



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Approval Sheet For Product Specification

Issued Date: Oct, 22, 2003

Product Name: SAW Filter 942.5 MHz for Mobile Communication

TST Parts No.: TA0218A

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

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Bob Chau

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

Date: \_\_\_\_\_ 10,22,2003



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

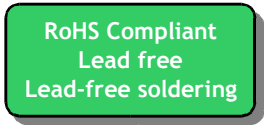
## SAW Filter 942.5 MHz for Mobile Communication

MODEL NO.: TA0218A

REV. NO.:4

### A. MAXIMUM RATING:

1. Operating Temperature: -20°C ~ +85°C
2. Storage Temperature: -40°C ~ +85°C



### B. ELECTRICAL CHARACTERISTICS :

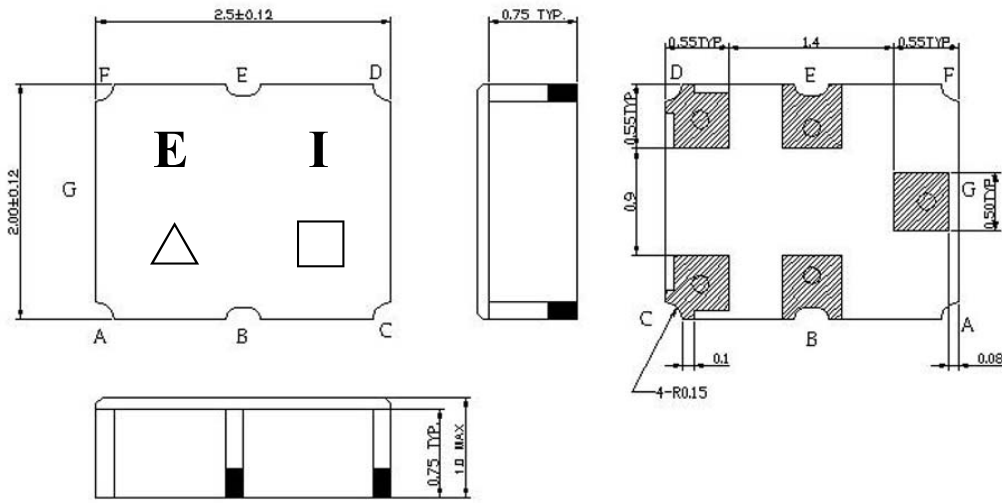
Singled to Balanced operation

Terminating source impedance :  $Z_s = 50 \Omega$

Terminating load impedance :  $Z_L = 150 \Omega // 70 \text{ nH}$

Item	Value			Note
	Min.	Typ.	Max.	
<b>Center frequency</b> $F_c$ MHz	-	942.5	-	-
<b>Insertion loss</b> ( 925~960 MHz) I.L. (dB)	-	2.8	4.0	-
<b>Ripple</b> ( 925~960 MHz) (dB)	-	1.0	2.4	-
<b>Input VSWR</b> ( 925~960 MHz)	-	1.8	2.5	-
<b>Output VSWR</b> ( 925~960 MHz)	-	1.8	2.5	-
<b>Attenuation:</b> ( Reference level from 0 dB)				
0 ~ 880 MHz (dB)	50	52	-	-
880 ~ 905 MHz (dB)	30	44	-	-
905 ~ 915 MHz (dB)	10	27	-	-
980 ~ 1050 MHz (dB)	21	27	-	-
1050 ~ 6000 MHz (dB)	50	54	-	-
<b>Symmetry in band</b> (referenced to the matched operating condition)				
<b>Output amplitude balance</b> ( $ S_{31}/S_{21} $ ) ( 925~960 MHz) (dB)	-1.3	0	1.3	
<b>Output phase balance</b> ( $\Phi(S_{31})-\Phi(S_{21})+180^\circ$ ) ( 925~960 MHz) degree	-10	0	10	

