

## TAI-SAW TECHNOLOGY CO., LTD. No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

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**

F	Product Description	on: 942MHz 24MHz	BW SMD 7.0 x 5.0 mm	SAW IF Filter
Т	TST Parts No.: Ti	30841A		
C	Customer Parts N	lo.:		
	Customer signatu	re required		
	Company:			
	Division:			
	Approved by :			
Checked by:		Kazuma Lee	1	
Approval by:		Bob Chau	Melm	
Date:		11/18/2016		<u> </u>

- 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 942MHz SMD 5.0X7.0mm

MODEL NO.: TB0841A REV. NO.2

#### A. MAXIMUM RATING:

1. 1. Operating temperature range: -40 ℃ to 85 ℃

2. Storage temperature range: -40 °C to 85 °C

3. Input Power Level: 10 dBm 4. Maximum DC Voltage: 10V

**RoHS Compliant** Lead free Lead-free soldering

Electrostatic Sensitive Device

#### **B. ELECTRICAL CHARACTERISTICS:**

1. Ambient Temperature: 25 °

Characteristics		Value			
		Min.		Max.	
Center frequency F <sub>C</sub>	MHz	-	942	-	
Maximum Insertion loss I.L.	dB	1	27.5	30.0	
3dB Band Width	MHz	24.0	27.8	-	
30B Band Width	MHz	1	30	33	
Passband Ripple in F <sub>C</sub> ±10 MHz	dB	-	0.5	1.2	
Group Delay in F <sub>C</sub> ±10 MHz	nsec	-	40	120	
Absolute delay	usec	-	0.80	-	
Single Input Impedance	Ohm	-	50	-	
Single Output Impedance	Ohm	-	50	-	
Temperature Coefficient	ppm/°C²	-	-0.036	-	

#### C. FREQUENCY CHARACTERISTICS:

#### 1. Wide band response

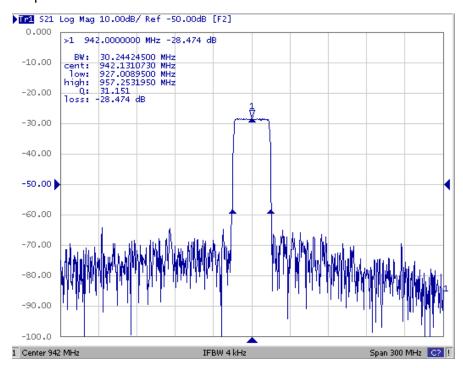


Fig1. Horizontal: 30MHz/Div Vertical: 10dB/Div

#### 2. Pass band & Group Delay response

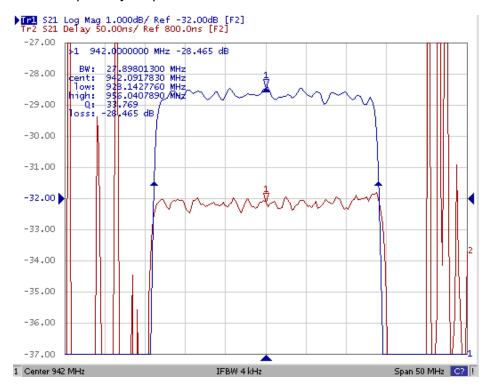
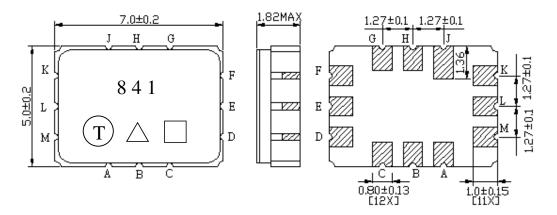


Fig2. Horizontal: 5MHz/Div Vertical: 1dB/Div Vertical: 50ns/Div

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TST DCC
Release document

#### **D. MATCHING CIRCUIT:**



Pin K –RF input

Pin D –RF output

Pin A, B, C, E. F. G, H, J. L.M - Ground

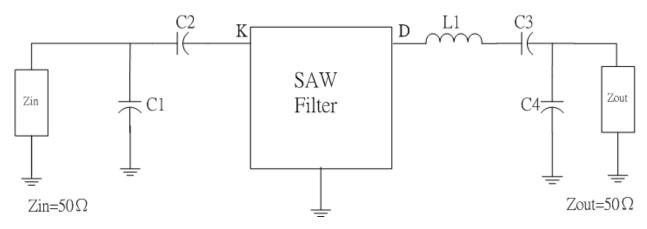
: Week Code

Unit: mm

 $\triangle$  : Product / Year Code

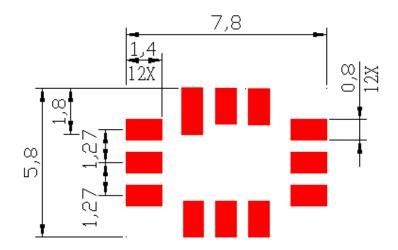
Year	2013	2014	2015	2016
	2017	2018	2019	2020
Product Code	В	b	<u>B</u>	<u>b</u>

#### **E. Measurement Circuit:**



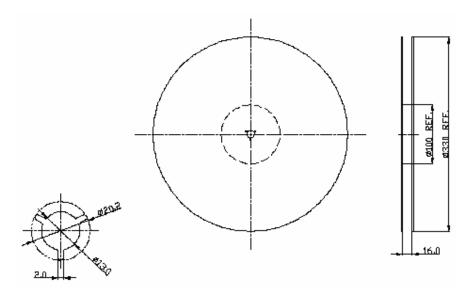
L1=3nH C1=10pF C2=32pF C3=18pF C4=9pF

#### F. PCB FOOTPRINT:

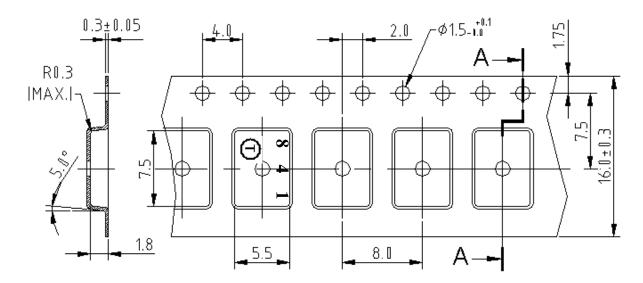


#### G. PACKING:

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



#### 2. TAPE DIMENSION



Feed of direction

#### H. RECOMMENDED REFLOW PROFILE:

- 1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
- 2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
- 3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (20~40sec).
- 4. Time: 2 times.

