



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: 498MHz 1MHz BW SMD 7.0 x 5.0 mm SAW IF Filter

TST Parts No.: TB1301A

Customer Parts No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Kazuma Lee *Kazuma Lee*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 08 / 02 / 2018

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 498MHz 1MHz BW (SMD 7.0×5.0mm)

MODEL NO.: TB1301A

REV. NO.1

A. MAXIMUM RATING:

1. Operating temperature range: -25℃ to 85℃
2. Storage temperature range: -40℃ to 85℃
3. Input Power Level : 20 dBm
4. Maximum DC Voltage : 10V
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

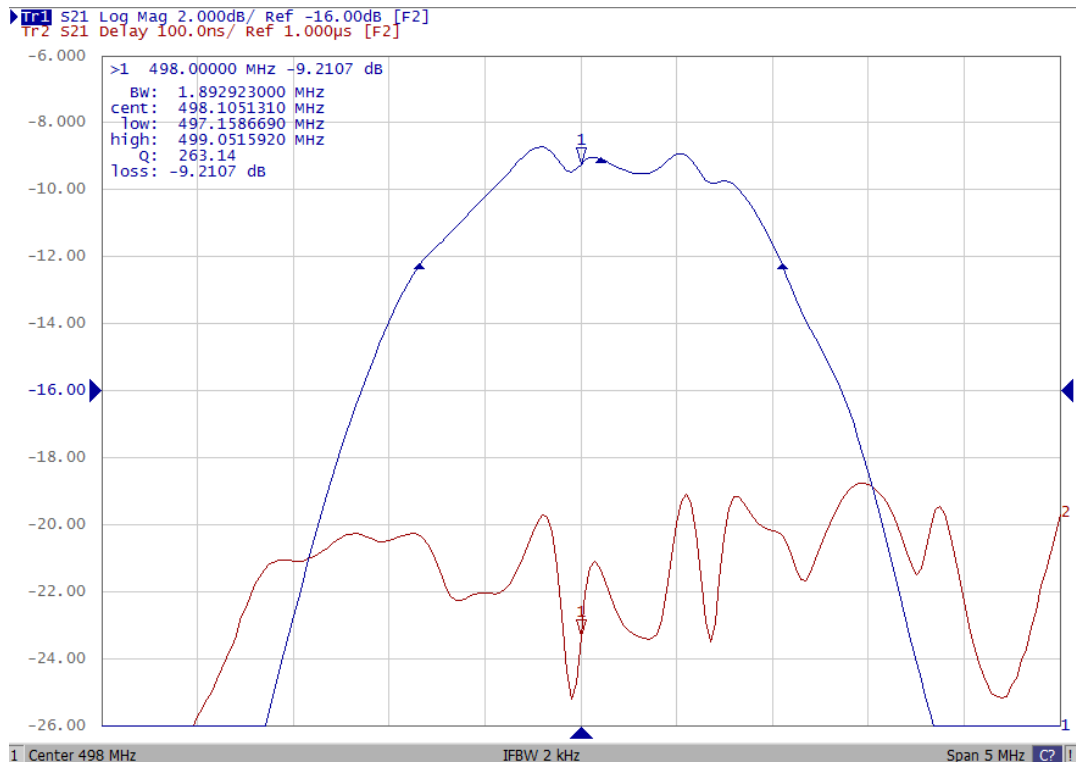
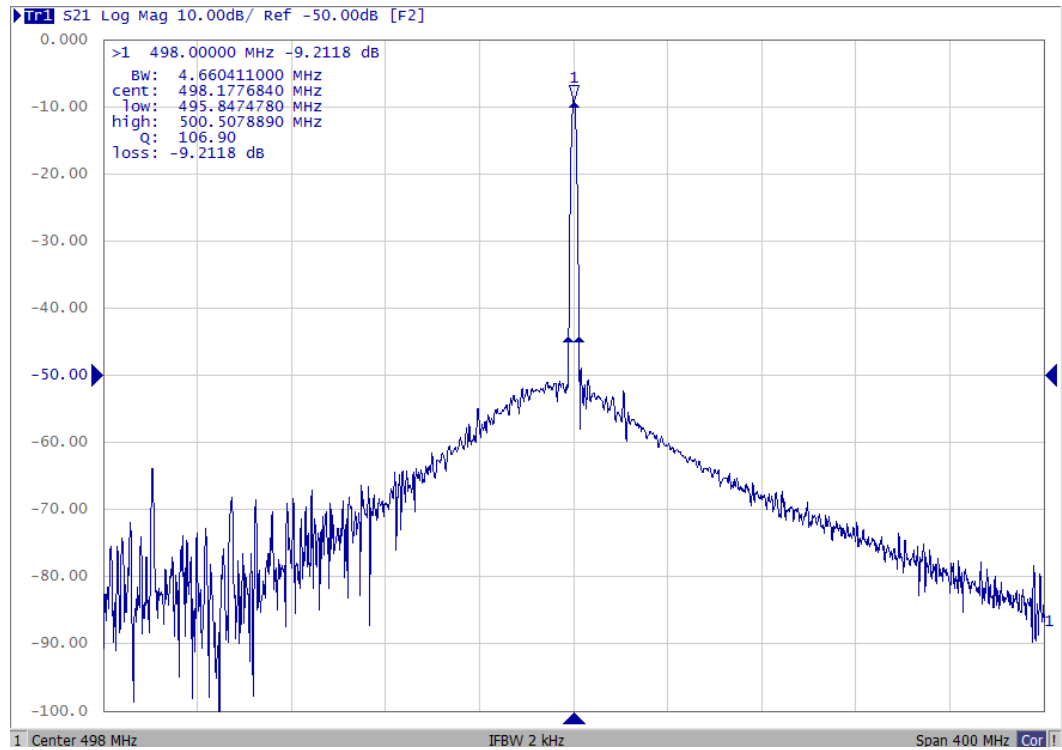
Electrostatic Sensitive Device

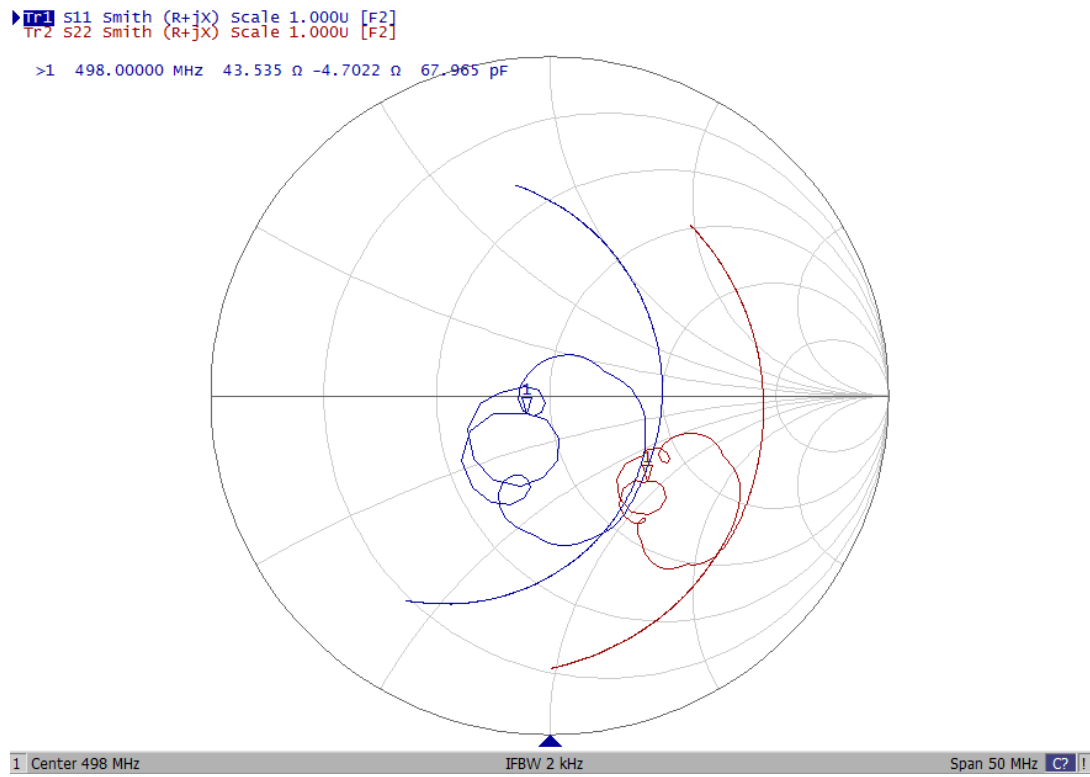
B. CHARACTERISTICS:

Temperature range for specification: T = 25 °C

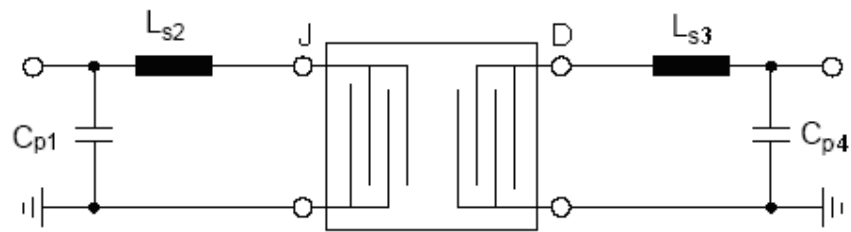
Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	498	-
Insertion Loss, IL	dB	-	8.7	10.0
-3dB Lower Frequency	MHz	-	497.1	497.5
-3dB Upper Frequency	MHz	498.5	499.0	-
-35dB Lower Frequency	MHz	495	495.8	-
-35dB Upper Frequency	MHz	-	500.5	501
Passband Ripple F _c +/-100KHz	MHz	-	0.5	1.0
Attenuation:(Reference level from Min IL)				
F _c -200MHz ~ F _c -10MHz	dB	40	43	-
F _c -10MHz ~ F _c -3MHz	dB	35	43	-
F _c +3MHz ~ F _c +10MHz	dB	35	40	-
F _c +10MHz ~ F _c +200MHz	dB	40	44	-
Temp. Coefficient	ppm/°C ²	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. FREQUENCY CHARACTERISTICS:



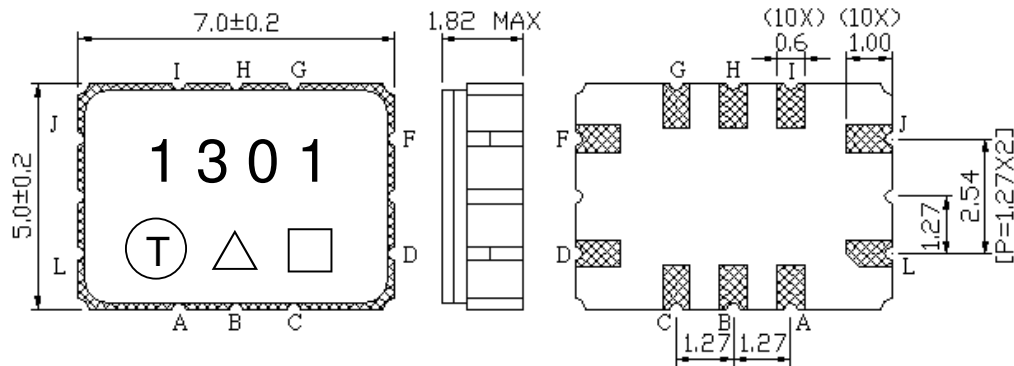


D. MATCHING CIRCUIT:



$$L1=12\text{nH} \quad L2=15\text{nH} \quad C1=18\text{pF} \quad C2=12\text{pF}$$

E. OUTLINE DRAWING:



Pin J: RF Input

Pin D: RF Output

Pin A, B, C, F, G, H, I, L: To be ground

Unit : mm

□ : Week Code

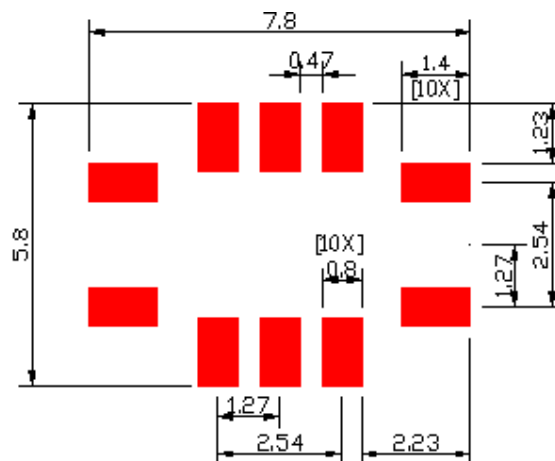
△ : Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
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

