



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Approval Sheet For Product Specification

Issued Date:

Product Name: SAW Filter 881.5MHz SMD 2.5×2.0 mm

TST Parts No.:TA0321A

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

Company:_____
Division:_____
Approved by :_____
Date:_____

Checked by:\_\_\_\_\_ Elvis Chiu

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

Date:\_\_\_\_\_ 2003/12/30



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## SAW Filter 881.5 MHz

MODEL NO.: TA0321A

REV. No.: 2

### A. MAXIMUM RATING:

1. Operating Temperature: -30°C ~ +85°C
2. Storage Temperature: -40°C ~ +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

Singled to Balanced operation

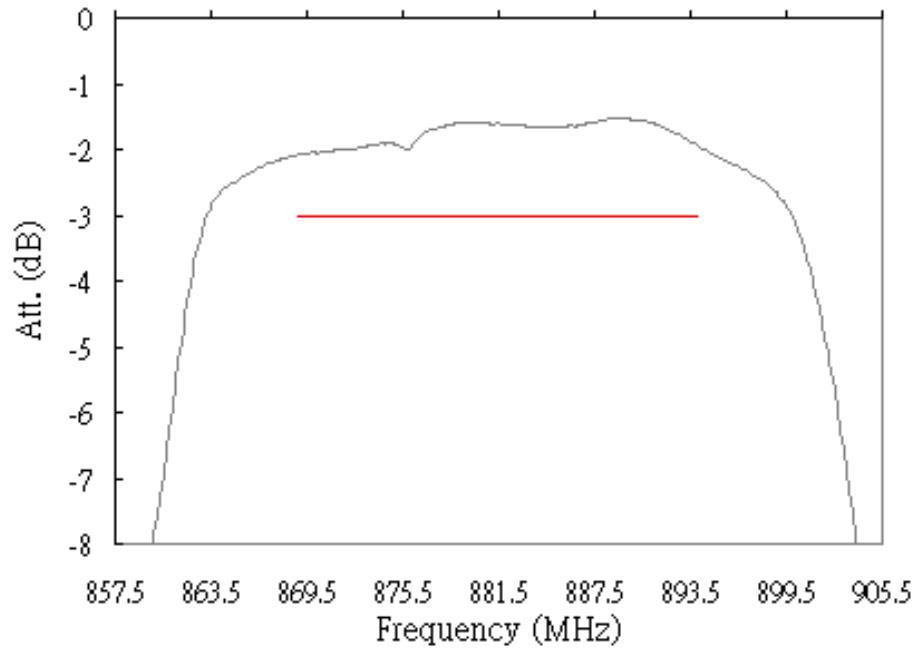
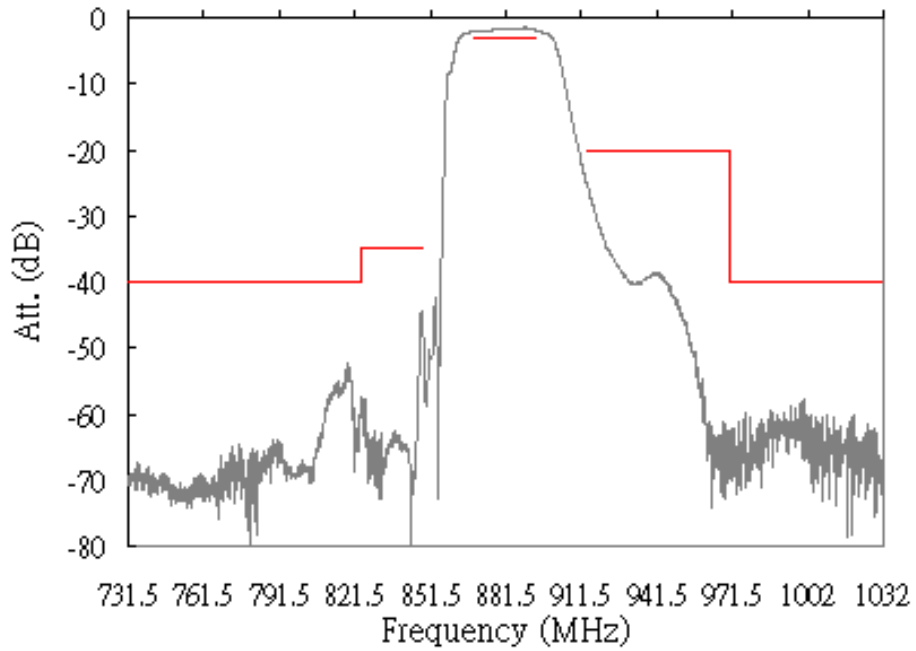
Terminating source impedance :  $Z_s = 50 \Omega$

Terminating load impedance :  $Z_L = 200 \Omega // 100 \text{ nH}$

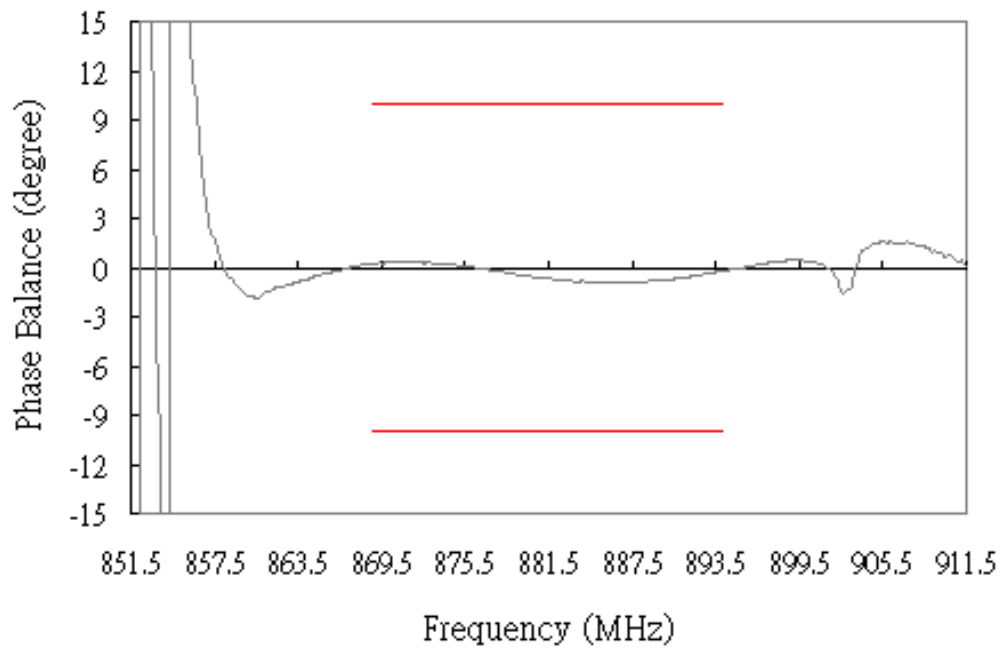
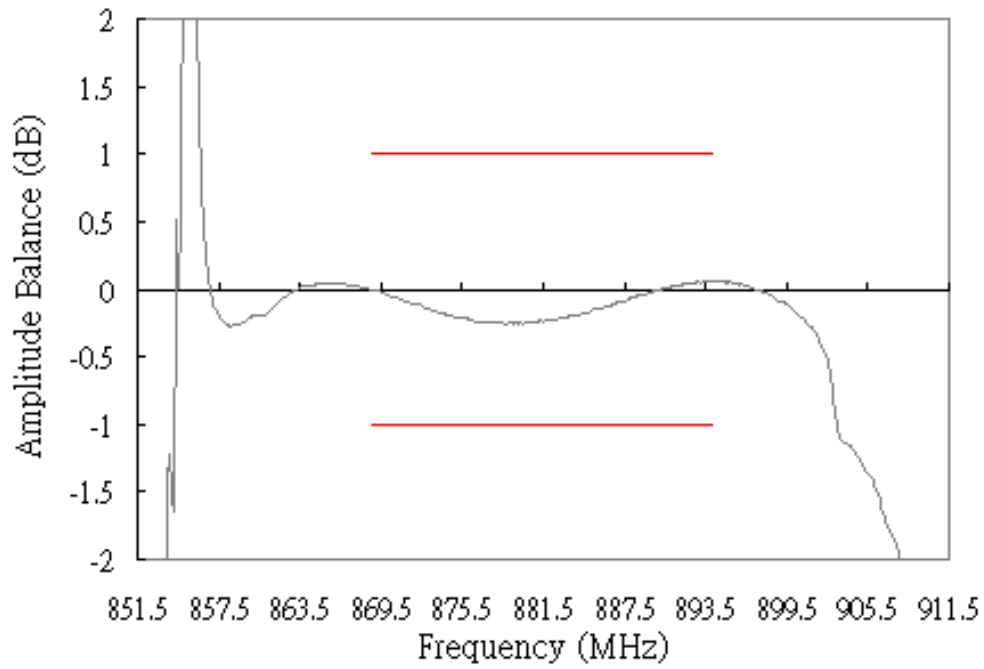
Item	Value			Unit
	Min.	Typ.	Max.	
<b>Center frequency</b> $F_C$	-	881.5	-	MHz
<b>Insertion loss</b> ( 869~894 MHz) I.L.	-	2.0	3.0	dB
<b>VSWR</b> ( 869~894 MHz)	-	1.5	2.1	
<b>Attenuation:</b> ( Reference level from 0 dB)				
100 ~ 824 MHz	40	53	-	dB
824 ~ 849 MHz	35	44	-	dB
914 ~ 970 MHz	20	26	-	dB
970 ~ 3000 MHz	40	55	-	dB
3000 ~ 6000 MHz	35	51	-	dB
<b>Symmetry in band</b> (referenced to the matched operating condition)				
<b>Output amplitude balance</b> ( $ S_{31}/S_{21} $ ) 869~894 MHz	-1.0	$\pm 0.3$	1.0	dB
<b>Output phase balance</b> ( $\Phi(S_{31})-\Phi(S_{21})+180^\circ$ ) 869~894 MHz	-10	$\pm 0.9$	10	degree

### C. Frequency Characteristics :

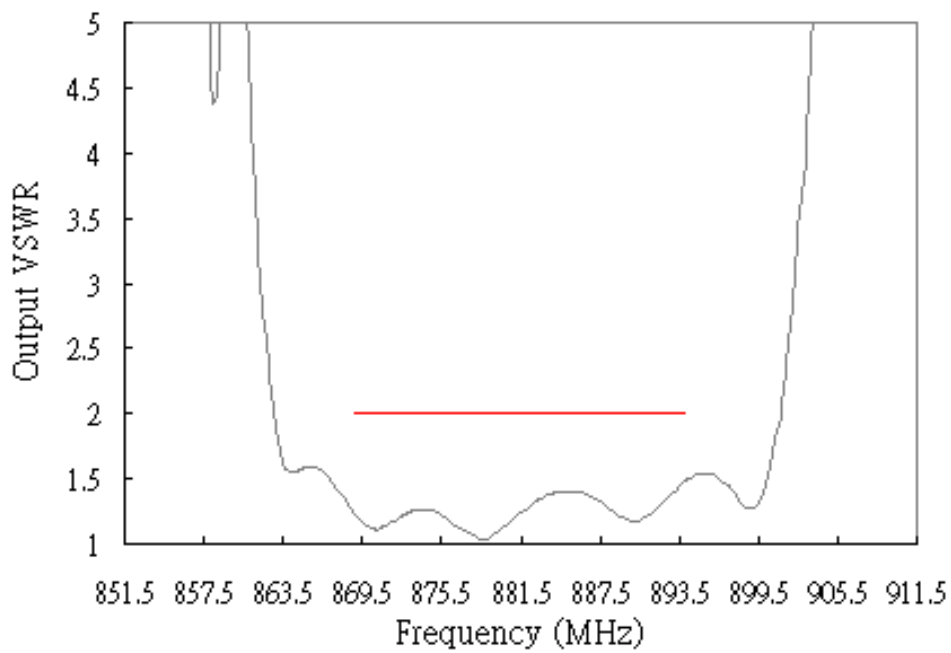
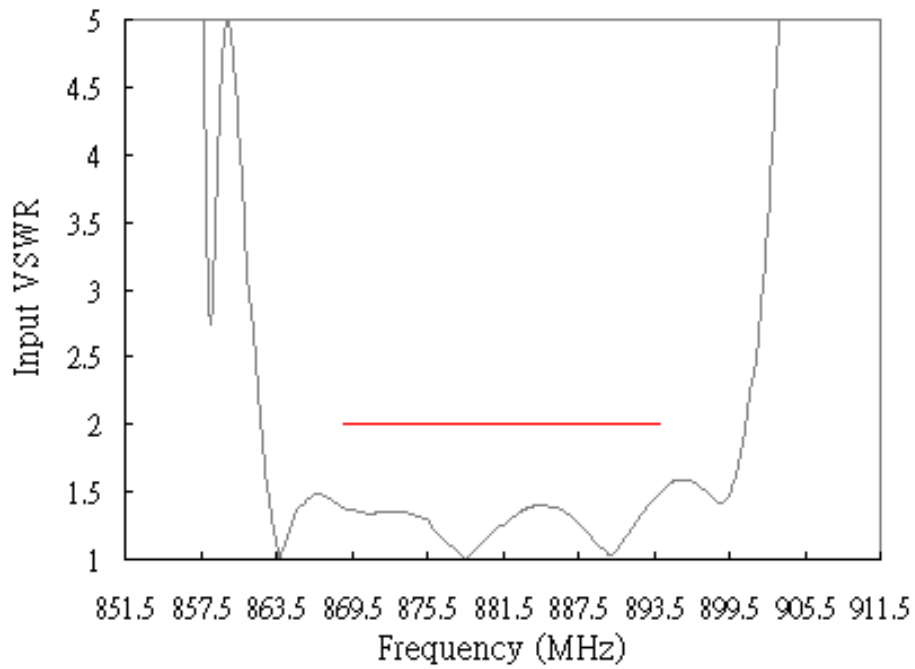
#### Transfer Function



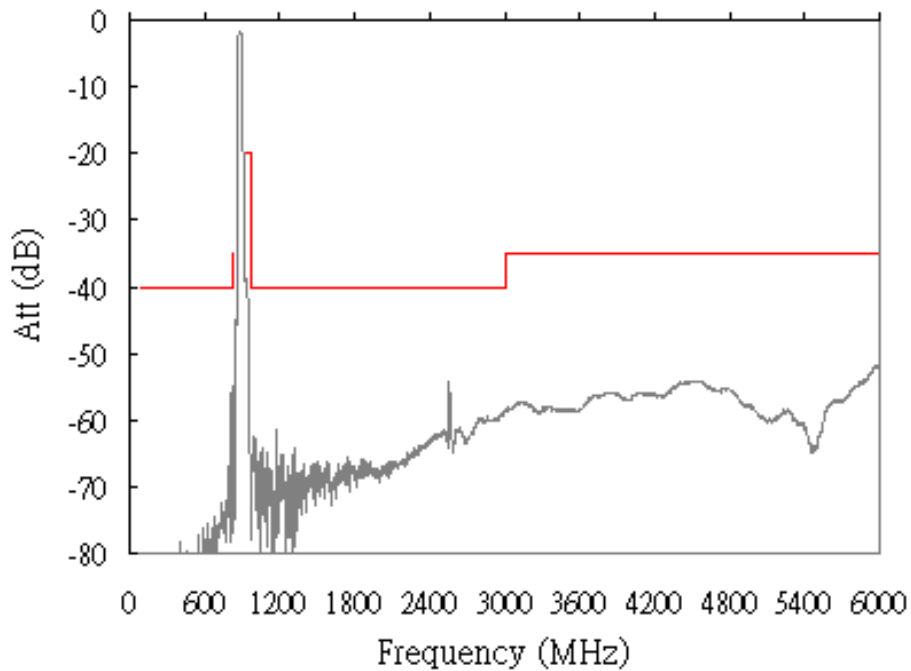
## Amplitude/Phase Balance



## Reflection Function



## Wideband



### D. ELECTRICAL CHARACTERISTICS:

Singled to Balanced operation

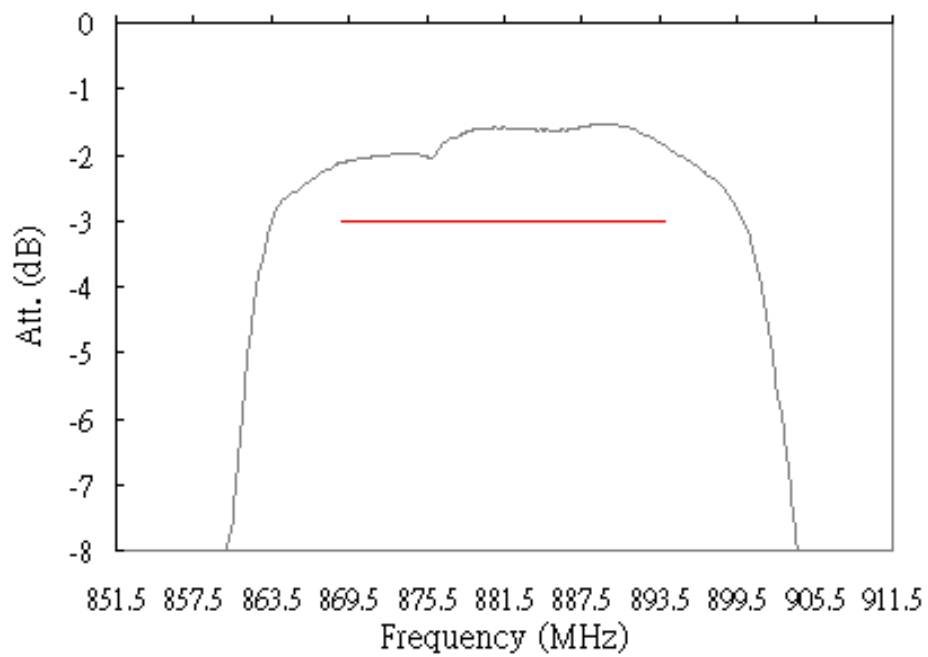
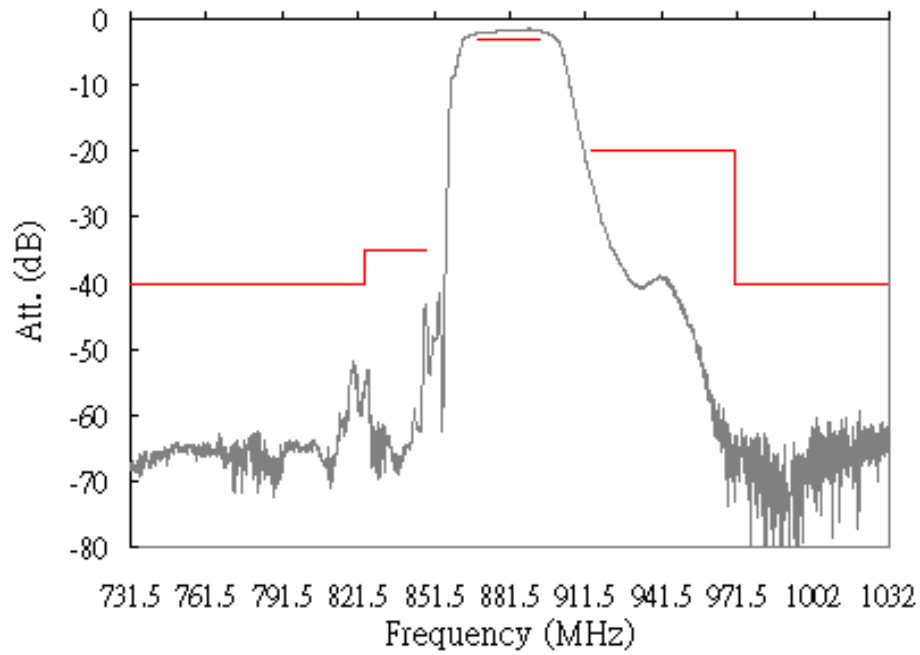
Terminating source impedance :  $Z_s = 50 \Omega$

Terminating load impedance :  $Z_L = 100 \Omega$  add matching circuit

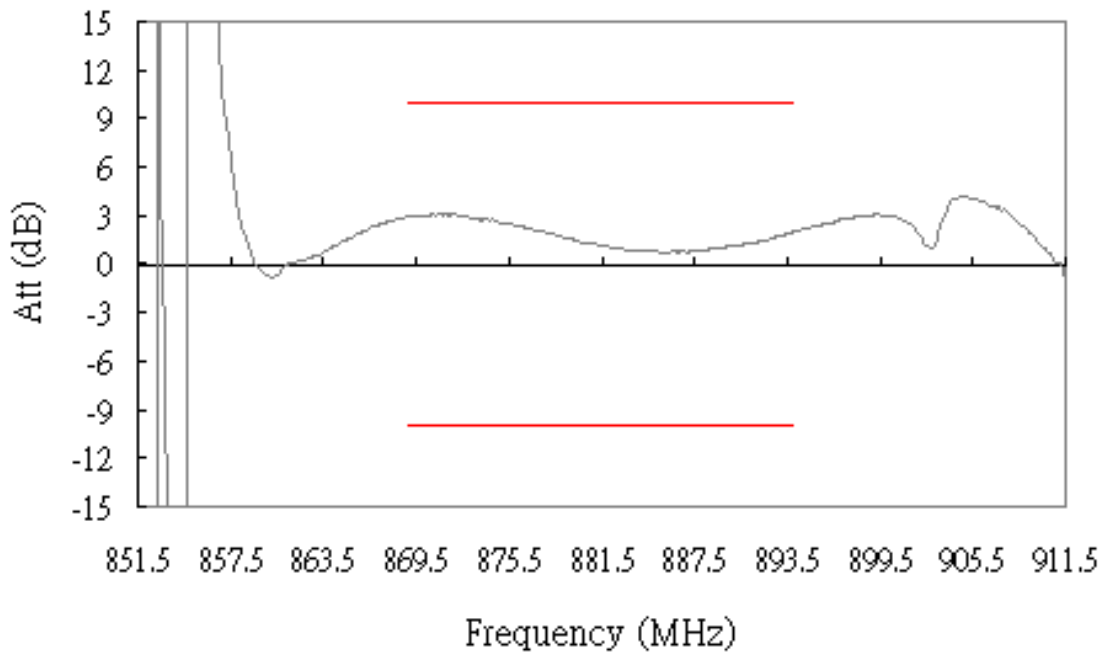
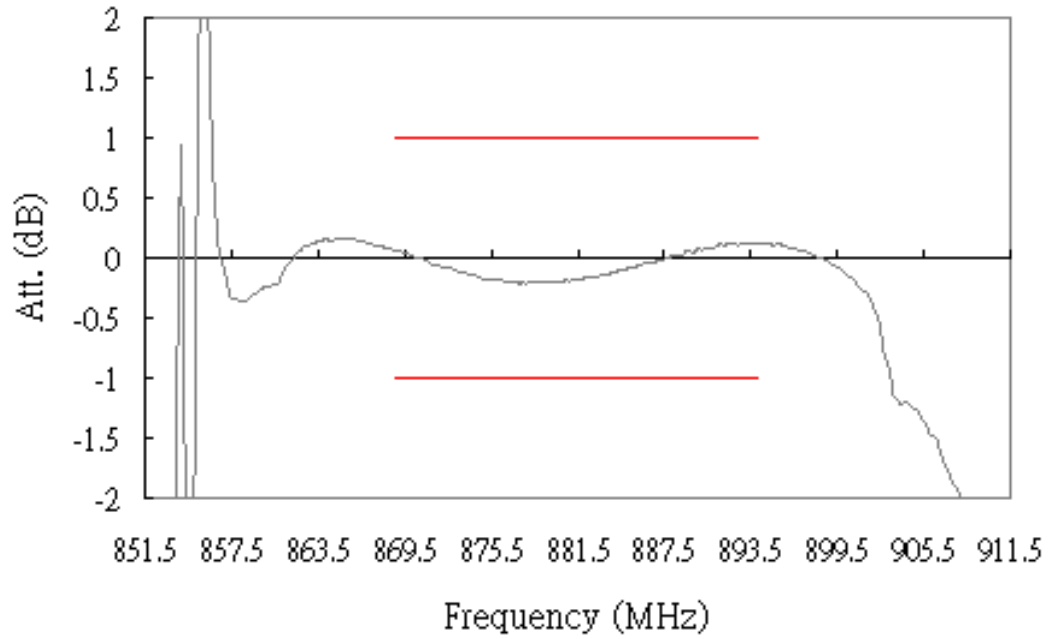
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100 ~ 824 MHz	40	52	-	dB
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<b>Symmetry in band</b> (referenced to the matched operating condition)				
<b>Output amplitude balance</b> ( $ S_{31}/S_{21} $ ) 869~894 MHz	-1.0	$\pm 0.3$	1.0	dB
<b>Output phase balance</b> ( $\Phi(S_{31})-\Phi(S_{21})+180^\circ$ ) 869~894 MHz	-10	$\pm 3$	10	degree

### C. Frequency Characteristics :

#### Transfer Function

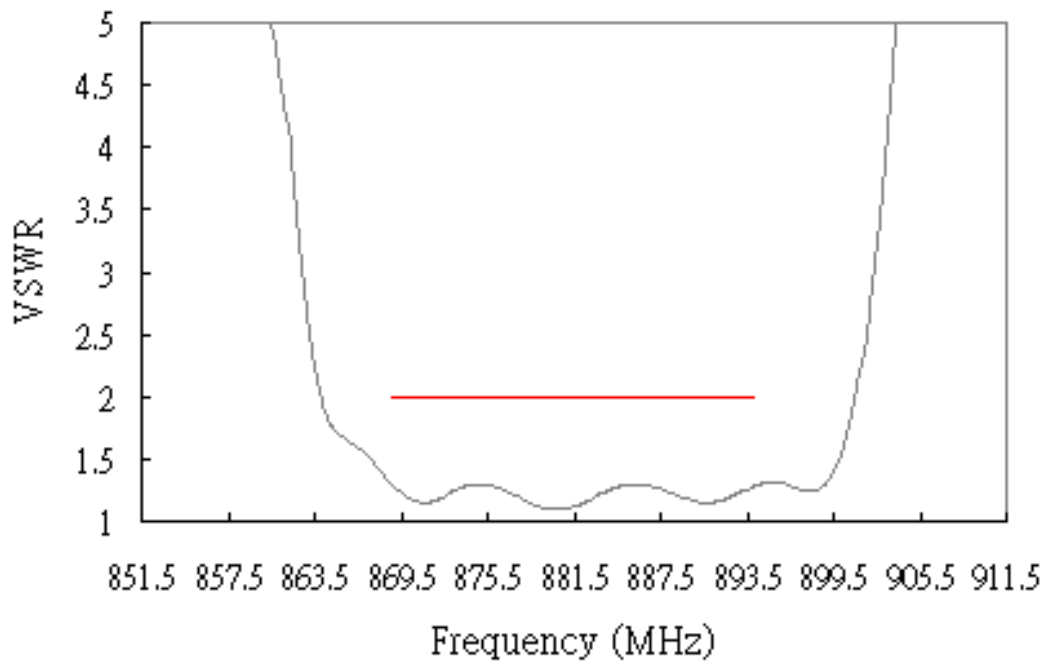
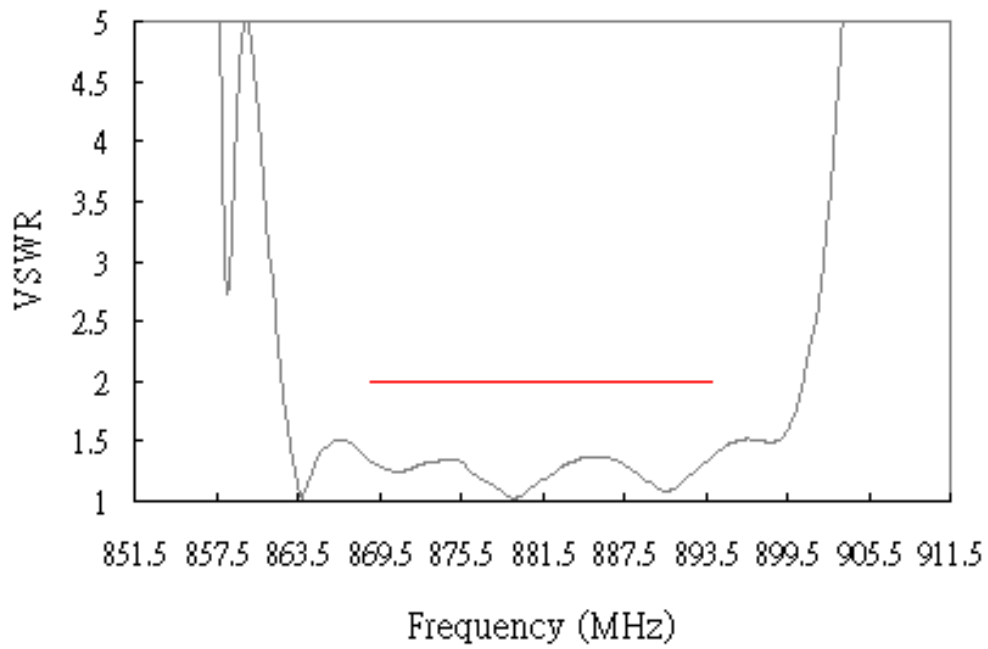


## Amplitude/Phase Balance

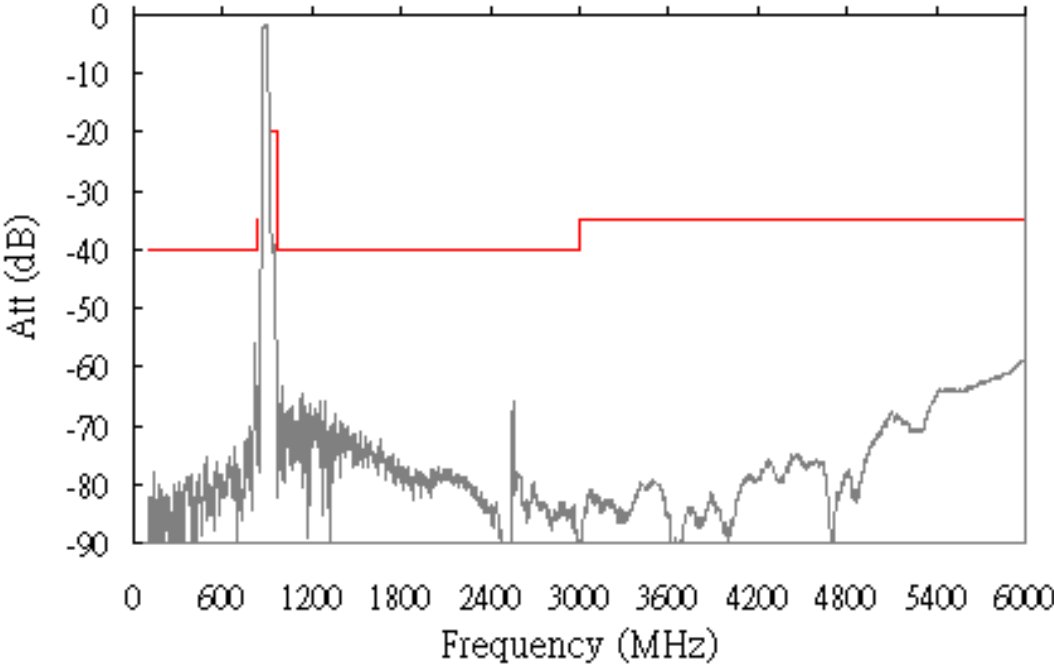




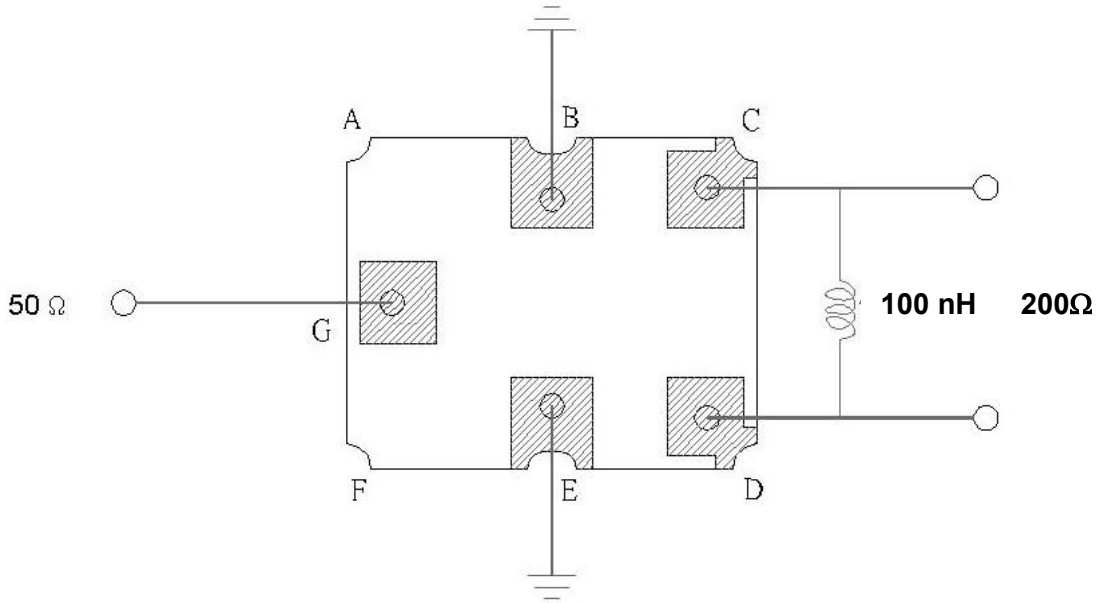
## Reflection Function

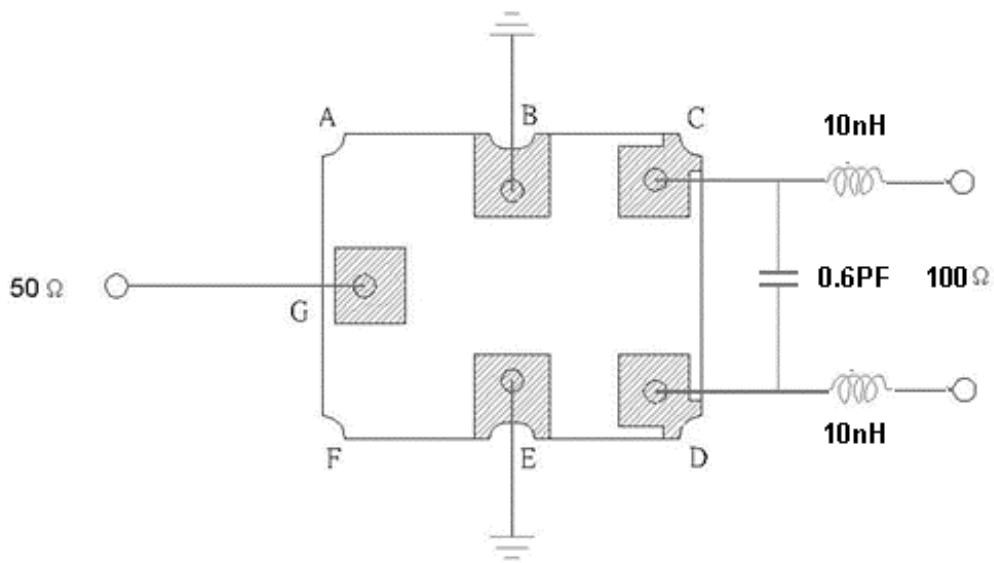


**Wideband**

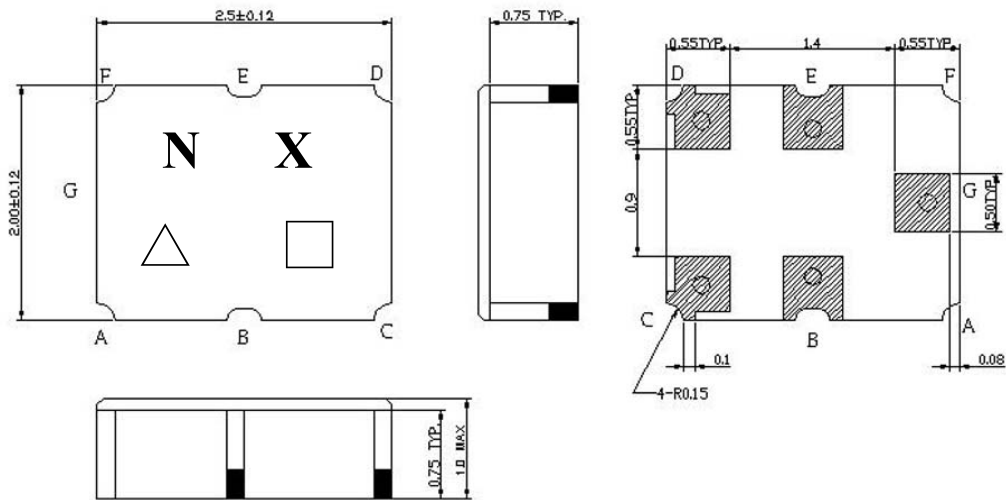


**E. MEASUREMENT CIRCUIT:**





**F.OUTLINE DRAWING:**

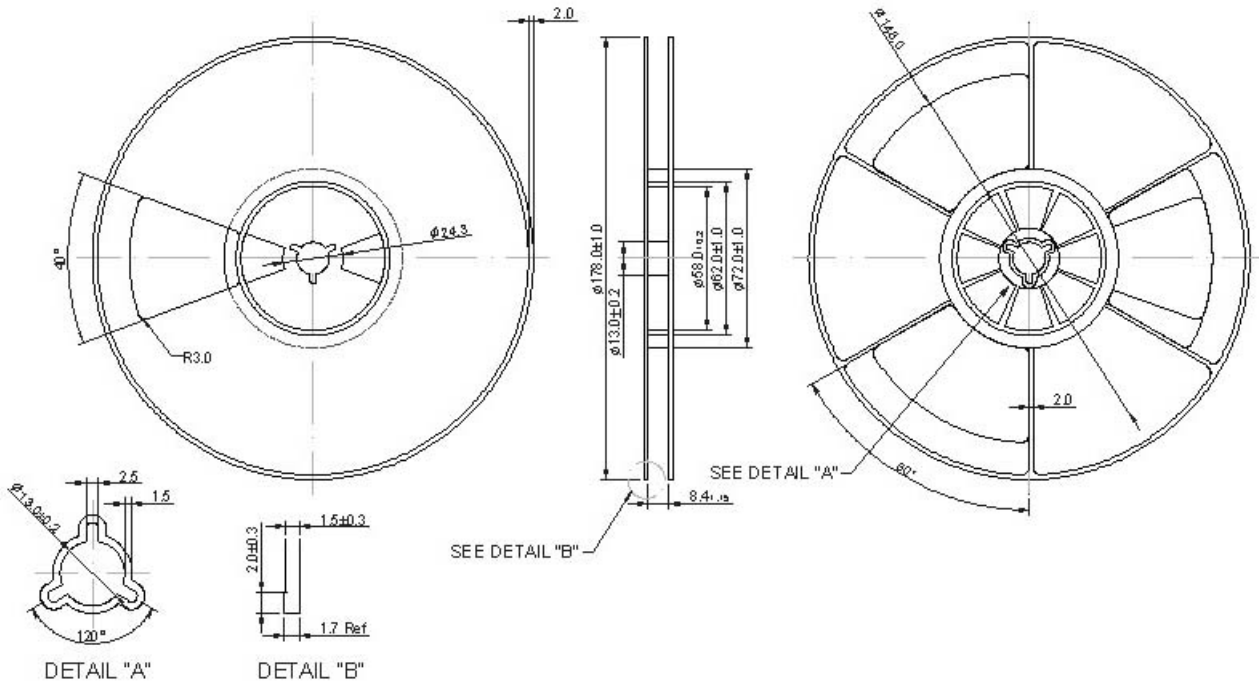


**Pin configuration**

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

## G. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION

