



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification


Issued Date:

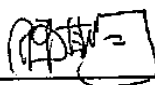
Product Name: SAW IF Filter 36.125MHz for Digital Cable TV

TST Parts No.: TB0176A

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

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

Checked by: \_\_\_\_\_ Kazuma lee 

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

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



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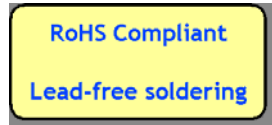
## IF SAW Filter 36.125 MHz

MODEL NO.: TB0176A

REV. NO.:7

### A. FEATURES:

- 1. IF Filter for Digital Cable TV



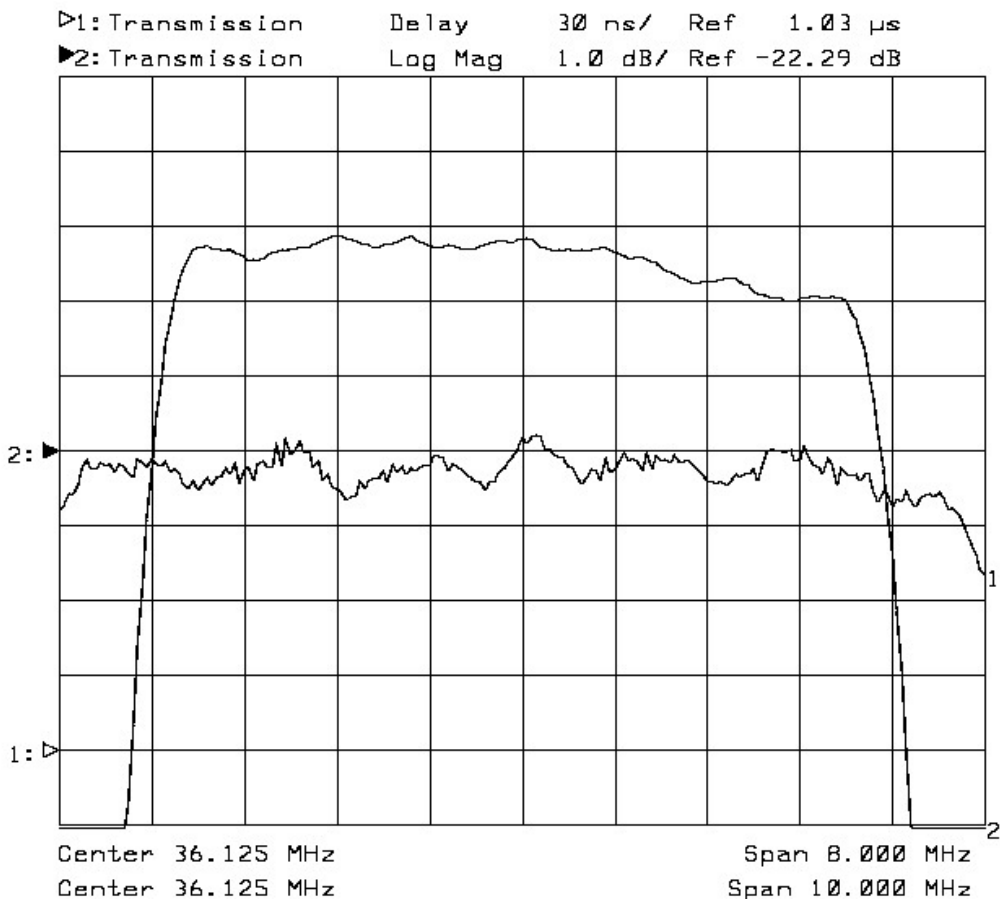
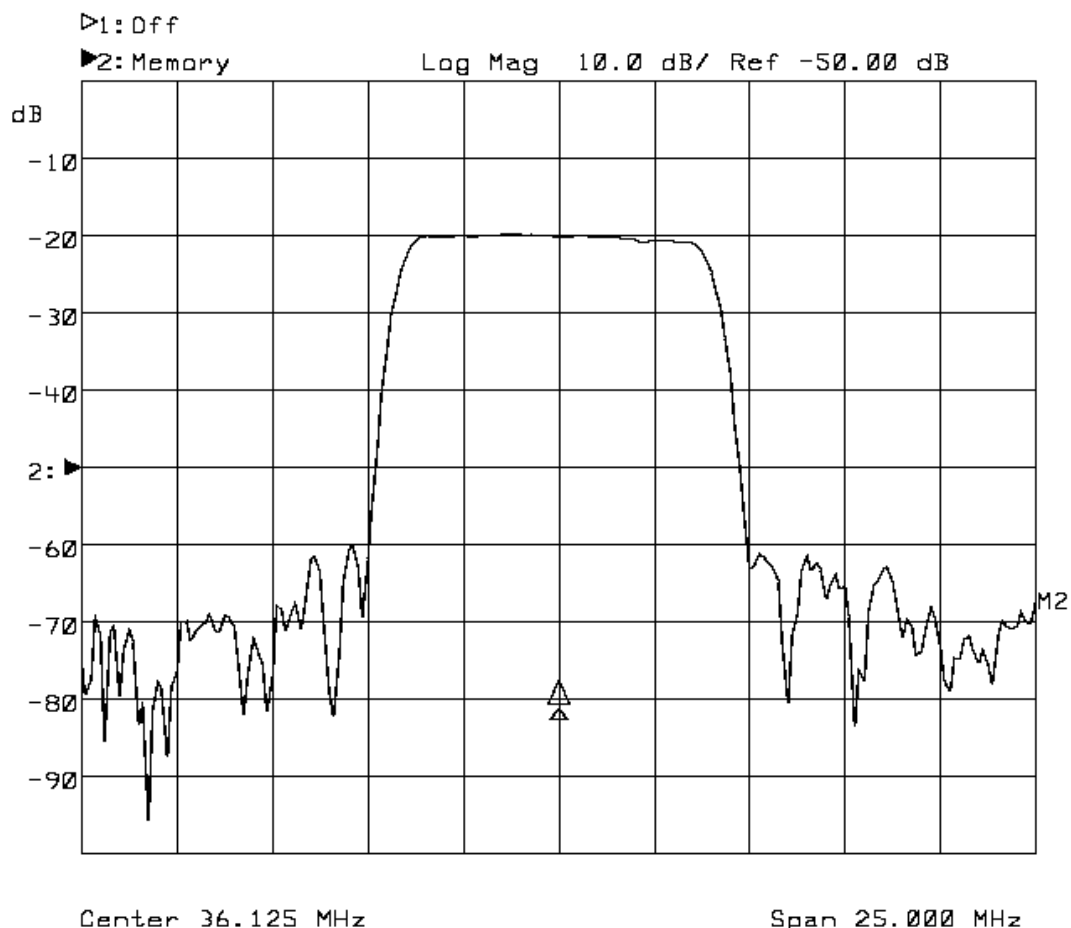
### B. MAXIMUM RATING:

- 1. DC voltage: 12 V.
  - 2. AC voltage: 10 V.
  - 3. Storage Temperature: -40°C to +85 °C.
  - 4. Operating Temperature: -25 °C to +65 °C
- Terminating source impedance  $Z_S=50\Omega$   
 Terminating load impedance  $Z_L=2k\Omega//3\text{ pF}$

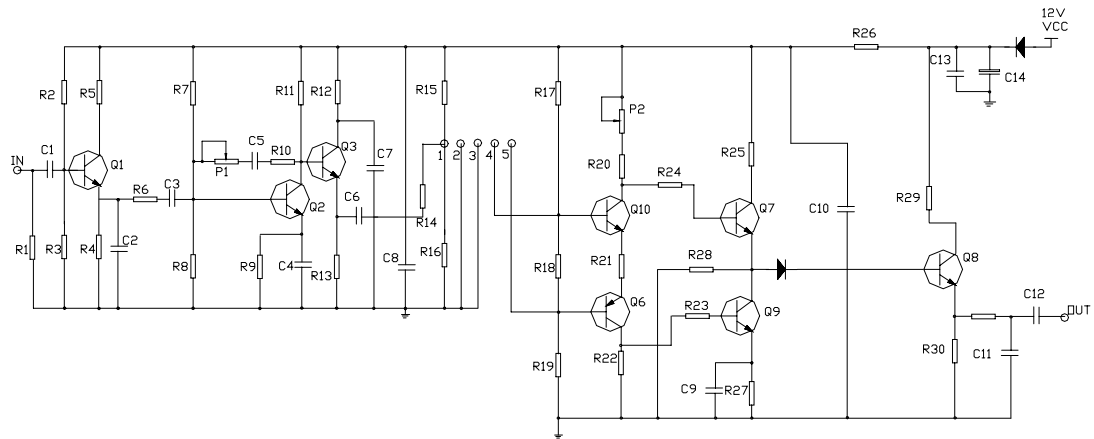
### C. ELECTRICAL CHARACTERISTICS:

FREQUENCY(MHz)	VALUE			unit
	Min	Typ.	Max.	
Center frequency	36.00	36.125	36.25	MHz
Insertion attenuation 36.13 MHz	19.7	21.7	23.7	dB
Reference Frequency 36.13 MHz	-	0	-	dB
Pass bandwidth $B_{3dB}$	7.8	8.0	8.2	MHz
Pass bandwidth $B_{30dB}$	9.2	9.5	9.8	MHz
Relative attenuation 32.32 MHz	-0.3	1.2	2.7	dB
39.93 MHz	-0.1	1.4	2.9	dB
32.13 MHz	1.2	3.2	5.2	dB
40.13 MHz	1.2	3.2	5.2	dB
31.25 MHz	32	45.0	-	dB
47.25 MHz	40	50.0	-	dB
Lower sidelobe: 25.00-29.50 MHz	36.0	43.0	-	dB
29.50-31.25 MHz	32.0	39.0	-	dB
Upper sidelobe: 41.00- 44.00 MHz	31.0	38.0	-	dB
44.00- 50.00 MHz	36.0	44.0	-	dB
Reflected wave signal suppression	42.0	52.0	-	dB
Feedthrough signal suppression	50.0	56.0	-	dB
Group delay ripple (p-p) 32.13 – 40.13 MHz	-	40	-	ns
Impedance at 36.13 MHz Input: $Z_{in} = R_{in} // C_{in}$ Output: $Z_{out} = R_{out} // C_{out}$	3.6 // 13.0 2.9 // 3.9			$k\Omega // pF$ $k\Omega // pF$
Temperature coefficient $TC_f$	-	-72	-	ppm/K

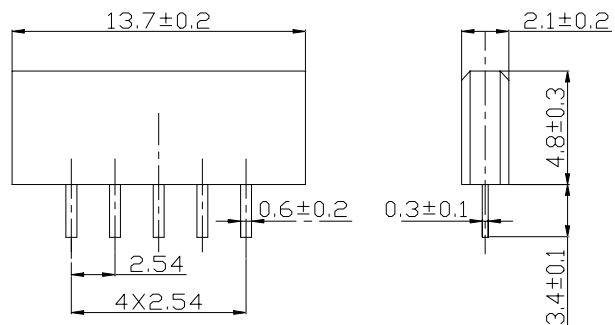
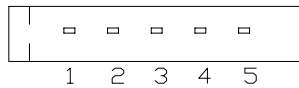
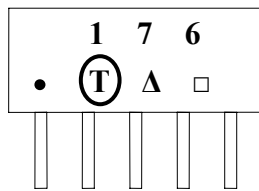
D.FREQUENCY CHARACTERISTICS:



## E. TEST CIRCUIT



## F. OUTLINE DRAWING:



### Pin No. Functions

1. Input
2. input - ground
3. Chip carrier - ground
4. Output
5. Output

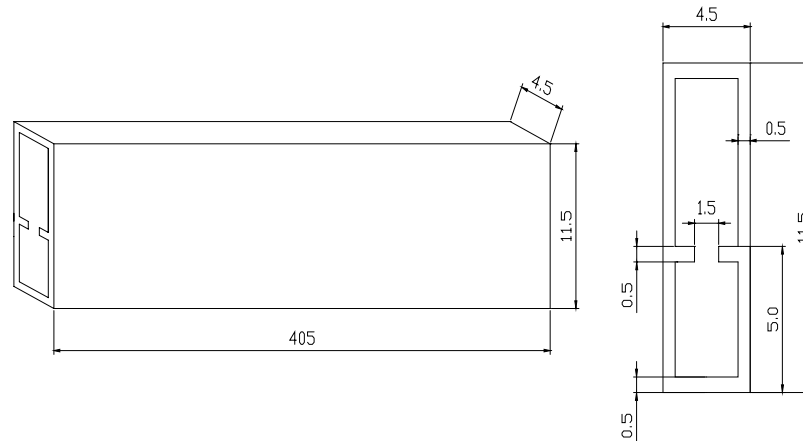
□ : Week Code (Follow the table from planner each year)

△ : Product / Year Code

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

**G. PACKING:**

Inside package:

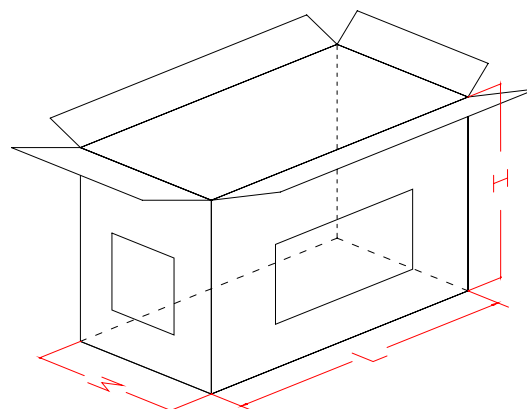


Dimensions of inside package:

Unit: mm

L	W	H	Products contained
405	4.50	11.50	28pcs

Dimensions of outside box:



Unit: mm

L	W	H	Inside box contained
490	260	190	12000PCS

## H. RECOMMENDED REFLOW PROFILE\_:

