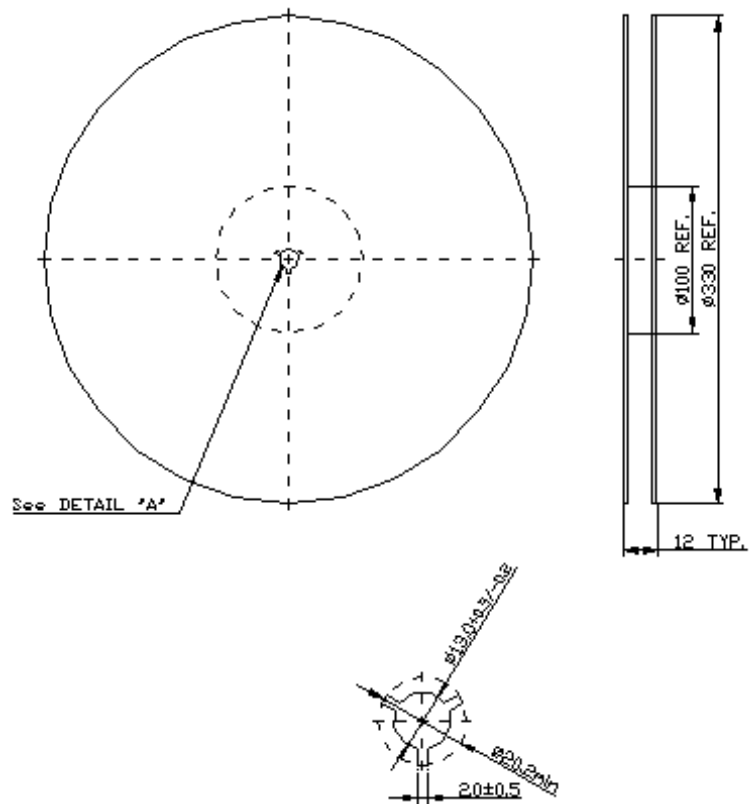
S22



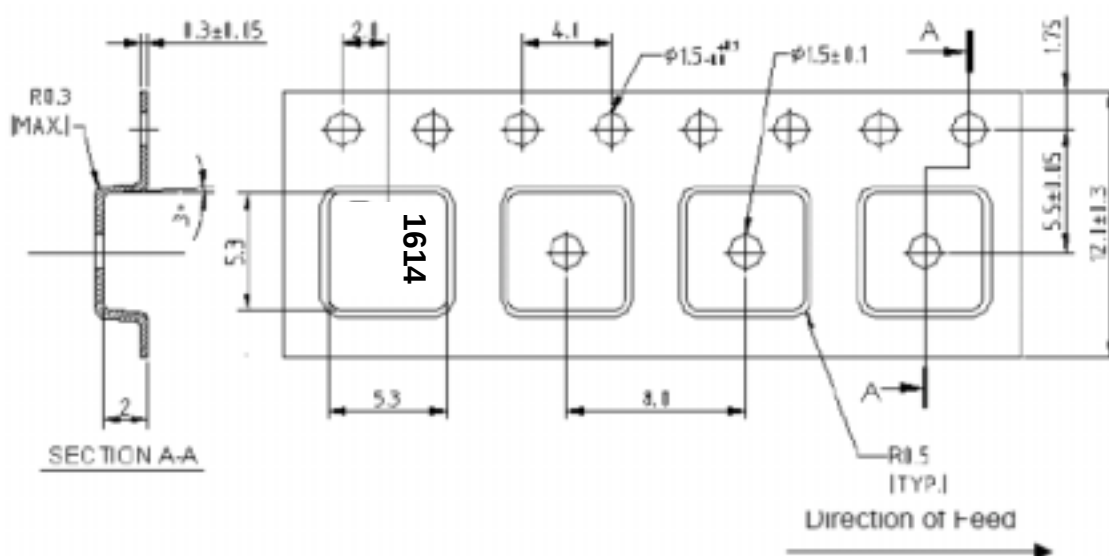
## G. PACKING:

### 1. REEL DIMENSION

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



### 2. TAPE DIMENSION



**H. RECOMMENDED REFLOW PROFILE:**