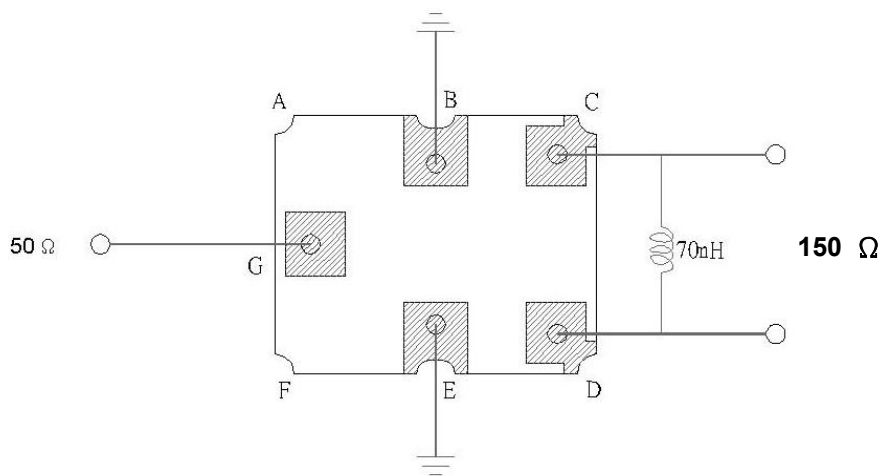
**C. OUTLINE DRAWING:**



**Pin configuration**

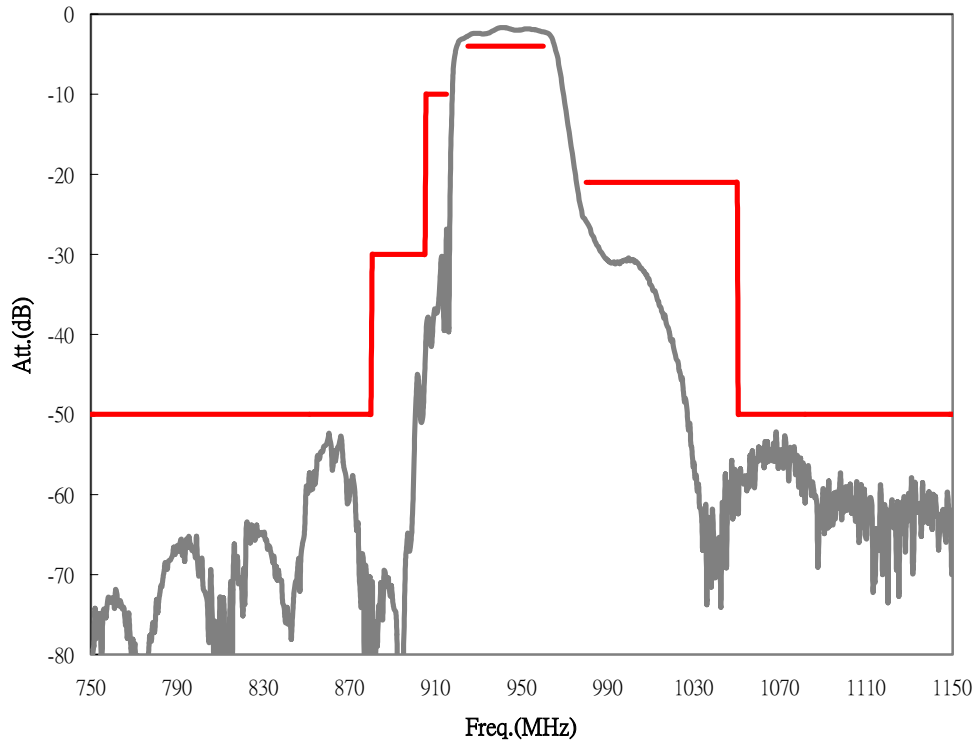
- G : Unbalance input
- C,D : Balance output
- B,E : Ground
- △ : Year code
- : Date code
- Unit : mm

**D. MEASUREMENT CIRCUIT:**

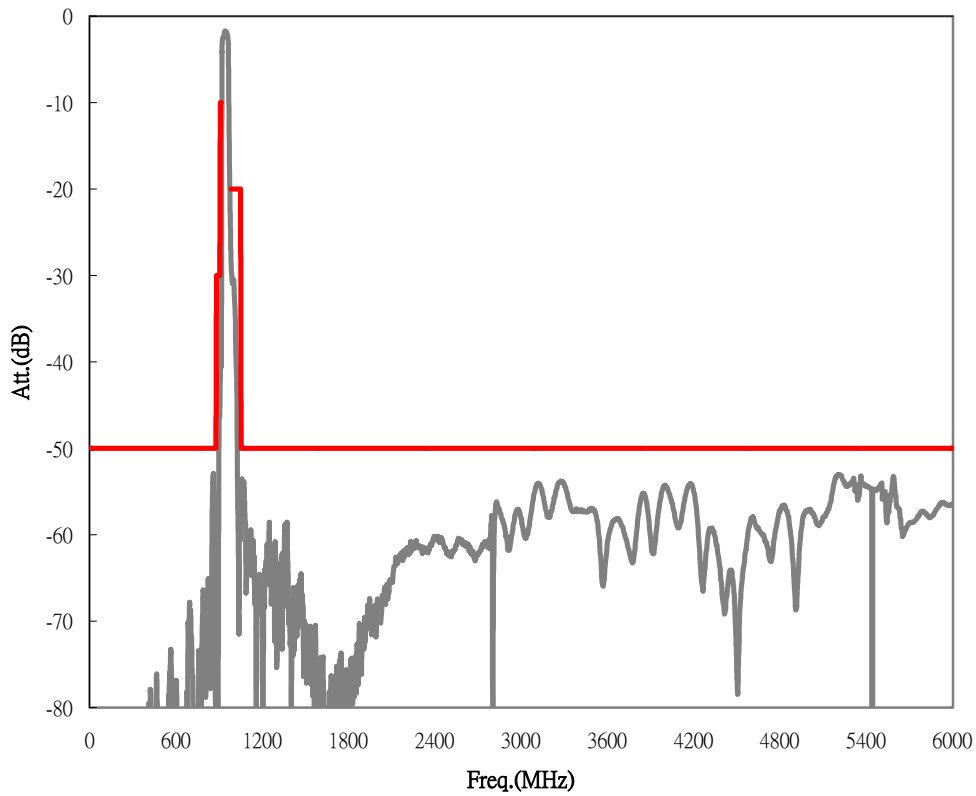


## E. FREQUENCY CHARACTERISTICS:

### 1. Transfer function (25 °C)

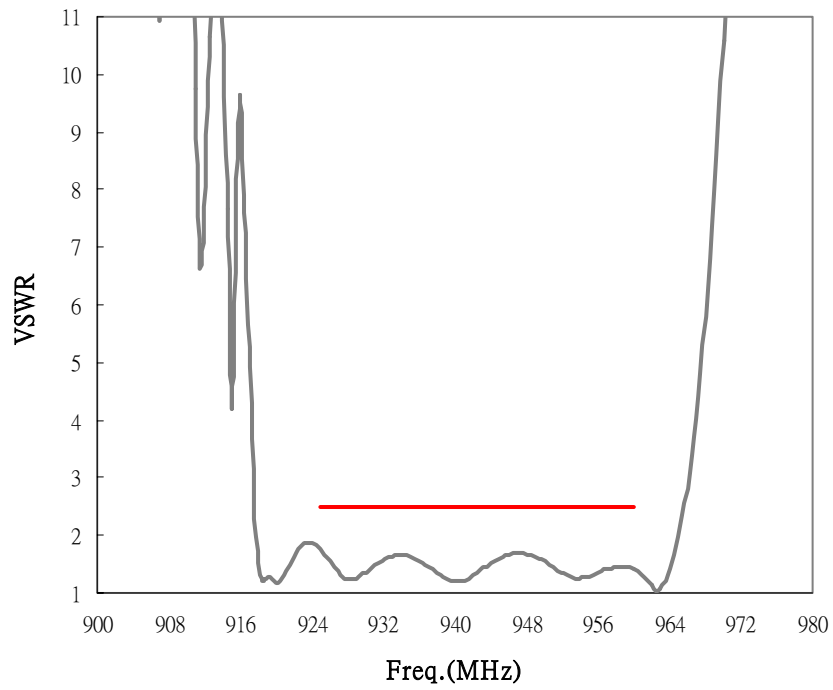


(wideband)

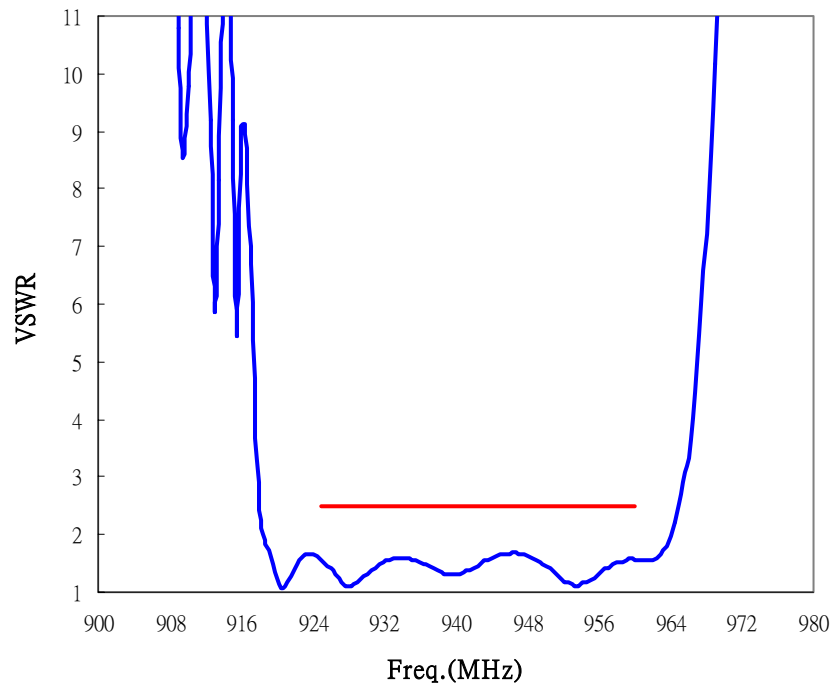


## 2. VSWR (25 °C)

### Unbalance Input

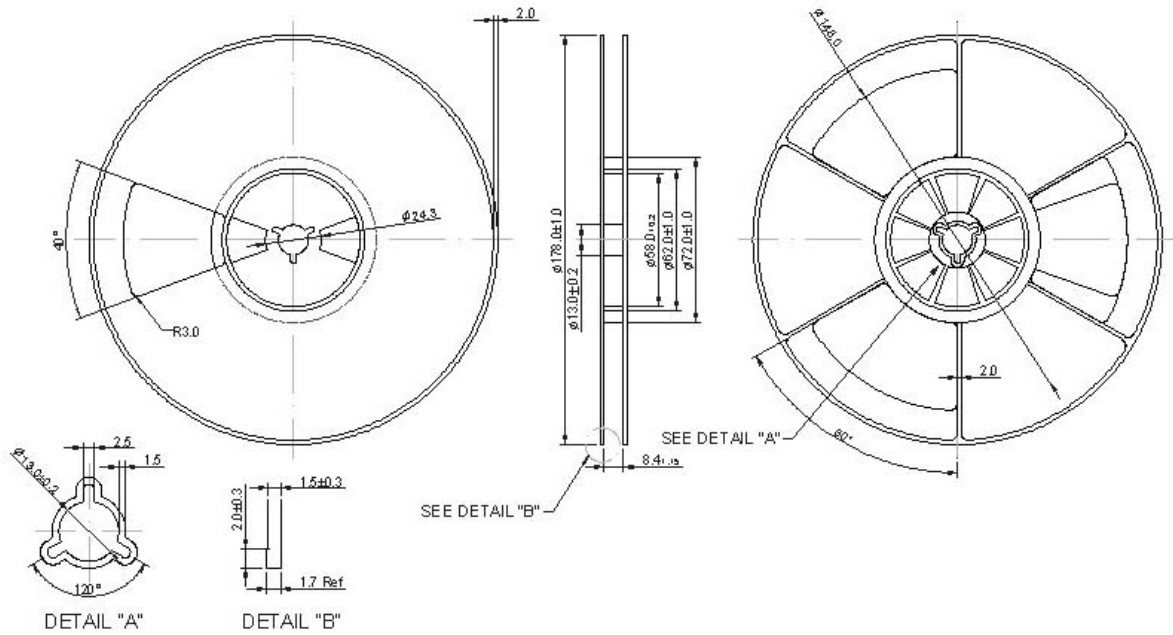


### Balance Output

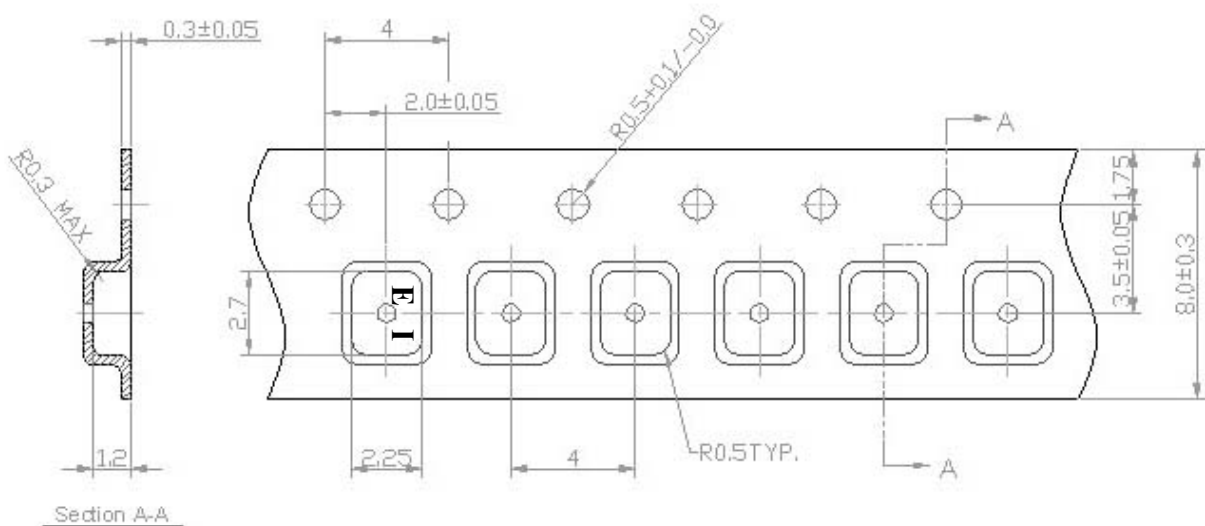


## F. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION



## G. Reflow Profile:

1. Preheating shall be fixed at 140 ~ 160 °C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150 °C shall be 30 seconds min.
3. Heating shall be fixed at 200 °C for 50 ~ 60 seconds and at 230±10 °C peak.

