

# TAI-SAW TECHNOLOGY CO., LTD.

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

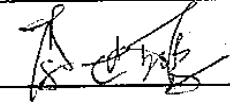
Issued Date:

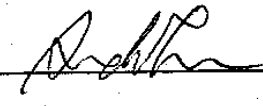
Product Name: SAW IF Filter 38.9 & 33.9 MHz for Audio Applications

TST Parts No.: TB0809A

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

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

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

Approval by: \_\_\_\_\_ Andrew Lee 

Date: \_\_\_\_\_ 10 / 23 / 2009

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 33.9 & 38.9 MHz for Audio Applications

MODEL NO.: TB0809A

REV. NO.:1

### A. FEATURES:

1. TV IF Filter for Audio Applications

RoHS Compliant  
Lead free  
Lead-free soldering

### B. MAXIMUM RATING:

Operating Temperature Range	T <sub>A</sub>	-25~65	°C	
Storage Temperature Range	T <sub>stg</sub>	-40~85	°C	
DC voltage	V <sub>DC</sub>	12	V	Between any terminals
AC voltage	V <sub>PP</sub>	10	V	Between any terminals

### C. ELECTRICAL CHARACTERISTICS:

- Reference temperature: Ta=25°C  
Terminating source impedance Z<sub>S</sub>=50Ω  
Terminating load impedance Z<sub>L</sub>=2kΩ//3 pF

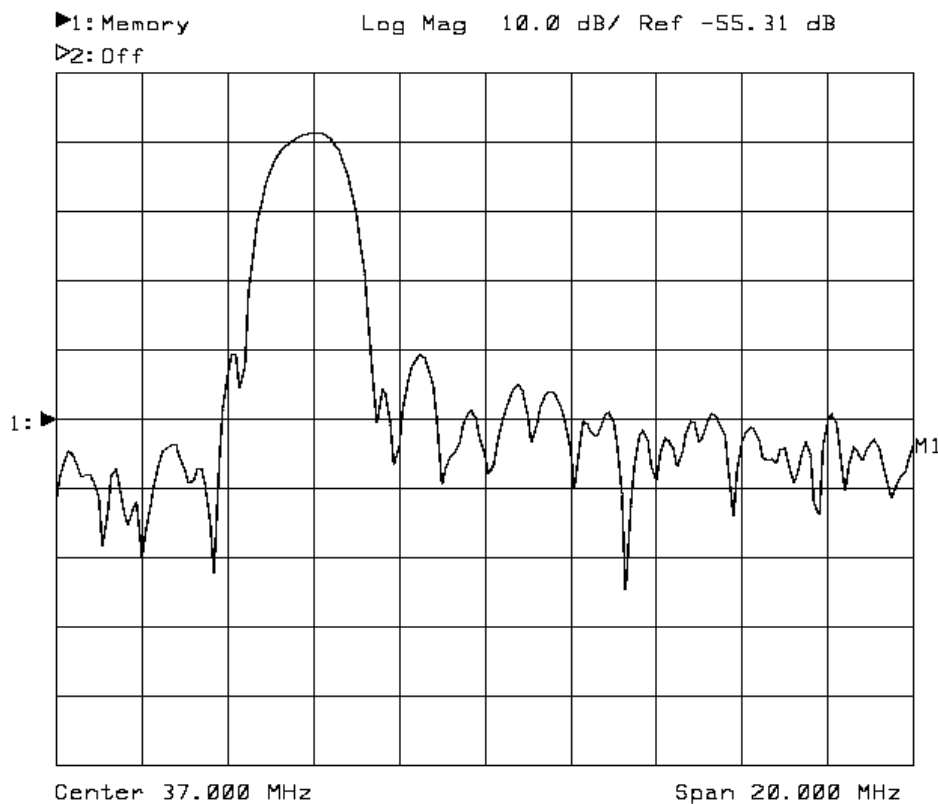
(switching pin 2 connected to ground)

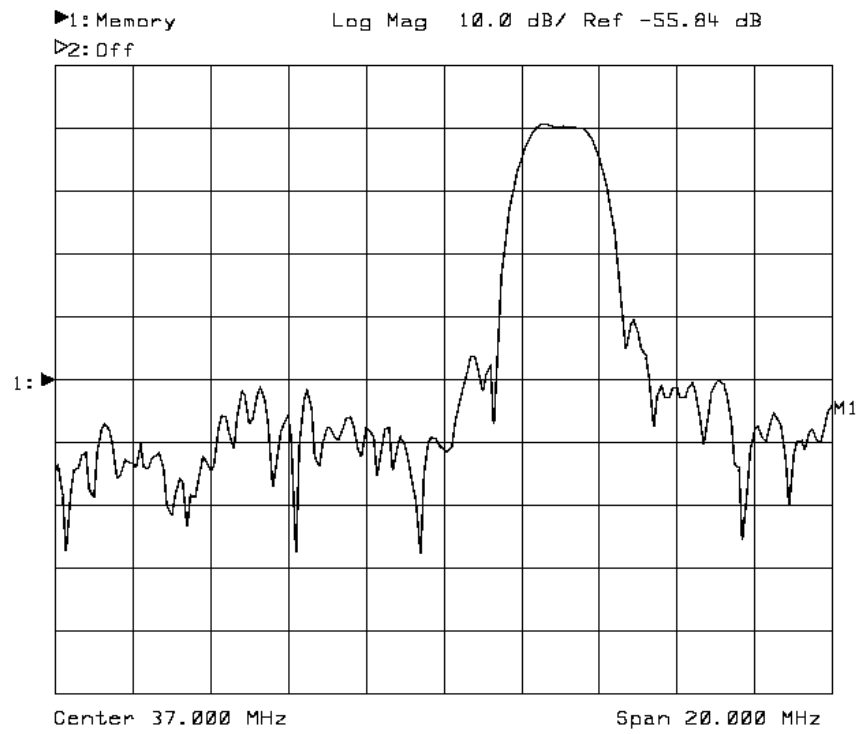
FREQUENCY(MHz)		VALUE			unit
		Min	Typ.	Max.	
Insertion attenuation	40.40 MHz	-	16.3	17.8	dB
Reference Frequency	39.75 MHz	-1.8	-0.3	1.2	dB
	38.40 MHz	25.0	33.0	-	dB
Picture carrier	33.90MHz	37.0	48.0	-	dB
Adjacent picture carrier	41.90 MHz	26.0	40.0	-	dB
Adjacent sound carrier	32.40 MHz	33.0	40.0	-	dB
Lower sidelobe:	25.00-33.90 MHz	33.0	40.0		dB
Upper sidelobe:	41.90-45.00 MHz	26.0	38.0		dB
Reflected wave signal suppression		42.0	50.0	-	dB
Feedthrough signal suppression		50.0	56.0	-	dB
Group delay ripple (p-p)		-	50	-	ns
Temperature coefficient	TC	-	-72	-	ppm/K

