

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

Product Specifications Approval Sheet

Product Name: 71 MHz 0.25MHz BW SMD 13.3 x 6.5 mm SAW IF Filter

TST Parts No.: TB0630A

Customer Parts No.: _____

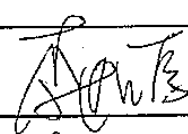
Customer signature required

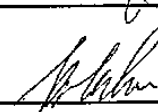
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee 

Approval by: _____ Bob Chau 

Date: _____ 05 / 14 / 2013

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038

FAX: 886-3-4697532

E-mail: tstsales3@mail.taisaw.com Web: www.taisaw.com

IF SAW Filter 71 MHz 0.25MHz BW SMD 13.3 x 6.5 mm

MODEL NO.: TB0630A

Rev No.4

A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. Characteristics :

Item	Unit	Min.	Typ.	Max.
Center frequency, F_c	MHz	-	71	-
Insertion Loss, IL	dB	-	7.2	8.0
1dB Passband width	kHz	250	330	-
Amplitude Ripple F _c +/-125kHz	P-P dB	-	0.9	2.0
Group delay at F _c	usec	1.9	2.34	2.4
Group delay ripple F _c +/-125kHz	nsec	-	550	1500
Relative Attenuation				
F _c +/-300kHz ~ F _c +/-500kHz	dB	15	18	-
F _c +/-500kHz ~ F _c +/-700kHz	dB	30	34	-
F _c +/-700kHz ~ F _c +/-3MHz	dB	35	39	-
F _c +/-800kHz	dB	41	46	-
F _c +/-3MHz ~ F _c +/-35MHz	dB	43	50	-
Temperature Coefficient	ppm/°C ²	-0.036		
Source Impedance (Balanced)	Ohm			
Load Impedance (Balanced)	Ohm			

Note: The Insertion loss has included loss of balun

C. Frequency Characteristics :

1. S21 Response(Span 5MHz)



Fig1. Horizontal: 0.5MHz/Div Vertical: 10dB/Div

2. S21 Response(Span 1MHz)

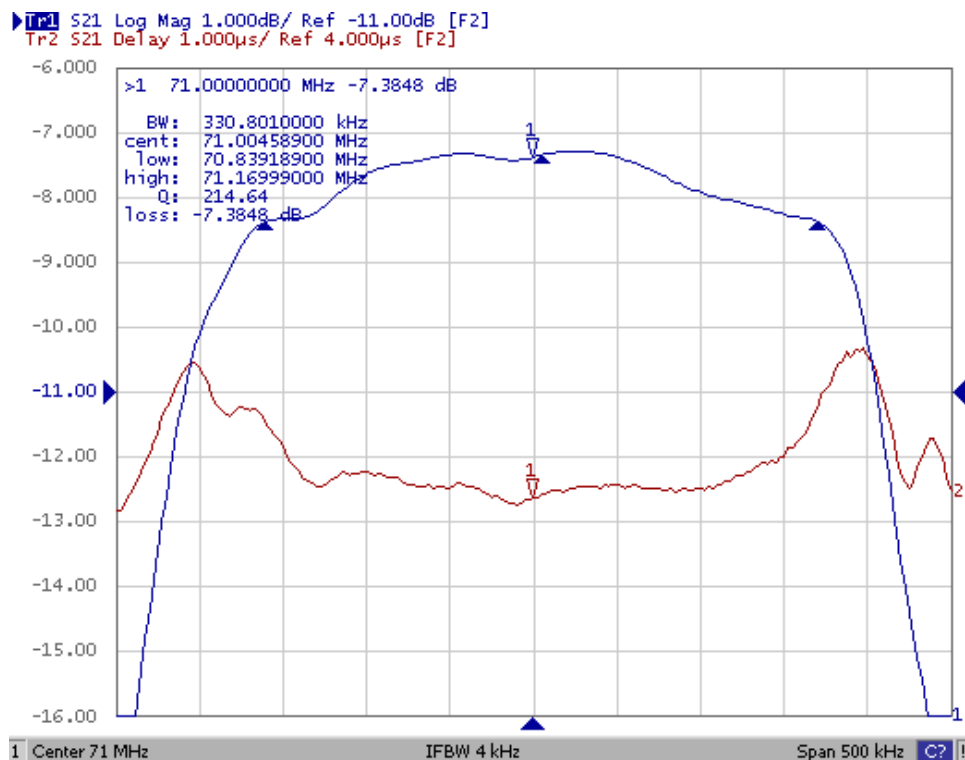
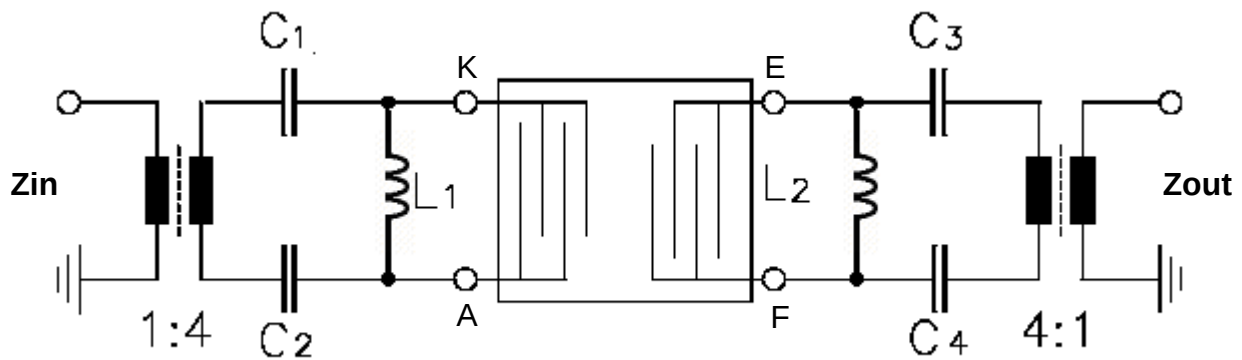
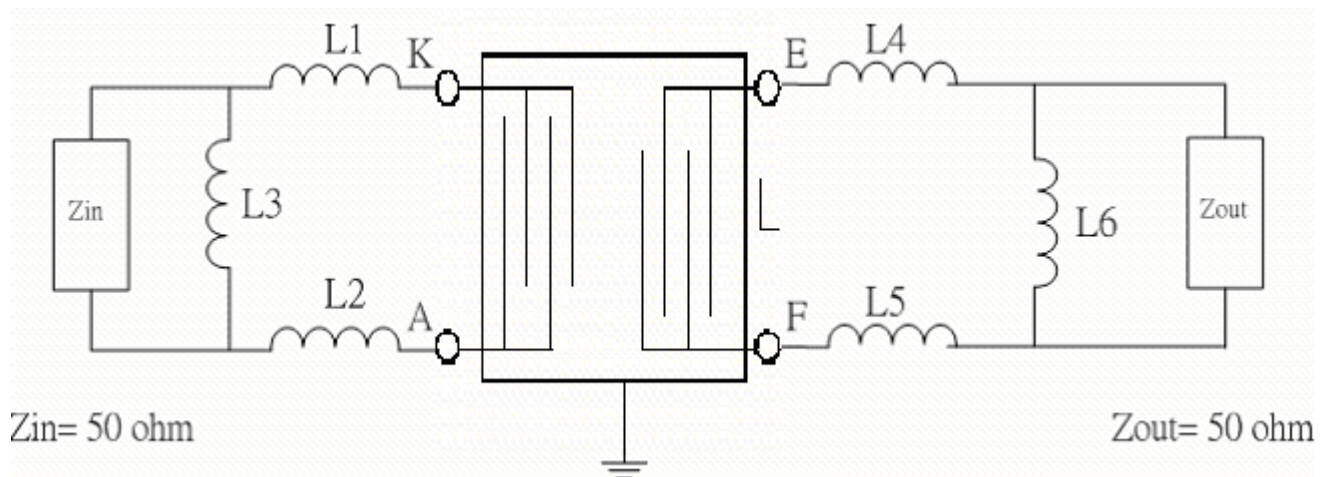


Fig2. Horizontal: 0.05MHz/Div; Vertical: 1dB/Div,
Vertical: 1uS/Div

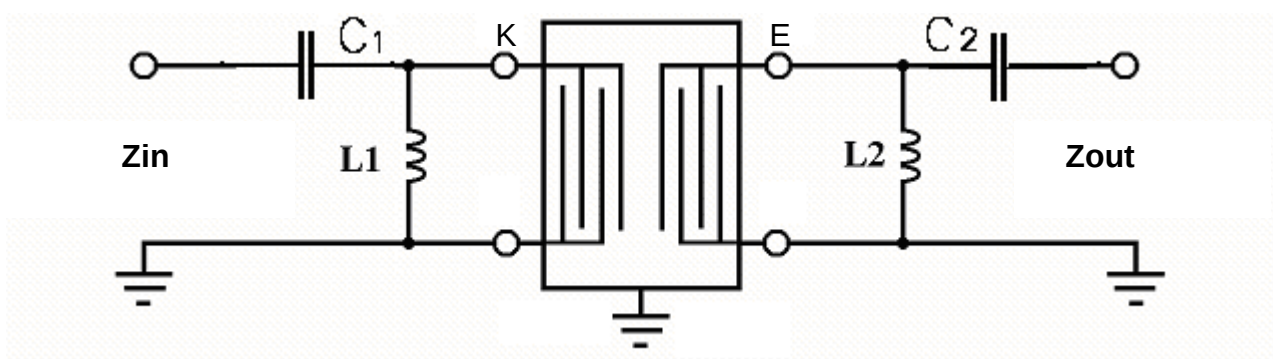
D. Measurement Circuit:



$$L1 = 297\text{nH} \quad C1=C2=9\text{pF} \quad L2=306\text{nH} \quad C3=C4=8\text{pF} \\ Z_{in}=Z_{out}=50\text{ohm}$$

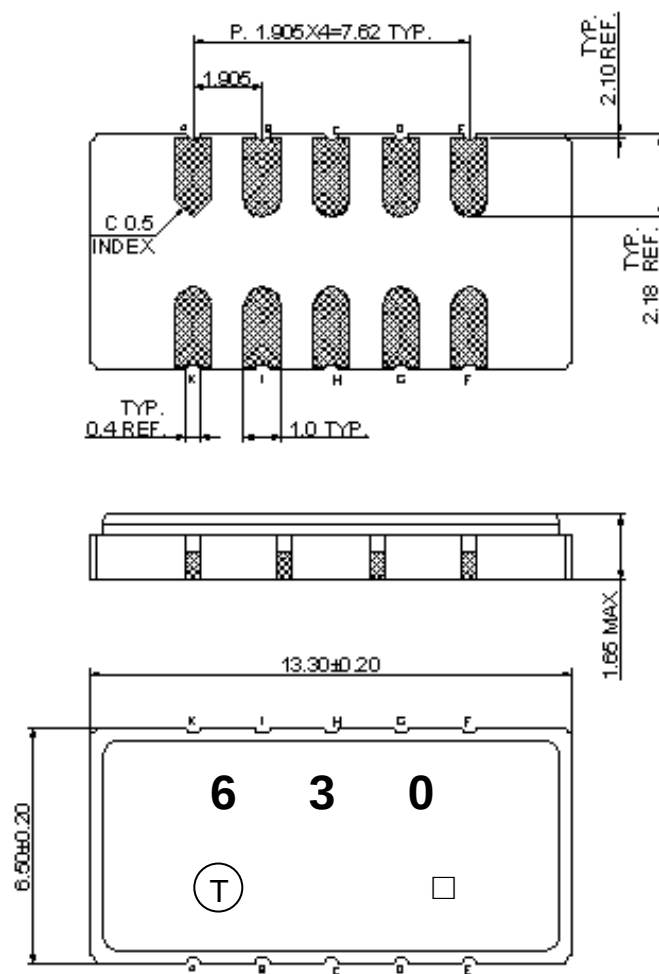


$$L1=L2=165\text{nH} \quad L3=68\text{pF} \quad L4=L5=165\text{nH} \quad L6=82\text{pF}$$



$$L1 = 220\text{nH} \quad C1 = 9\text{pF} \quad L2=220\text{nH} \quad C2=9\text{pF} \\ Z_{in}=Z_{out}=50\text{ohm}$$

E. Outline Drawing:



Pin configuration

Pin K –RF input

Pin A –RF balance input or to be ground

Pin E –RF output

Pin F –RF balance output or to be ground

Pin B,C,D,G,H,I - Ground

□ : Week Code

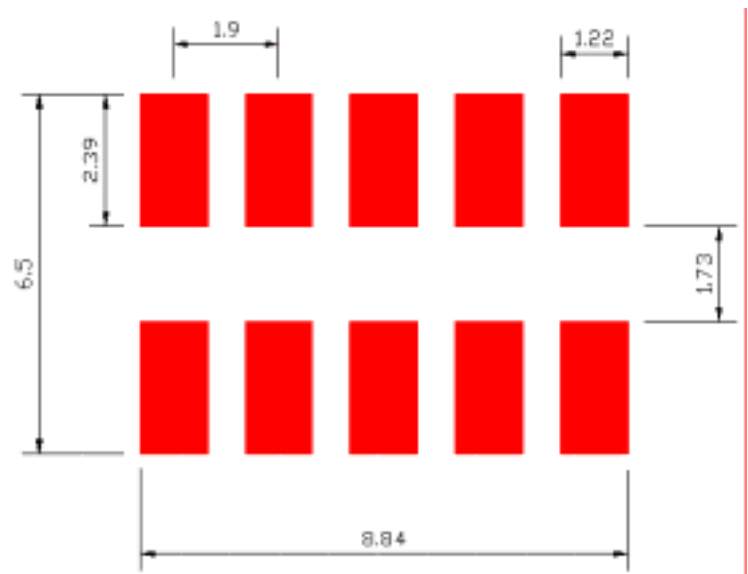
: Product / Year Code

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

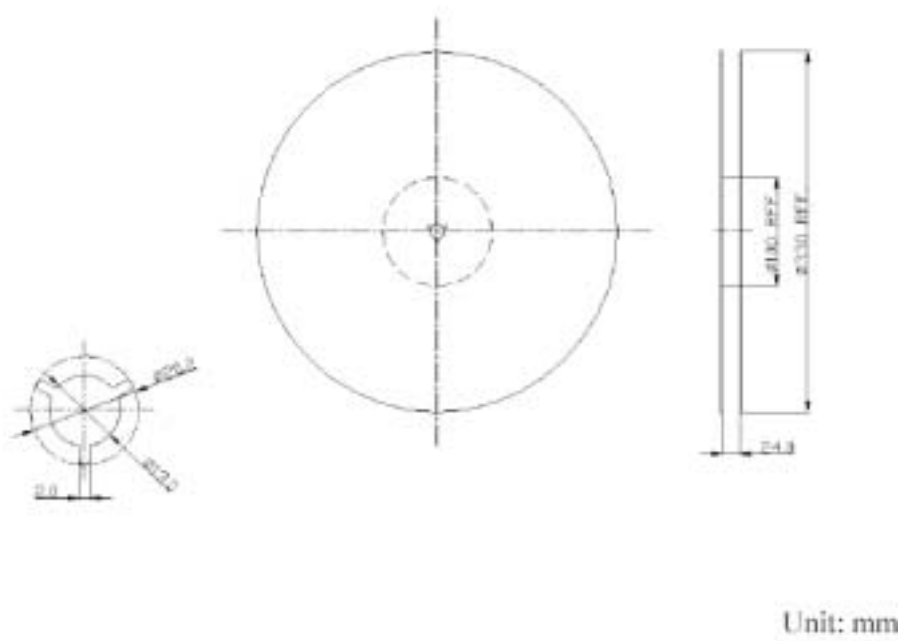
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

F. PCB Footprint:

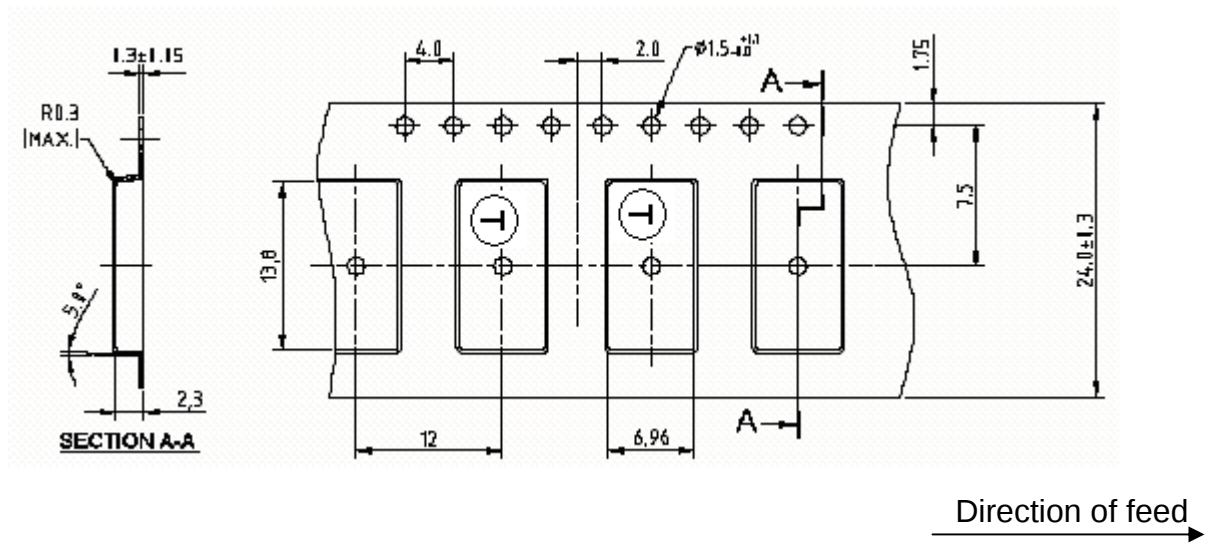


G. PACKING:

- 1. REEL DIMENSION
(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

