

Product Specifications Approval Sheet

Product Description: 469.8MHz 55MHzBW SMD 5.0mm x 5.0 mm SAW IF Filter

TST Parts No.: TB0961A

Customer Parts No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee *Kazuma Lee*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 04 / 23 / 2021

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 469.8MHz 55MHz BW (SMD 5.0×5.0 mm)

MODEL NO.: TB0961A

REV. NO.2

A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V
5. Moisture Sensitivity Level: Level1 (MSL1)



Electrostatic Sensitive Device

B. CHARACTERISTICS:

Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	469.8	-
Insertion Loss, IL	dB	-	10.8	14.0
-1dB bandwidth	MHz	54	58	-
-40dB bandwidth	MHz	-	76	80
Passband Ripple F _c +/- 25MHz	dB	-	0.6	1.0
Attenuation:(Reference level from Min IL)				
DC ~ 360MHz	dB	45	60	-
360MHz ~ 389MHz	dB	40	58	-
389MHz ~ 430MHz	dB	30	44	-
517MHz ~ 550MHz	dB	35	41	-
550MHz ~ 600MHz	dB	40	55	-
600MHz ~ 890MHz	dB	45	52	-
890MHz ~ 1000MHz	dB	35	52	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. FREQUENCY CHARACTERISTICS:

(1) Wide band Response:(span 400MHz)

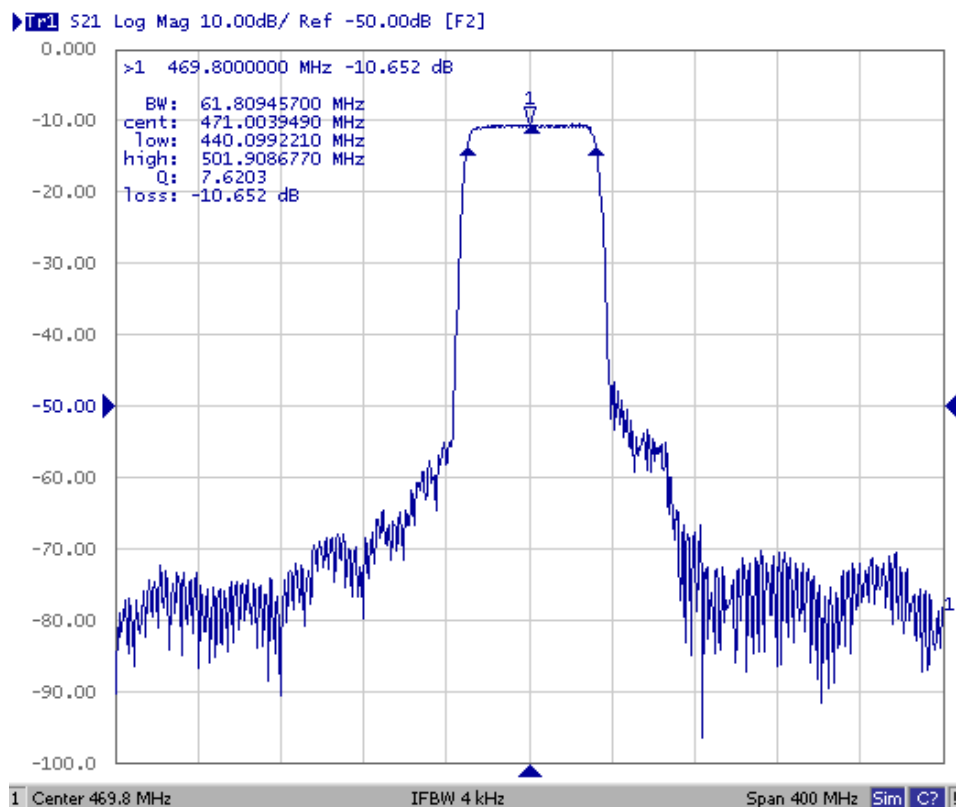


Fig1. Horizontal: 40MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

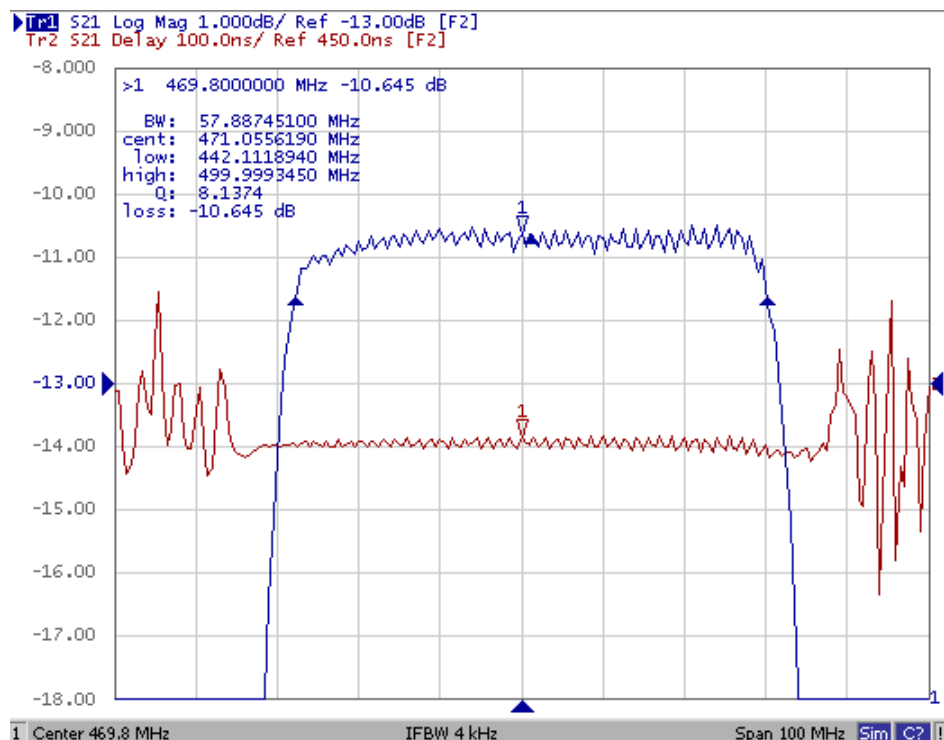
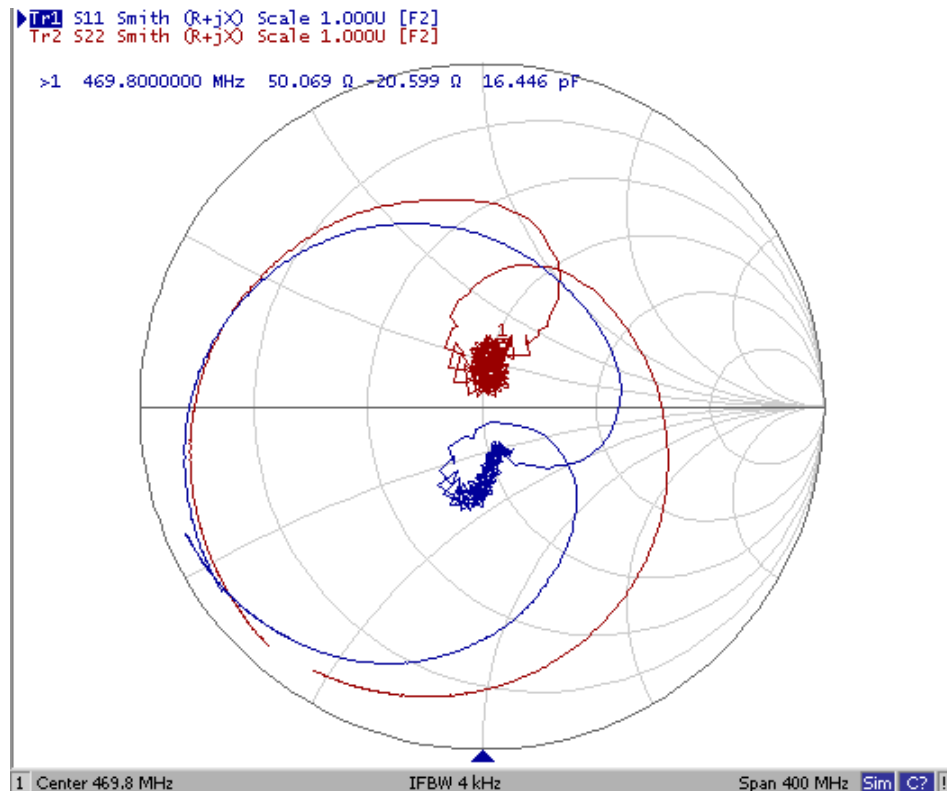


Fig2. Horizontal: 10MHz/Div Vertical: 1dB/Div
Vertical: 100ns/Div

(3) Smith Chart:



(4) Wide Band:

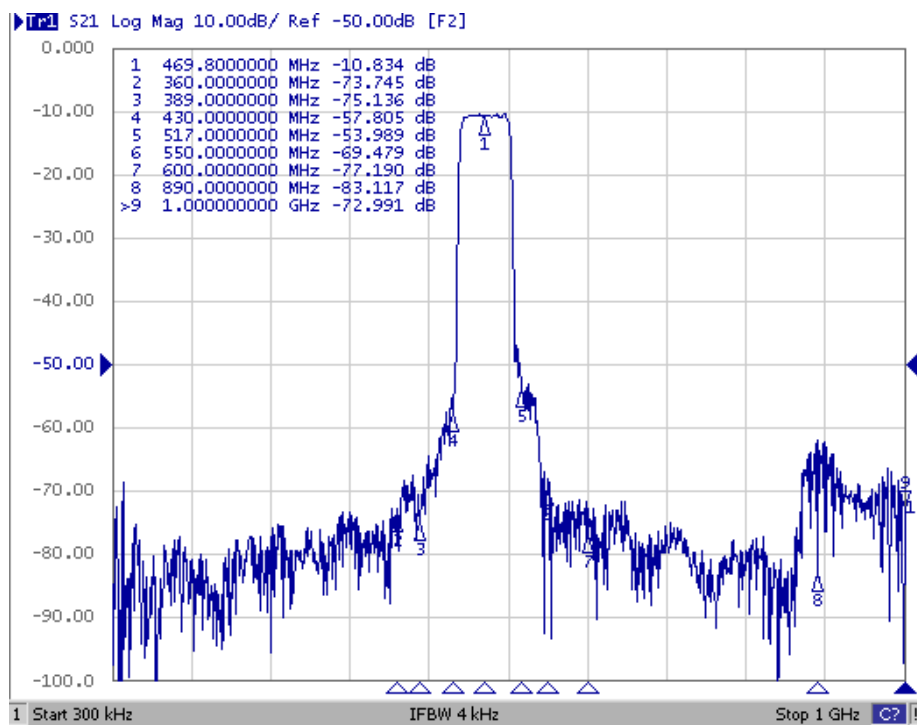
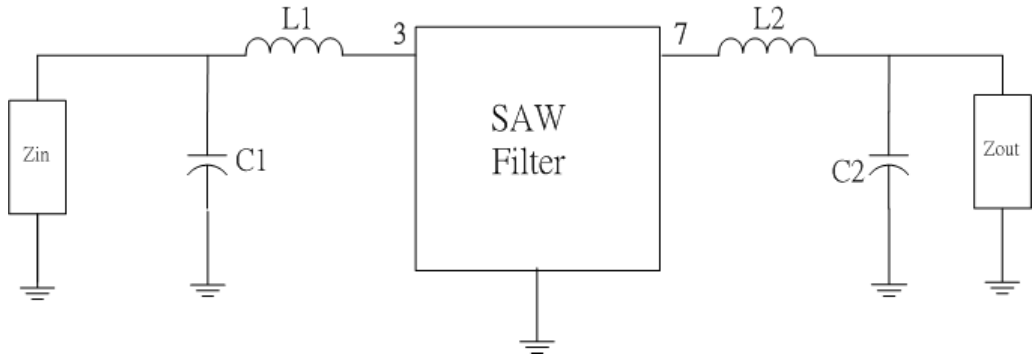


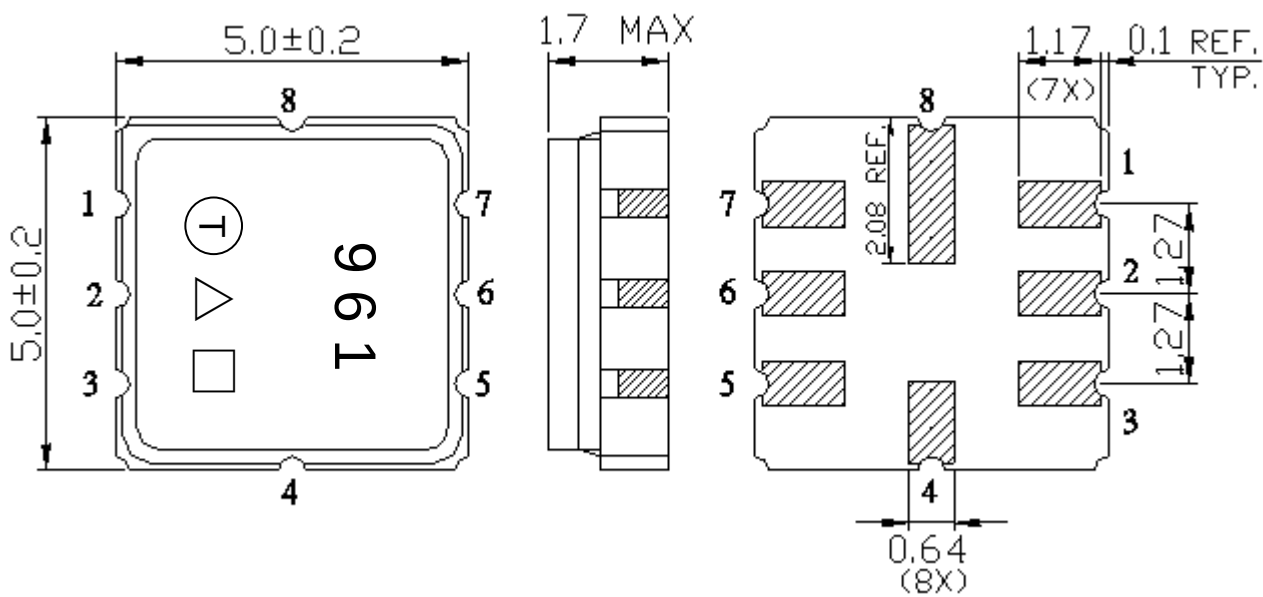
Fig4. Horizontal: 100MHz/Div Vertical: 10dB/Div

D. MATCHING CIRCUIT:



L1=L2=18nH C1=10pF C2=7pF

E. OUTLINE DRAWING:



- #3 – Input
- #2 – Input ground
- #7 – Output
- #6 – Output ground
- #1, 4, 5, 8 – Ground

Unit: mm

□ : Week Code

△ : Product / Year Code

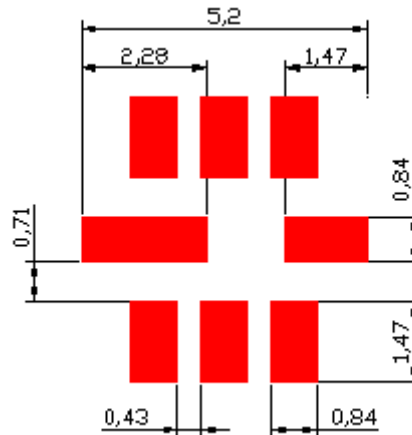
Product / Year Code: 4year cycle

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

Week Code Table

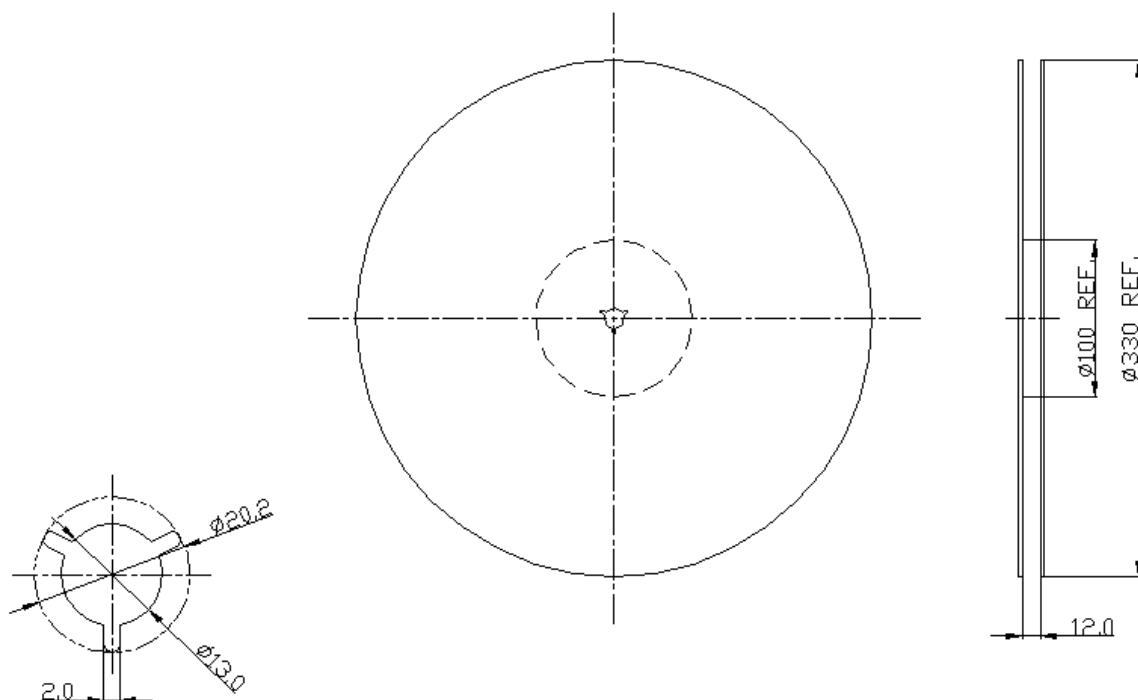
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

F. PCB FOOTPRINT:

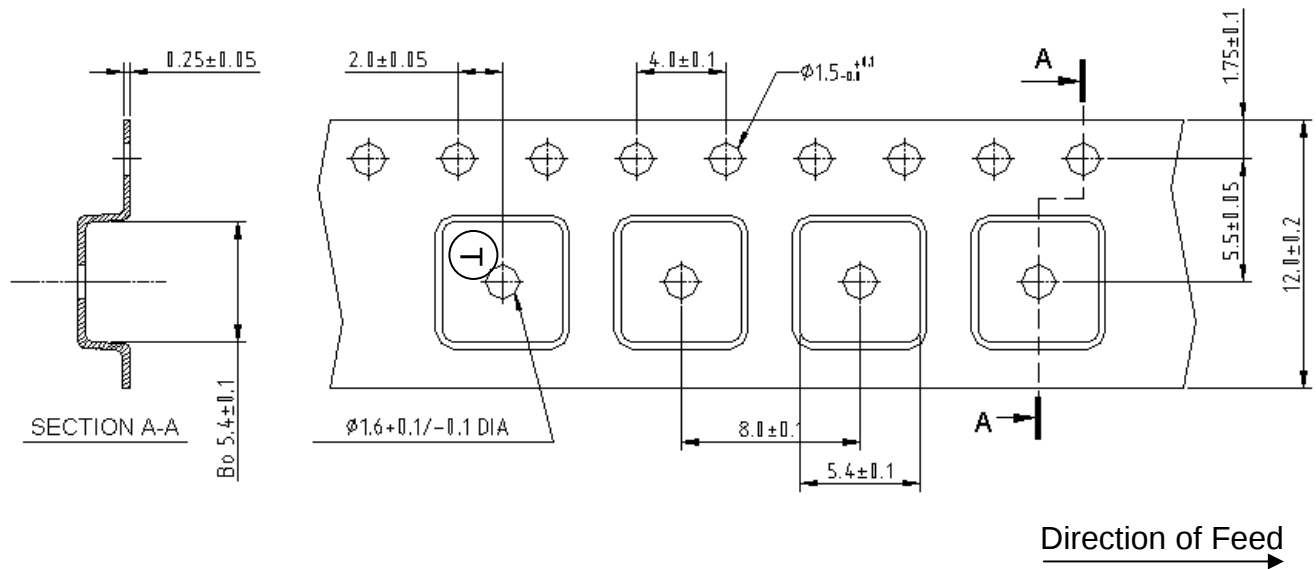


G. PACKING:

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



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at $150 \sim 180^{\circ}\text{C}$ 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 $260^{\circ}\text{C} \pm 0/-5^{\circ}\text{C}$ peak (20~40sec).
4. Time: 2 times.

