



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: 632.8125 MHz 1.0MHz BW SMD 3.0 x 3.0 mm SAW RF Filter

TST Parts No.: TA1730A

Customer Parts No.: _____

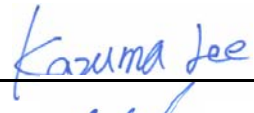
Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee 

Approval by: _____ Bob Chau 

Date: _____ 06 / 12 / 2014

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 632.8125MHz 1.0MHz BW (SMD 3.0×3.0 mm)

MODEL NO.: TA1730A

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 85°C
2. Storage temperature range: -55°C to 85°C
3. Input Power Level : 4 dBm
4. Maximum DC Voltage : 10V
5. MSL : Level 1

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. Characteristics :

Data is valid for all operational temp. range -40 to +85C

Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	632.8125	-
Insertion Loss, IL	dB	-	2.9	4.5
-3dB bandwidth	MHz	-	1.6	-
Passband Ripple(632.3125~633.3125)	dB	-	0.5	1.5
Return Loss with matching circuit (632.3125~633.3125)	dB	7	10	-
Attenuation (Relative to IL @ 632.8125MHz)				
DC~F _c -32.8MHz	dB	40	55	-
F _c -32.8MHz ~F _c -12.8MHz	dB	30	25	-
F _c -12.8MHz ~F _c -2MHz	dB	10	20	-
F _c -2MHz ~F _c -1MHz	dB	5	8.2	-
F _c +1.5MHz ~F _c +2MHz	dB	5	14	-
F _c +2MHz ~ F _c +12.8MHz	dB	10	24	-
F _c +12.8MHz ~ F _c +32.8MHz	dB	28	31	-
F _c +32.8MHz ~ F _c +600MHz	dB	38	42	-
F _c +600MHz ~ F _c +2400MHz	dB	35	60	-
Temperature Coefficient	ppm/°C ²	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. Frequency Characteristics :

(1) Pass band Response:

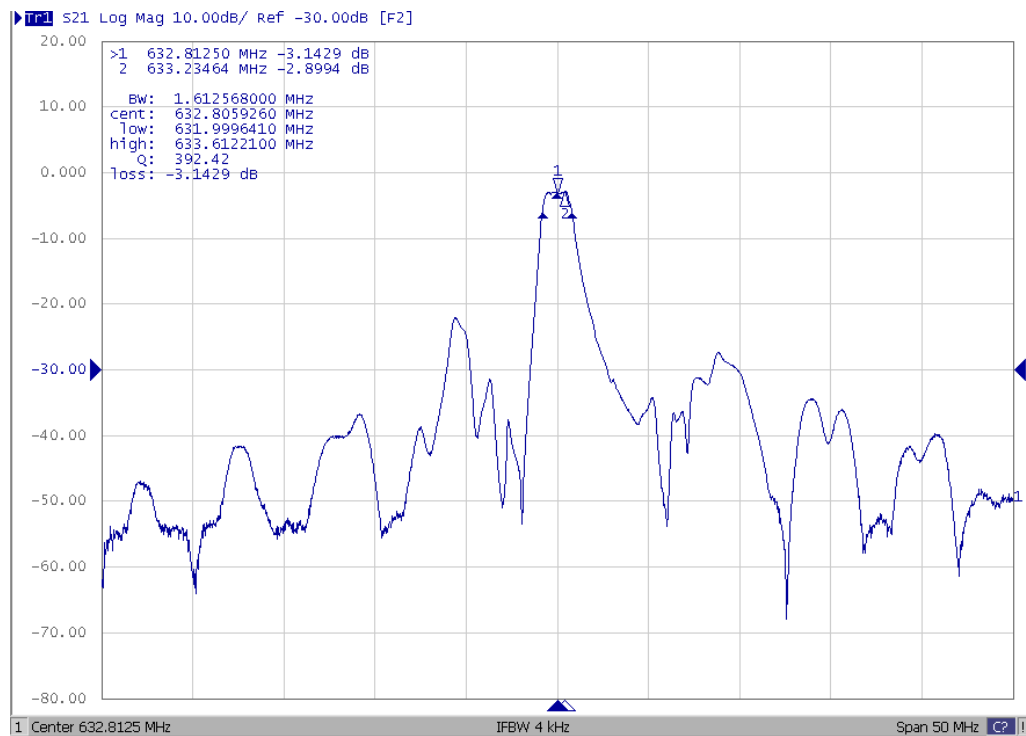


Fig1. Horizontal: 5MHz/Div Vertical: 10dB/Div

(2) Wide band Response:

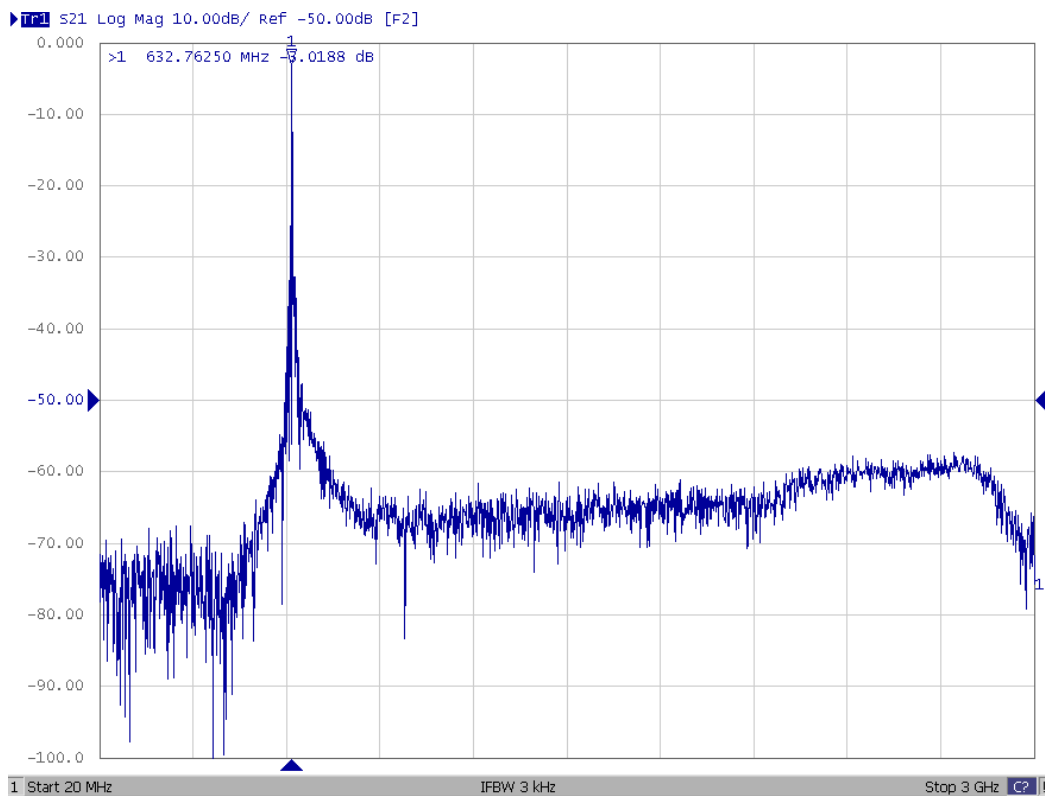
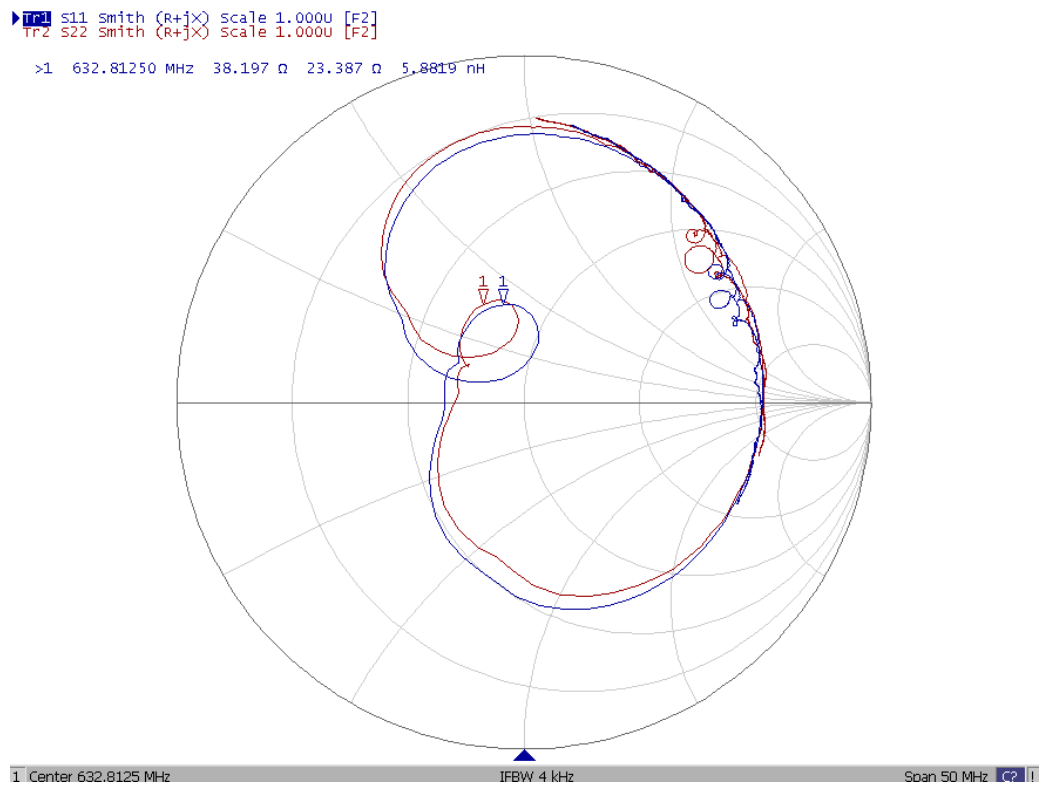
