



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: 464 MHz 3.4MHz BW SMD 7.0 x 5.0 mm SAW IF Filter

TST Part No.: TB0472A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee

Approved by: _____ Francis Chen

Date: _____ 07/03/2012

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.



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SAW Filter 464 MHz SMD 7.0mmX5.0mm

MODEL NO.: TB0472A

REV. NO. 2

A. MAXIMUM RATING:

1. Operating Temperature: -40°C to +85°C
2. Storage Temperature: -40°C to +85°C
3. Maximum Input Power : 10dBm

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. Characteristics :

1. Ambient Temperature: 25°C
2. Optimal Source Impedance(Balanced): 200 ohm
3. Optimal Load Impedance(Balanced): 200 ohm

Characteristics		Value			Note	
		Min.	Typ.	Max.		
Center frequency	FC	MHz	-	464	-	-
Minimum Insertion Loss		dB	-	10.8	13.0	-
Return Loss (Fc±1.5MHz)		dB	8	13	-	-
1dB Bandwidth		MHz	-	3.50	-	-
3dB Bandwidth		MHz	-	3.96	-	-
Passband Ripple (Fc±1.5MHz)		dB	-	0.7	1.0	-
Group Delay Ripple (Fc±1.5MHz)		nS	-	78	250	-
Attenuation:(Reference level from minimum insertion loss)						dB
1)	10 MHz....264 MHz	dB	30	70	-	-
2)	264 MHz ~ 368 MHz	dB	50	65	-	-
3)	368 MHz ~ 424 MHz	dB	45	60	-	-
4)	424MHz ~ 458.6 MHz	dB	40	48	-	-
5)	469.4 MHz ~504 MHz	dB	40	48	-	-
6)	504 MHz ~ 664 MHz	dB	40	58	-	-
7)	664 MHz ~ 1000 MHz	dB	30	67	-	-
Temp Coefficient		ppm/°C ²	-0.036			

