



# 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: 140 MHz 0.1MHz BW SMD 7.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB0217A

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

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

Checked by: \_\_\_\_\_ Kazuma Lee 

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

Date: \_\_\_\_\_ 08 / 01 / 2014

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 140MHz

MODEL NO.:TB0217A

REV. NO.:3

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 5V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -55°C to +95°C

RoHS Compliant  
Lead free  
Lead-free soldering

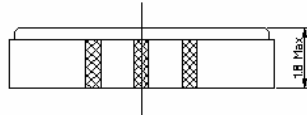
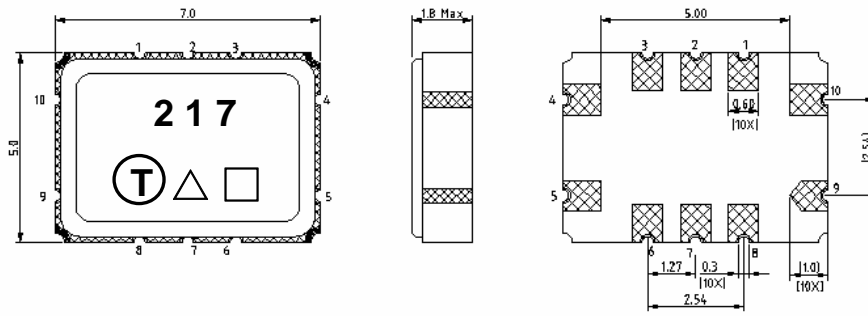
Electrostatic Sensitive Device

### B. ELECTRICAL CHARACTERISTICS:

| Item                                                   | Unit               | Min. | Type.  | Max. | Note |
|--------------------------------------------------------|--------------------|------|--------|------|------|
| Center frequency, <b>Fc</b>                            | MHz                | -    | 140    | -    | -    |
| Minimum Insertion Loss, ( <b>Fc</b> ±20KHz ) <b>IL</b> | dB                 | -    | 3.0    | 6.0  | -    |
| 3 dB bandwidth, <b>BW-3</b>                            | KHz                | 40   | 100    | -    | 1    |
| Passband Ripple ( <b>Fc</b> ±20KHz )                   | dB                 | -    | 0.1    | 3.0  | -    |
| 50 dB bandwidth, <b>BW-50</b>                          | KHz                | -    | 390    | 450  | -    |
| Group delay ripple ( <b>Fc</b> ±20KHz ), <b>GD</b>     | μs                 | -    | 1      | 12   | -    |
| Temperature coefficient of frequency <b>TCf</b>        | ppm/C <sup>2</sup> | -    | -0.032 | -    | -    |

Note1. Considering -20 KHz frequency shift from -40°C to +85°C

**C.OUTLINE DRAWING:**



**Pin configuration**

- #9 Input
  - #4 Output
  - #10 Balance input or input ground
  - #5 Balance output or output ground
  - #1,2,3,6,7,8 To be grounded
- Unit : mm

- : Week Code
- △ : Product / Year Code

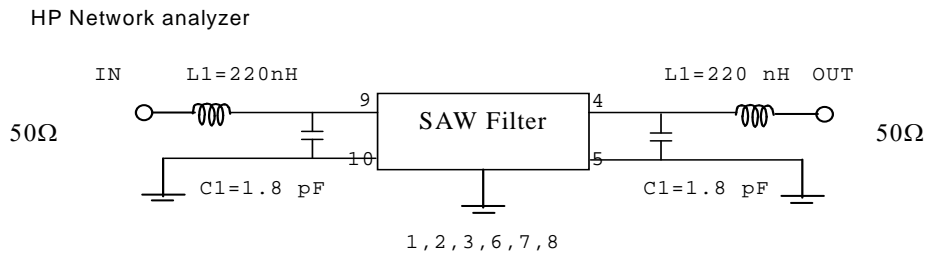
|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| Year         | 2013<br>2017 | 2014<br>2018 | 2015<br>2019 | 2016<br>2020 |
| Product Code | B            | b            | <u>B</u>     | <u>b</u>     |