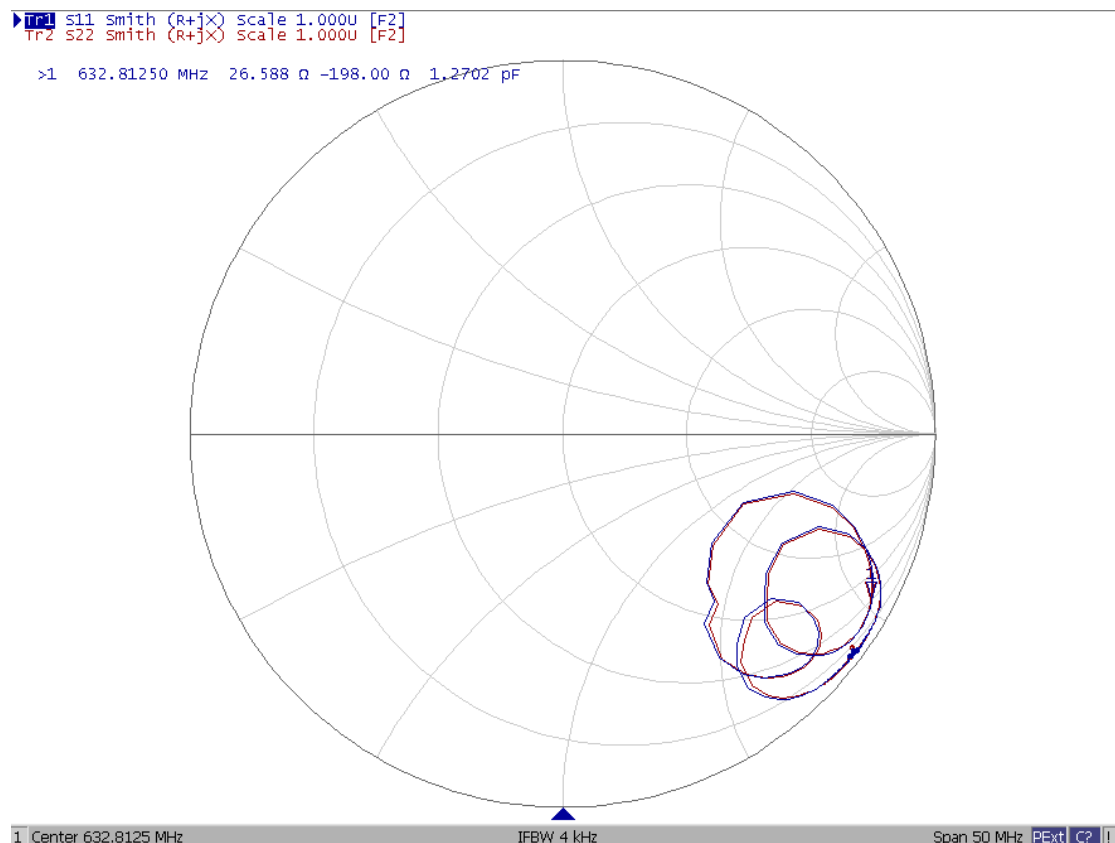


Fig2. Horizontal: 300MHz/Div Vertical: 10dB/Div

(3) Smith Chart:
With matching circuit



(4) Smith Chart:
Without matching circuit



(5) Return Loss:

With matching circuit

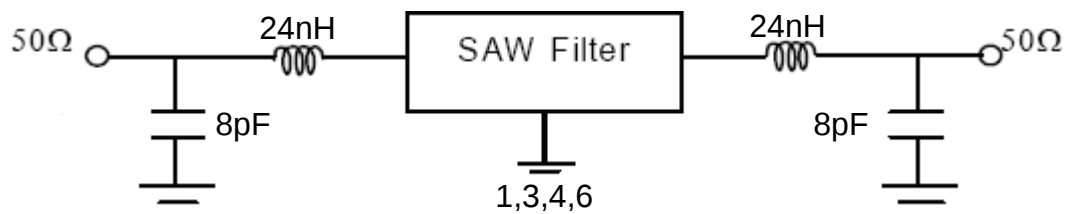


(6) Return Loss:

Without matching circuit



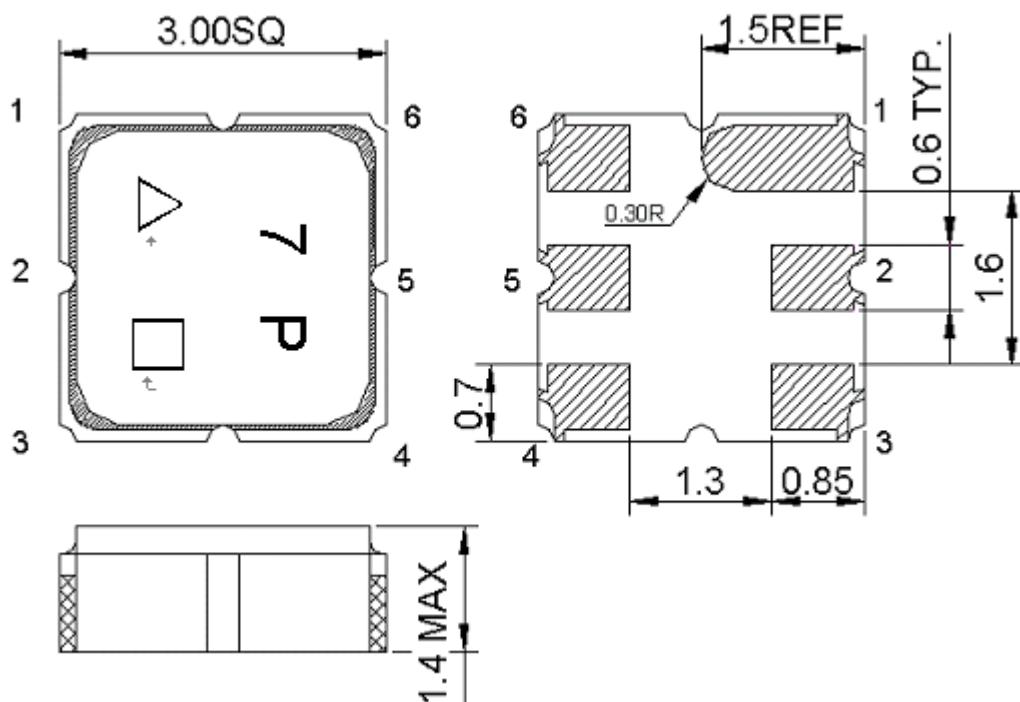
D. Matching Circuit:



0805 Coillcraft CS series chip conductor is used for inductor.

0402 muRata GRM series is used for capacitor.

E. Outline Drawing:



#2 –Input

#5 – Output

#1,3,4,6 – Ground

△ : Year Code (2009->9, 2010->0,..., 2018->8)

□ : Week

Note :

The base material is ceramic with Au over Ni plating.

The plating thicknesses are:

Electro Ni : 1.27~8.89 μ m.

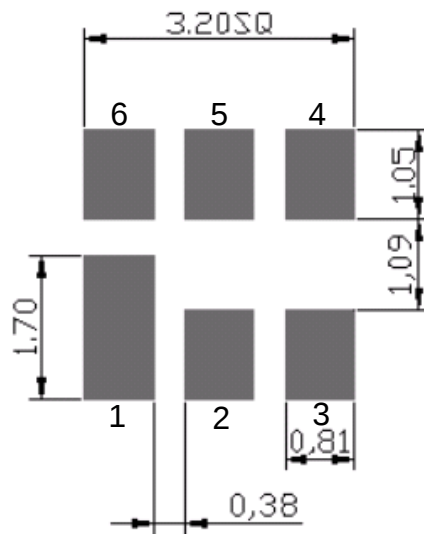
Electro Au : 0.3~1.0 μ m (solder pads only).

0.3 μ m Min. (Others)

Week Code Table

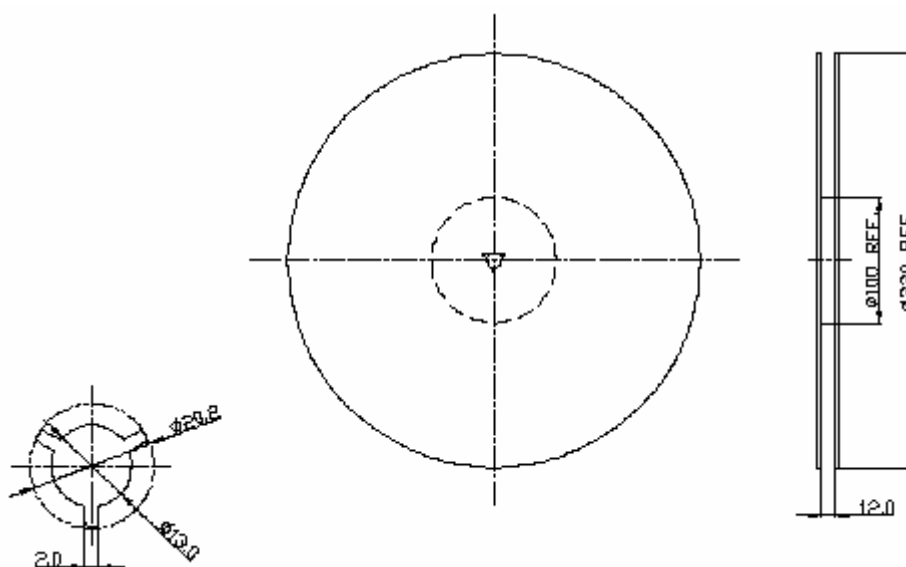
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

F. PCB Footprint:

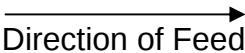


G. PACKING:

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



2. TAPE DIMENSION:



H. RECOMMENDED REFLOW PROFILE:

