



# 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 1135 MHz SMD 3.0×3.0 mm (BW=44 MHz)

TST Part No.: TA2177A

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

Customer signature required

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

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

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

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

Checked by: \_\_\_\_\_ David Chang *David*

Approved by: \_\_\_\_\_ Bob Chau *Bob*

Date: \_\_\_\_\_ 2017/05/05

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 1135 MHz

MODEL NO.: TA2177A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 3 V
3. Operating Temperature: -55°C to +85°C
4. Storage Temperature: -55°C to +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

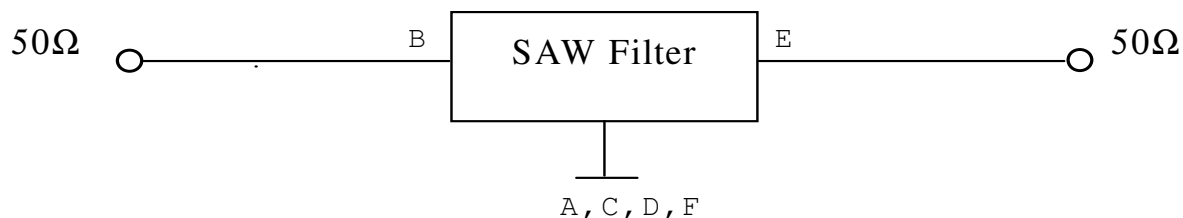
Electrostatic Sensitive Device (ESD)

### B. ELECTRICAL CHARACTERISTICS:

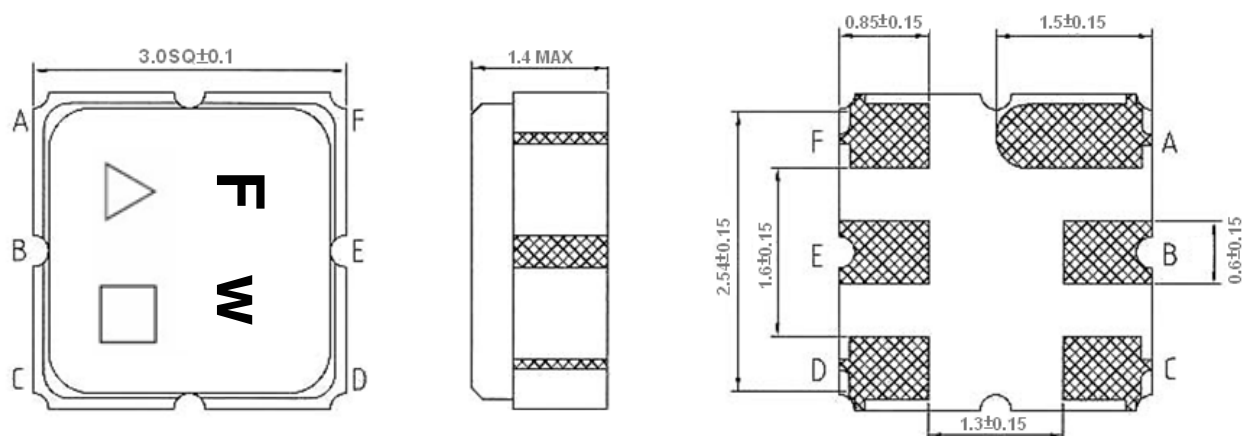
| Item                                     | Unit   | Min. | Typ. | Max. |
|------------------------------------------|--------|------|------|------|
| Center frequency <b>F<sub>c</sub></b>    | MHz    | -    | 1135 | -    |
| Insertion Loss (1113~1157 MHz) <b>IL</b> | dB     | -    | 3.8  | 4.2  |
| Amplitude Ripple (1113~1157 MHz)         | dB     | -    | 0.6  | 1.5  |
| VSWR (1113~1157 MHz)                     | -      | -    | 1.5  | 2.4  |
| Attenuation (Reference level from 0 dB)  |        |      |      |      |
| 10 ~ 1015 MHz                            | dB     | 23   | 29   | -    |
| 1200 ~ 1240 MHz                          | dB     | 10   | 14   | -    |
| 1300 ~ 1500 MHz                          | dB     | 25   | 32   | -    |
| Temperature Coefficient of Frequency     | Ppm/°C | -    | -80  | -    |

### C. MEASUREMENT CIRCUIT:

HP Network analyzer



## D. OUTLINE DRAWING:



**B:** Input

**E:** Output

**A, C, D, F:** Ground

**Unit:** mm

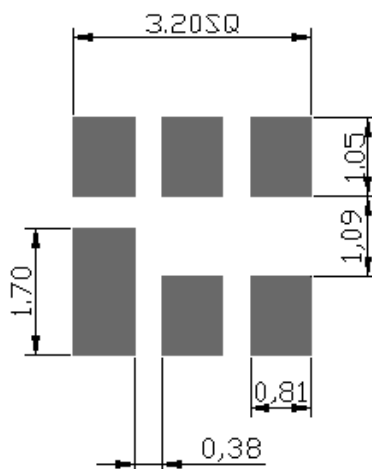
△ : Year Code (2011->1, 2012->2, ..., 2019->9, 2020->0)

□ : Date Code

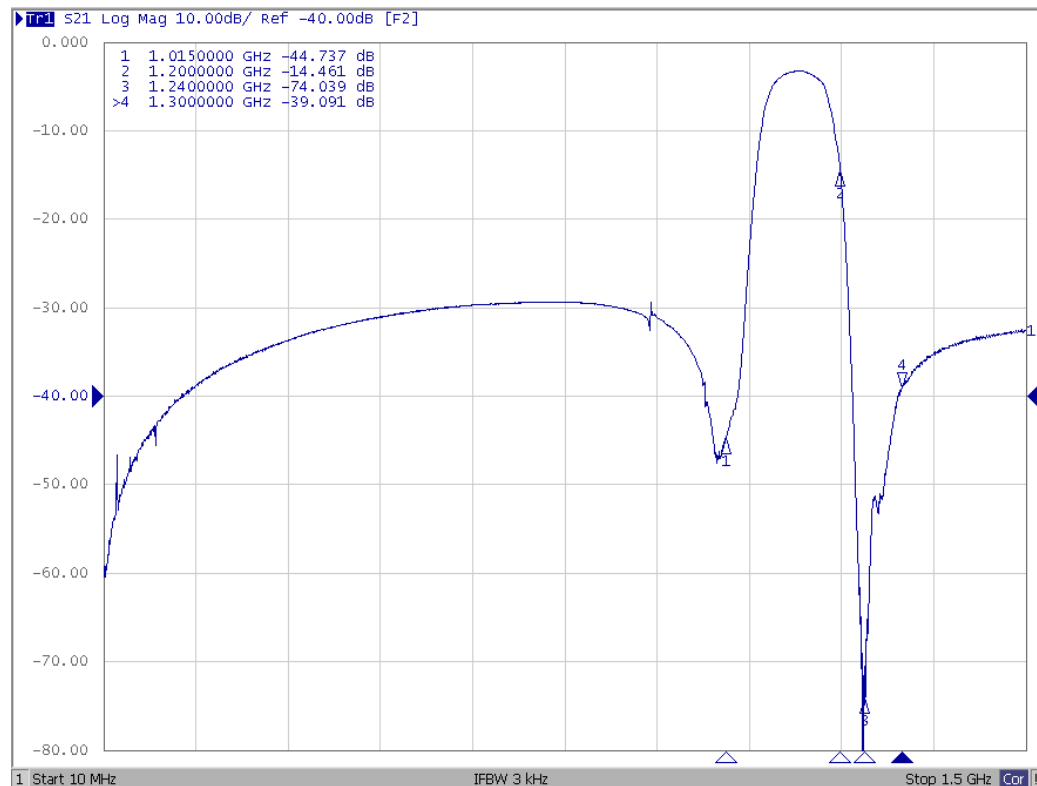
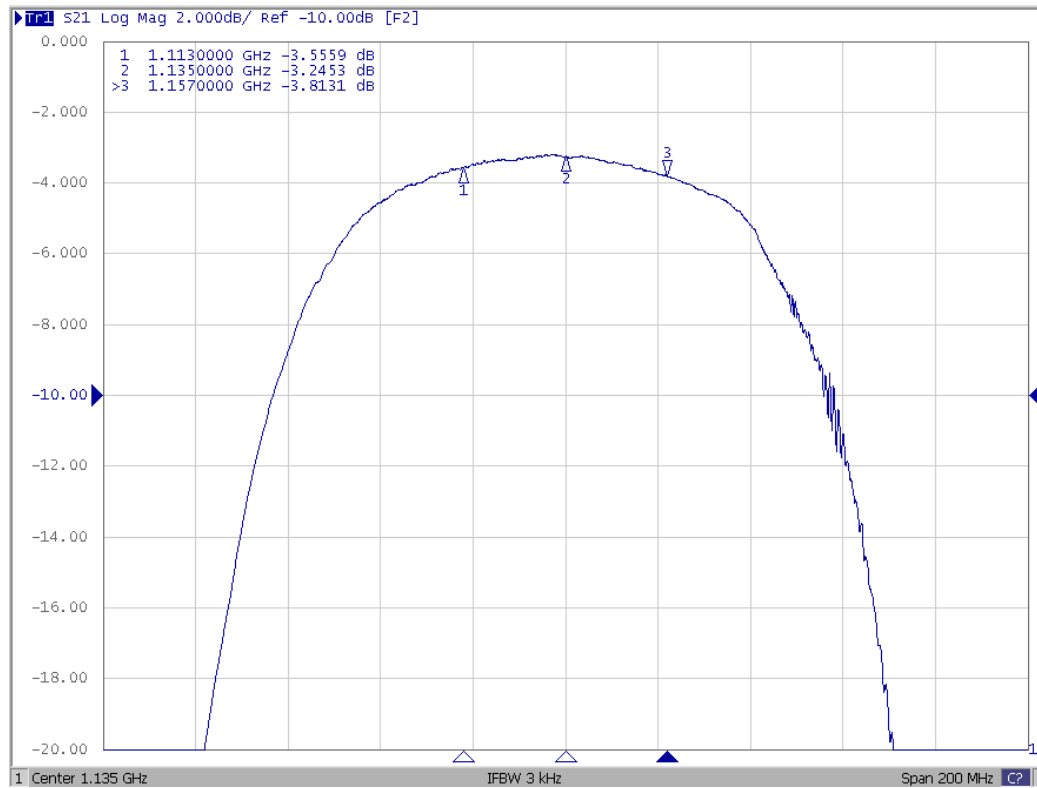
**Date Code Table:**

