



# TAI-SAW TECHNOLOGY CO., LTD.

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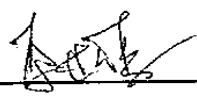
## Product Specifications Approval Sheet

Product Description: SAW IF Filter 38MHz for Video

TST Part No.: TB0796A

Customer Part No.: \_\_\_\_\_

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

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

Approved by: \_\_\_\_\_ Francis Chen 

Date: \_\_\_\_\_ 2009, 08/05

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 38 MHz

MODEL NO.: TB0796A

REV. NO.:1

### A. FEATURES:

1. IF Filter for Video

### 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:

Attenuation ( ref. : 36.5 MHz): (Switching pin2 connected to ground)

	MAX.	TYP.	MIN.	
Reference level for the Following data 36.50 MHz	-	-13.9	-15.9	dB
Adjacent picture carrier 30.00MHz	-44.0	-49.0	-	dB
31.00MHz	-43.0	-50.0	-	dB
Sound carrier 31.50 MHz	-45.0	-53.0	-	dB
32.00 MHz	-35.0	-45.0	-	dB
32.50 MHz	-35.0	-45.0	-	dB
Color carrier 33.57 MHz	0.0	-1.5	-3.0	dB
Picture carrier 38.00 MHz	-4.0	-5.5	-7.0	dB
Adjacent sound carrier 39.50 MHz	-42.0	-50.0	-	dB
40.00 MHz	-40.0	-45.0	-	dB
40.50 MHz	-40.0	-45.0	-	dB
Lower side lobe 25.0-30.0 MHz	-40.0	-44.0	-	dB
Upper side lobe 39.5-45.0 MHz	-38.0	-40.0	-	dB
Reflected Wave Signal Suppression	-42.0	-52.0		dB
Feed through Signal Suppression	-50.0	-56.0		dB
Group delay (ref:38.0MHz)				
36.00 MHz	-	-50	-	ns
33.57 MHz		80		ns
Impedance at 36.50 MHz				
Input Impedance	-	1.1  19.3	-	K $\Omega$   pF
Output Impedance	-	1.5  5.1	-	K $\Omega$   pF
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

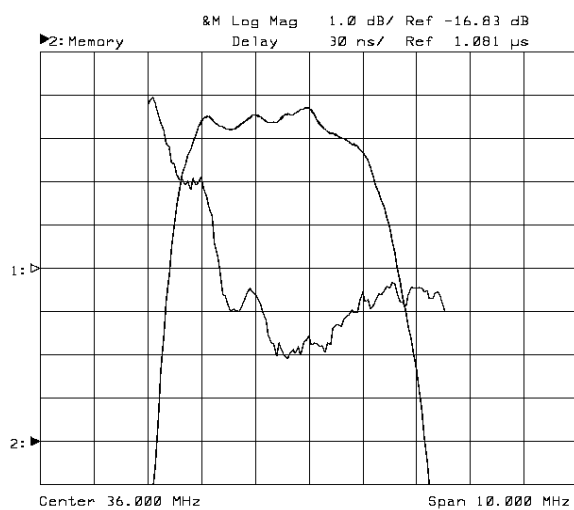
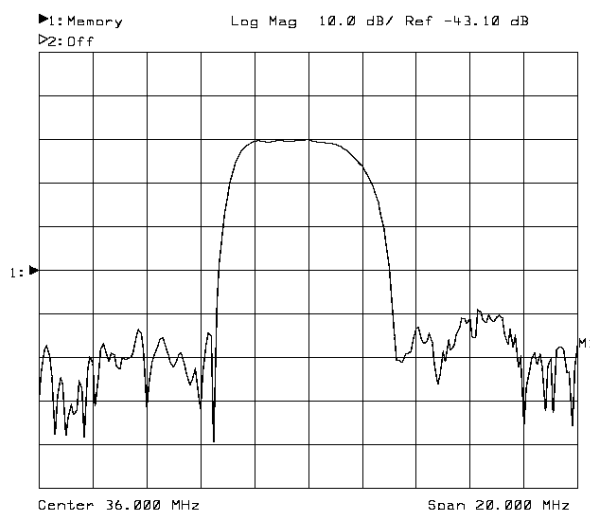
RoHS Compliant  
Lead free  
Lead-free soldering

(Switching pin2 connected to pin 1)

