



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 Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date: Oct, 22, 2003

Product Name: SAW Filter 1842.5 MHz for Mobile Communication

TST Parts No.: TA0219A

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 Web: www.taisaw.com

SAW Filter 1842.5 MHz for Mobile Communication

MODEL NO.: TA0219A

REV. NO.:4

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 :

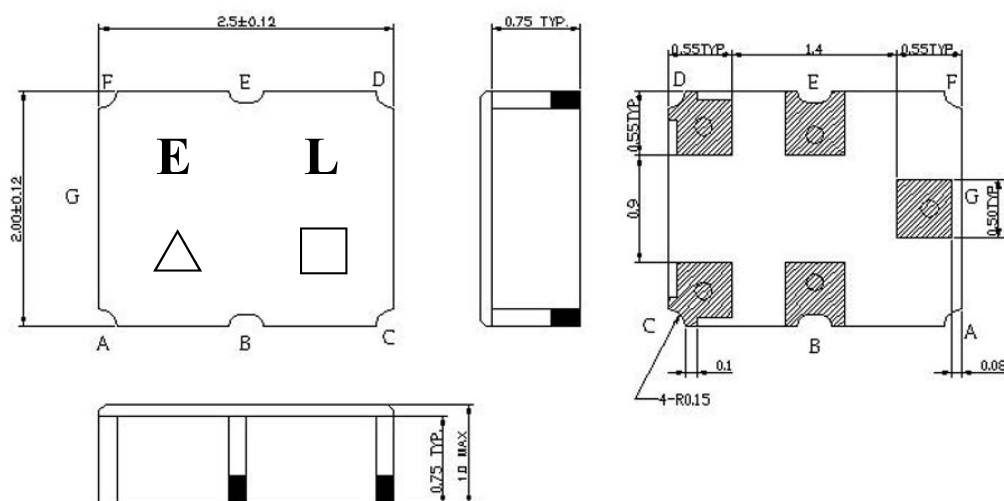
Singled to Balanced operation

Terminating source impedance : $Z_s = 50 \Omega$

Terminating load impedance : $Z_L = 200 \Omega // 18 \text{ nH}$

Item	Value			Note
	Min.	Typ.	Max.	
Center frequency F_c MHz	-	1842.5	-	-
Insertion loss(1805~1880 MHz) I.L. (dB)	-	2.9	4.0	-
Ripple (1805~1880 MHz) (dB)	-	1.0	2.1	-
Input VSWR (1805~1880 MHz)	-	2.1	2.7	-
Output VSWR (1805~1880 MHz)	-	2.0	2.7	-
Attenuation: (Reference level from 0 dB)				
0 ~ 1200 MHz (dB)	40	49	-	-
1200 ~ 1705 MHz (dB)	30	34	-	-
1705 ~ 1785 MHz (dB)	9	14	-	-
1920 ~ 1980 MHz (dB)	10	22	-	-
1980 ~ 2200 MHz (dB)	20	23.5	-	-
2200 ~ 3000 MHz (dB)	30	36	-	-
3000 ~ 6000 MHz (dB)	40	44	-	-
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	-

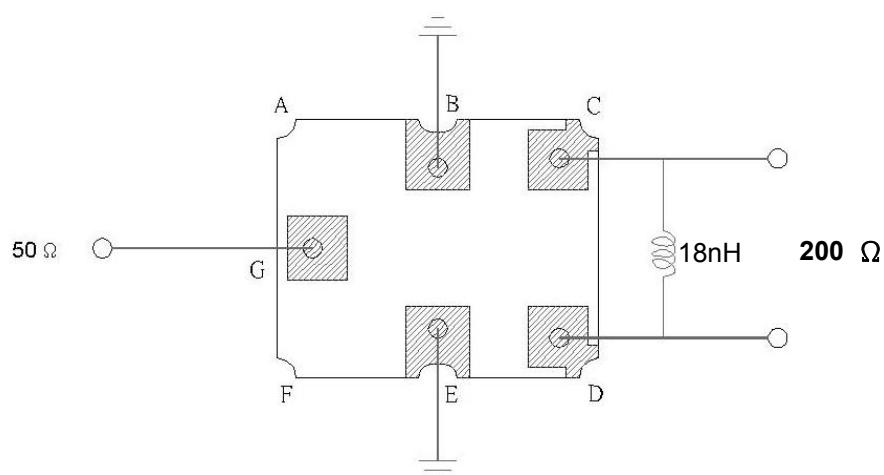
C. OUTLINE DRAWING:



Pin configuration

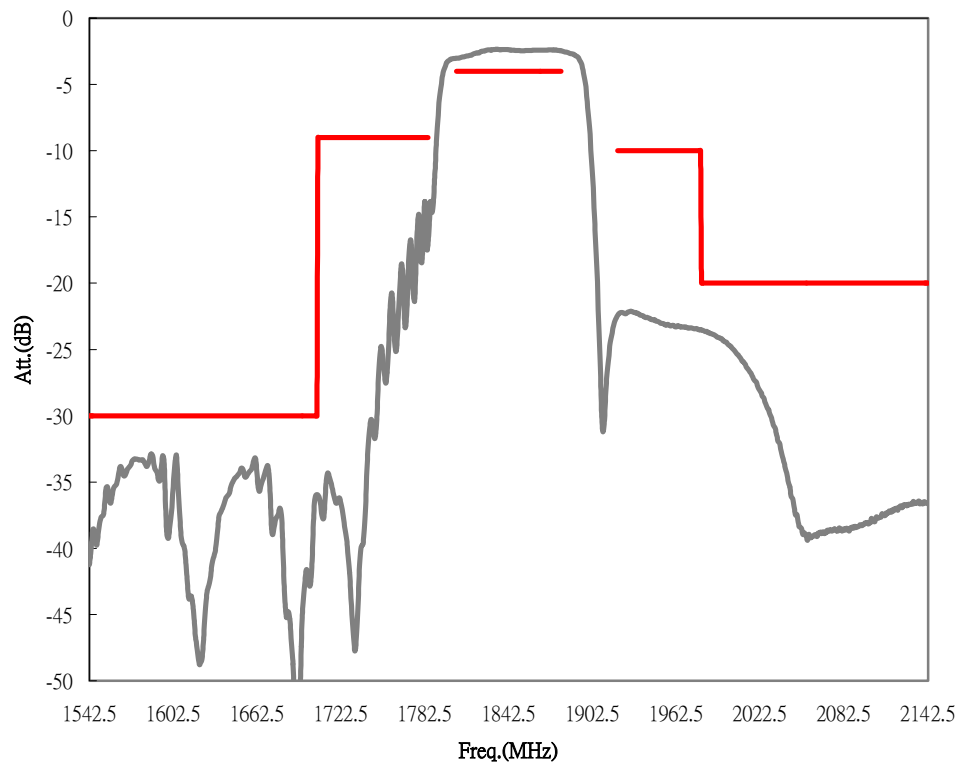
- G : Unbalance input
- C,D : Balance output
- B,E : Ground
- △ : Year code
- : Date code
- Unit : mm

D. MEASUREMENT CIRCUIT:

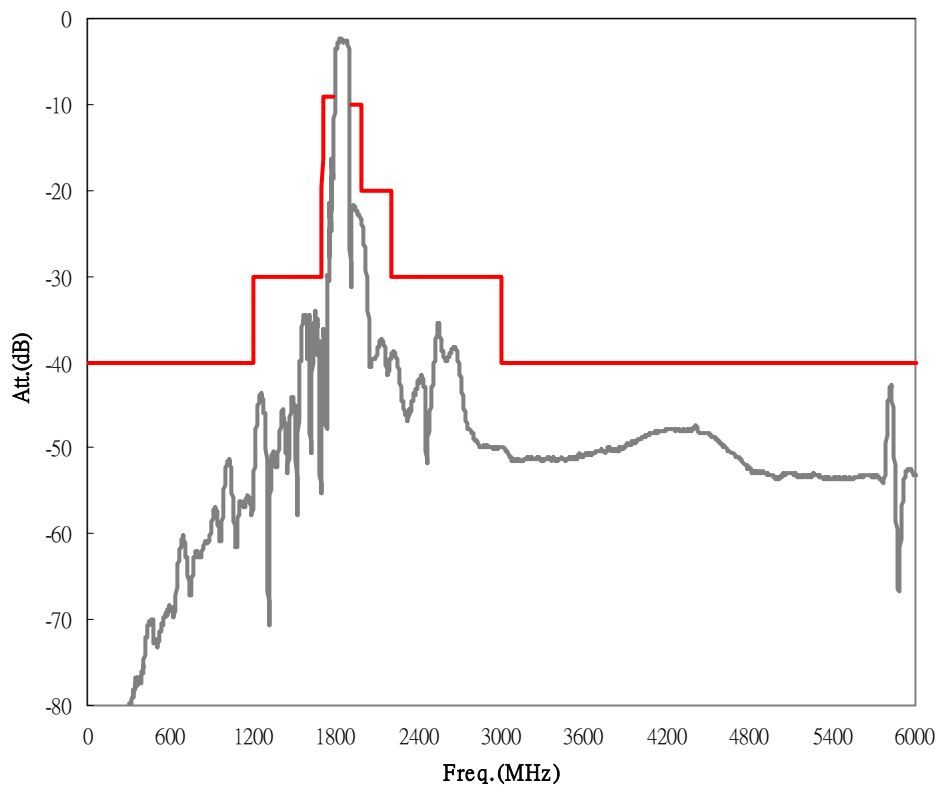


E. FREQUENCY CHARACTERISTICS:

1. Transfer function (25 °C)

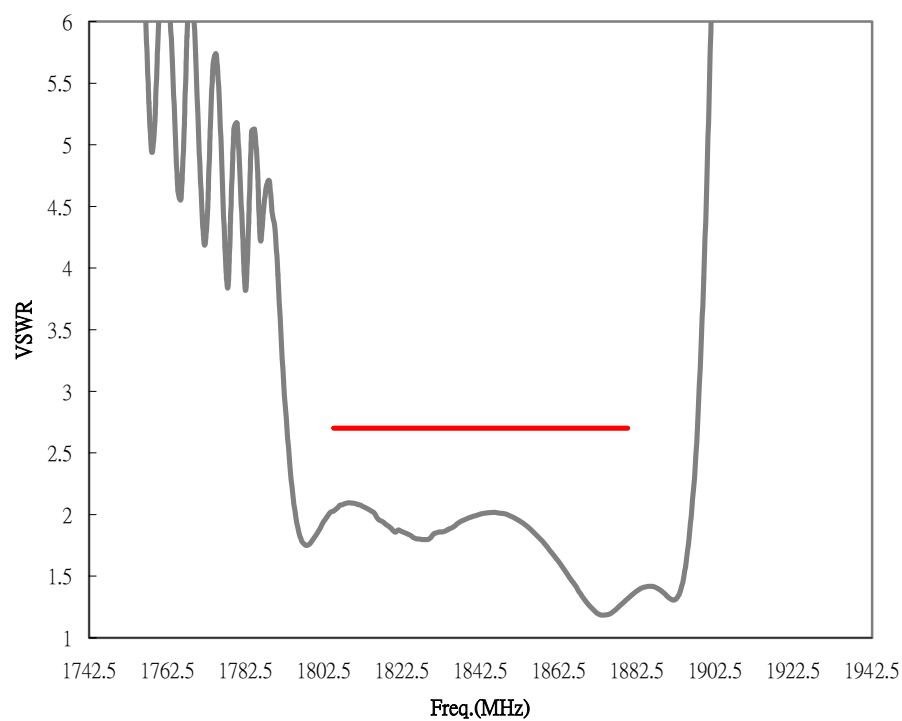


(wideband)

