



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

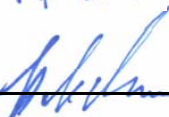
Product Description: SAW Filter 2602.5 MHz 105MHz BW Band41 SMD 1.1X0.9 mm

TST Part No.: TA1971A

Customer Part No.: _____

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

Checked by: _____ Anne Chen 

Approved by: _____ Bob Chau 

Date: _____ 01/27/2016

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 2602.5MHz 105MHz BW SMD1.1x0.9mm

MODEL NO.:TA1971A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm (In-band) 17 dBm (Out- band)
2. Operating Temperature: -30°C to +85°C
3. Storage Temperature: -40°C to +85°C
4. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

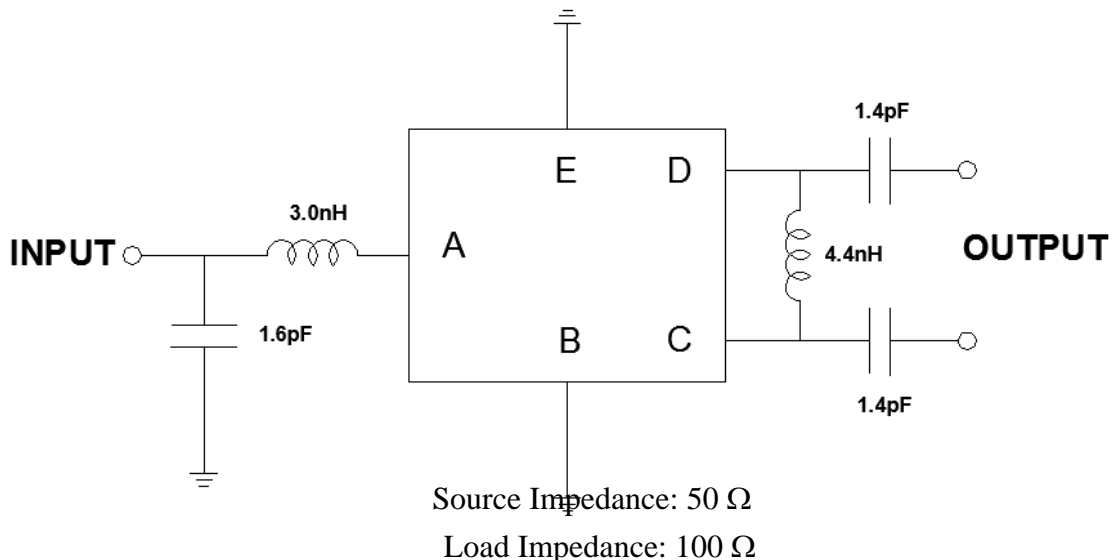
B. ELECTRICAL CHARACTERISTICS:

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

Terminating load impedance(Balanced) : $Z_L = 100 \Omega$

| Item | Unit | Min. | Typ. | Max. | Note |
|--|-----------|-------|------|--------|------|
| Center Frequency | Fc | MHz | - | 2602.5 | - |
| Insertion Loss (2550~2655 MHz) | IL | dB | - | 1.8 | 2.7 |
| Amplitude ripple (2550~2655 MHz) | | dBp-p | - | 0.6 | 2.0 |
| VSWR (2550~2655 MHz) | | | - | 1.6 | 2.0 |
| Attenuation (reference level from 0 dB) | | | | | |
| 880 ~ 915 MHz (GSM900 Tx) | dB | 50 | 70 | - | - |
| 1710 ~ 1785 MHz (DCS1800 Tx) | dB | 35 | 48 | | |
| 2401 ~ 2482 MHz (ISM Band) | dB | 13 | 17 | | |
| Temperature Coefficient of Frequency | ppm/°C | - | -36 | - | - |

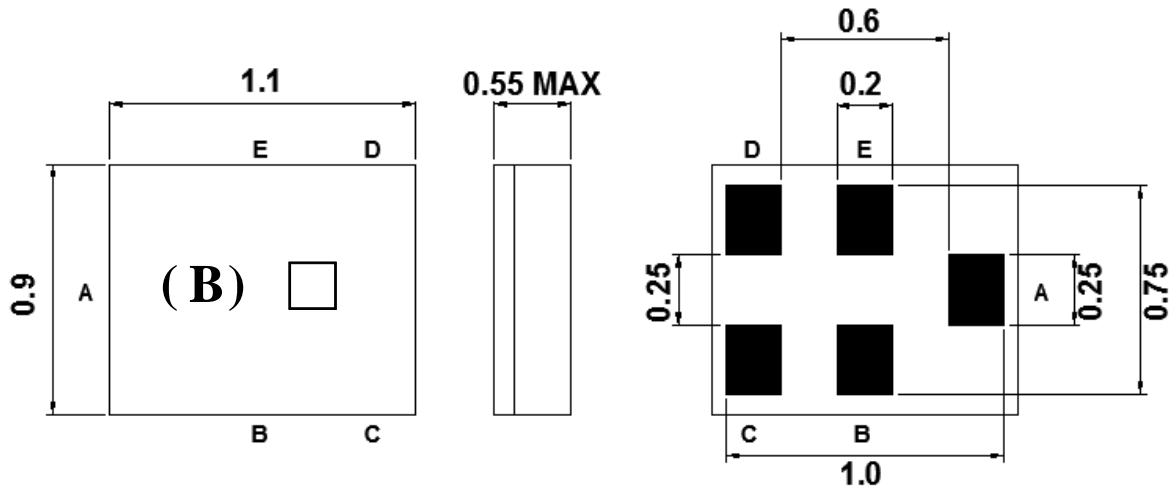
C. MEASUREMENT CIRCUIT:



D.OUTLINE DRAWING:

top view

bottom view



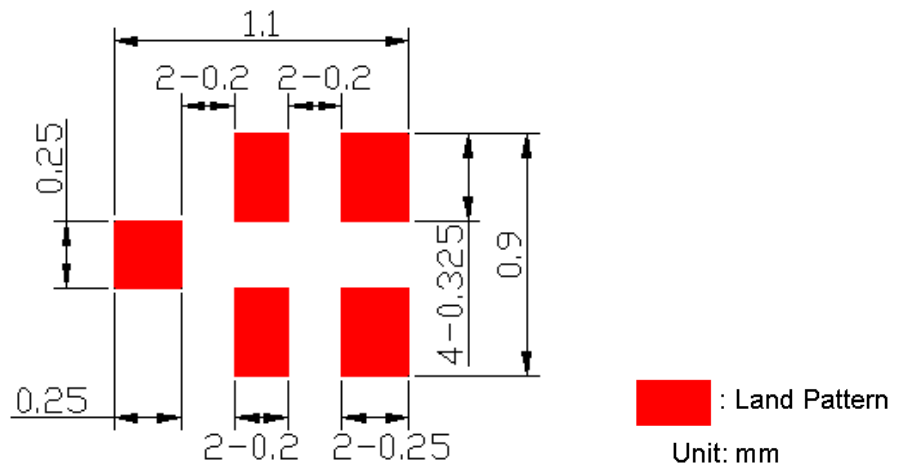
| Marking Descriptions | |
|----------------------|-----------------------|
| (B) | Series Number |
| □ | Date Code(Year+Month) |

| Pin Description | |
|-----------------|-----------------|
| B,E | Ground |
| A | Input |
| C,D | Balanced Output |

□ : Year/Month Code (Follow the table)

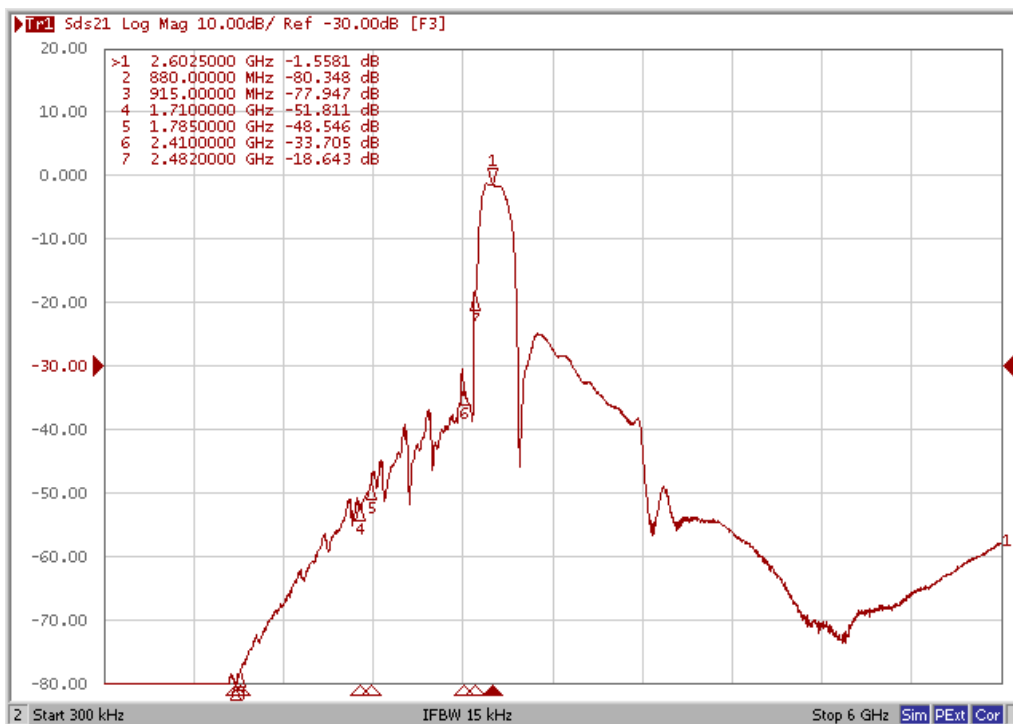
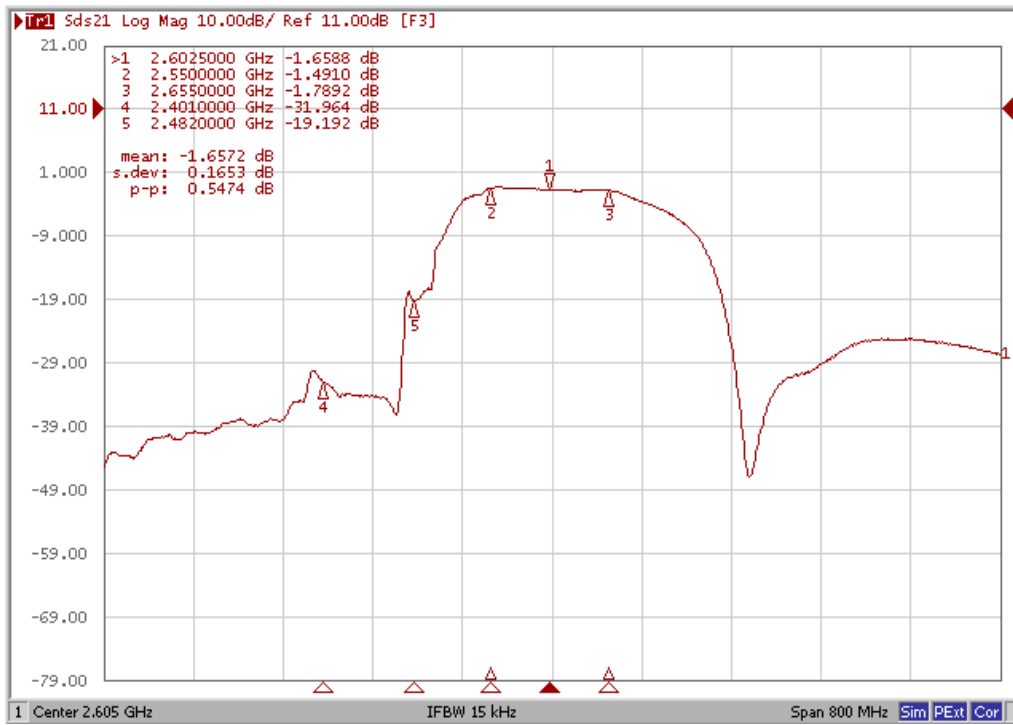
| YEAR/Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 2013 | A | B | C | D | E | F | G | H | J | K | L | M |
| 2014 | N | P | Q | R | S | T | U | V | W | X | Y | Z |
| 2015 | a | b | c | d | e | f | g | h | j | k | l | m |
| 2016 | n | p | q | r | s | t | u | v | w | x | y | z |

E. PCB Footprint :



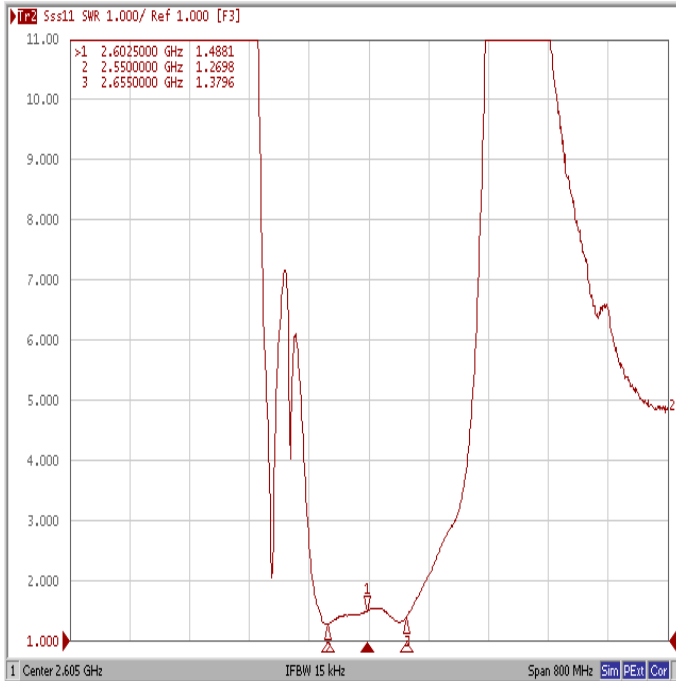
E. Frequency Characteristics :

Frequency Response

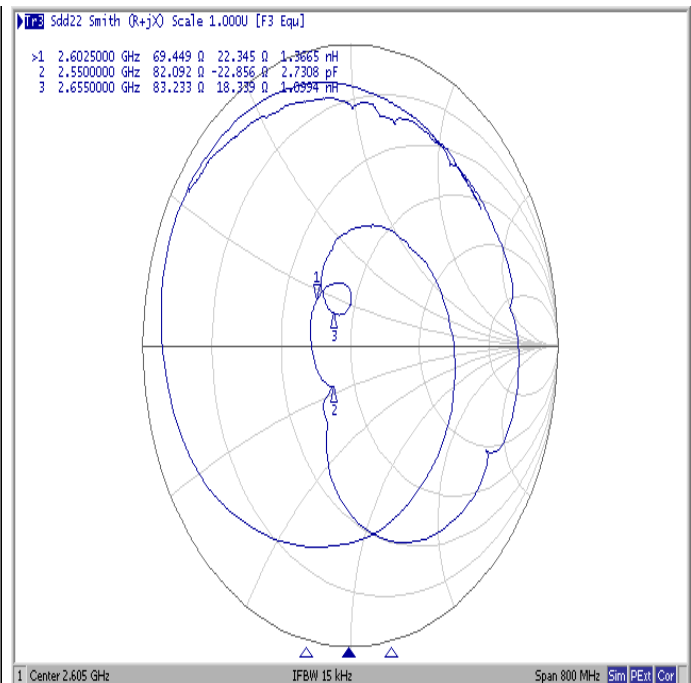
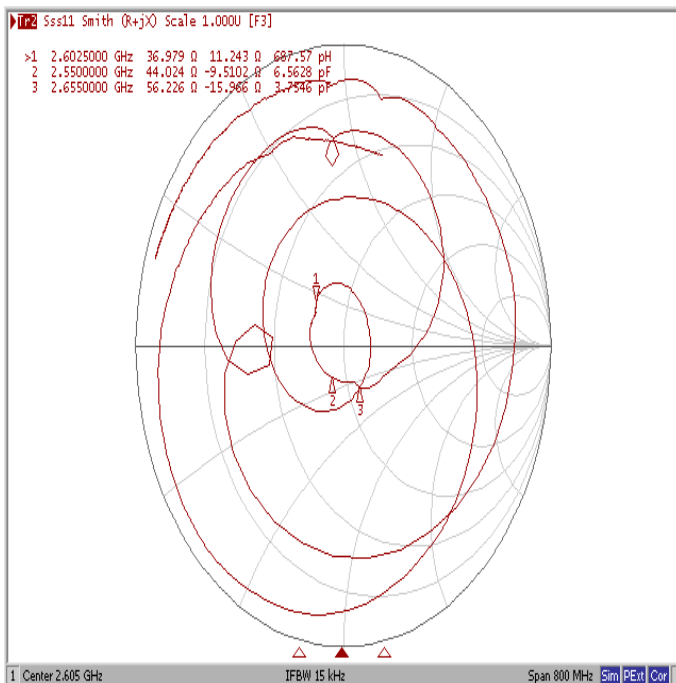


F.Reflection Function

VSWR



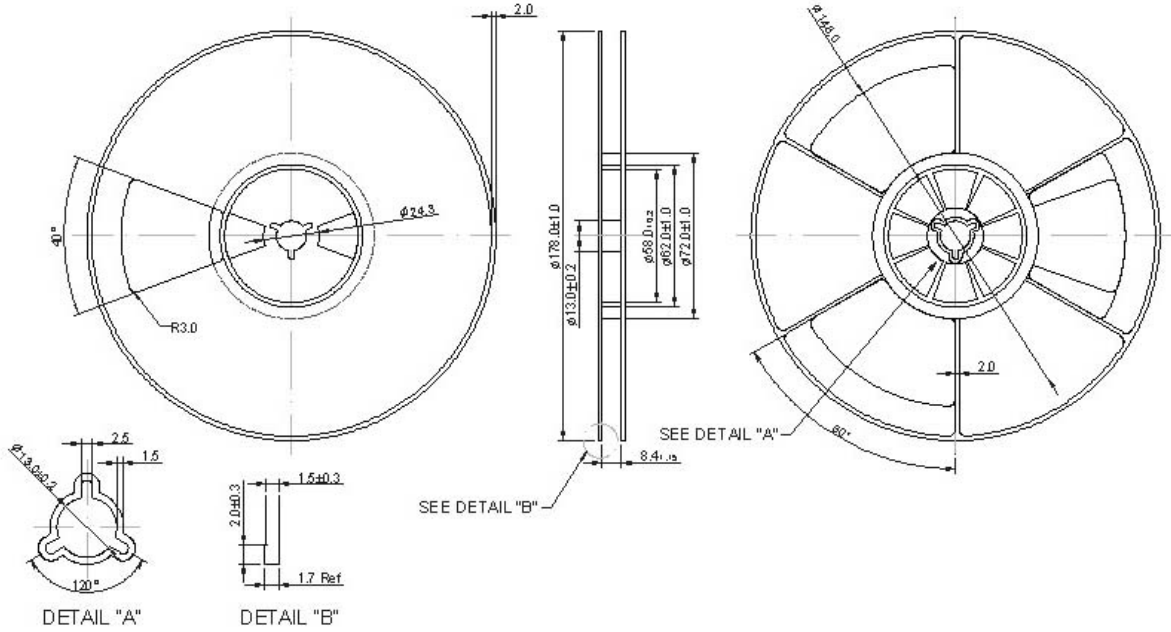
Smith Chart



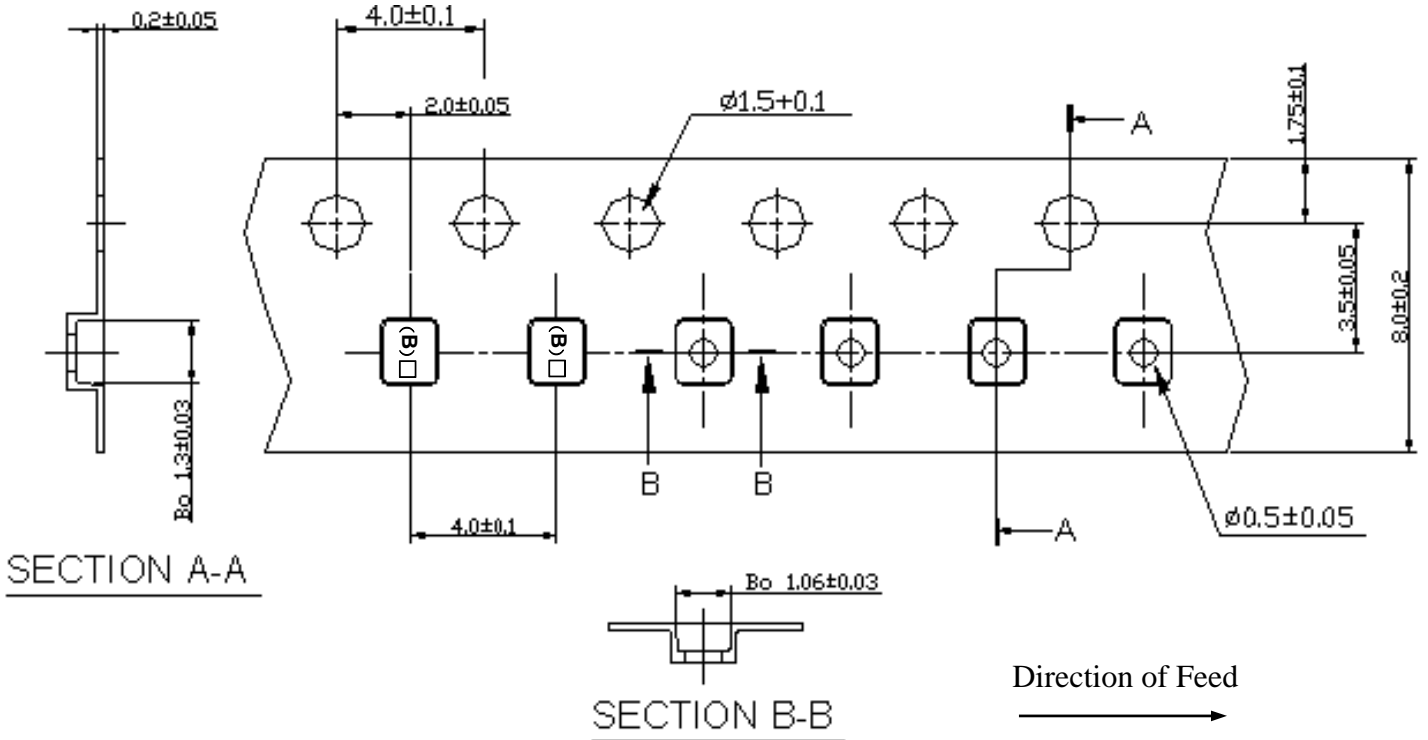
G. PACKING:

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.

