

TAI-SAW TECHNOLOGY CO., LTD.

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

Product Name: SAW IF Filter 36.17MHz

TST Parts No.: TB0500A

Customer Parts No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee

Approval by: _____ Francis Chen

Date: _____ 12 / 29 / 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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IF SAW Filter 36.17MHz(BW=7.9MHz) for digital TV

MODEL NO.: TB0500A

REV. NO.3

A. MAXIMUM RATING:

DC voltage	V_{DC}	12	V	Between any terminals
AC voltage	V_{PP}	10	V	Between any terminals
Operating Temperature Range	T_A	-25~65	°C	
Storage Temperature Range	T_{stg}	-40~85	°C	

B. Characteristics :

1. Electronic Characteristics

Reference temperature: $T_a=25^{\circ}\text{C}$
Terminating source impedance $Z_S=50\Omega$
Terminating load impedance $Z_L=2k\Omega//3pF$

RoHS Compliant

Lead-free soldering

2 .Amplitude Characteristics

Attenuation (ref. : 36.17 MHz) (Switching pin2 connected to ground)

	MIN.	TYP.	MAX.	
Insertion attenuation				
Reference level for the Following data 36.17 MHz	19.0	21.0	23.0	dB
3.0dB Pass Bandwidth	7.4	7.9	8.4	MHz
15 dB Pass Bandwidth	8.4	8.9	9.4	
30dB Pass Bandwidth	8.8	9.4	10.0	MHz
Lower side lobe 25.00 to 31.15 MHz	35.0	40.0	-	dB
Upper side lobe 41.15 to 42.00 MHz	31.0	36.0	-	dB
42.00 to 45.00 MHz	36.0	44.0	-	dB
Impedance at 36.17 MHz				
Input Impedance	-	1.7 17.3	-	$k\Omega pF$
Output Impedance		2.4 4.3		$k\Omega pF$
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

(Switching pin2 connected to pin 1)

	MIN.	TYP.	MAX.	
Insertion attenuation				
Reference level for the Following data 36.17 MHz	19.0	21.0	23.0	dB
3.0dB Pass Bandwidth	6.5	7.0	7.5	MHz
15 dB Pass Bandwidth	7.5	8.0	8.5	
30dB Pass Bandwidth	7.9	8.5	9.1	MHz

Lower side lobe 25.00 to 31.55 MHz	35.0	40.0	-	dB
Upper side lobe 40.75 to 45.00 MHz	31.0	36.0	-	dB
Impedance at 36.17 MHz				
Input Impedance	-	1.5 20.9	-	K Ω pF
Output Impedance		2.4 4.3		K Ω pF
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

C. Frequency Characteristics :

1. S21 Response: (span 20MHz)

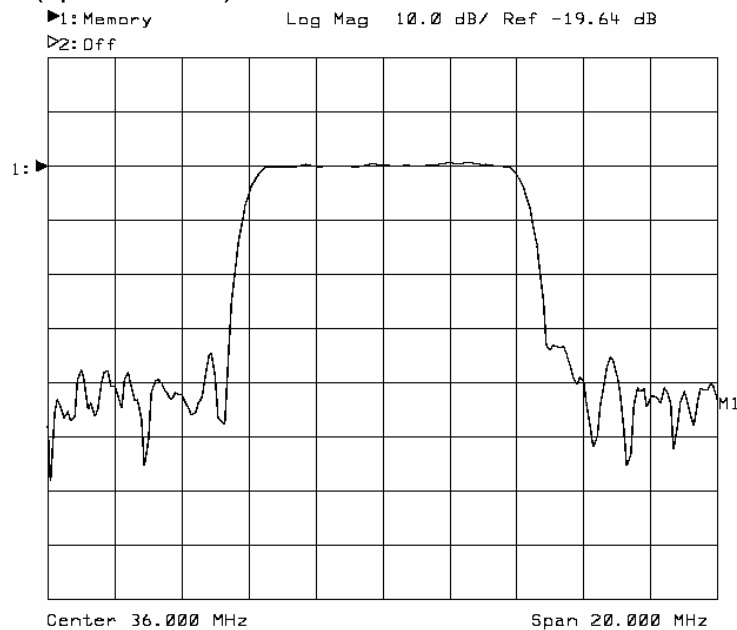


Fig.1 Horizontal : 2MHz/Div Vertical: 10B/Div

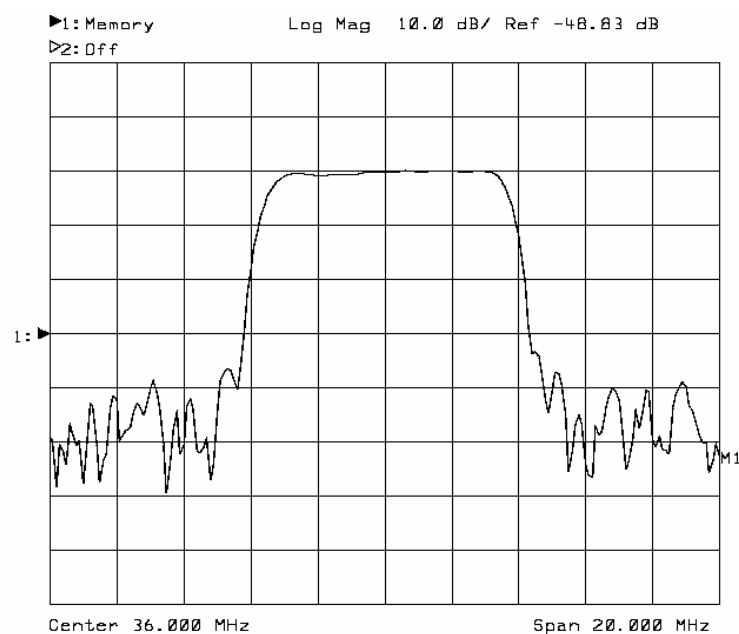
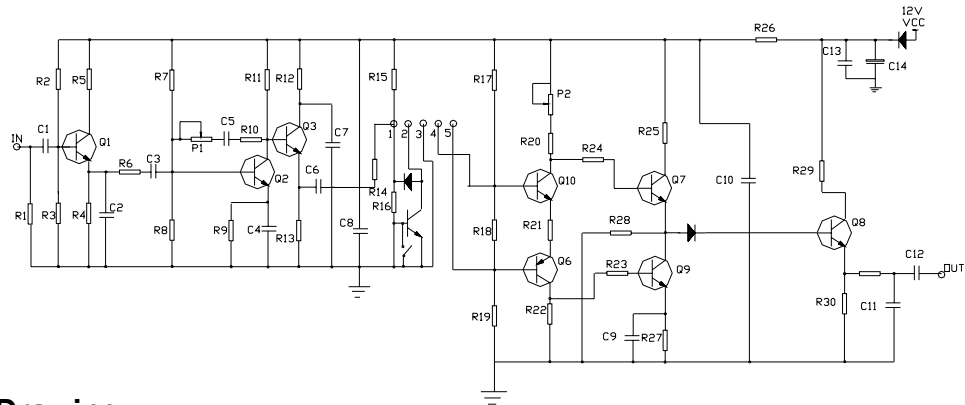


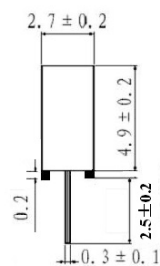
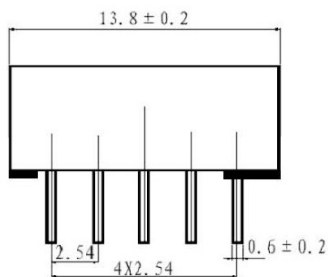
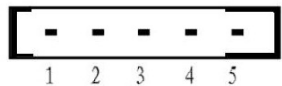
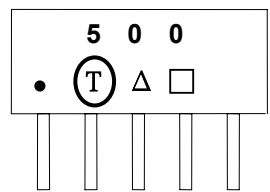
Fig.2 Horizontal : 2MHz/Div Vertical: 10dB/Div

D. TEST CIRCUIT:



E. Outline Drawing:

Unit: mm



Pin No. Functions

1. Input
2. Switching- Input
3. Chip carrier-Ground
4. Output
5. Output

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

△ : Product / Year Code

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