



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification


Issued Date:


Product Name: IF SAW Filter 44 MHz

TST Parts No.: TB0496A

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

Company: _____
Division: _____
Approved by : _____
Date: _____

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

Approval by: \_\_\_\_\_ Francis Chen 

Date: \_\_\_\_\_ 2008/12/15



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## IF SAW Filter 44MHz(BW=6.0z) for digital TV

MODEL NO.: TB0496A

REV. NO.2

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



#### 2 .Amplitude Characteristics

	MIN.	TYP.	MAX.	
Center frequency $f_c$				
Center frequency between 3dB point	-	44.00	-	MHz
<b>Insertion attenuation</b>				
Reference level for the Following data 44.06 MHz	12.7	14.7	16.7	dB
<b>Amplitude ripple</b>				
41.53-46.59 MHz	0.0	0.4	1.0	dB
3dB Pass Bandwidth	-	6.0	-	MHz
30dB Pass Bandwidth	-	7.6	-	MHz
41.53 MHz	-1.2	0.3	1.8	dB
46.59 MHz	-1.1	0.4	1.9	dB
41.06 MHz	1.5	2.7	3.8	dB
47.06 MHz	1.8	3.0	4.2	dB
47.31 MHz	6.3	8.3	10.3	dB
39.81 MHz	39.0	55.0	-	dB
<b>Lower side lobe</b>				
35.06 to 39.46 MHz	42.0	47.0	-	dB
39.46 to 40.06 MHz	37.0	47.0	-	dB
<b>Upper side lobe</b>				
48.06 to 50.06 MHz	35.0	42.0	-	dB
50.06 to 55.06 MHz	41.0	51.0	-	dB
<b>Reflected Wave Signal Suppression</b>	42.0	52.0		dB
<b>Feed through Signal Suppression</b>	50.0	56.0		dB
<b>Group delay ripple</b>				
41.53 ... 46.59 MHz	-	40	-	ns

Impedance at 44.06 MHz				
Input Impedance	-	1.3    16.1	-	K $\Omega$   pF
Output Impedance		1.1    5.6		K $\Omega$   pF
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

**C. Frequency Characteristics :**

1. S21 Response: (span 20MHz)

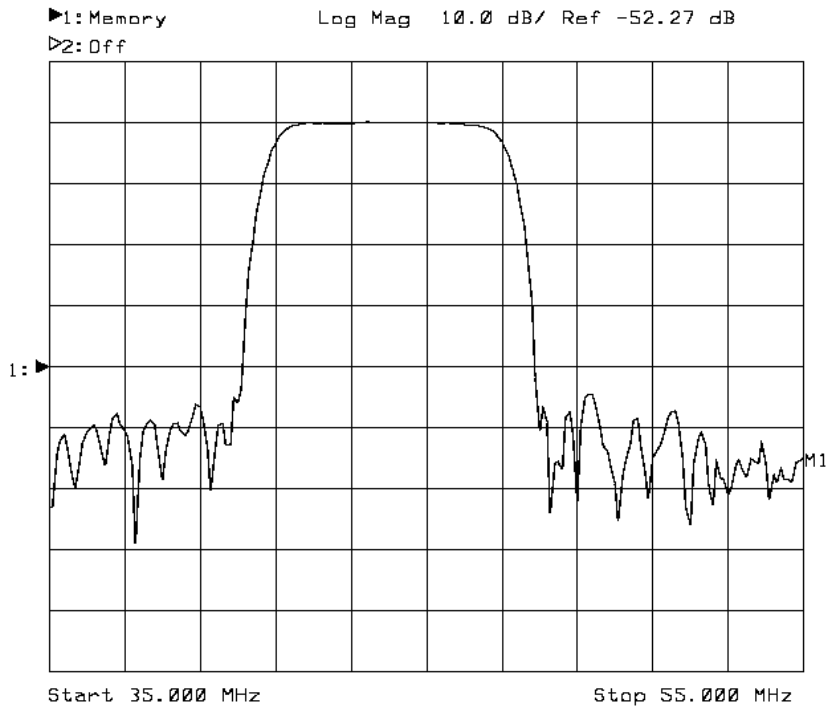


Fig.1 Horizontal : 2MHz/Div    Vertical: 10B/Div

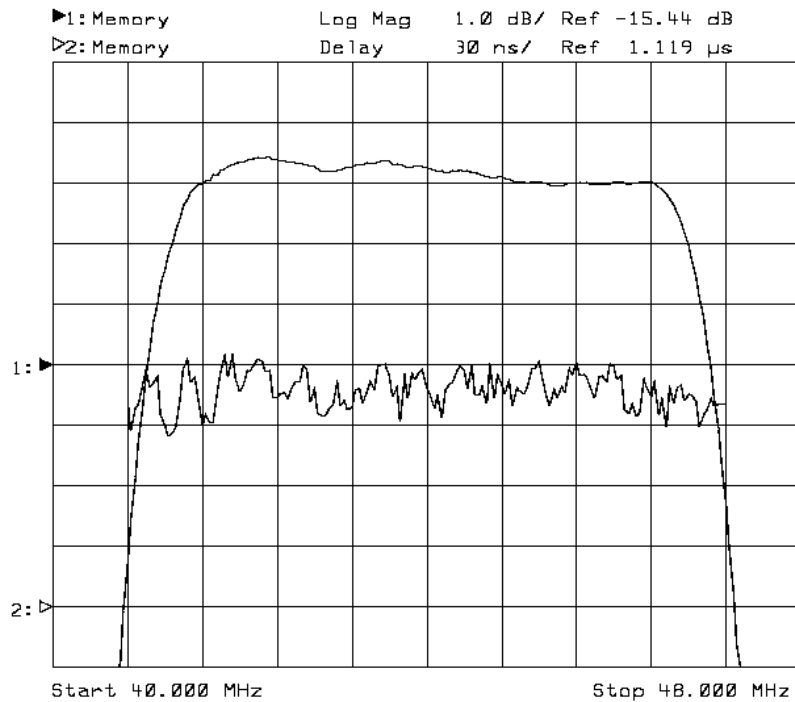
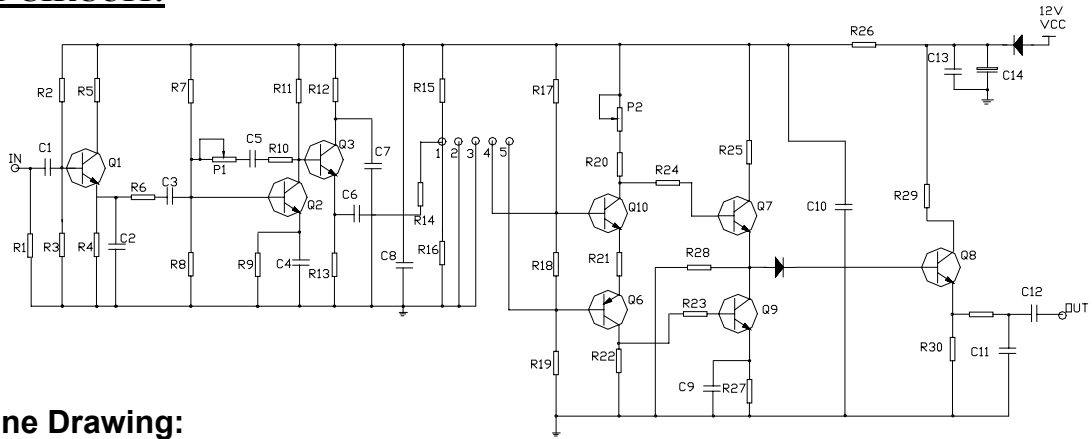


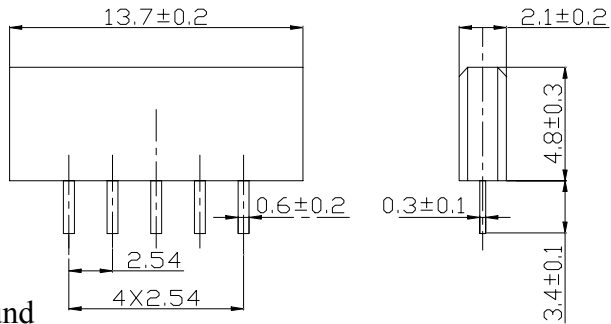
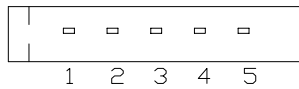
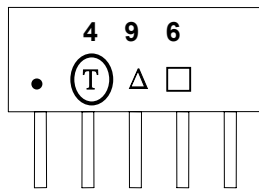
Fig.2 Horizontal : 0.8MHz/Div    Vertical: 1dB/Div

**D. TEST CIRCUIT:**



**E. Outline Drawing:**

Unit: mm



- Pin No. Functions
1. Input
  2. Chip carrier - ground
  3. Output - sound
  4. Output - picture
  5. Output - picture

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

△ : Product / Year Code

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