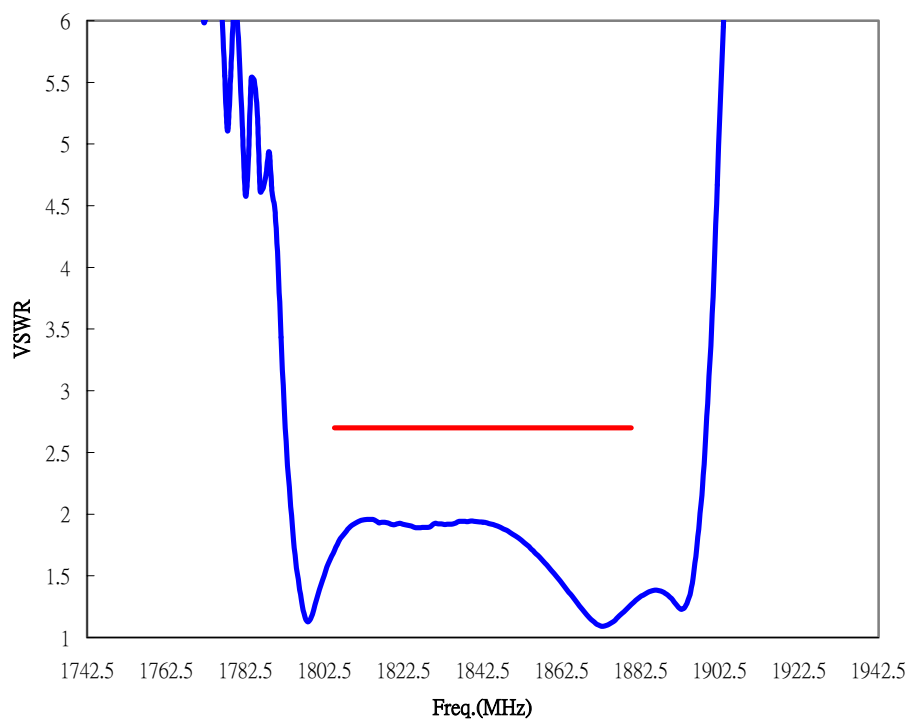


2. VSWR (25 °C)

Unbalance Input

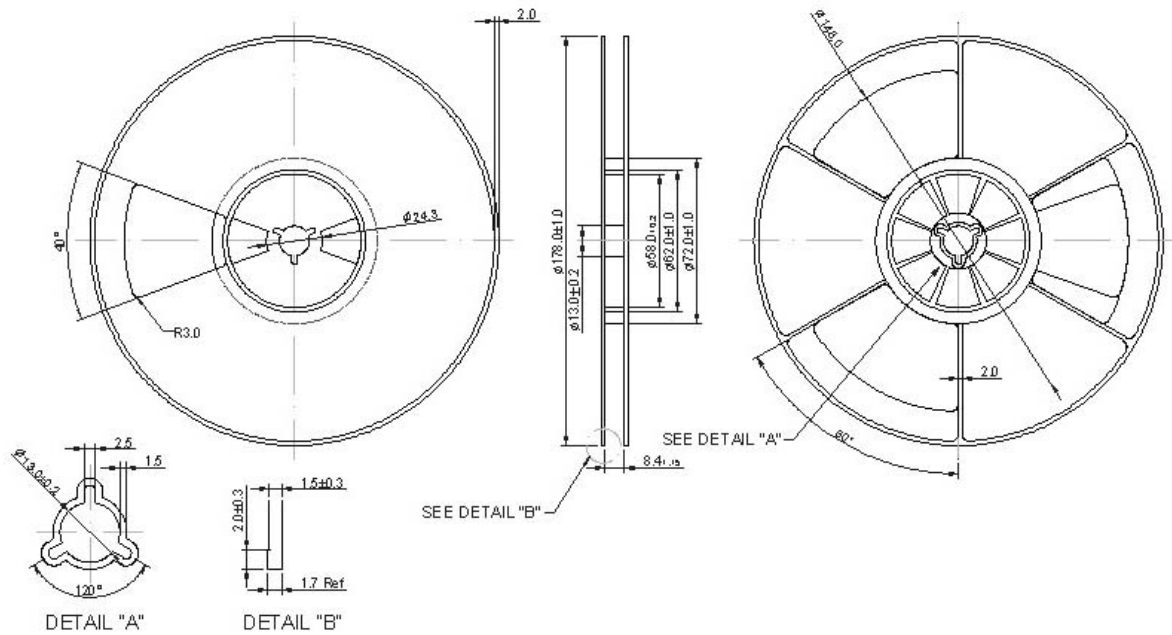


Balance Output

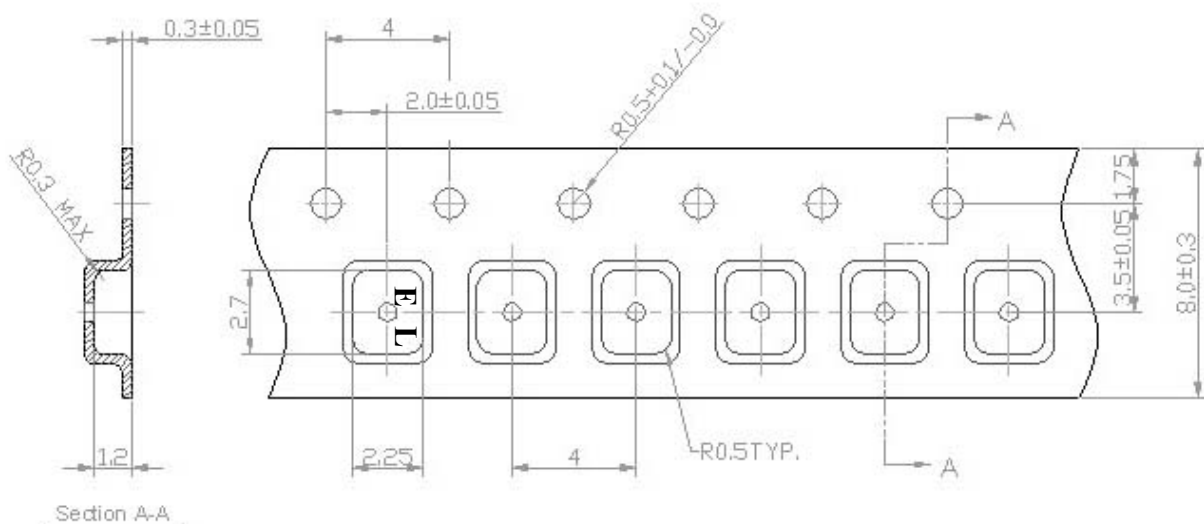


F. PACKING:

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.

