



# 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: Dec, 31, 2003

Product Name: SAW Filter 1960 MHz for Mobile Communication

TST Parts No.: TA0319A

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

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

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

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

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

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

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

Date: \_\_\_\_\_ 12,31,2003



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## SAW Filter 1960 MHz for Mobile Communication

MODEL NO.: TA0319A

REV. NO.:1

### A. MAXIMUM RATING:

1. Operating Temperature: -20°C ~ +75°C
2. Storage Temperature: -40°C ~ +85°C

RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS :

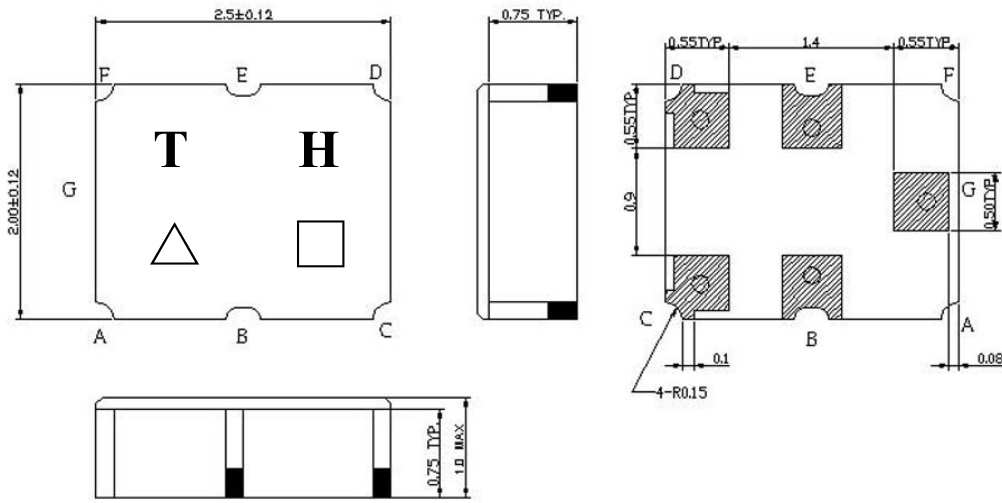
Singled to Balanced operation

Terminating source impedance :  $Z_s = 50 \Omega$

Terminating load impedance :  $Z_L = 150 \Omega // 18 \text{ nH}$

Item			Value			Note
			Min.	Typ.	Max.	
<b>Center frequency</b>	$F_c$	MHz	-	1960	-	-
<b>Insertion loss</b> ( 1930~1990 MHz)	<b>I.L.</b>	(dB)	-	3.3	4.0	-
<b>Ripple</b>	( 1930~1990 MHz)	(dB)	-	0.8	2.4	-
<b>Input VSWR</b>	( 1930~1990 MHz)		-	1.8	2.7	-
<b>Output VSWR</b>	( 1930~1990 MHz)		-	2.3	2.7	-
<b>Attenuation:</b> ( Reference level from 0 dB)						
0 ~ 1000	MHz	(dB)	45	57	-	-
1000 ~ 1830	MHz	(dB)	25	31	-	-
1830 ~ 1900	MHz	(dB)	15	25	-	-
1900 ~ 1910	MHz	(dB)	7	14	-	-
2010 ~ 2030	MHz	(dB)	5	12	-	-
2030 ~ 2070	MHz	(dB)	12	18	-	-
2070 ~ 2310	MHz	(dB)	20	23.5	-	-
2310 ~ 2380	MHz	(dB)	35	38	-	-
2380 ~ 4600	MHz	(dB)	30	39	-	-
4600 ~ 6000	MHz	(dB)	23	54	-	-
<b>Symmetry in band</b> (referenced to the matched operating condition)						
<b>Output amplitude balance</b> ( $ S_{31}/S_{21} $ )	( 1930~1990 MHz)	(dB)	-2.2	0	2.2	-
<b>Output phase balance</b> ( $\Phi(S_{31})-\Phi(S_{21})+180^\circ$ )	( 1930~1990 MHz)	degree	-15	0	15	-

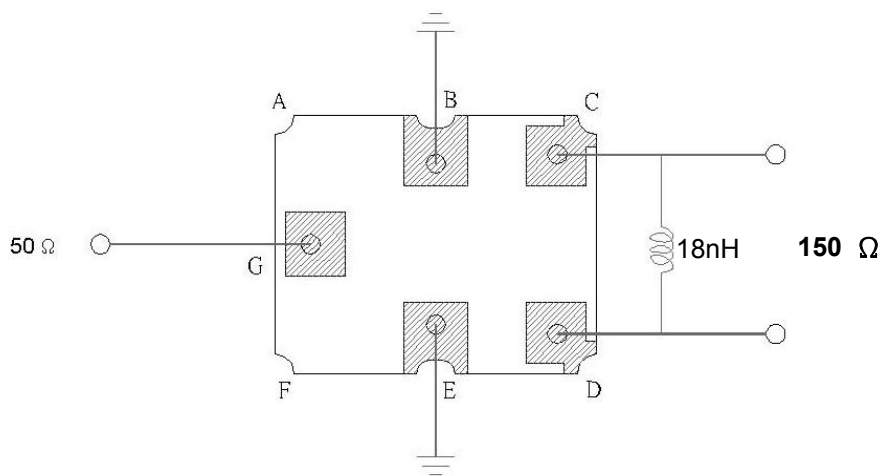
**C. OUTLINE DRAWING:**



**Pin configuration**

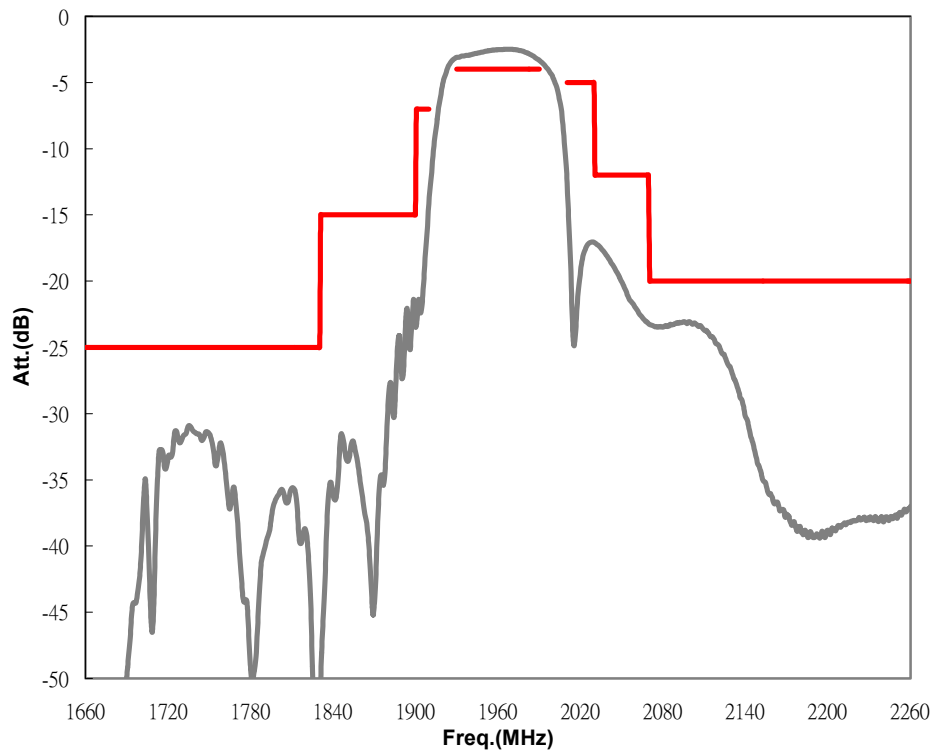
- G : Unbalance input
- C,D : Balance output
- B,E : Ground
- △ : Year code
- : Date code
- Unit : mm

**D. MEASUREMENT CIRCUIT:**

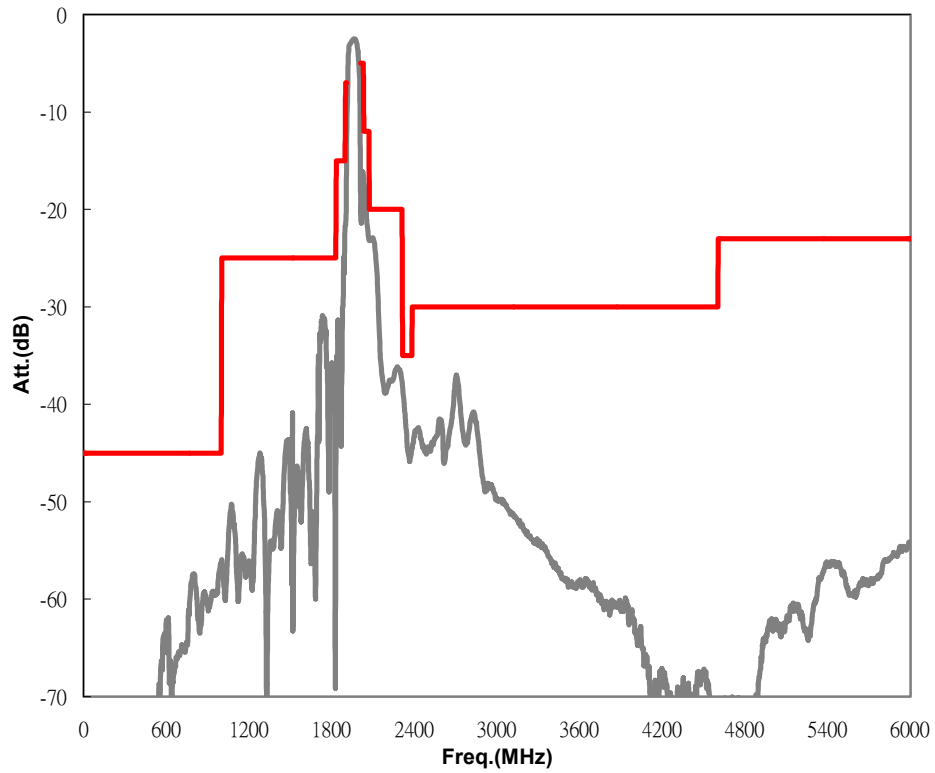


## E. FREQUENCY CHARACTERISTICS:

### 1. Transfer function (25 °C)

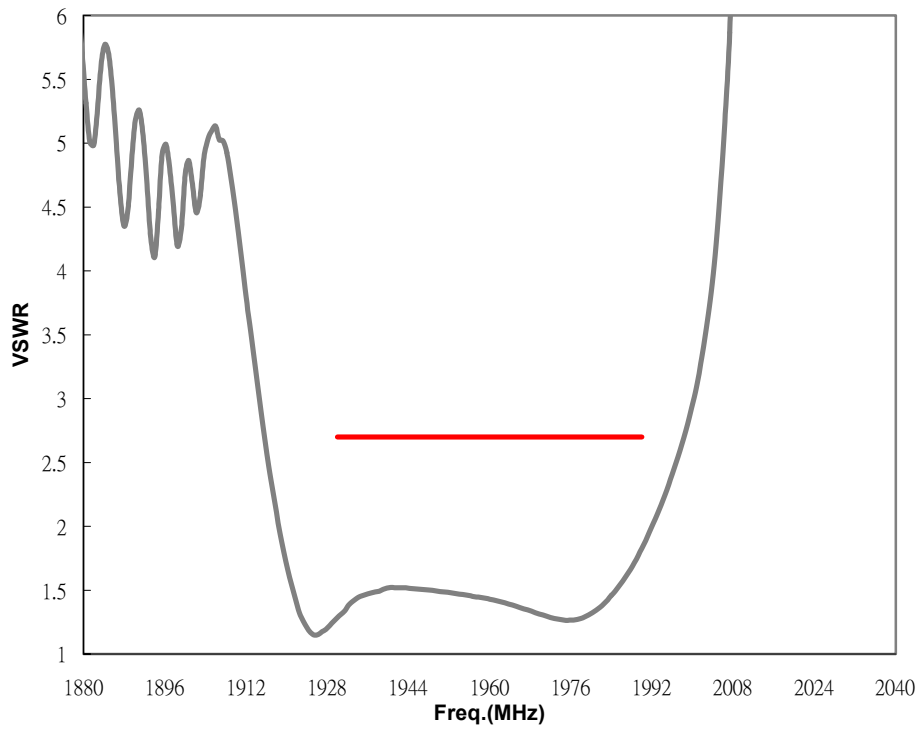


(wideband)

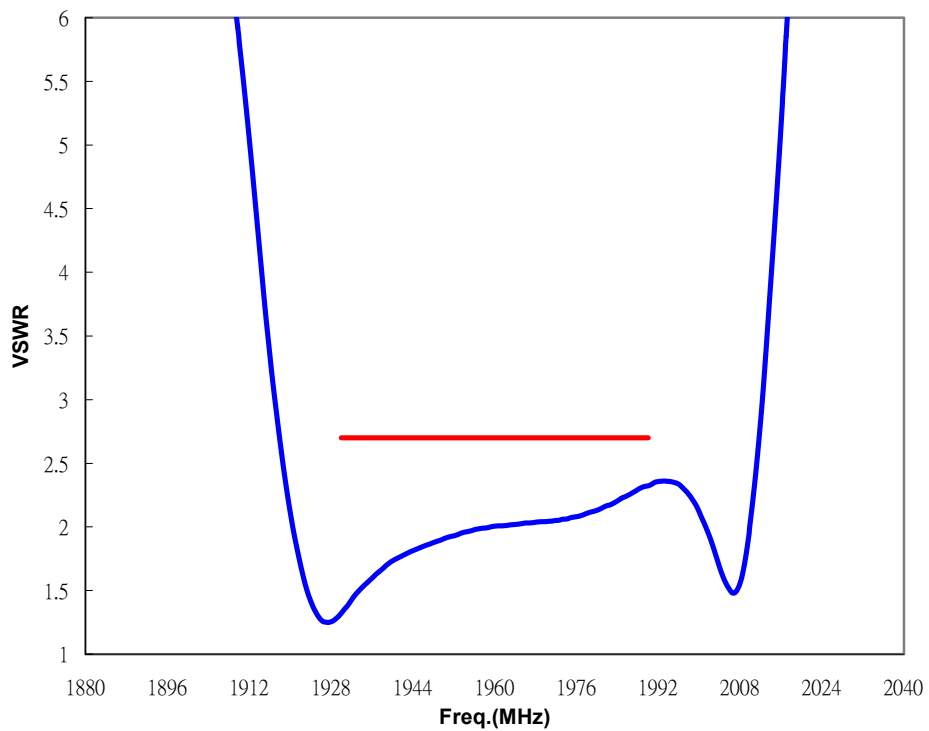


## 2. VSWR (25 °C)

### Unbalance Input

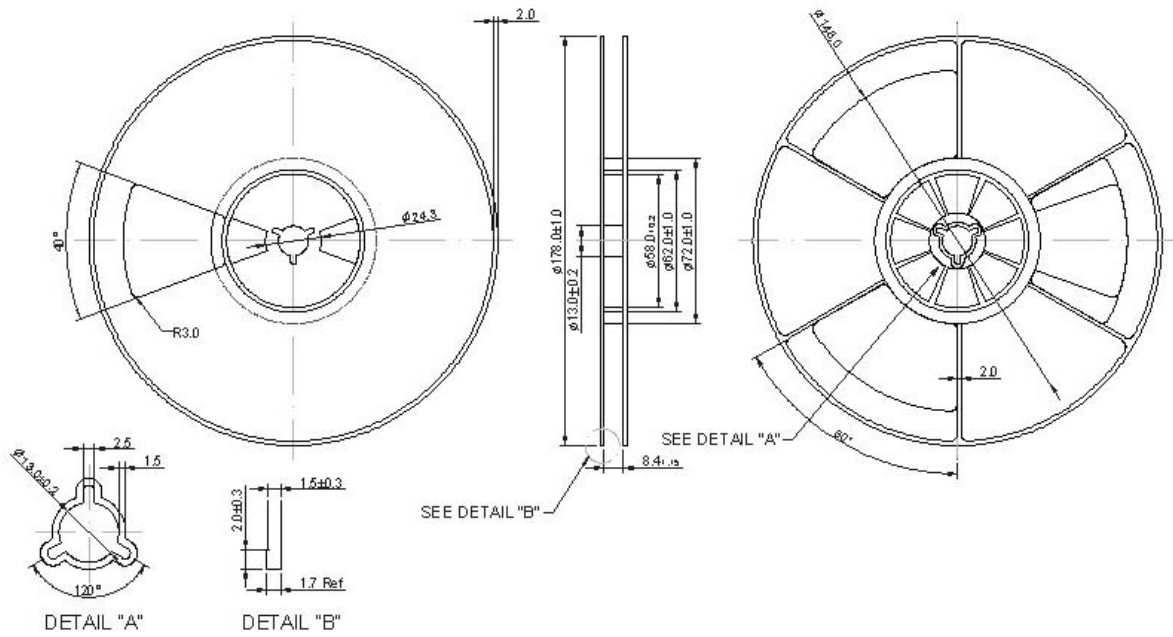


### Balance Output



**F. PACKING:**

**1. REEL DIMENSION**



**2. TAPE DIMENSION**

