



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: 288MHz IF SAW Filter (BW=20 MHz)

TST Parts No.: TB0589A

Customer Parts No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2020/03/10

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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IF SAW Filter 288MHz(BW=20MHz) SMD 5X5mm

MODEL NO.: TB0589A

Rev. NO. 2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40 °C ~ 85°C
4. Storage Temperature: -40 °C ~ +85 °C
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

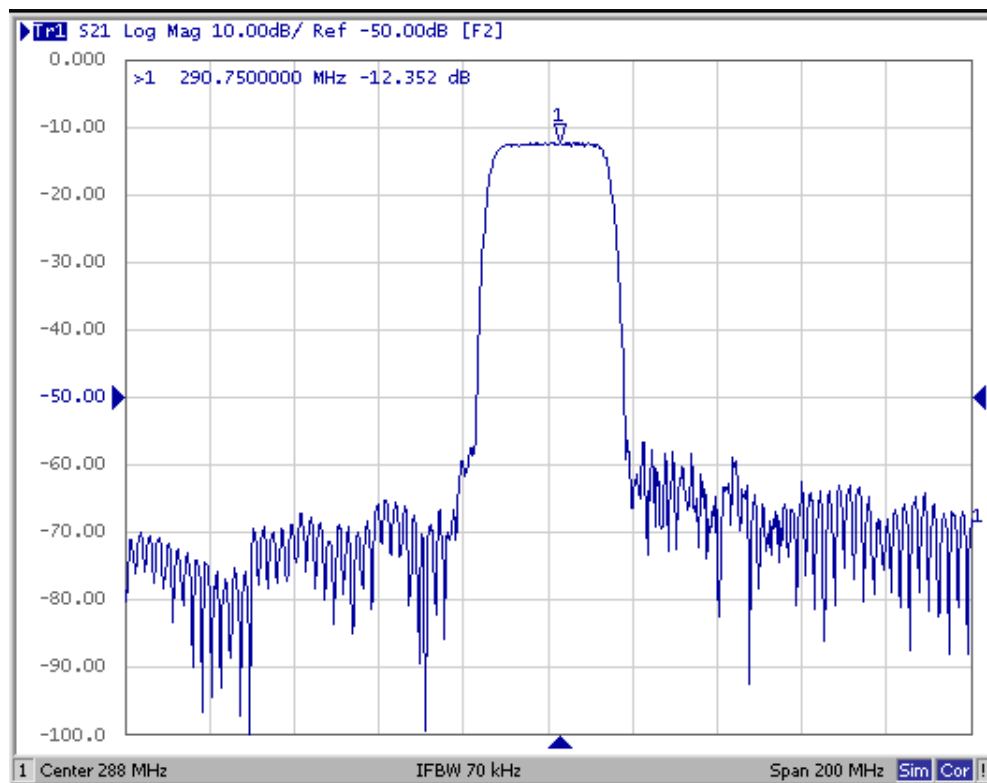
Electrostatic Sensitive Device

B. CHARACTERISTICS:

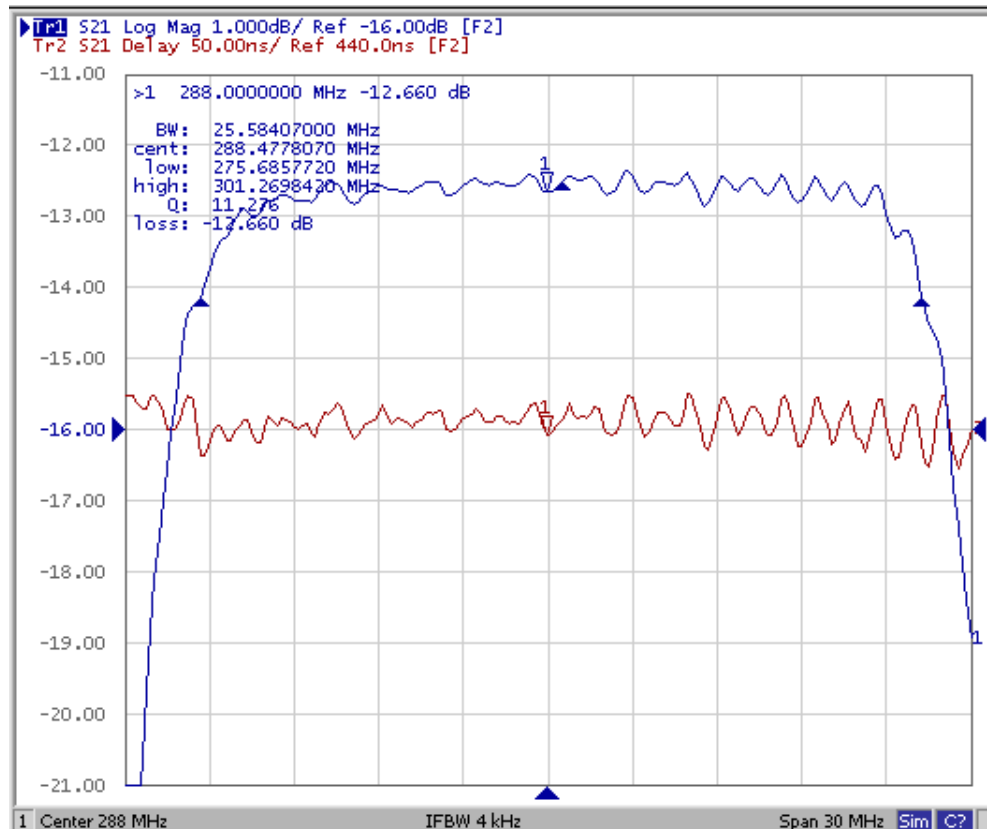
Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency F_c MHz	-	288	-	-
Minimum Insertion loss I.L. dB	-	12.5	15	-
1.5 dB Bandwidth MHz	22.3	25.6	-	-
Amplitude Ripple ($F_c \pm 11.1$ MHz) dB	-	0.6	1.0	-
Group-delay Ripple ($F_c \pm 11.1$ MHz) nsec	-	45	200	-
Average-delay ($F_c \pm 11.1$ MHz) usec		0.45		
Attenuation (Reference level from Minimum insertion loss)				
(1) $F_c \pm 17.1$ MHz dB	18	23	-	-
(2) $F_c \pm 28.6$ MHz dB	42	50	-	-
(2) $F_c \pm 37.1$ MHz dB	45	52	-	-
(2) $F_c \pm 74.3$ MHz dB	47	55	-	-

C. FREQUENCY CHARACTERISTICS:

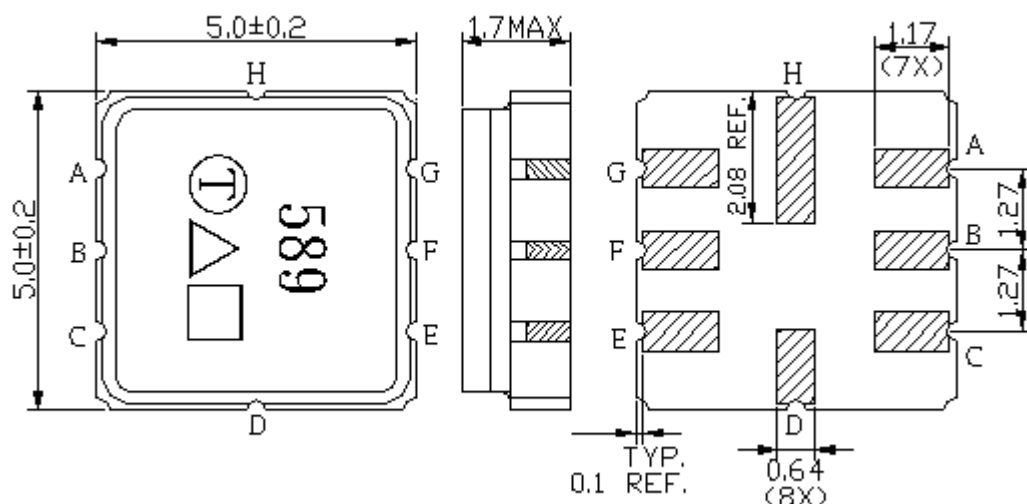
1. S21 Response:(span 200MHz)



2. Passband Response: (span 30MHz)



D. OUTLINE DRAWING:



Pin C: RF input

Pin G: RF output

Pin H, D: Case Ground

Pin A, B, E, F: Ground

△ : Product / Year Code

□ : Week Code (Follow the table from planner each year)

Unit: mm

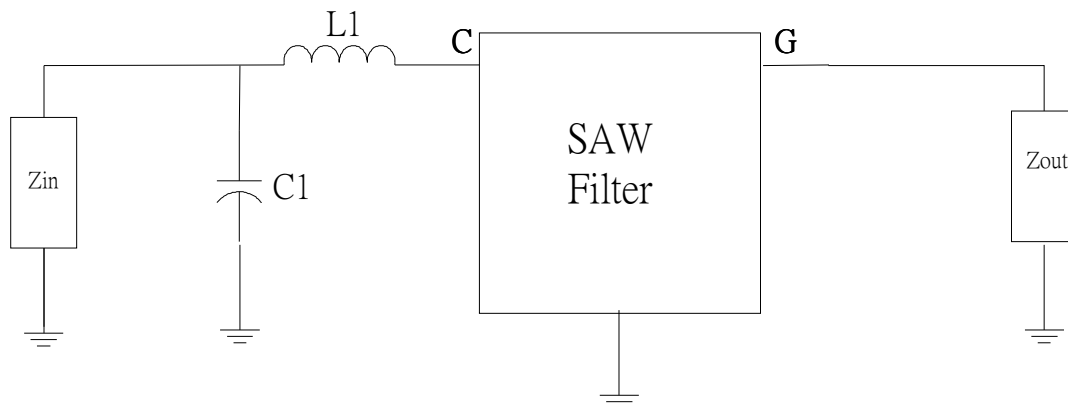
△: Product / Year Code- 4year cycle

Year	2017 2021	2018 2022	2019 2023	2020 2024
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

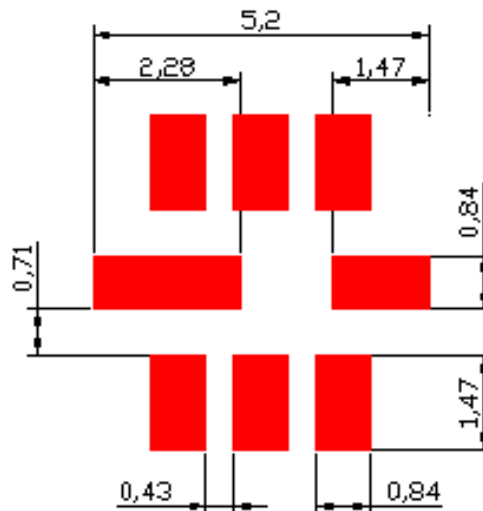
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

E. MATCHING CIRCUIT:



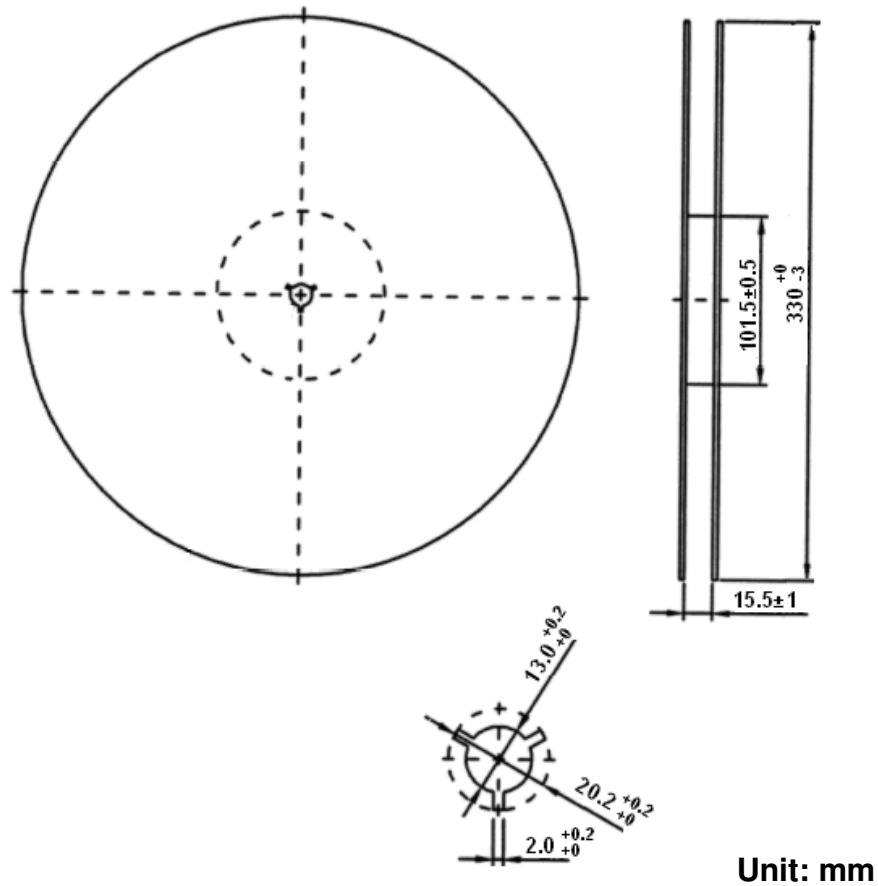
Z_{in} and Z_{out} are 50Ω
 $L1=27\text{nH}$, $C1=18\text{pF}$

F. PCB FOOTPRINT:

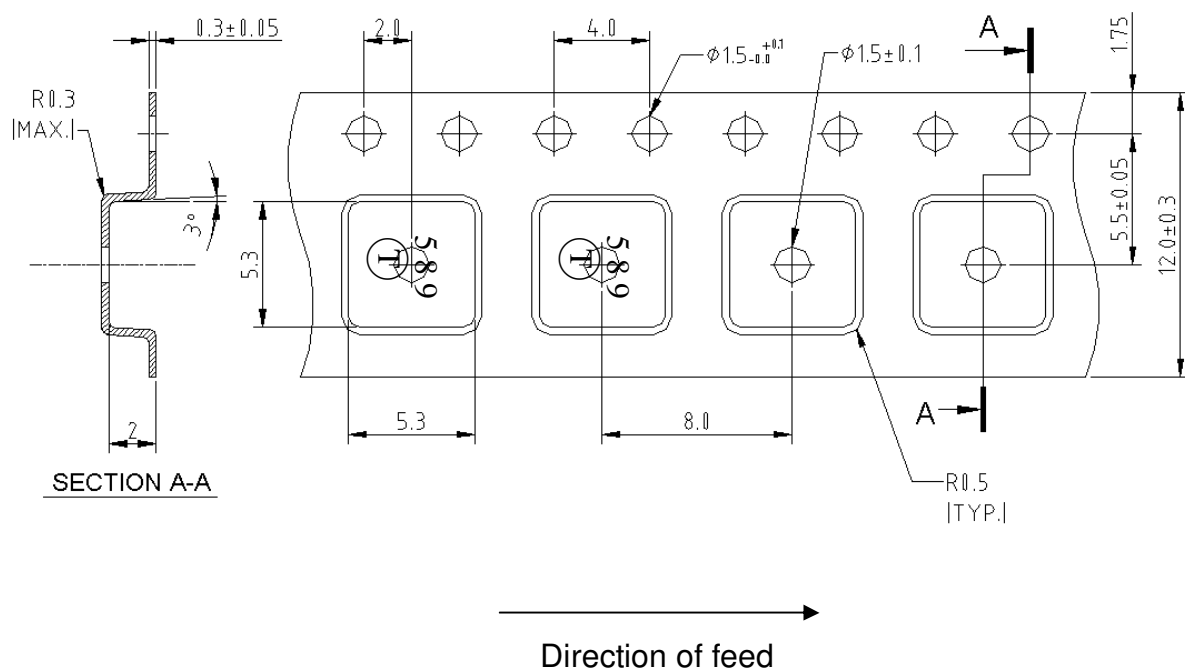


G. PACKING:

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



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°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.

