



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Approval Sheet For Product Specification

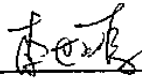
Issued Date:

Product Name: IF SAW Filter 44 MHz

TST Parts No.: TB0486A

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

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

Checked by: Kazuma Lee 

Approval by: Francis Chen 

Date: 2008/12/15



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## IF SAW Filter 44MHz(BW=5.6MHz) for digital TV

MODEL NO.: TB0486A

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

RoHS Compliant

Lead-free soldering

#### 2 .Amplitude Characteristics

	MIN.	TYP.	MAX.	
Center frequency $f_c$ Center frequency between 10dB point	-	44.0	-	MHz
Insertion attenuation Reference level for the Following data 44.08(44.00) MHz	12.0	14.0	16.0	dB
Amplitude ripple 41.75-46.41 (41.67-46.33) MHz	0.0	0.6	1.0	dB
3dB Pass Bandwidth	5.4	5.6	5.8	MHz
30dB Pass Bandwidth	7.0	7.3	7.6	MHz
Lower side lobe 35.08-38.08 (35.00-38.00) MHz	42.0	48.0	-	dB
38.08-40.13 (38.00-40.05) MHz	38.0	45.0	-	dB
Upper side lobe 48.03-50.33 (47.95-50.25) MHz	37.0	45.0	-	dB
50.33-55.08 (50.25-55.00) MHz	41.0	50.0	-	dB
Reflected Wave Signal Suppression	42.0	52.0		dB
Feed through Signal Suppression	50.0	56.0		dB
Group delay ripple 41.75...46.41 (41.67...46.33) MHz	-	40	-	ns
Impedance at 44.08 MHz Input Impedance	-	1.5    15.4	-	$k\Omega$    pF
Output Impedance		1.3    4.6		$k\Omega$    pF
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

### C. Frequency Characteristics :

#### 1. S21 Response: (span 20MHz)

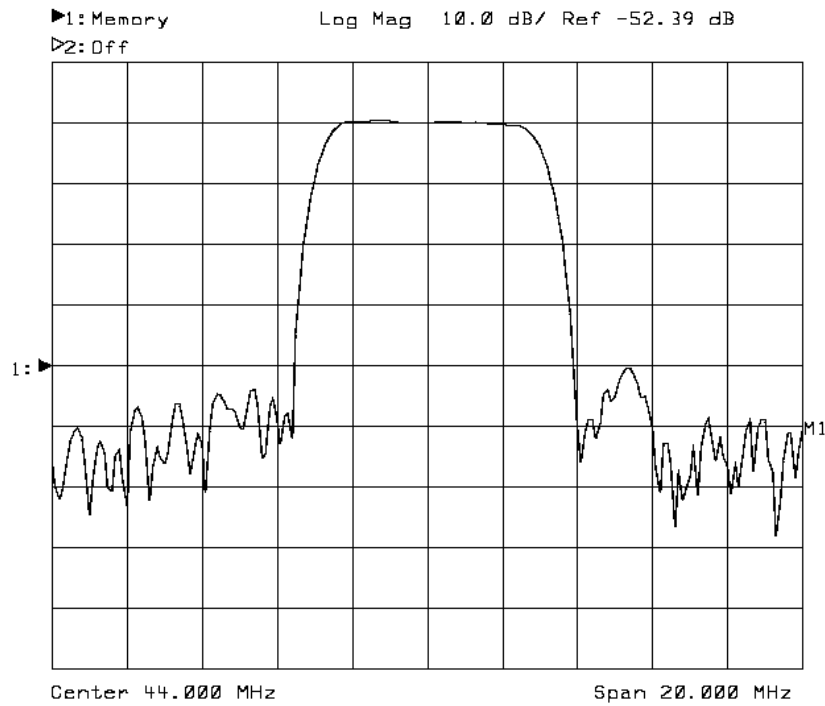


Fig.1 Horizontal : 2MHz/Div    Vertical: 10B/Div

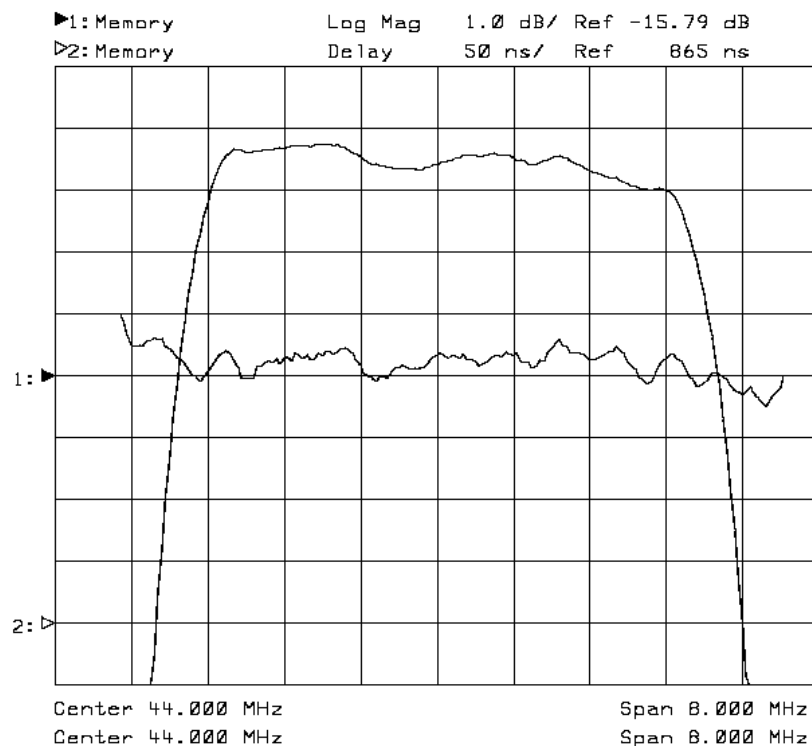
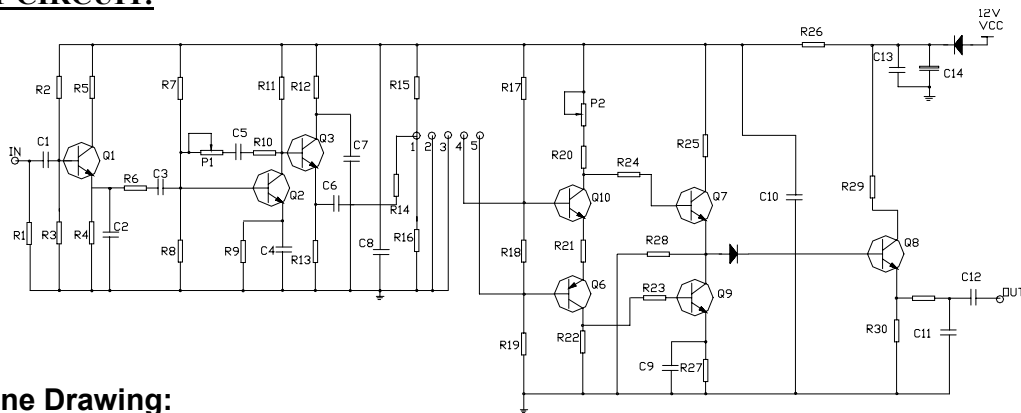


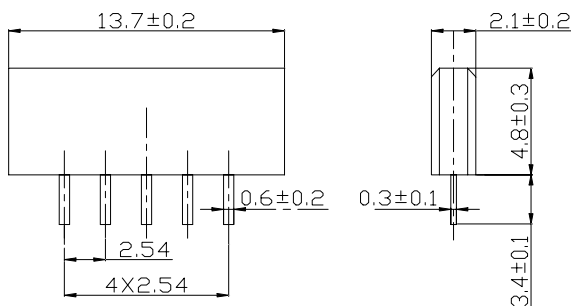
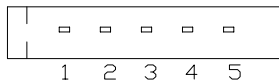
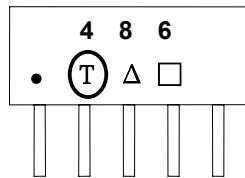
Fig.2 Horizontal : 0.8MHz/Div    Vertical: 1dB/Div

**D. TEST CIRCUIT:**



**E. Outline Drawing:**

Unit: mm



Pin No. Functions

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

□ : 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>