



TAI-SAW TECHNOLOGY CO., LTD.

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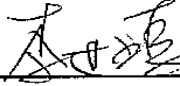
Product Specifications Approval Sheet

Product Name: SAW IF Filter 113 MHz (package 5.0mm x7.0 mm)

TST Parts No.: TB0890A

Customer Parts No.: _____

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

Checked by: _____ Kazuma Lee 

Approval by: _____ Francis Chen 

Date: _____ 11 / 04 / 2010

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 113MHz 1MHz BW (SMD 13.3×6.5 mm)

MODEL NO.: TB0890A

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

1. Ambient Temperature: 25 °

| Item | Unit | Min. | Type. | Max. |
|-----------------------------------|---------------------|------|--------|------|
| Center frequency, Fc | MHz | - | 113 | - |
| Insertion Loss, IL | dB | - | 13.0 | 14.5 |
| -1.5dB bandwidth | MHz | - | 1.0 | - |
| -35dB bandwidth | MHz | - | 2.8 | 3.8 |
| Passband Ripple Fc+/-100KHz | MHz | - | 0.1 | 1.0 |
| Group Delay Variation Fc+/-100KHz | nsec | - | 40 | 150 |
| Absolute Delay | usec | - | 0.8 | 1.2 |
| Temp. Coefficient | ppm/°C ² | - | -0.036 | - |
| Source Impedance | Ohm | - | 50 | - |
| Load Impedance | Ohm | - | 50 | - |

C. Frequency Characteristics :

(1) Wide band Response:(span 50MHz)

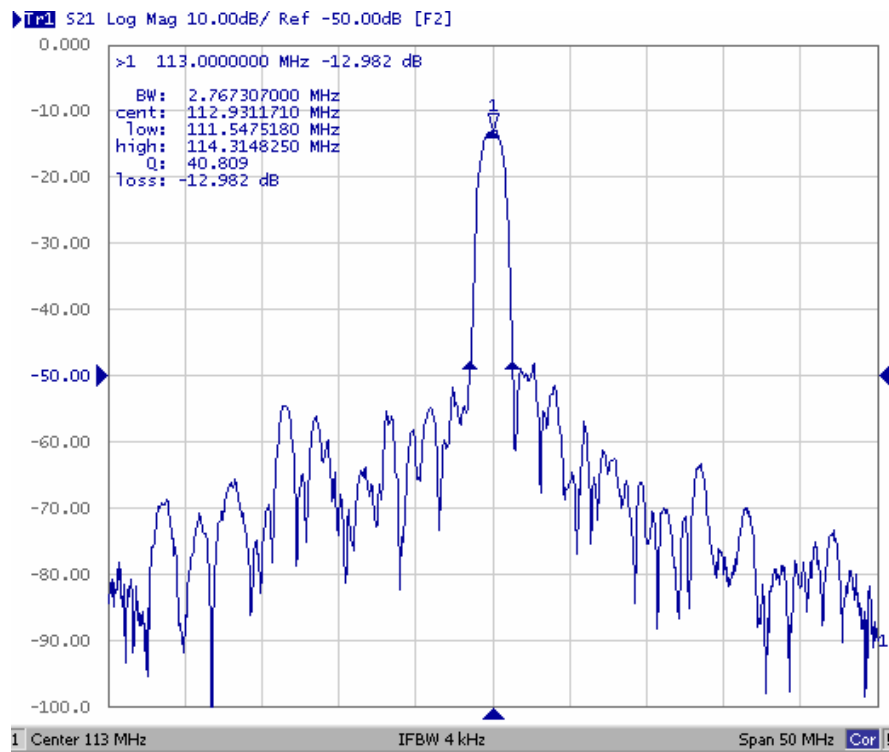


Fig1. Horizontal: 5MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Delay Response:

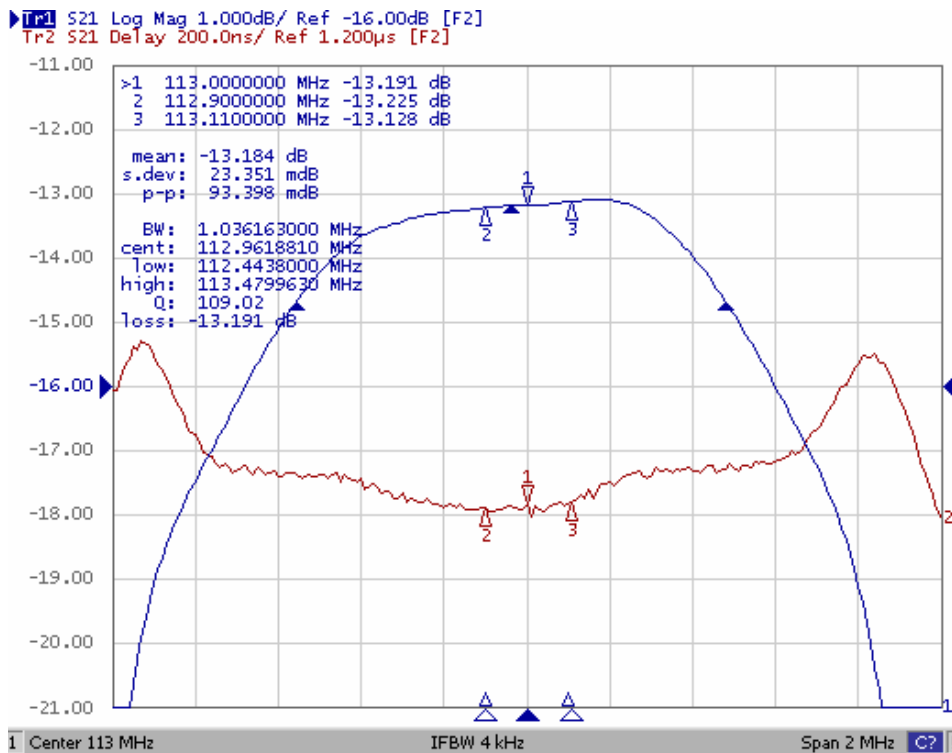
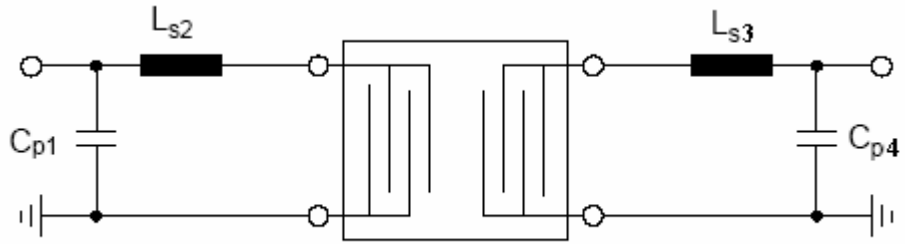


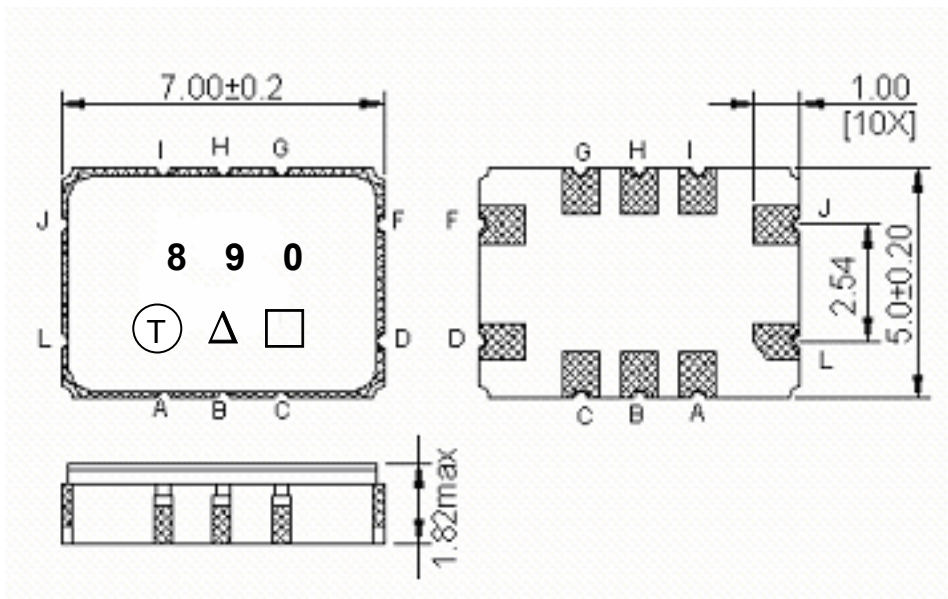
Fig2. Horizontal: 0.2MHz/Div Vertical: 1dB/Div
Vertical: 200ns/Div

D. Matching Circuit:



$$L_{s2}=390\text{nH} + 12\text{nH} \quad L_{s3}=390\text{nH} + 390\text{nH} \quad C_{p1}=47\text{pF} \quad C_{p4}=39\text{pF}$$

E. Outline Drawing:



Pin J –RF input

Pin L –RF input ground

Pin D –RF output

Pin F –RF output ground

Pin A,B,C,G,H,I - Ground

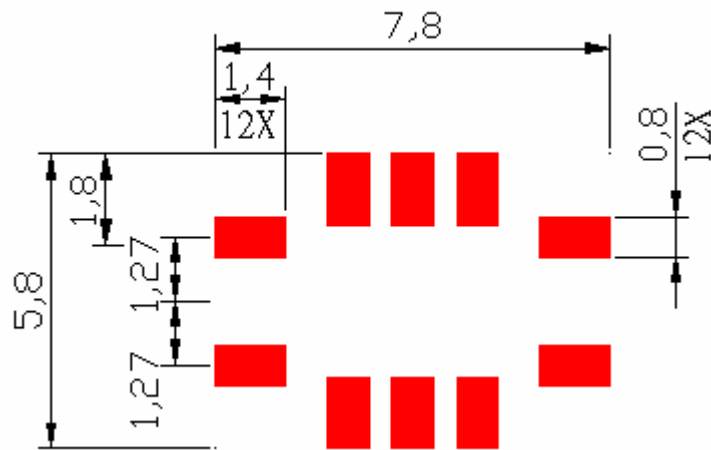
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

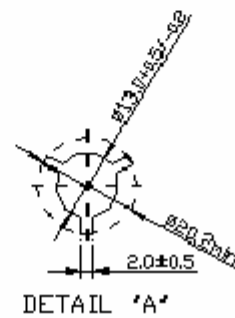
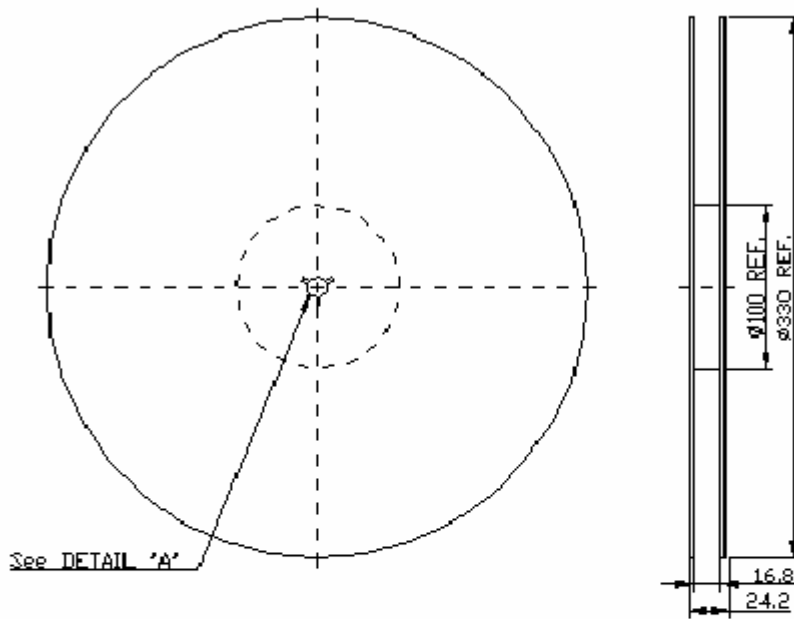
| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| Year | 2009 2013 | 2010 2014 | 2011 2015 | 2012 2016 |
| Product Code | B | b | <u>B</u> | <u>b</u> |

F. PCB Footprint:

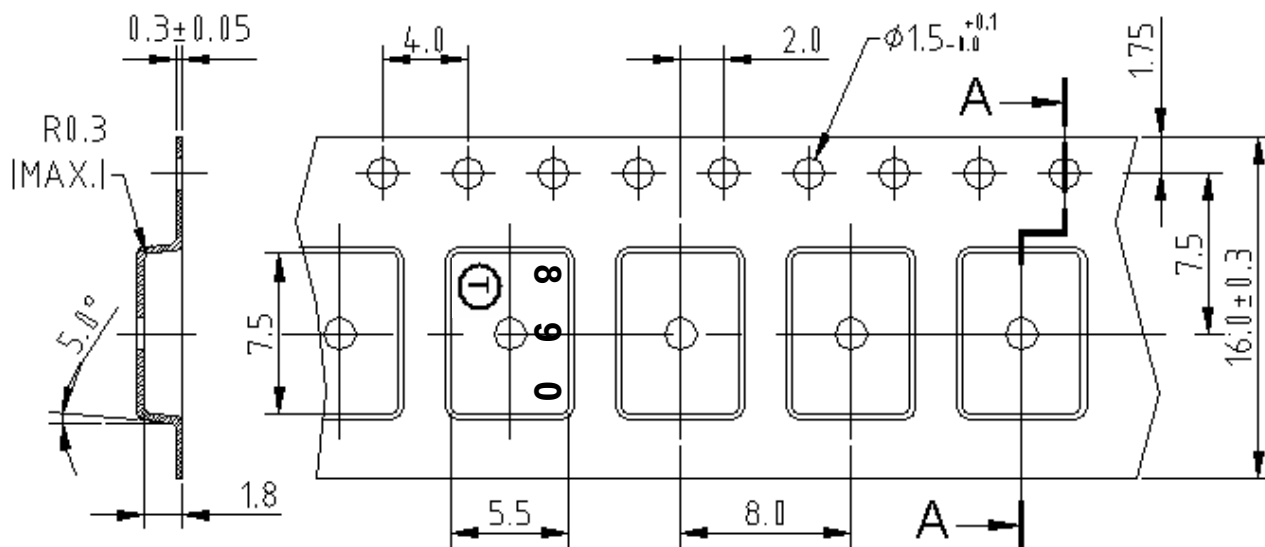


G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

