



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 Web: www.taisaw.com

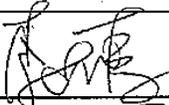
Product Specifications Approval Sheet

Product Description: 36MHz 7.8MHz BW 13.8x4.9mm Plastic DIP SAW IF Filter

TST Part No.: TB1016A

Customer Part No.: _____

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

Checked by: _____ Kazuma Lee 

Approved by: _____ Francis Chen 

Date: _____ 08/11/2011

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 36 MHz

MODEL NO.: TB1016A

REV. NO.:1

A. FEATURES:

1. IF Filter for Digital 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:

Attenuation (ref. : 36 MHz):

Characteristics of channel 1 (switching pin 2 connected to ground)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

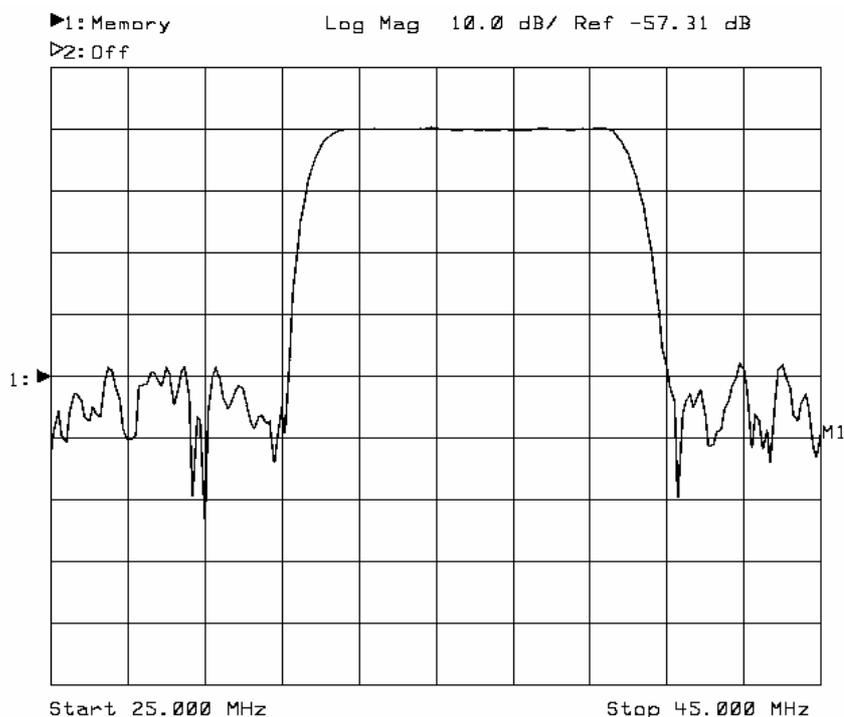
Items	Conditions	Specification			Unit
		Min.	Typ.	Max.	
Insertion Loss	36.00 MHz	17.3	19.3	21.3	dB
Pass bandwidth	B3dB	-	7.8	-	MHz
	B15dB	-	9.0	-	MHz
	B30dB	-	9.5	-	MHz
Lower sidelobe	25.00-31.00	35.0	40.0	-	dB
Upper sidelobe	41.00- 45.00	31.0	38.0	-	dB
Reflected wave signal suppression 1,1 ms ... 6,0 ms after main pulse		40.0	48.0	-	
Feedthrough signal suppression 1,3 ms ... 1,2 ms before main pulse		-	55.0	-	
Group delay ripple	32.10~39.90 MHz	-	50	-	ns
Input Impedance at 36.0 MHz		-	2.0 17.1	-	K Ω pF
Output Impedance at 36.0 MHz		-	2.1 4.7	-	K Ω pF
Temperature coefficient		-	-72	-	Ppm/°C