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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:

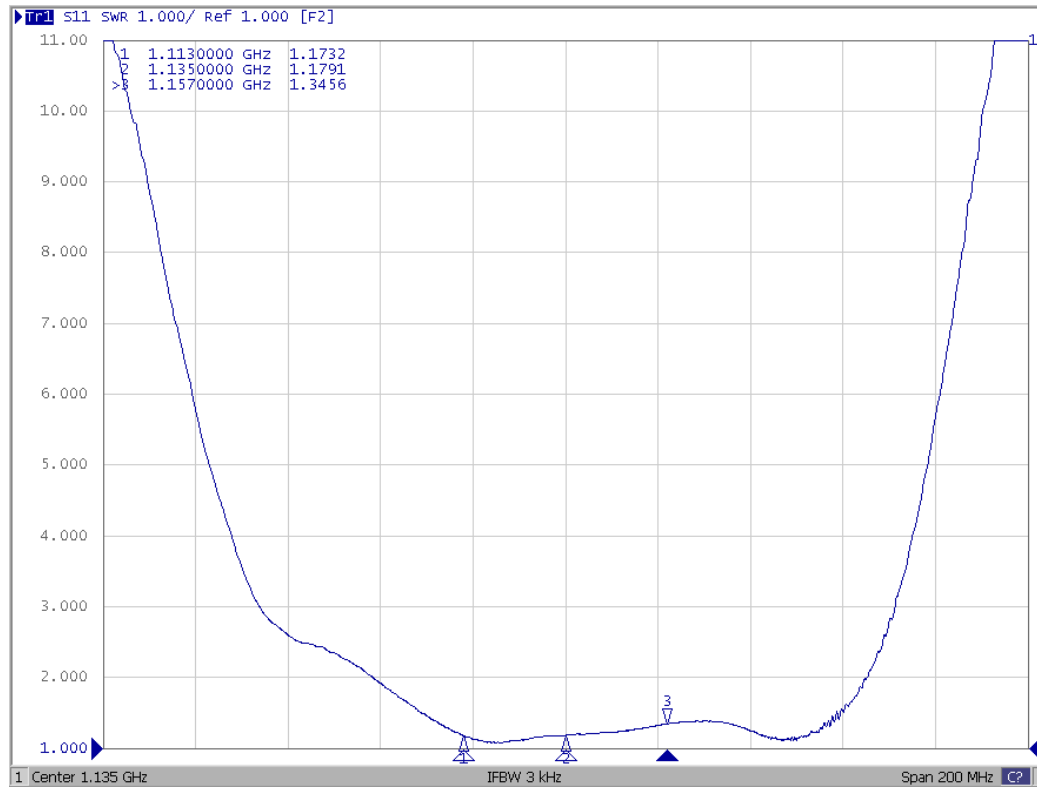


## F. Frequency Characteristics:

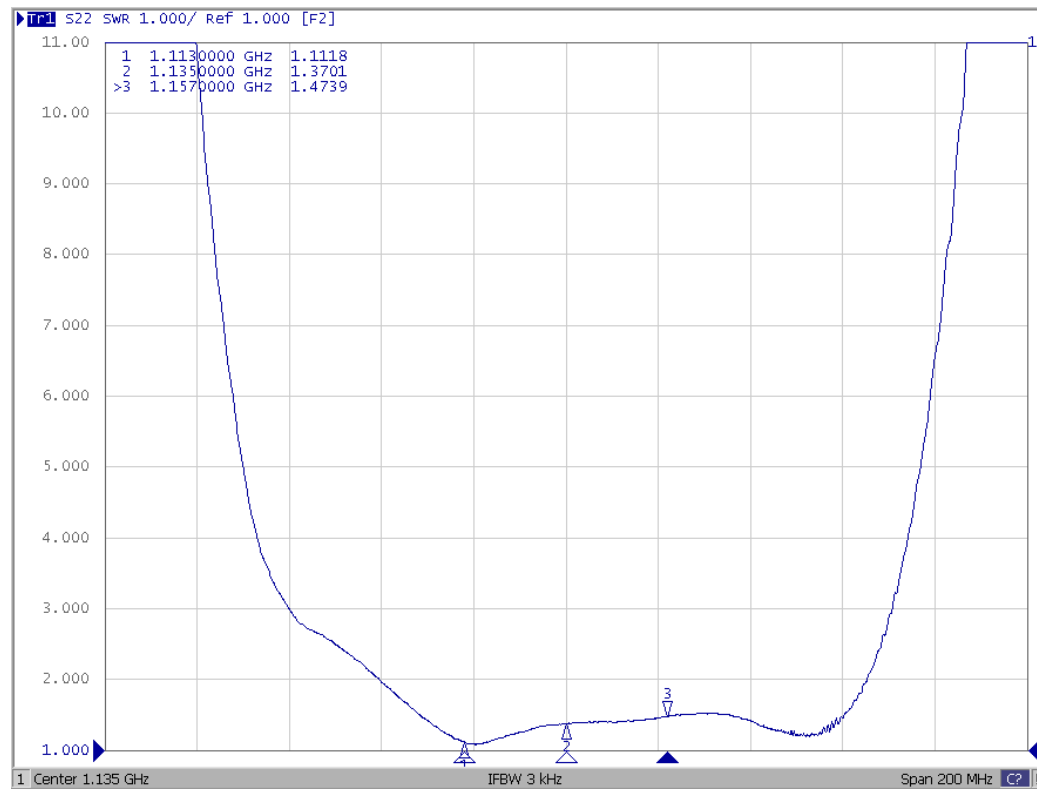


## Reflection Functions:

**S11**



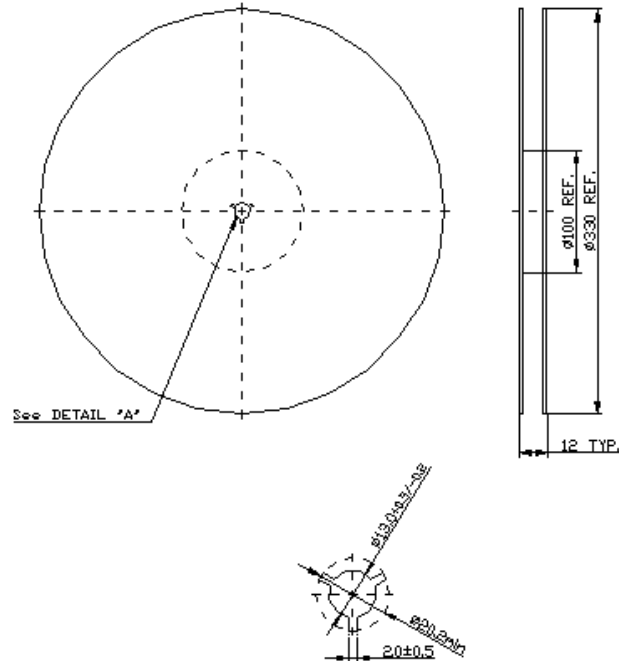
**S22**



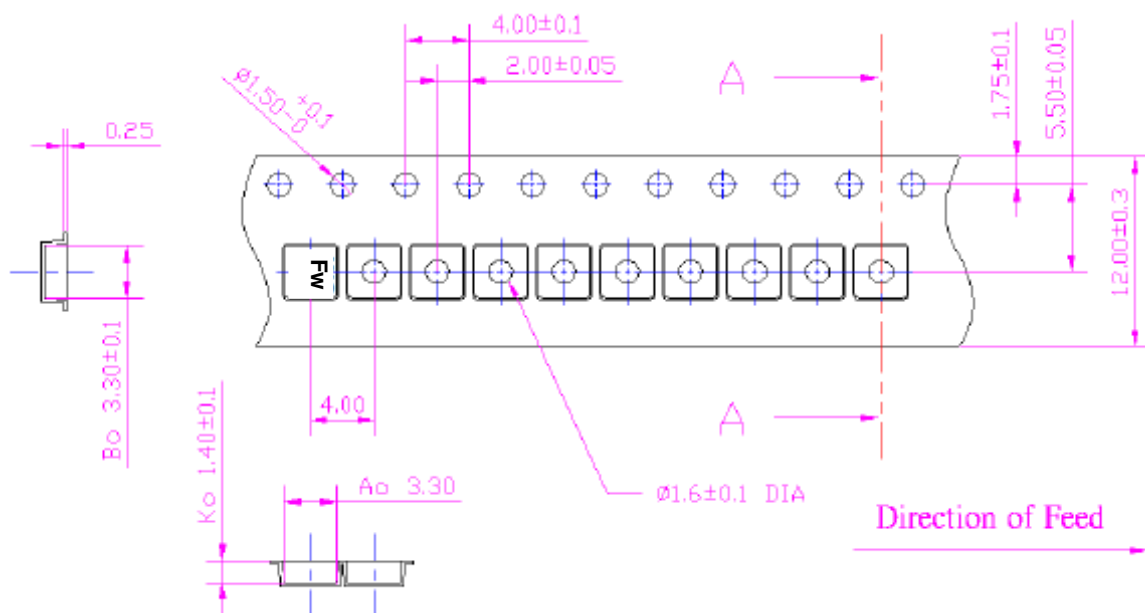
## G. PACKING:

### 1. REEL DIMENSION

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



### 2. TAPE DIMENSION



#### H. Recommended Reflow Profile:

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.