C. FREQUENCY CHARACTERISTICS :

1.S21 Response

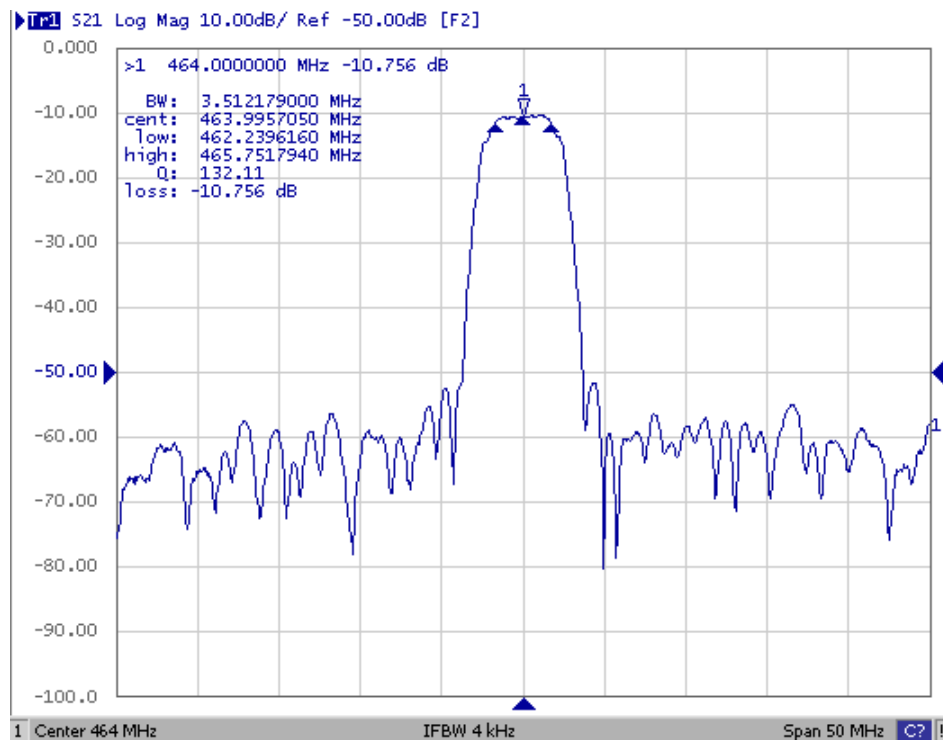


Fig1. Horizontal: 5MHz/Div Vertical: 10dB/Div

2. Passband Response and Group Delay Ripple

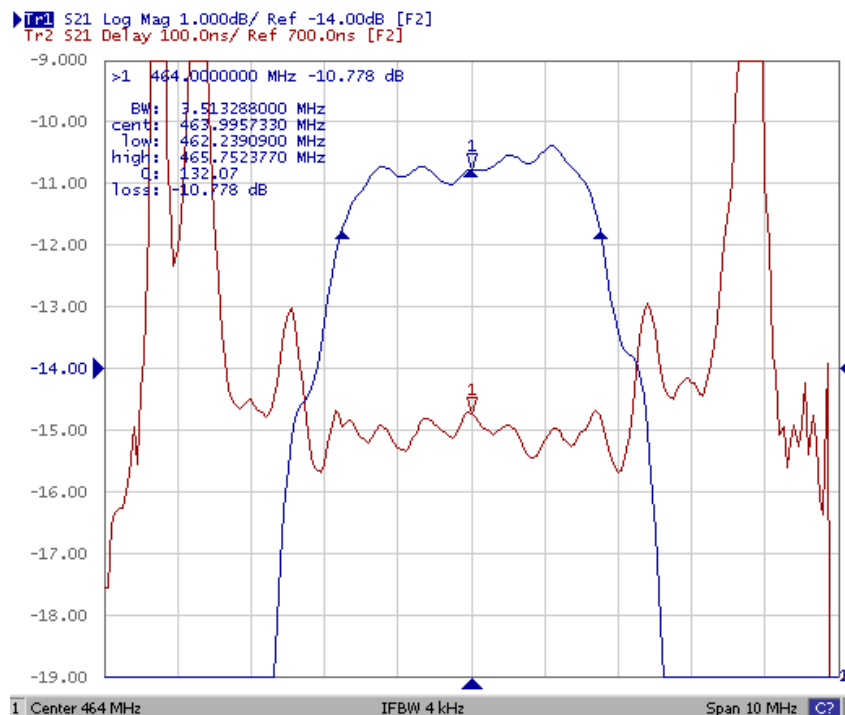


Fig2. Horizontal: 1.0MHz/Div Vertical: 1dB/Div
Vertical: 100nS/Div

3. Wide band Response

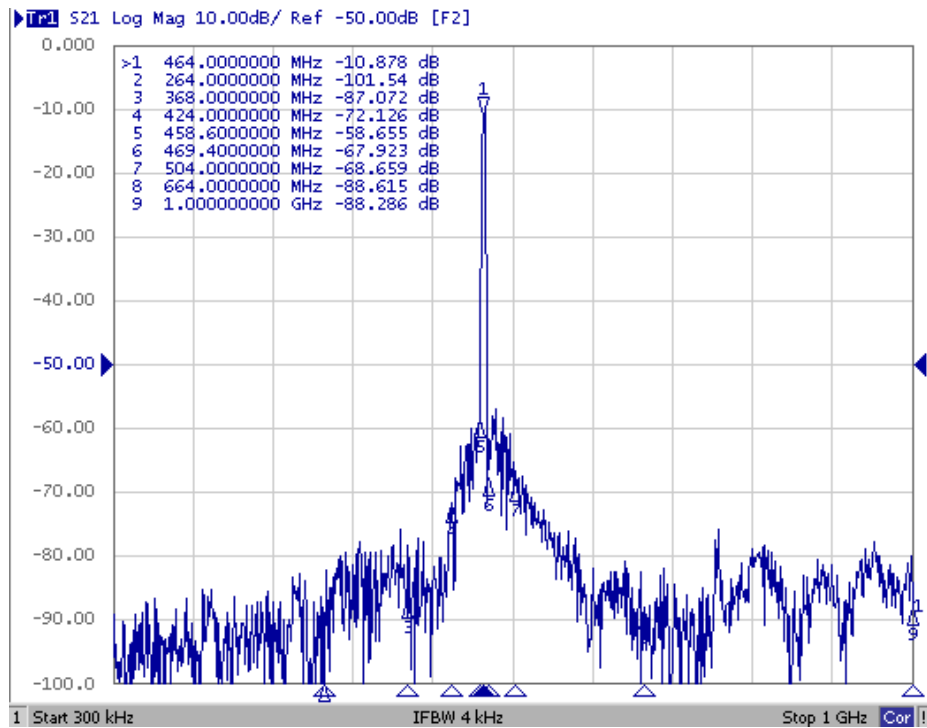
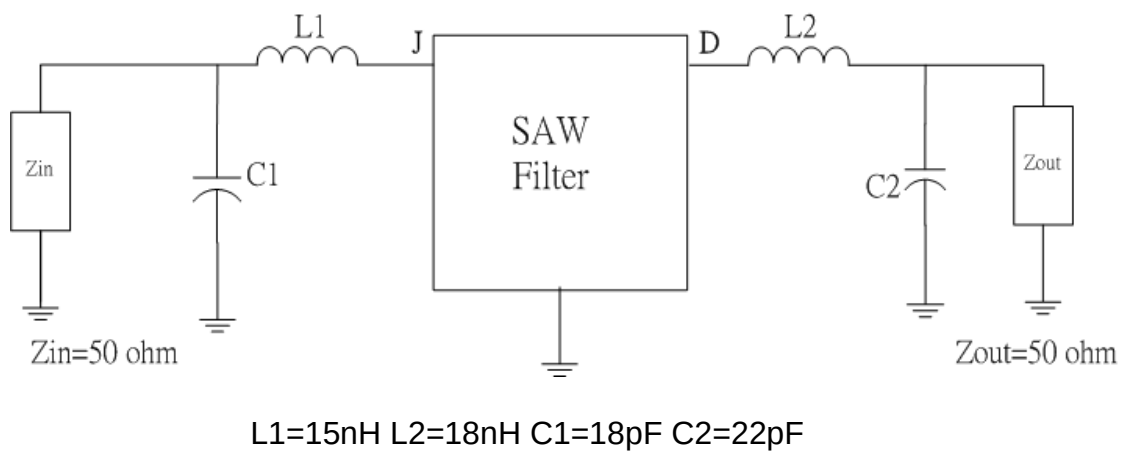