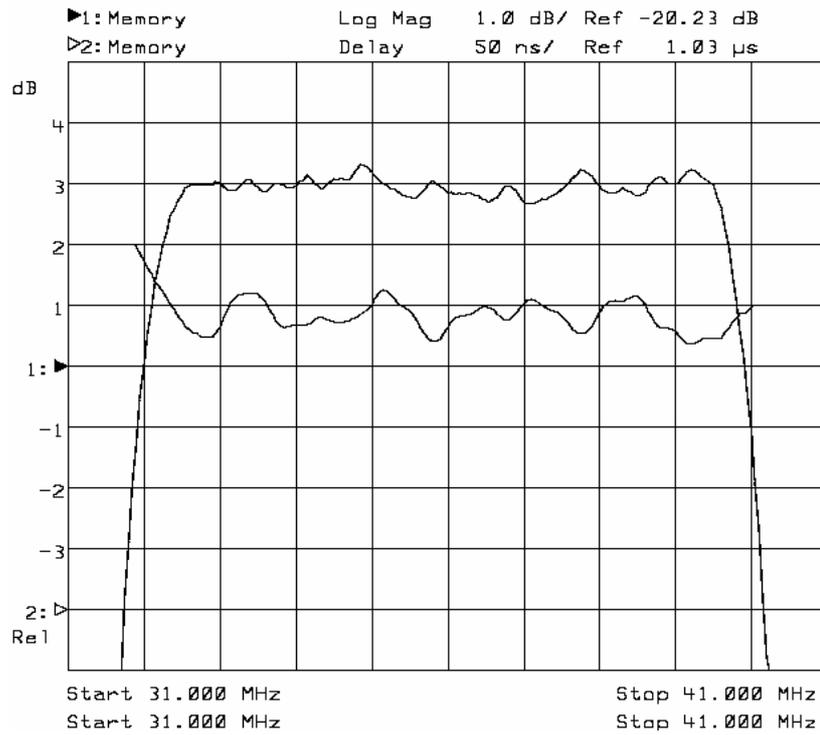
Characteristics of channel 2 (switching pin 2 connected to pin 1)

Items	Conditions	Specification			Unit
		Min.	Typ.	Max.	
Insertion Loss	36.00 MHz	18.5	20.5	22.5	dB
Pass bandwidth	B3dB	-	6.9	-	MHz
	B15dB	-	8.0	-	MHz
	B30dB	-	8.5	-	MHz
Lower sidelobe	25.00-31.50	35.0	40.0	-	dB
Upper sidelobe	40.60- 45.00	31.0	38.0	-	dB
Reflected wave signal suppression 1,1 ms ... 6,0 ms after main pulse		40.0	48.0	-	
Feedthrough signal suppression 1,3 ms ... 1,2 ms before main pulse		-	48.0	-	
Group delay ripple	32.60~39.40 MHz	-	50	-	ns
Input Impedance at 36.0 MHz		-	2.3 17.8	-	K Ω pF
Output Impedance at 36.0 MHz		-	2.1 4.7	-	K Ω pF
Temperature coefficient		-	-72	-	Ppm/ $^{\circ}$ C

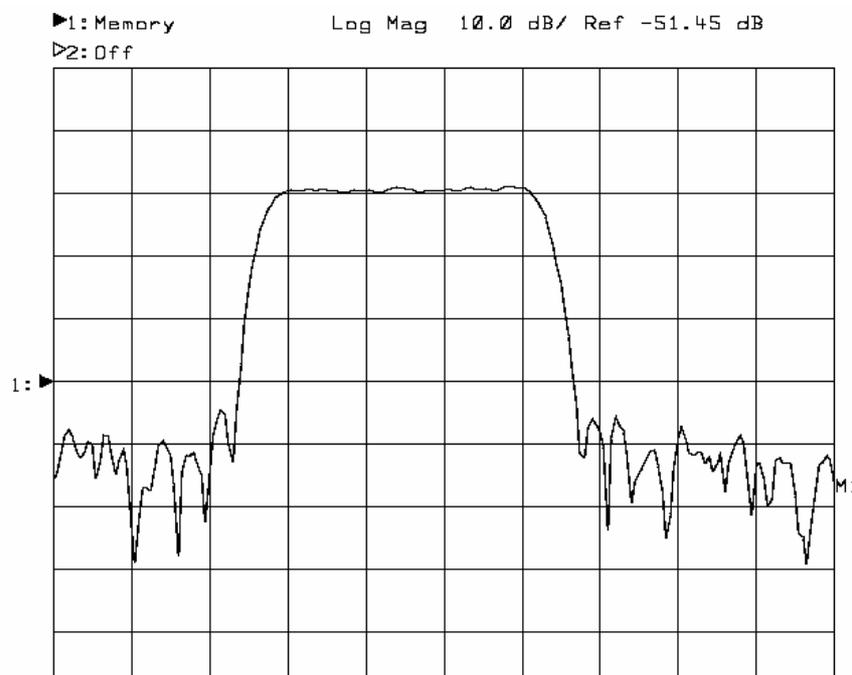
D.FREQUENCY CHARACTERISTICS:

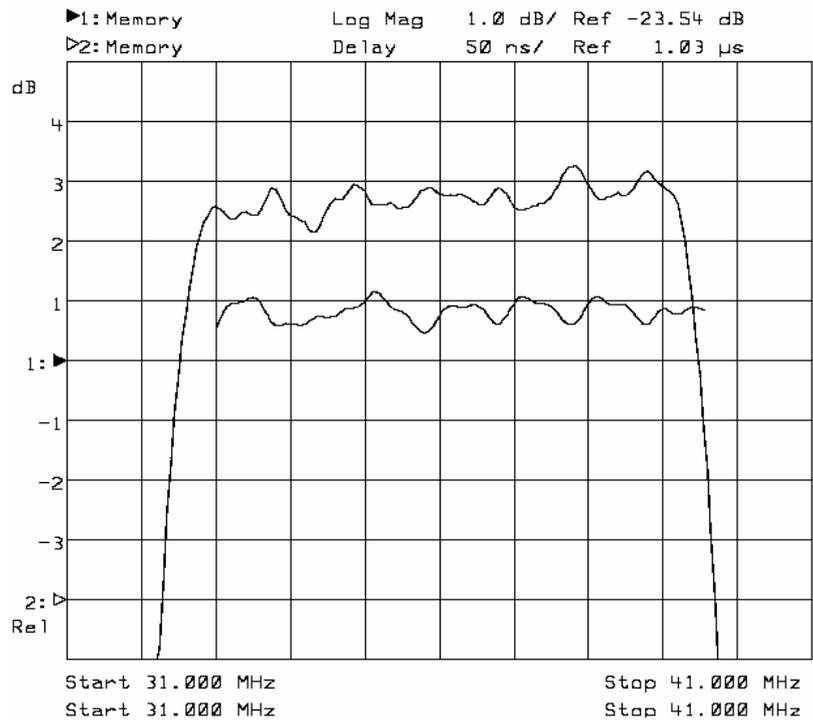
Characteristics of channel 1 (switching pin 2 connected to ground)



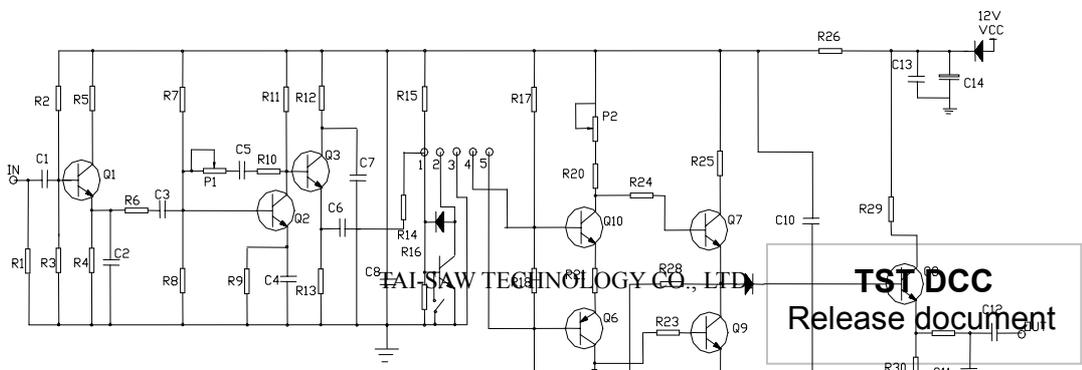


Characteristics of channel 2 (switching pin 2 connected to pin 1)

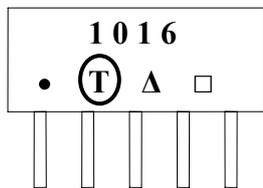




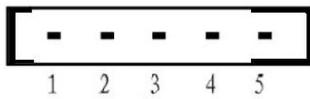
E. TEST CIRCUIT



E. Outline Drawing:

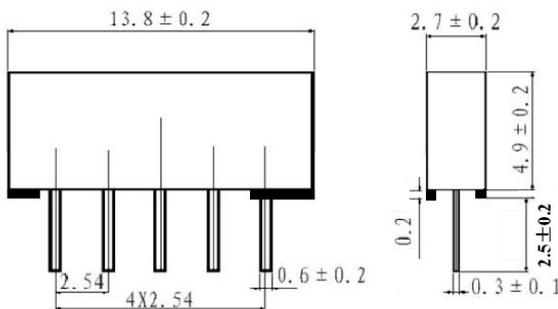


- | Pin No. | Functions |
|---------|---------------------|
| 1. | Input |
| 2. | Switching-Input |
| 3. | Chip carrier-Ground |
| 4. | Output |
| 5. | Output |



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

△ : Product / Year Code



Year	2009 2013	20106 2014	2011 2015	2012 2016
Product Code	B	b	<u>B</u>	<u>b</u>