



TAI-SAW TECHNOLOGY CO., LTD.

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

Product Description: Low-Loss 70MHz IF SAW Filter (BW=3.0MHz)

TST Parts No.: TB0195A

Customer Parts No.: _____

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

Checked by: _____ Ava Wang *Ava Wang*

Approved by: _____ Kazuma Lee *Kazuma Lee*

Date: _____ 2022/04/14

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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Low-Loss 70 MHz IF SAW Filter (SMD 13.3x6.5 mm)

Model No.: TB0195A

Rev. No.:3.0

A. MAXIMUM RATING:

1. Input Power Level: +20 dBm
2. Operating Temperature: -10 °C to 70 °C.
3. Storage Temperature: -40 °C to 85 °C
4. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

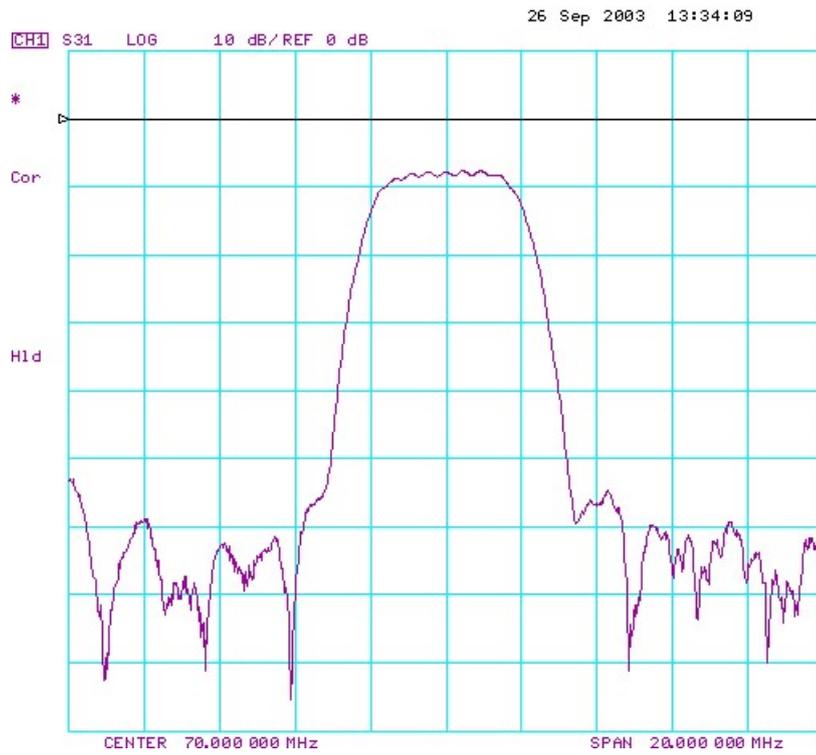
Electrostatic Sensitive Device

B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.	Note
Center frequency, F_c	MHz	69.85	70	70.15	
Insertion Loss, IL	dB	-	7.5	8.2	
1 dB Bandwidth	MHz	2.3	2.63	-	
3 dB Bandwidth	MHz	3.0	3.55		
35 dB Bandwidth	MHz		6.0	7.5	
Amplitude ripple within $F_c \pm 0.92$ MHz	dB	-	0.75	1	
Phase Linearity within $F_c \pm 1.2$ MHz (rms)	deg	-	2.2	5	
Group Delay ripple within $F_c \pm 1.2$ MHz	nsec		155	190	
Absolute Delay	µsec	-	1.07	-	
Attenuation (Reference level from Min IL)					
10 ~ 66MHz	dB	40	45	-	
74~140MHz	dB	40	45	-	
Substrate Material	-	-	YZ-LN	-	
Temperature Coefficient	ppm/ °C	-	-94	-	
Ambient Temperature	°C	-	25	-	

C. FREQUENCY CHARACTERISTICS:

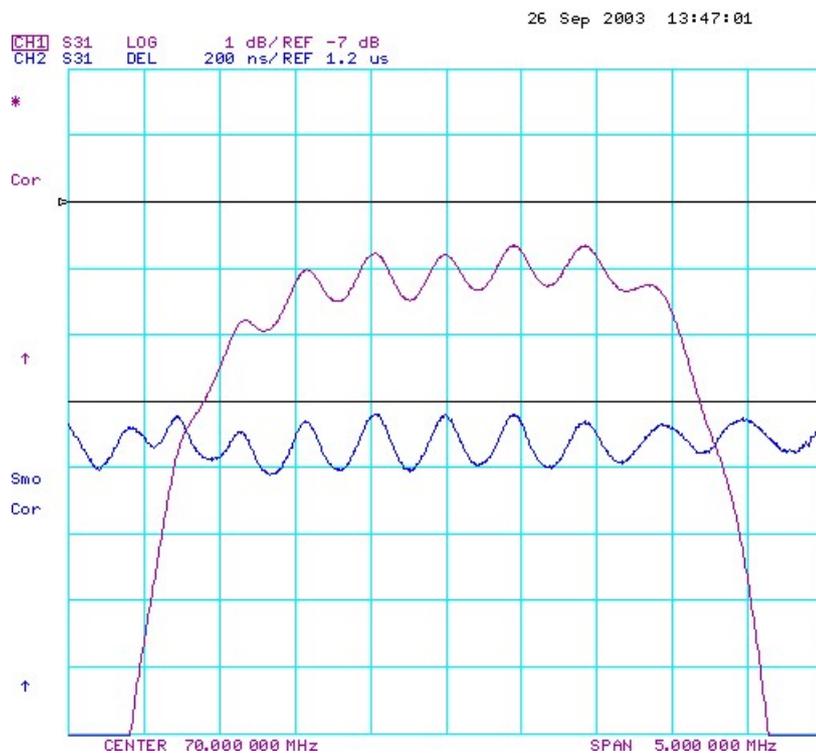
(1) S21 Response:



Horizontal: 2 MHz/Div

Vertical: 10 dB/Div

(2) Group Delay and Ripple

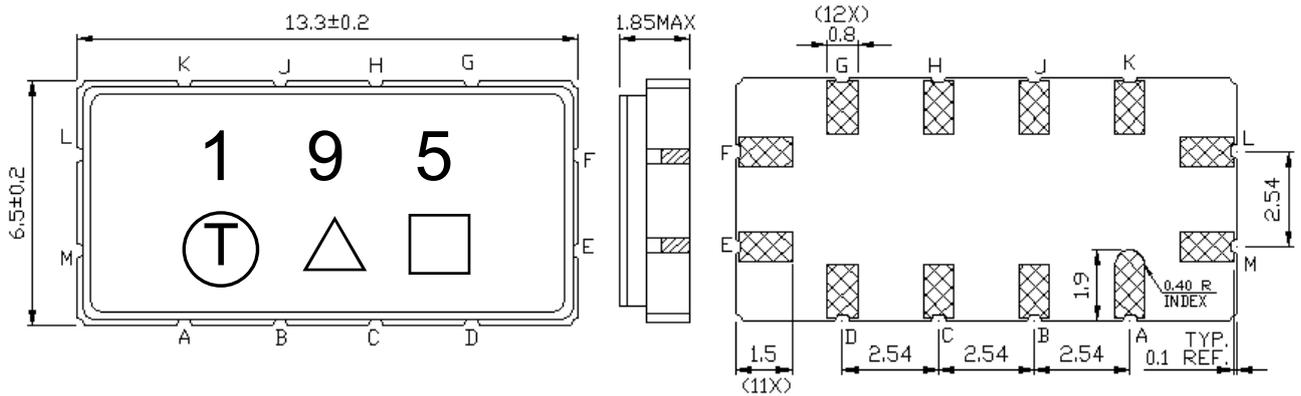


Horizontal: 500 kHz/Div

CH1 Vertical 1: 1 dB/Div

CH2 Vertical 2: 200 nsec/Div

D. OUTLINE DRAWING:



- Pin L: RF Input
- Pin E: RF Output
- Pin M: Input Ground
- Pin F: Output Ground
- Pin A, B, C, D, G, H, J, K: To be Ground
- Unit: mm
- △ : Product / Year Code
- : Week Code

Product / Year Code- 4year cycle

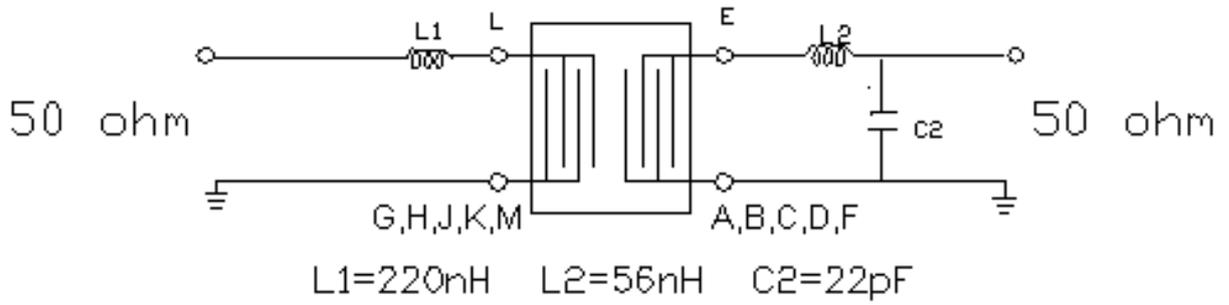
Year	2021 2025	2022 2026	2023 2027	2024 2028
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

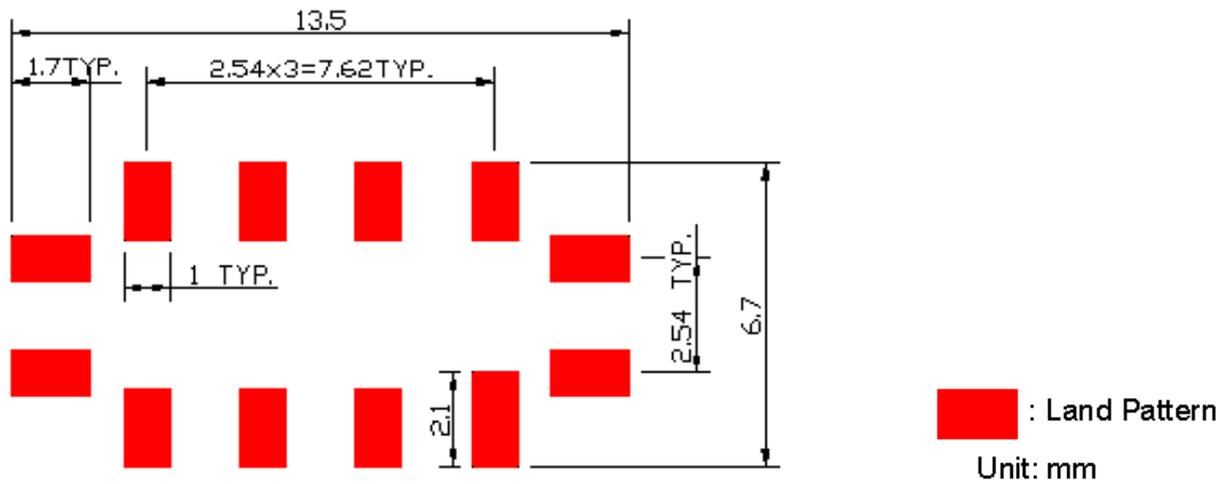
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

E. MEASUREMENT CIRCUIT:

(1) For 50 ohm Unbalanced Input and Output

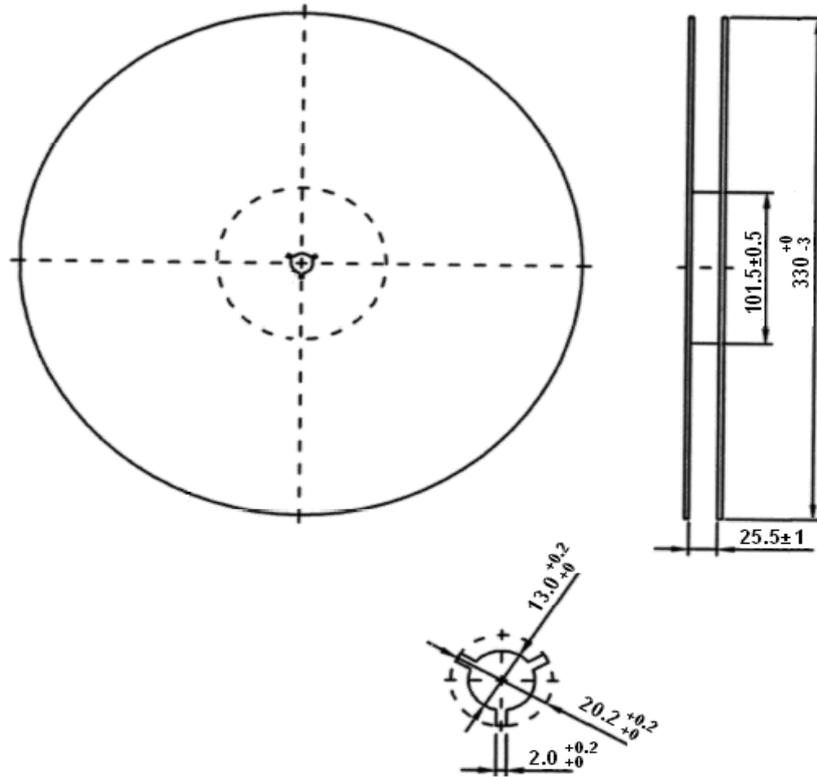


F. PCB FOOTPRINT:



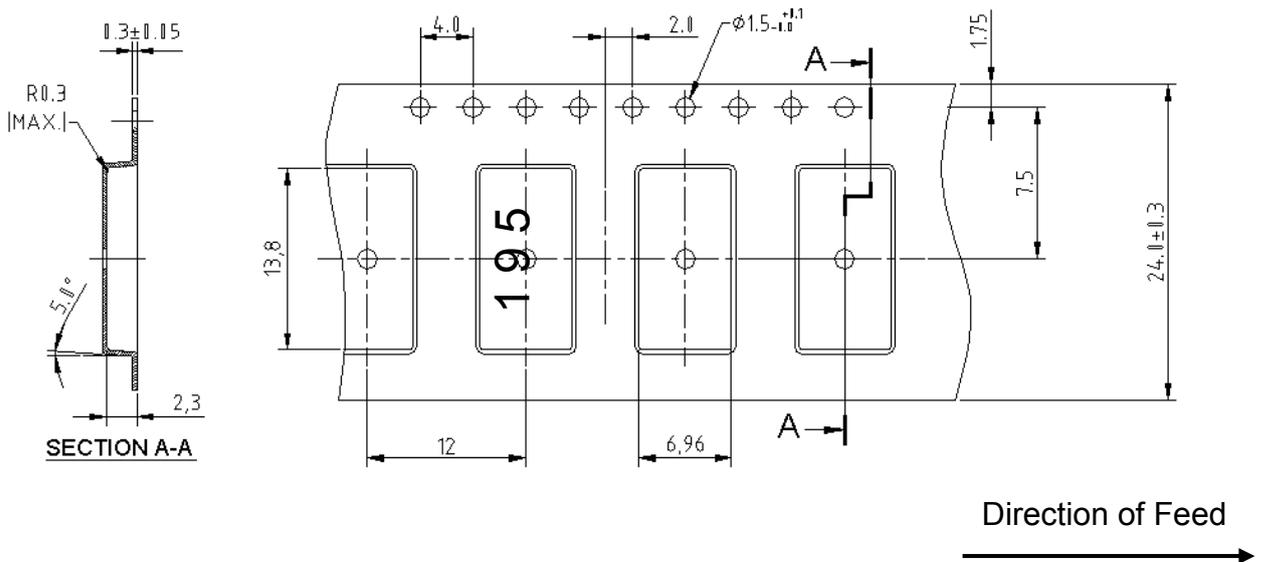
G. PACKING:

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



Unit: mm

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.