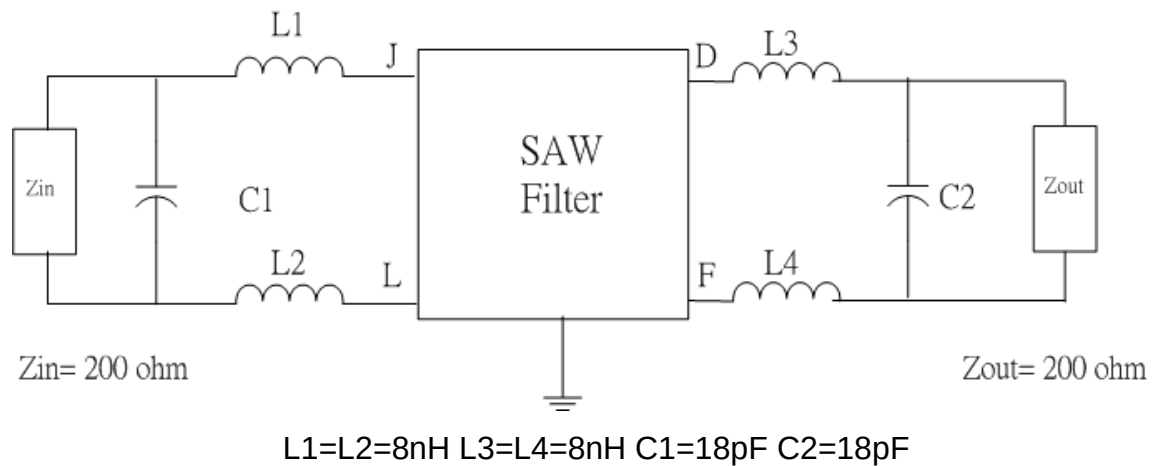
Fig4. Horizontal: 100MHz/Div Vertical: 10dB/Div

D. MEASUREMENT CIRCUIT

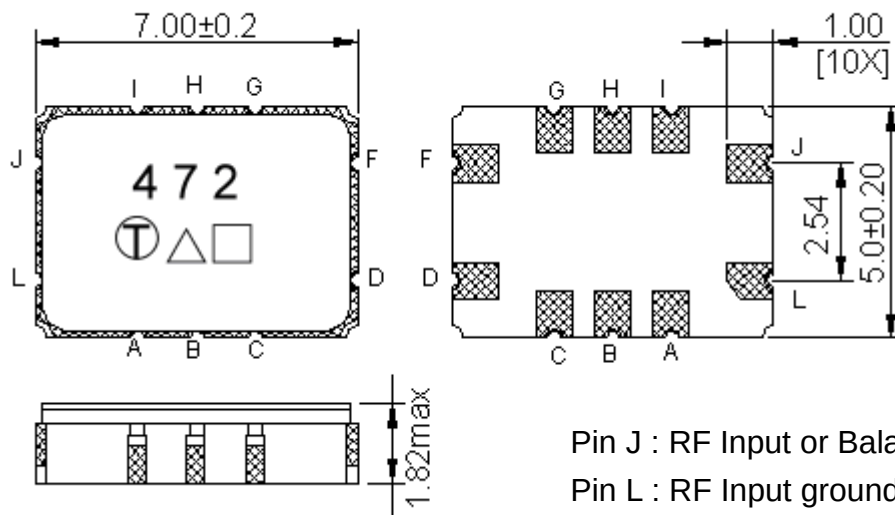
(1) Single ended input 50 ohm to Single ended Output 50 ohm



(2) Balanced 200 ohm to Balanced 200 ohm



E.OUTLINE DRAWING:



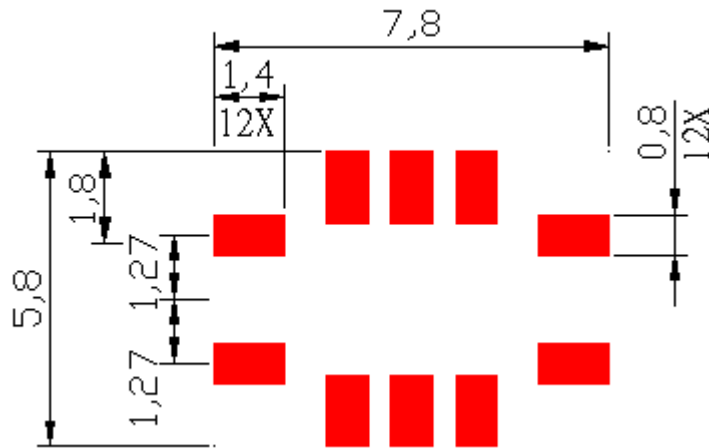
Pin J : RF Input or Balanced Input +
 Pin L : RF Input ground or Balanced input -
 Pin D : RF Output or Balanced Output+
 Pin F : RF Output ground or Balanced Output -
 Pin A,B,C,G,H,I : Ground
 Unit: mm
 □ : Week Code
 △ : Product / Year Code

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

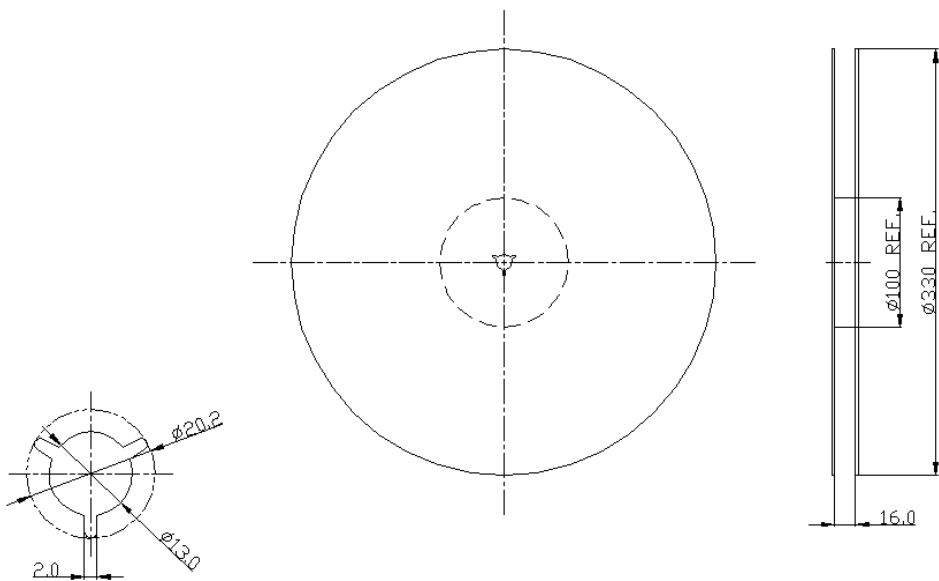
F. PCB Footprint



Unit: mm

G. PACKING:

1. REEL DIMENSION



Unit: mm

Technical drawing of a component with dimensions and tolerances. The drawing includes a side view on the left and a top view on the right. The side view shows a profile with a thickness of 0.3 ± 0.05 mm, a fillet radius of $R0.3$ MAX.1, and a chamfer of 5.0° . The top view shows a rectangular layout with overall dimensions of 16.0 ± 0.3 mm by 7.5 mm. The component features a central row of 7 holes with a diameter of $\phi 1.5_{-0.1}^{+0.1}$ mm and a pitch of 2.0 mm. There are also 4 larger rectangular features arranged in a row, with a pitch of 5.5 mm. The total length of the component is 1.8 mm. The unit is mm.

The graph illustrates the temperature profile over time. The y-axis represents Temperature in degrees Celsius, ranging from 20 to 280. The x-axis represents Time in seconds, ranging from 0 to 360. The curve shows a rapid initial rise, a period of relative stability (plateau) around 150°C, a second rise to a maximum, and a subsequent cooling phase.

Time (Sec)	Temp (Deg C)
0	25
20	28
40	145
60	150
80	155
100	150
120	170
140	180
160	200
180	220
200	250
220	260
240	250
260	180
280	150
300	150
320	140
340	120
360	110