(switching input pin 2 connected to input pin 1)

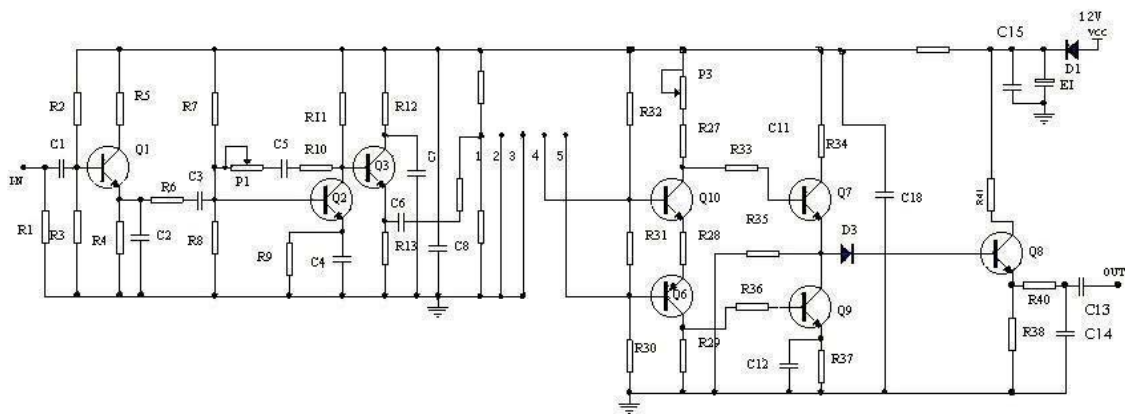
FREQUENCY(MHz)		VALUE			unit
		Min	Typ.	Max.	
Insertion attenuation	33.40 MHz	-	15.8	17.3	dB
Sound carrier B/G-NICAM	33.05 MHz	-2.0	-0.5	1.0	
Sound carrier I	32.90 MHz	-1.9	-0.4	1.1	dB
Sound carrier D/K,L	32.40MHz	-0.4	1.1	2.6	dB
Color carrier	34.47 MHz	23.0	30.0	-	dB
Picture carrier	38.90 MHz	34.0	41.0	-	dB
Adjacent picture carrier	30.90 MHz	37.0	45.0	-	dB
Adjacent sound carrier	40.40 MHz	36.0	45.0	-	dB
	40.90 MHz	33.0	38.0	-	dB
	41.40 MHz	38.0	50.0	-	dB
Lower sidelobe:	25.00-30.90 MHz	36.0	42.0	-	dB
Upper sidelobe:	40.40-45.00 MHz	31.0	38.0	-	dB
Reflected wave signal suppression		42.0	50.0	-	dB
Feedthrough signal suppression		50.0	56.0	-	dB
Group delay ripple (p-p)		-	50	-	ns
Temperature coefficient	TC	-	-72	-	ppm/K

#### D. FREQUENCY CHARACTERISTICS:

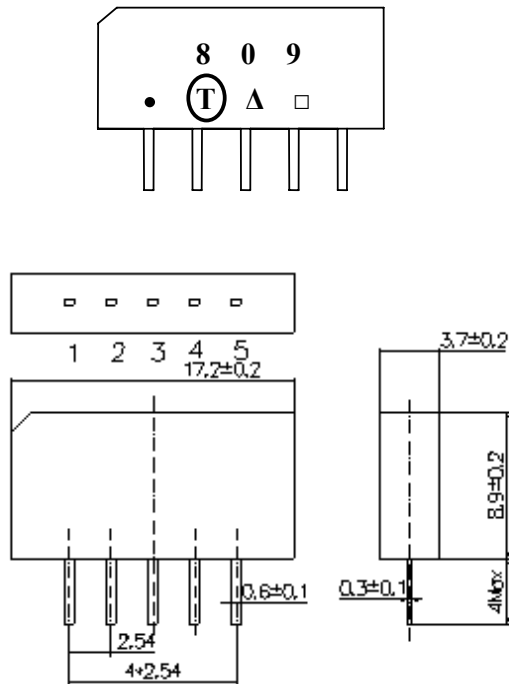




## E. TEST CIRCUIT



## E. Outline Drawing:



### 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>