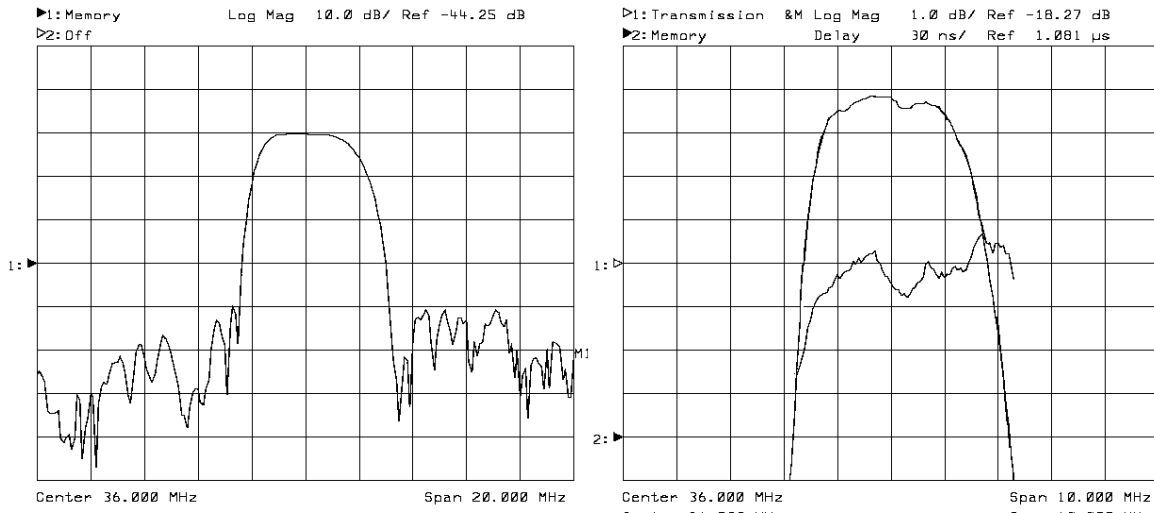
	MAX.	TYP.	MIN.	
Reference level for the Following data 36.50 MHz	-	-15.9	-17.9	
Adjacent picture carrier 32.00MHz	-45.0	-55.0	-	dB
Sound carrier 33.50 MHz	-30.0	-40.0	-	dB
Color carrier 34.42 MHz	-1.3	-2.8	-4.3	dB
Picture carrier 38.00 MHz	-3.8	-5.3	-6.8	dB
Adjacent sound carrier 39.50 MHz	-43.0	-50.0	-	dB
Lower side lobe 25.0-32.0 MHz	-40.0	-43.0	-	dB
Upper side lobe 39.5-45.0 MHz	-37.0	-40.0	-	dB
Reflected Wave Signal Suppression	-42.0	-52.0		dB
Feed through Signal Suppression	-50.0	-56.0		dB
Group delay ripple(p-p)	-	60	-	ns
Impedance at 36.50 MHz				
Input Impedance	-	1.5  13.7	-	K $\Omega$   pF
Output Impedance	-	1.5  5.1	-	K $\Omega$   pF
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

#### D.FREQUENCY CHARACTERISTICS:

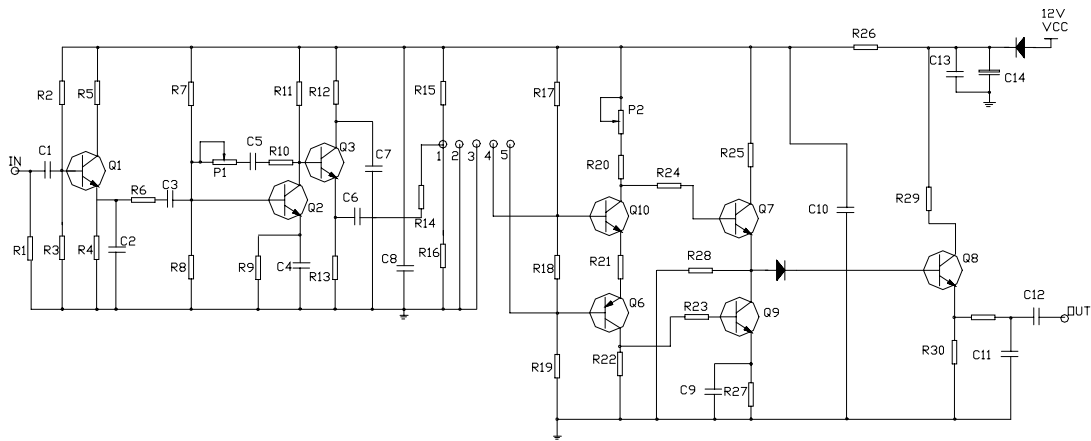
Characteristics of channel 1 (Switching pin2 connected to ground)



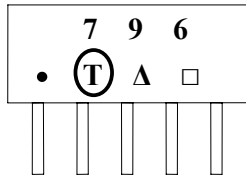
## Characteristics of channel 2 (Switching pin2 connected to pin1)



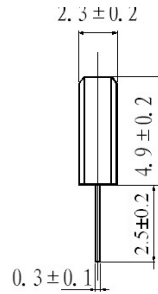
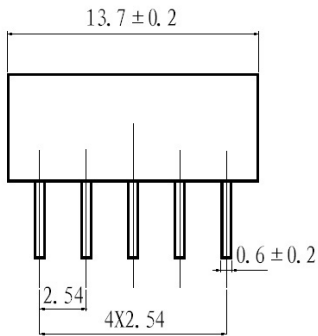
## E. TEST CIRCUIT



E. Outline Drawing:



1 2 3 4 5



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