**Week Code Table**

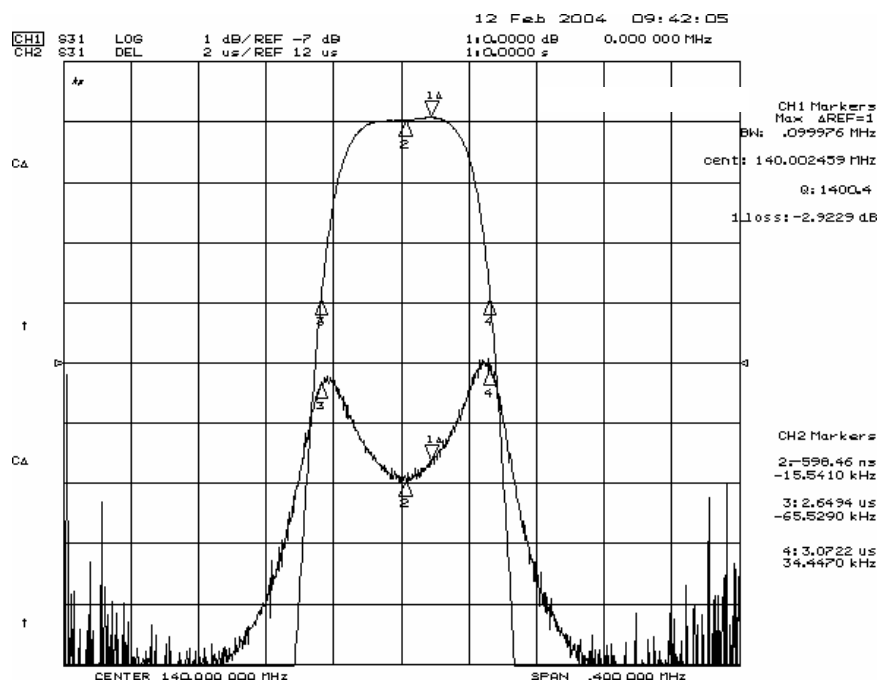
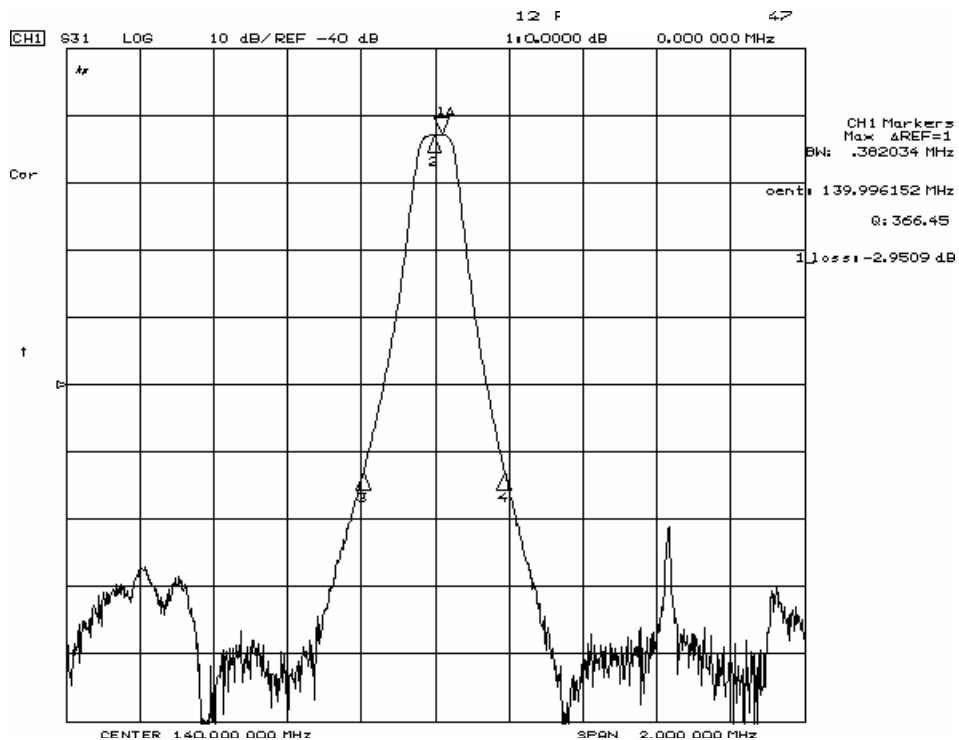
|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
| A    | B    | C    | 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    |

## D. MEASUREMENT CIRCUIT:

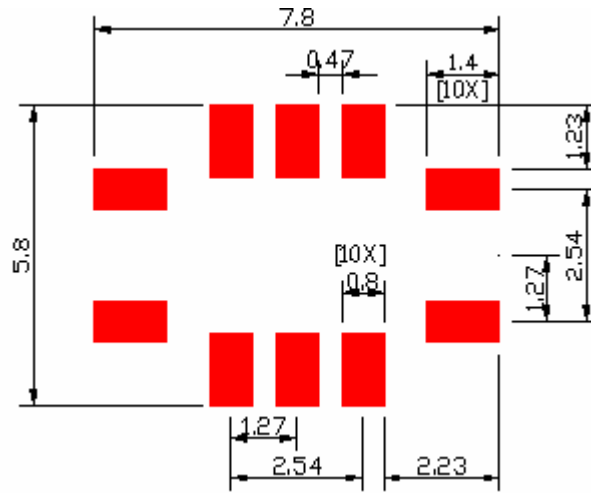
### 50 Ohm Test circuit ( single-ended / single-ended )



## E. FREQUENCY CHARACTERISTICS:

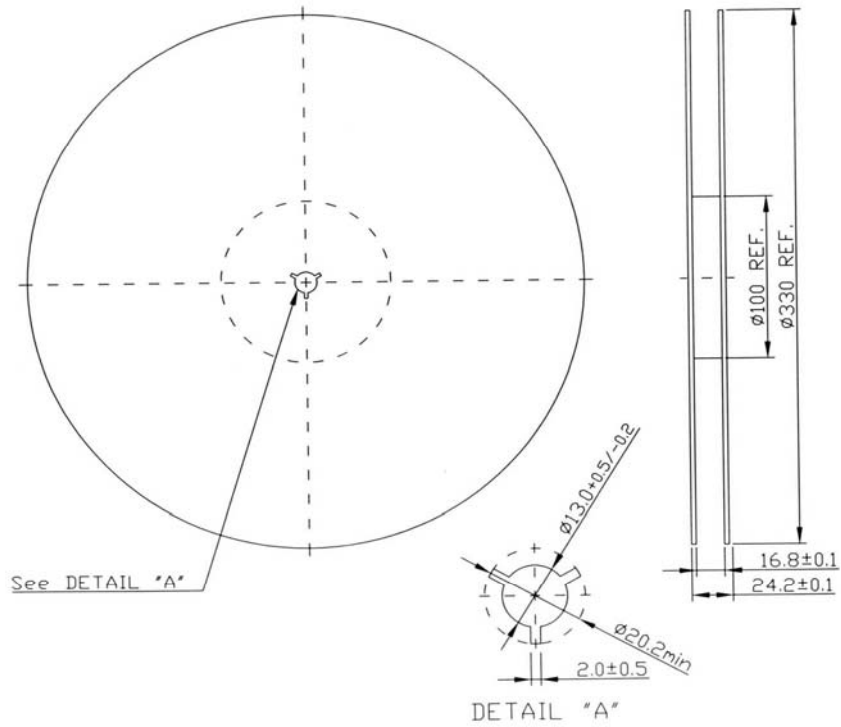


**F. PCB FOOTPRINT:**

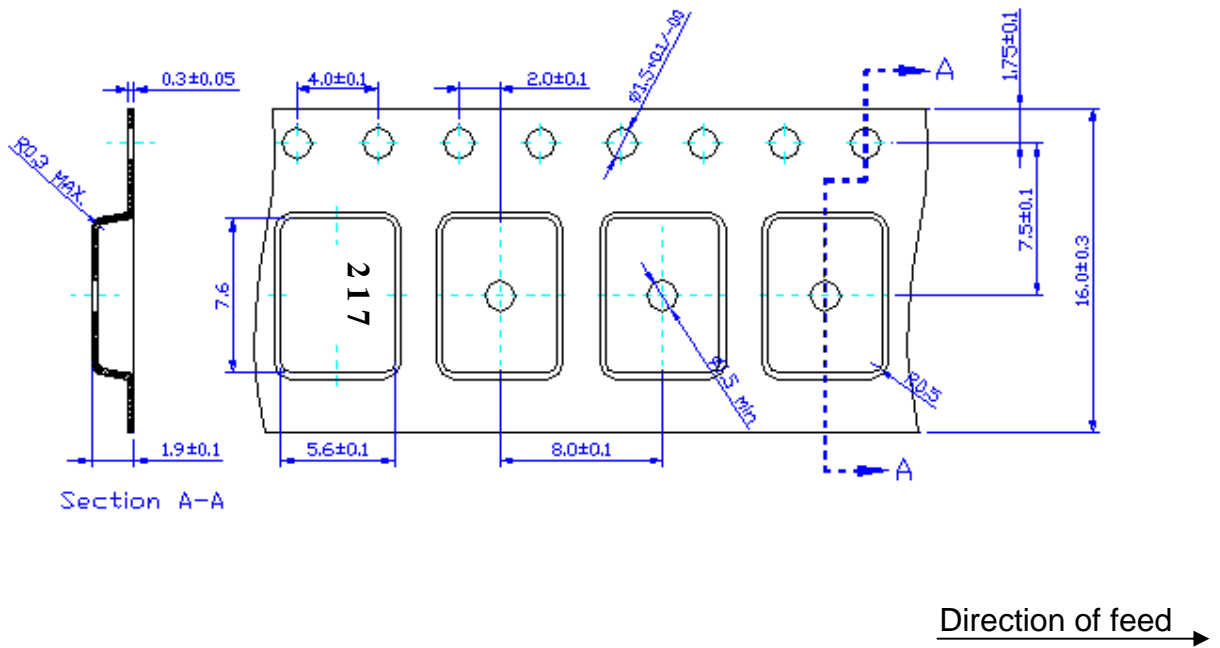


**G. PACKING:**

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



## 2.TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE:

