



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date: Jun, 5, 2007

Product Name: SAW Filter 1747.5 MHz for Mobile Communication

TST Parts No.: TA0685A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Bob Chau

Approval by: _____ Francis Chen

Date: _____ 6,5,2007



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SAW Filter 1747.5 MHz for Mobile Communication

MODEL NO.: TA0685A

REV. NO.:1

A. MAXIMUM RATING:

1. Operating Temperature: -20°C ~ +75°C

2. Storage Temperature: -30°C ~ +85°C

RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS :

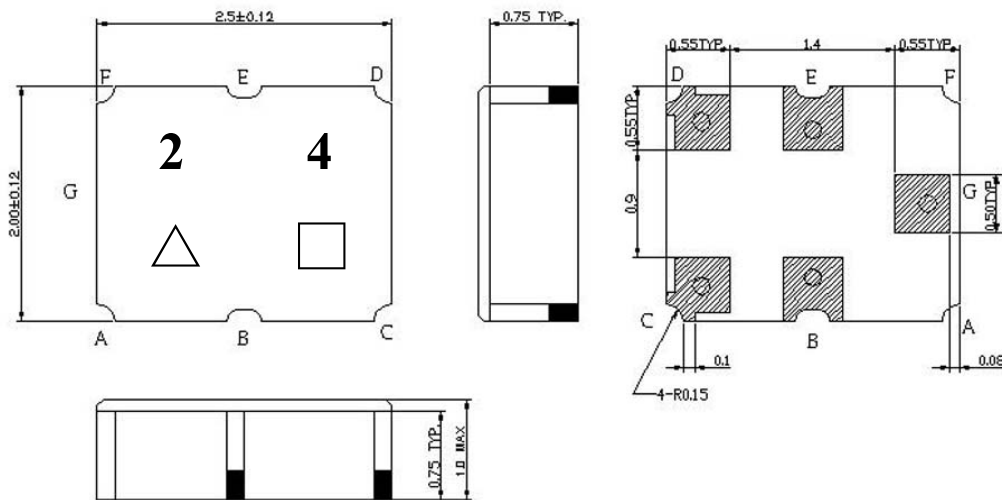
Singled to Balanced operation

Terminating source impedance : $Z_s = 50 \Omega$

Terminating load impedance : $Z_L = 150 \Omega // 22 \text{ nH}$

Item	Value			Note
	Min.	Typ.	Max.	
Center frequency F_c (MHz)	-	1747.5	-	-
Insertion loss(1710~1785 MHz) I.L. (dB)	-	3	4	-
Ripple (1710~1785 MHz) (dB)	-	0.9	2.1	-
Input VSWR (1710~1785 MHz)	-	2.1	2.7	-
Output VSWR (1710~1785 MHz)	-	2.3	2.7	-
Attenuation: (Reference level from 0 dB)				
0 ~ 1200 MHz (dB)	40	43	-	-
1200 ~ 1600 MHz (dB)	30	33	-	-
1600 ~ 1690 MHz (dB)	9	15	-	-
1825 ~ 1890 MHz (dB)	10	19	-	-
1890 ~ 2200 MHz (dB)	20	26	-	-
2200 ~ 3000 MHz (dB)	30	35	-	-
3000 ~ 4000 MHz (dB)	40	50	-	-
Symmetry in band (referenced to the matched operating condition)				
Output amplitude balance ($ S_{31}/S_{21} $) (1805~1880 MHz) (dB)	-2	0	2	-
Output phase balance ($\Phi(S_{31}) - \Phi(S_{21}) + 180^\circ$) (1805~1880 MHz) degree	-12	0	12	-

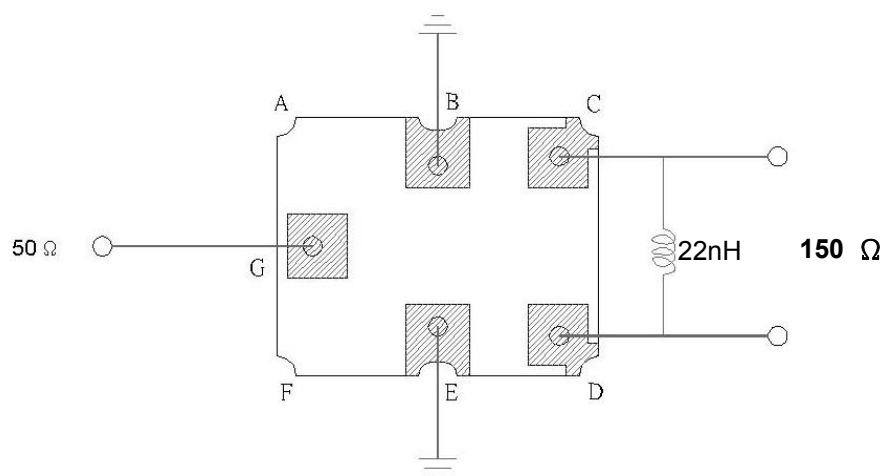
C. OUTLINE DRAWING:



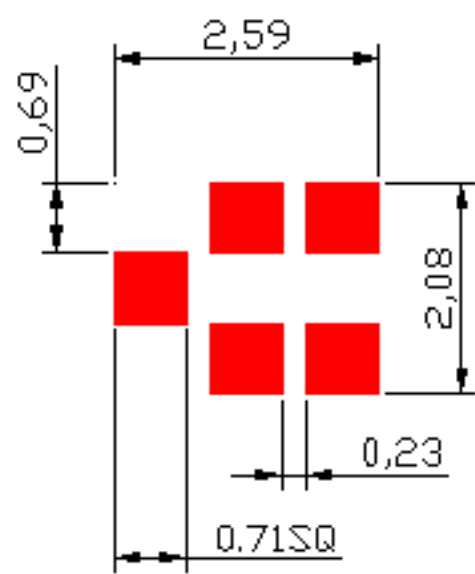
Pin configuration

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

D. MEASUREMENT CIRCUIT:

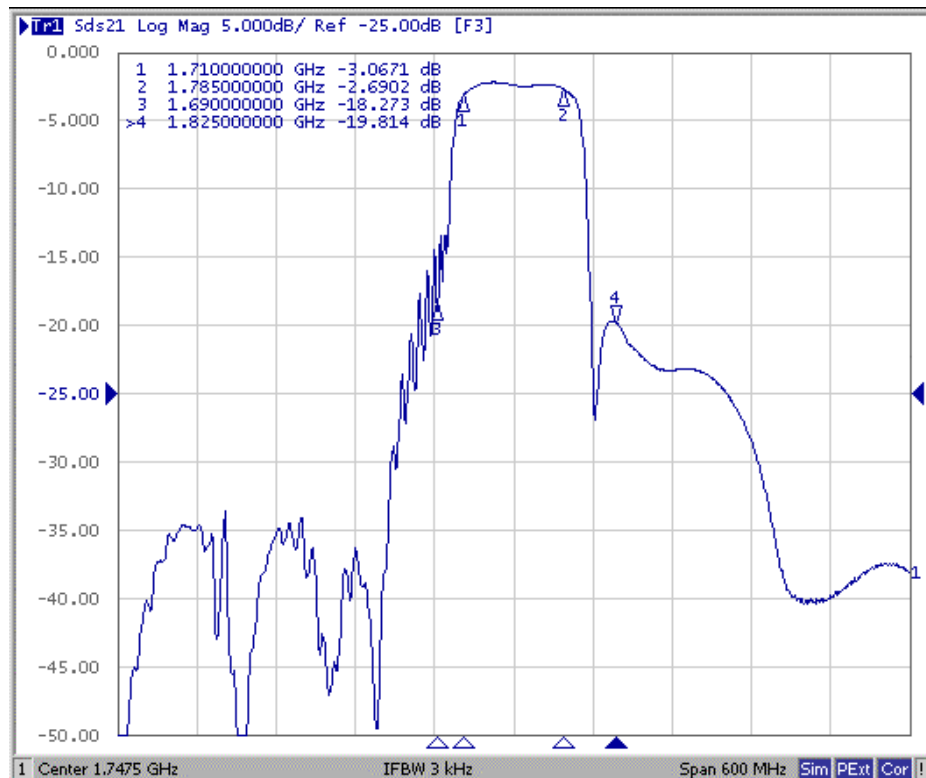


E. PCB Footprint:



F. FREQUENCY CHARACTERISTICS:

1. Transfer function (25 °C)

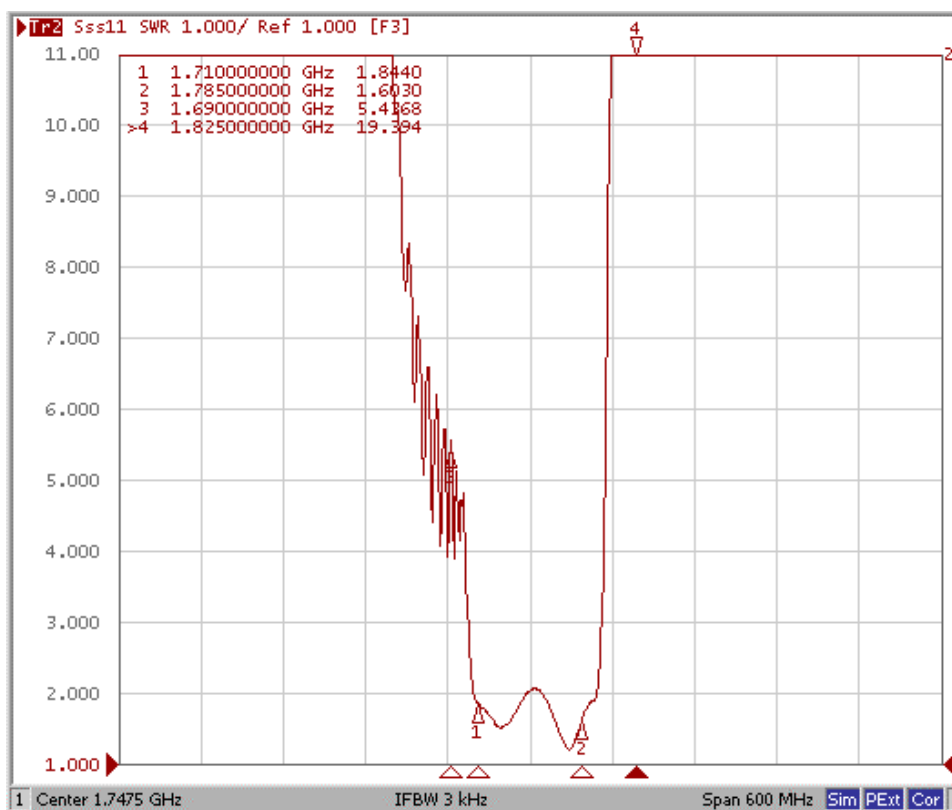


(wideband)

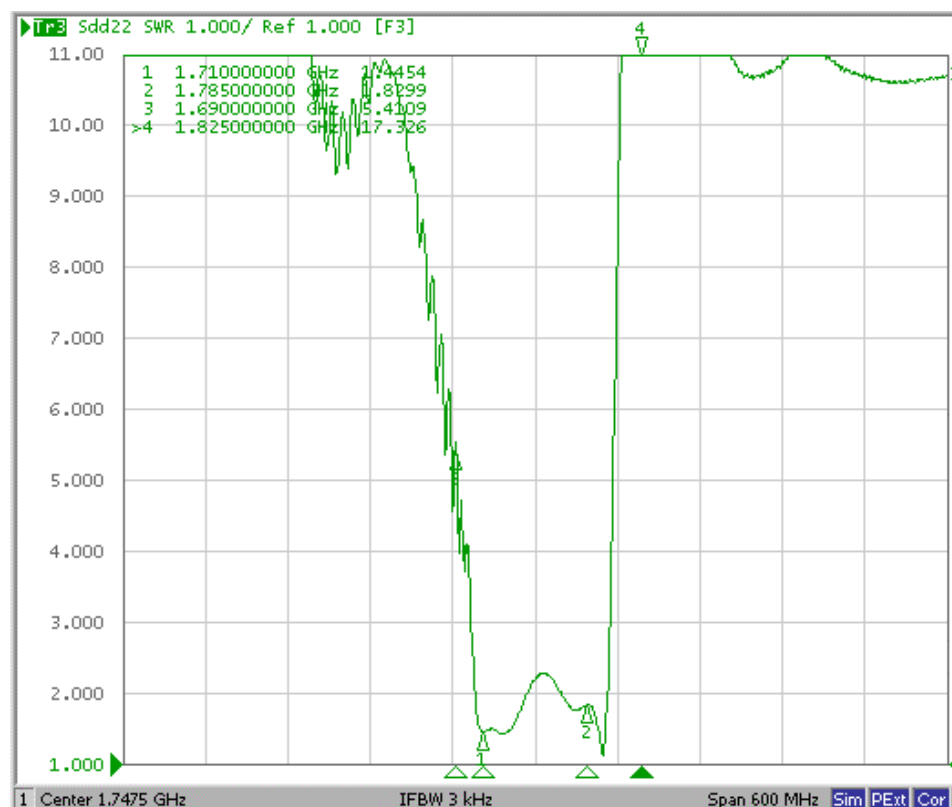


2. VSWR (25 °C)

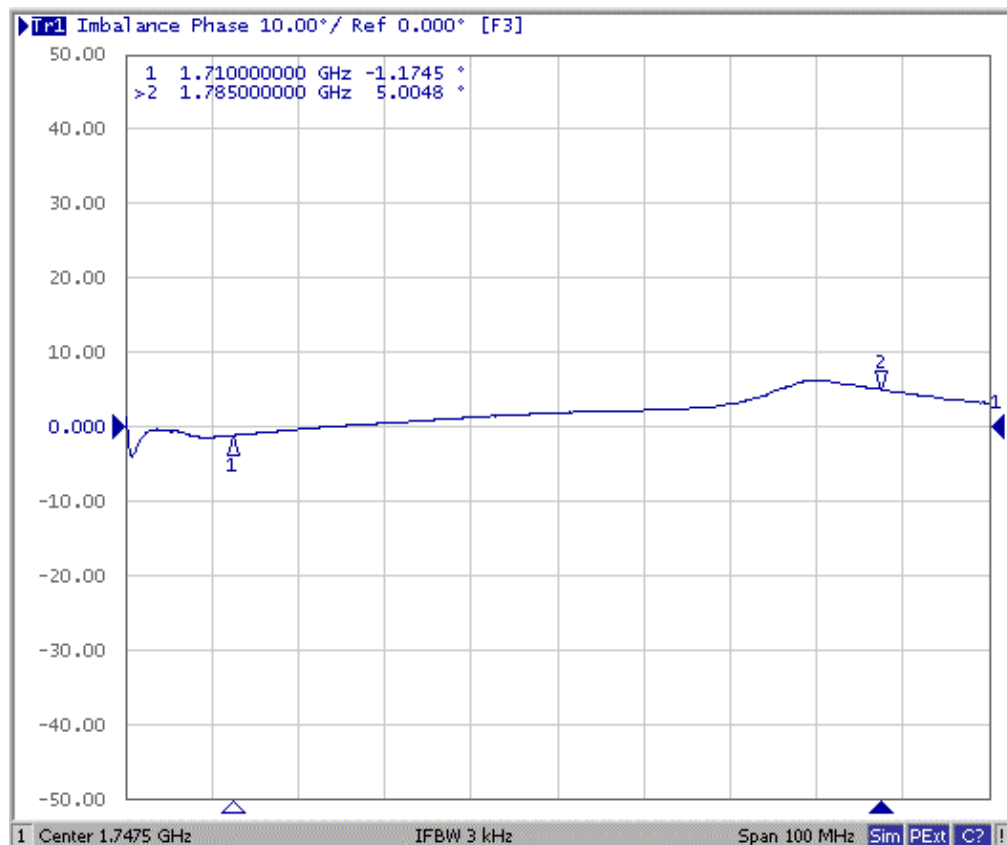
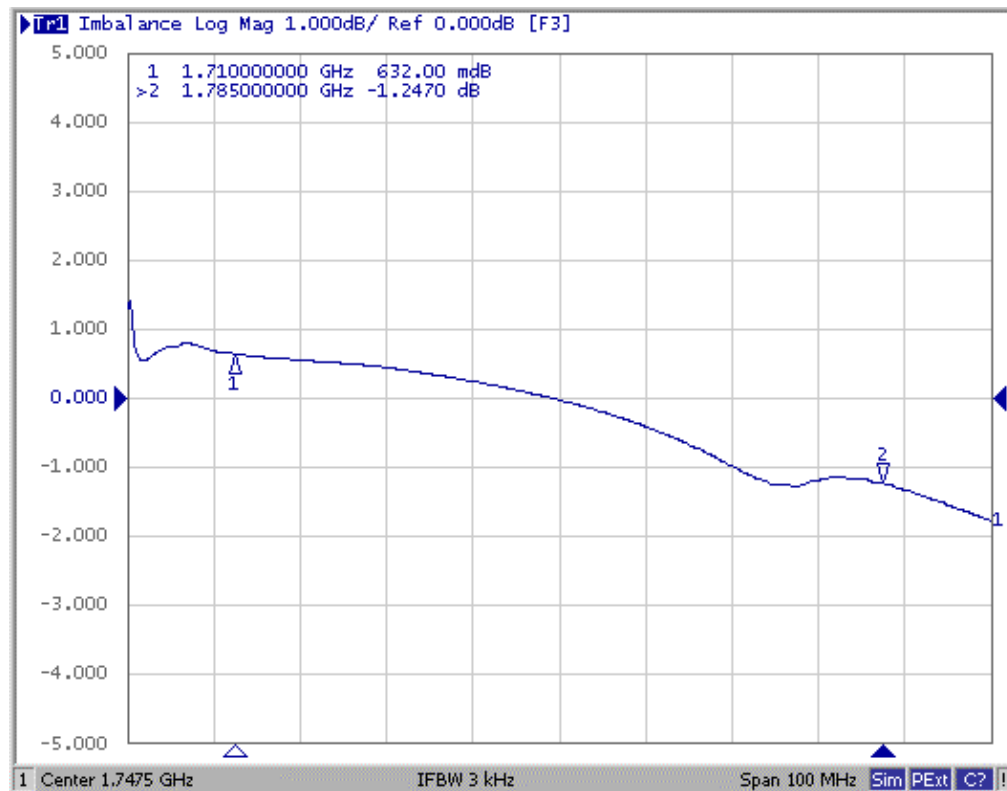
Unbalance Input



Balance Output

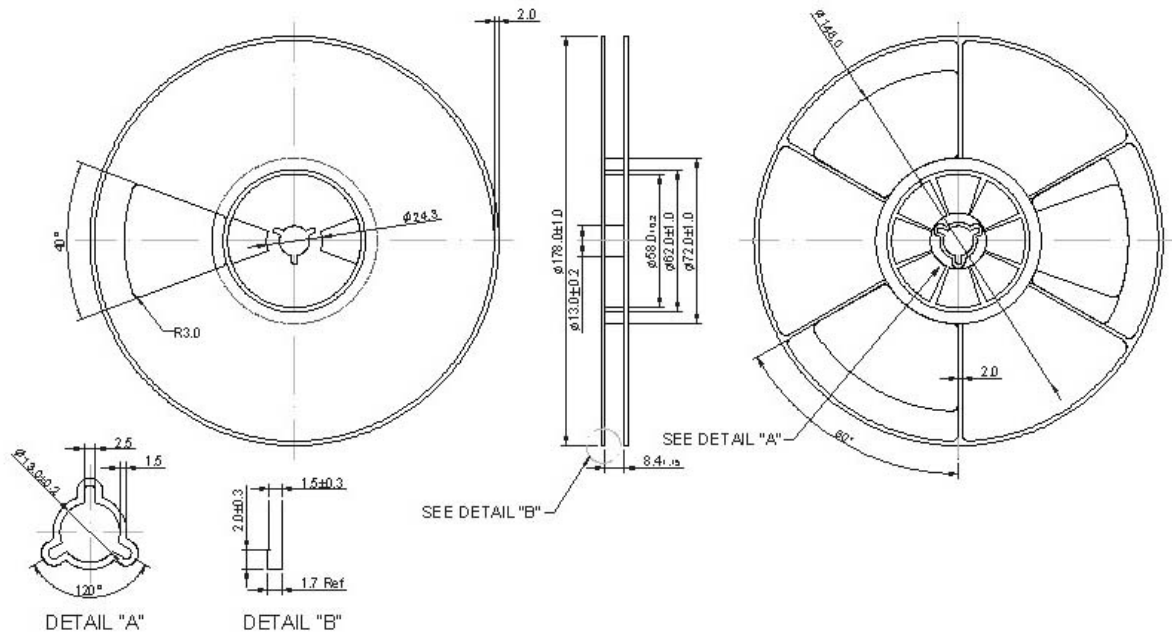


3. Imbalance

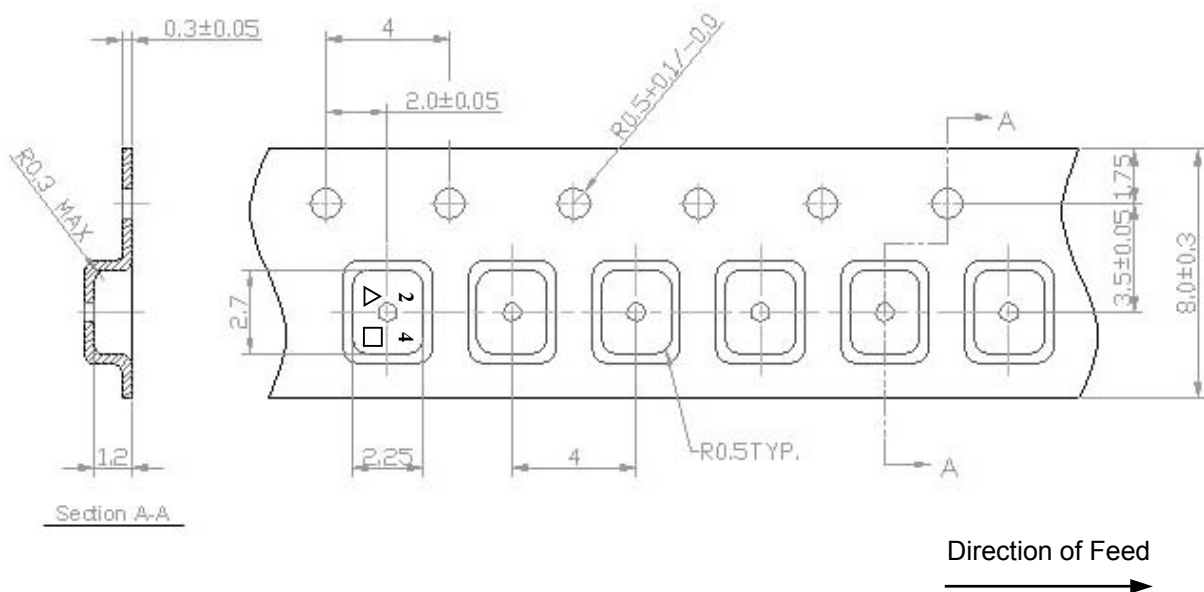


G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :