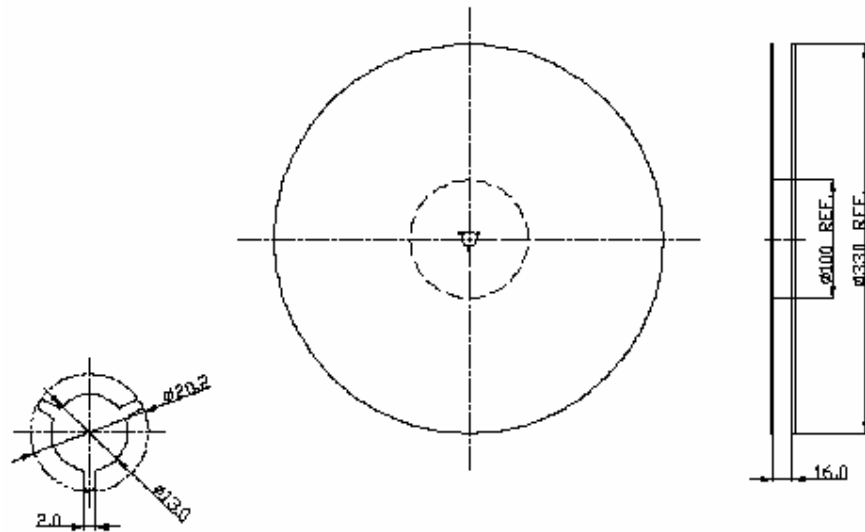
F. PCB FOOTPRINT:



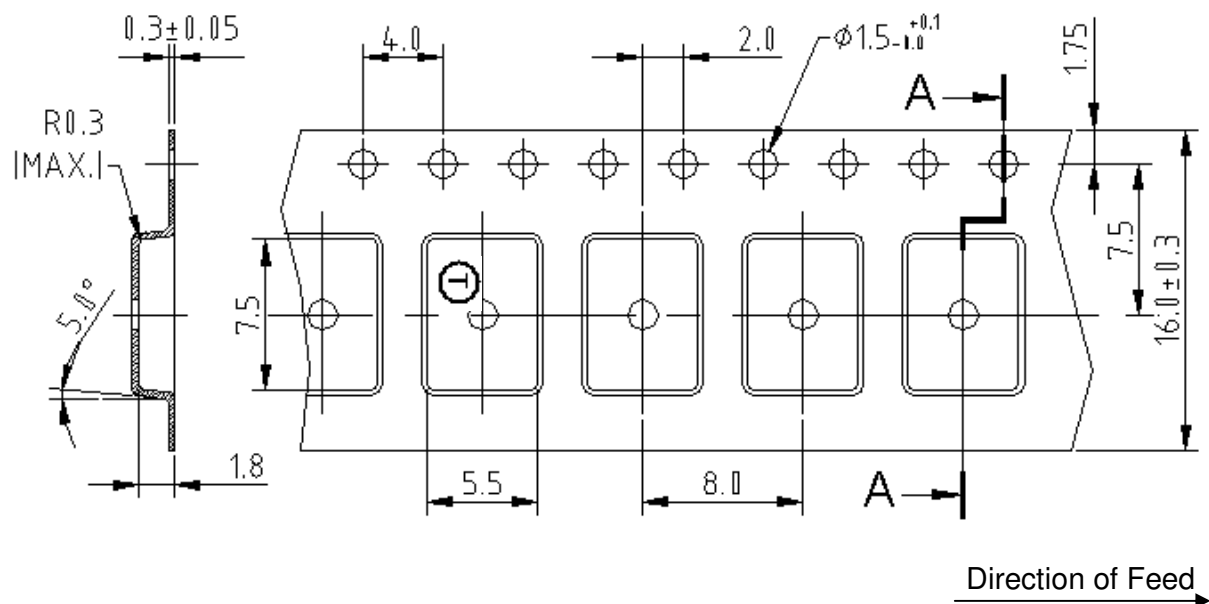
G. PACKING:

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity and FR-75M03 for MSL)



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

