



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: SAW Filter 307.36MHz SMD 5.0×7.0mm

TST Part No.: TB0789A

Customer Part No.: _____

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

Checked by: _____ Ricky Lee *Ricky*

Approved by: _____ Francis Chen *MC*

Date: _____ 2012/02/09

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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IF SAW Filter 307.36MHz(BW=20MHz) SMD 5X7mm

MODEL NO.: TB0789A

REV.2.0

A. MAXIMUM RATING:

1. Operating Temperature: -30 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input power: 10dBm

RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

Ambient Temperature: 25 °C

Item	Unit	Min	Typ	Max
Center Frequency	MHz	-	307.36	-
Insertion Loss (Fc ± 10.0 MHz)	dB	-	11.4	16
Passband Ripple (Fc ± 10.0 MHz)	dB	-	0.5	1.0
1dB BW	MHz	20.0	21.4	-
45dB BW	MHz	-	31.3	32
Group Delay Ripple (Fc±9MHz)	nS		20	80
Absolute Group Delay at Fc	uS		0.54	0.65
Attenuation 1 @ 10 ~ 290 MHz	dB	40	44	-
Attenuation 2 @ 325 ~ 550 MHz	dB	40	43	-

C. Frequency Characteristics :

1. S21 Response: (span : 80MHz)

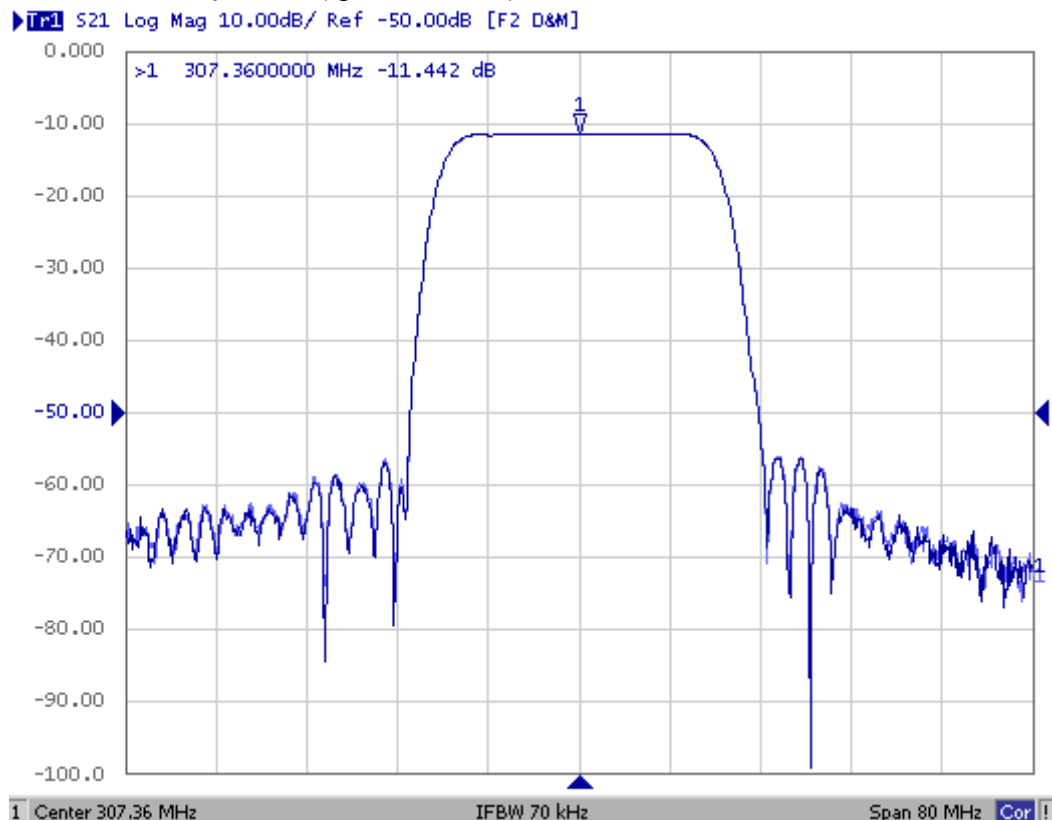


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

2. Group-Delay Ripple: (span : 35MHz)

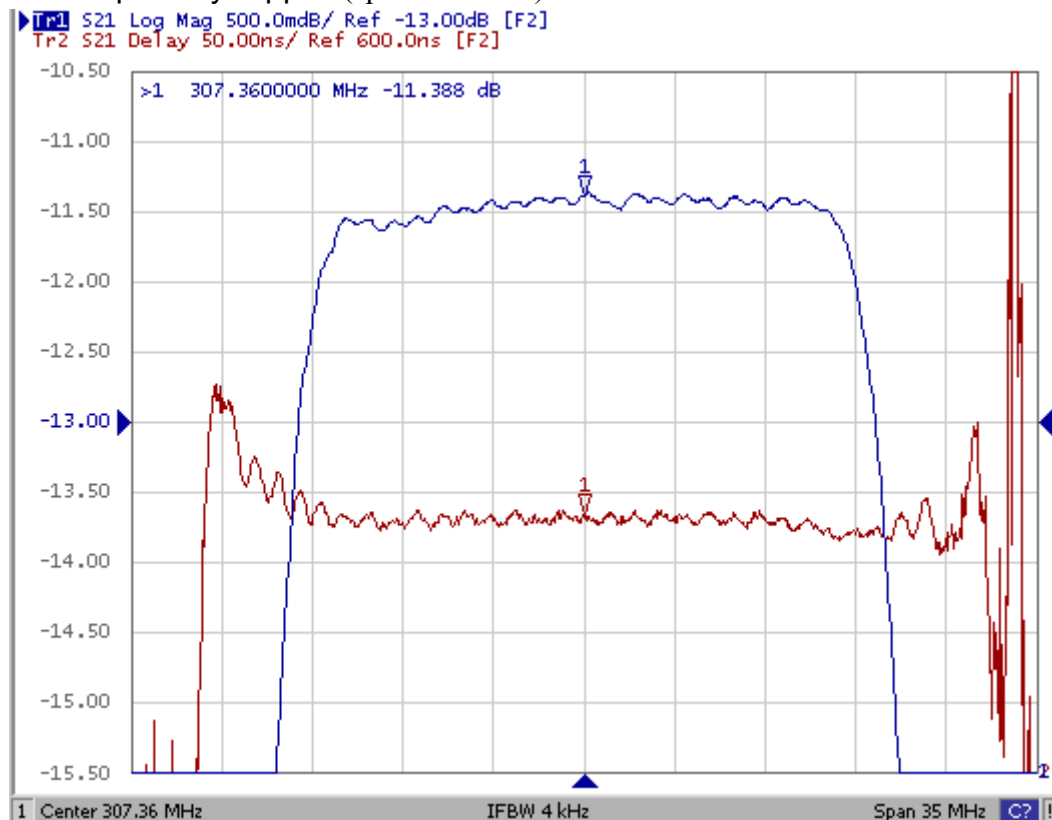
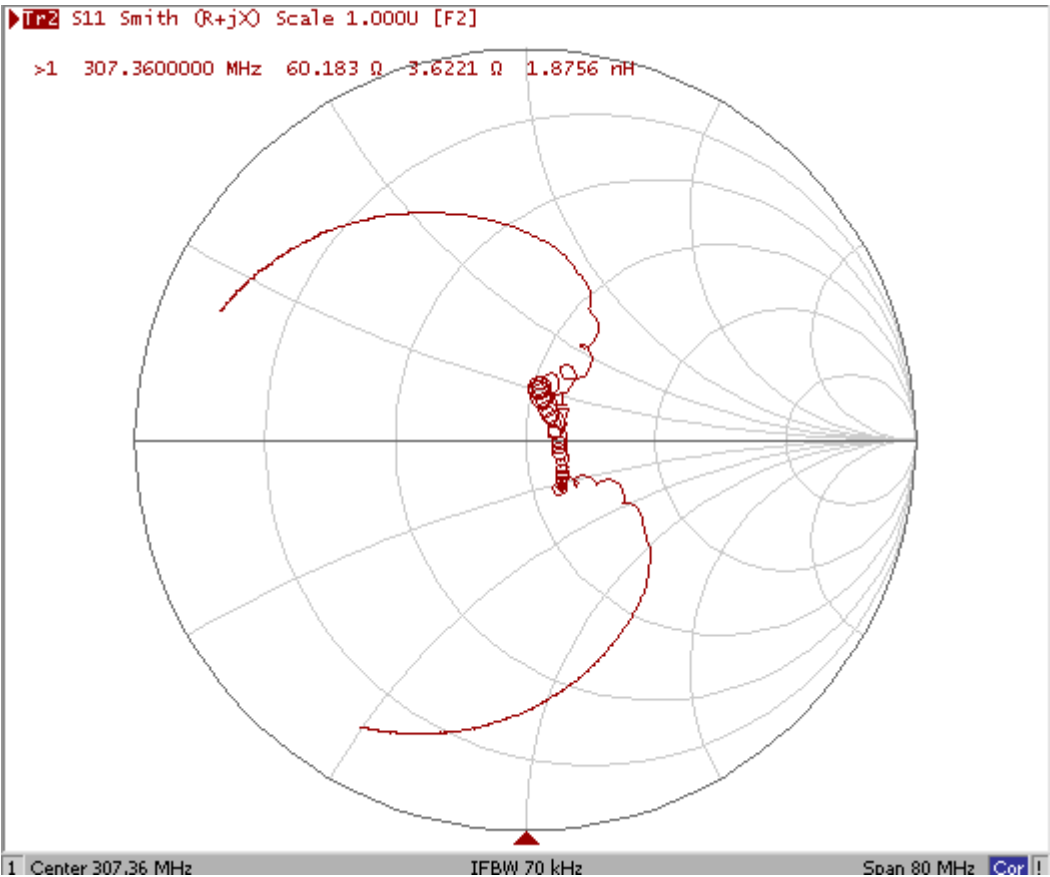
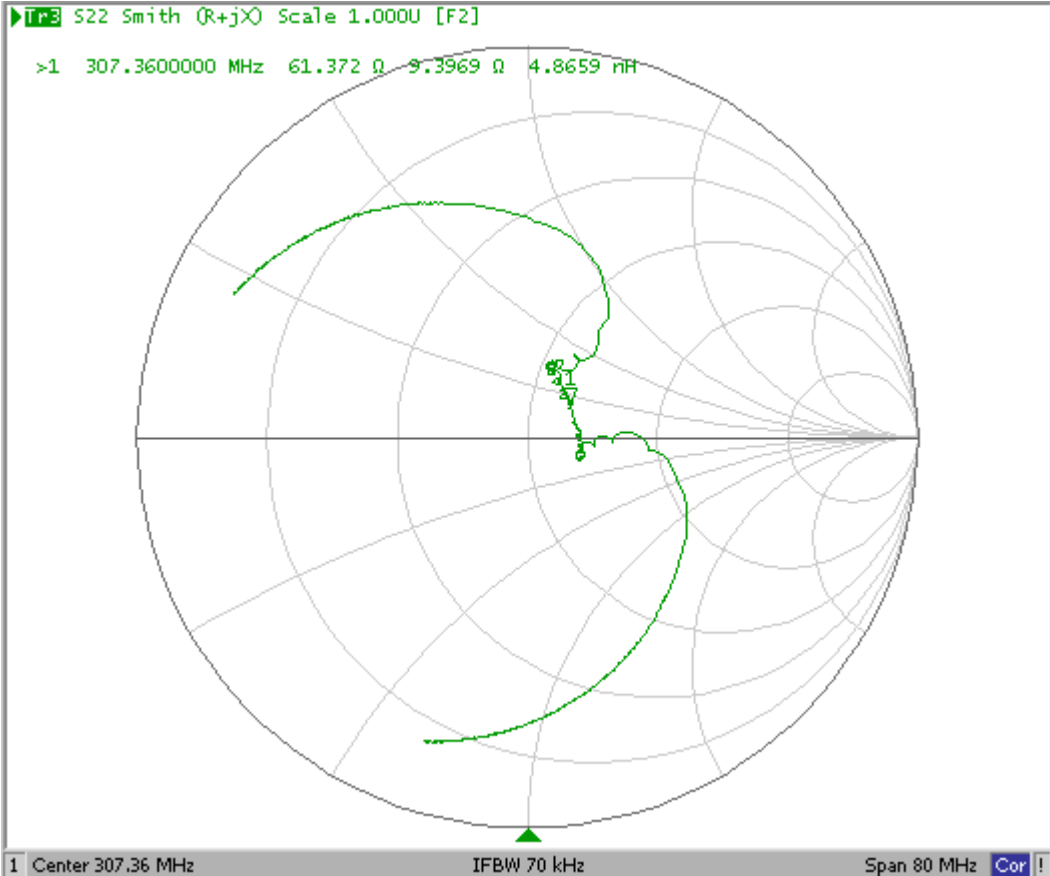


Fig2. Horizontal: 3.5MHz/Div Vertical: 100nec/Div

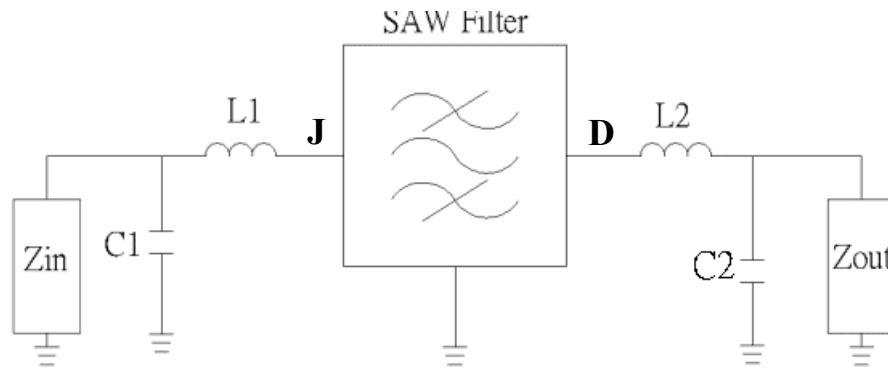
3. S11 Smith Chart: (span : 80MHz)



4. S22 Smith Chart (span : 80MHz)



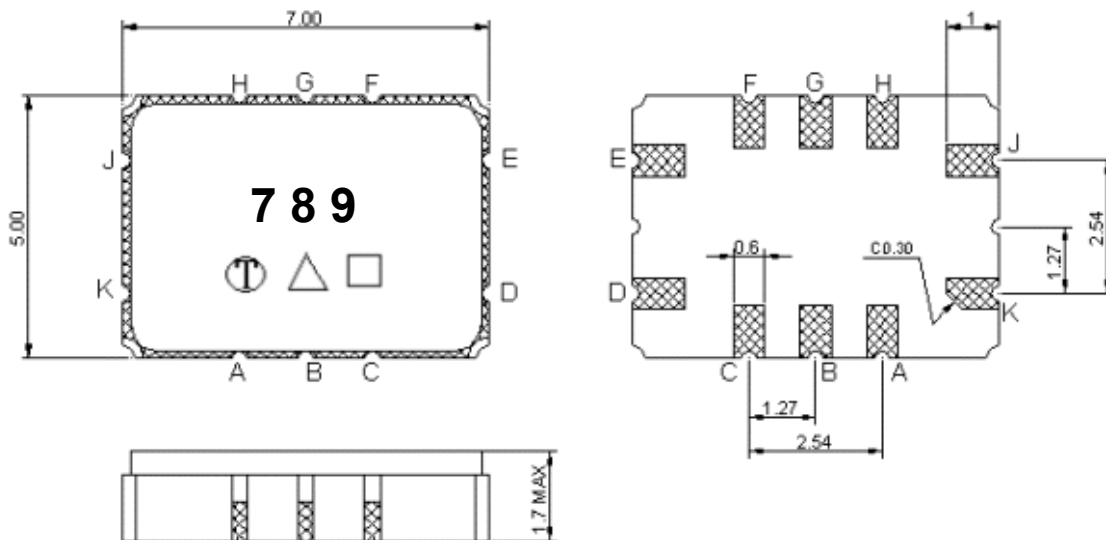
D. Measurement Circuit:



Z_{in} and Z_{out} are 50Ω .

$L1=28.8\text{nH}$, $C1=22\text{pF}$, $L2=25\text{nH}$, $C2=21\text{pF}$

E. Outline Drawing:



Pin J: RF input

Pin D: RF output

Pin K,E: Case Ground

Pin A, B, C, F, G, H: Ground

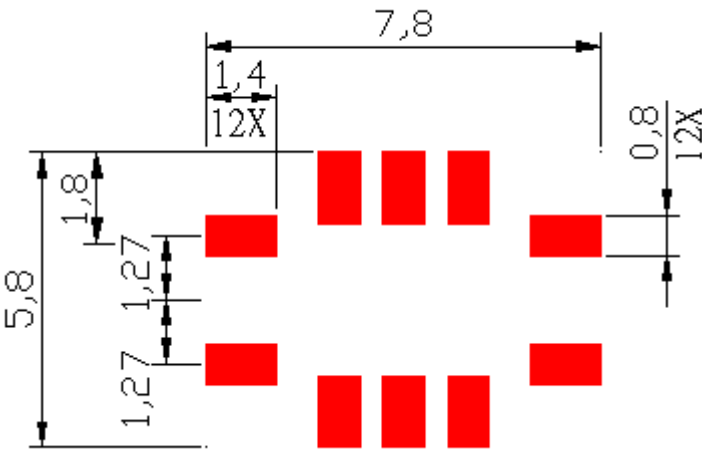
□ : Week Code (W01->A,W02->B,...W27->a,...,W52->z)

Unit : mm

△ : Product / Year Code

Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

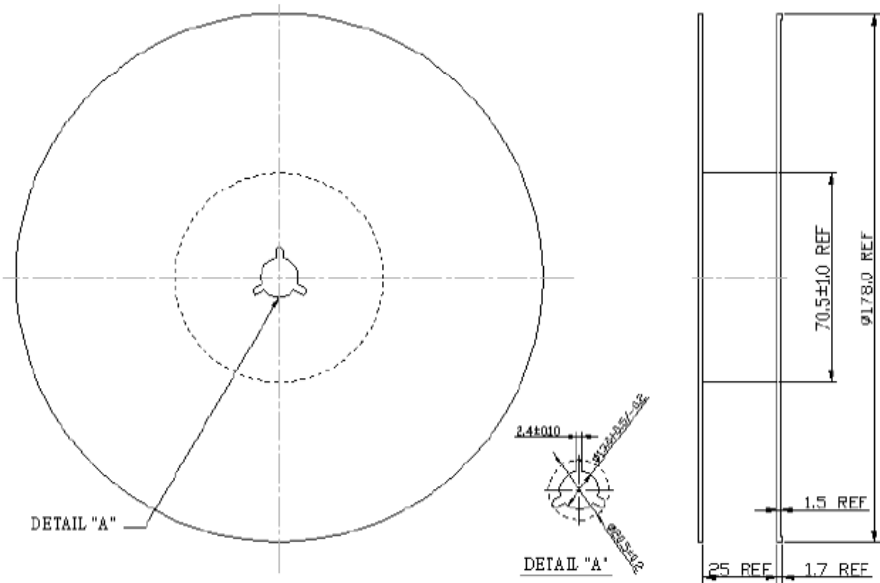
F. PCB Footprint:



Unit: mm

H. PACKING:

1. REEL DIMENSION



Unit: mm

Technical drawing of a 12-pin D-subminiature connector. The drawing includes a side view (SECTION A-A) and a top view.

SECTION A-A: Shows the profile of the connector housing. Key dimensions include a 5.0° angle, a thickness of 0.3±0.05, and a width of 1.8. The top edge has a radius of R0.3 (MAX.).

Top View: Shows the 12-pin layout. Key dimensions include:

- Pin pitch: 2.0
- Pin diameter: $\phi 1.5^{+0.1}_{-0.0}$
- Pin length: 1.75
- Pin spacing: 4.0, 5.5, 8.0
- Pin diameter: $\phi 1.5$ (MIN.)
- Pin diameter: R0.3 (TYP.)
- Pin diameter: 7.89
- Pin diameter: 7.5
- Pin diameter: 16.0±0.3

Notes:

- See Note 1
- See Note 6

I. RECOMMENDED REFLOW PROFILE:

