



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: 190MHz 4.8MHz BW SMD5.0X5.0 mm SAW IF Filter

TST Parts No.: TB0103A

Customer Parts No.: _____

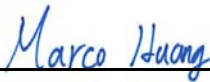
Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Marco Huang 

Approval by: _____ Bob Chau 

Date: _____ 05 / 26 / 2015

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 190MHz SMD(5.0x5.0mm)

MODEL NO.: TB0103A

REV. NO.:3

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. Operating Temperature: -40°C to +85°C
3. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. ELECTRICAL CHARACTERISTICS :

Item	Unit	Min.	Typical.	Max.	Note
Center frequency, Fc	MHz	-	190	-	
Insertion Loss, IL	dB	-	8.0	10	
Passband width, BW5	MHz	4.8	5.73		
Group Delay, GD	ns	-	70	150	
Attenuation:(Reference level from Min IL)					
Fc -20 to -10MHz(170-180MHz)	dB	27	34	-	
Fc -10 to -4.5MHz(180-185.5MHz)	dB	25	31	-	
Fc +4.5 to +10MHz(194.5-200MHz)	dB	25	30	-	
Fc +10 to +20MHz(200-210MHz)	dB	27	33	-	

C. FREQUENCY CHARACTERISTICS:

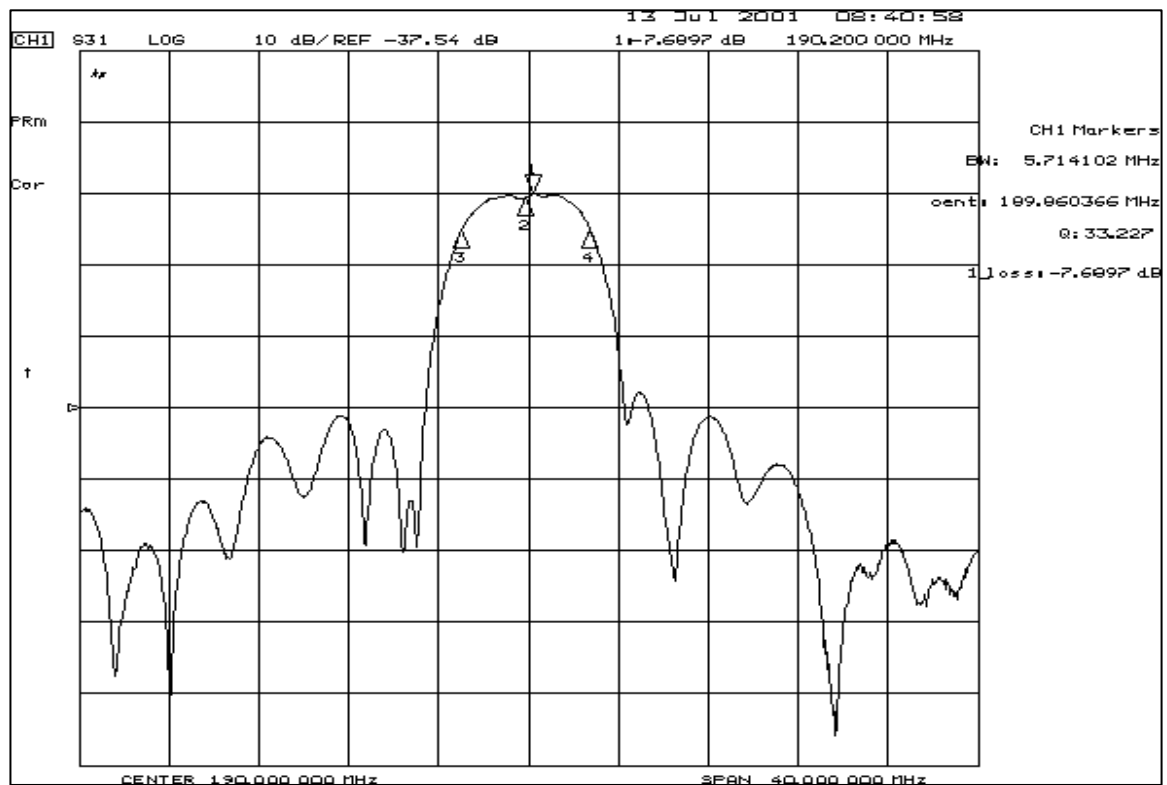


Fig-1 S21 Response

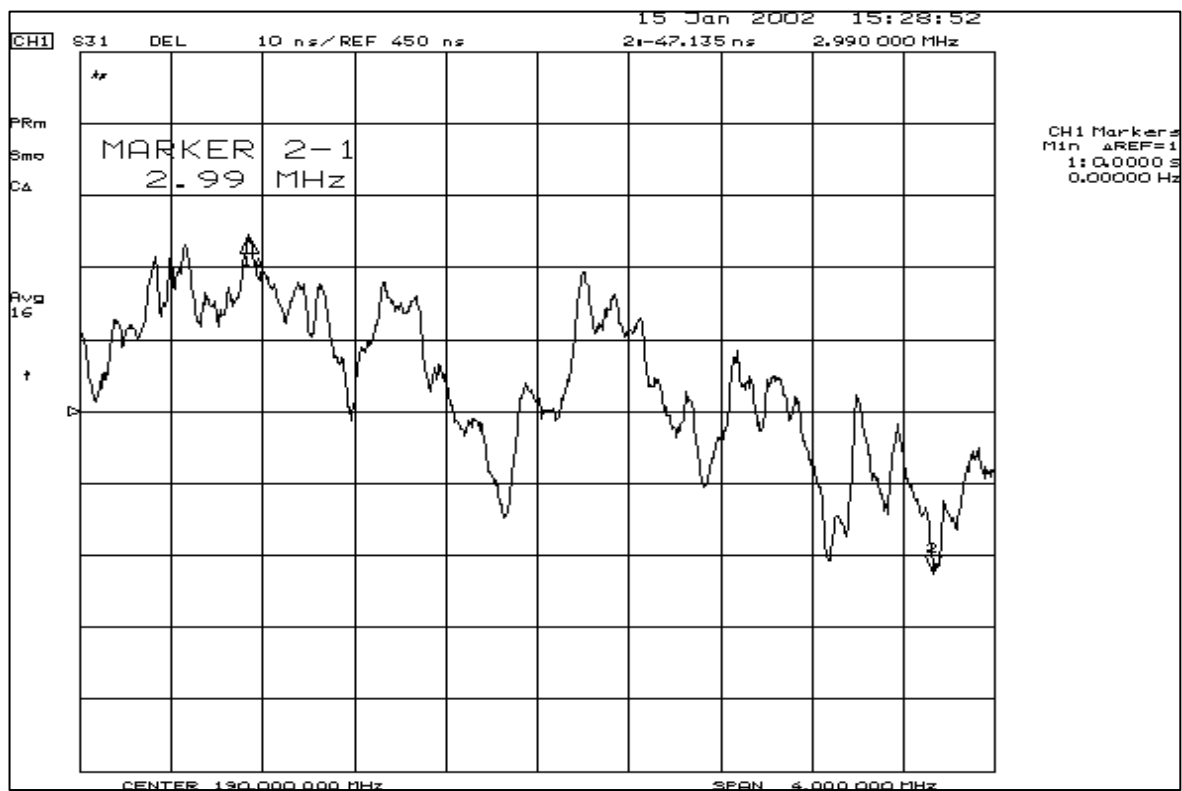
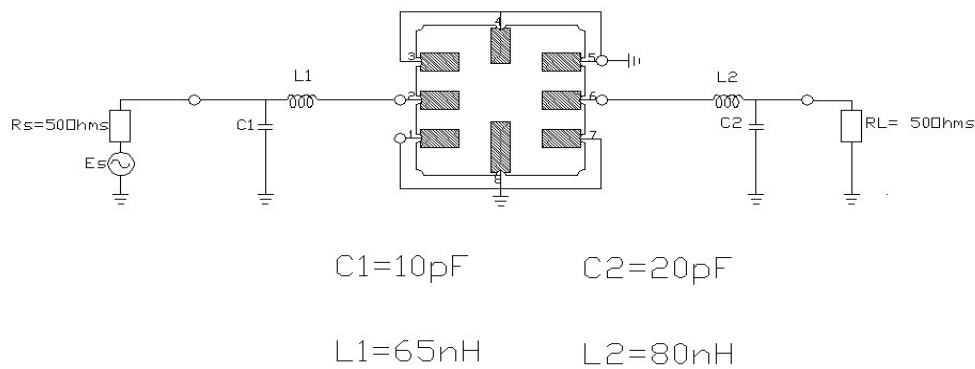


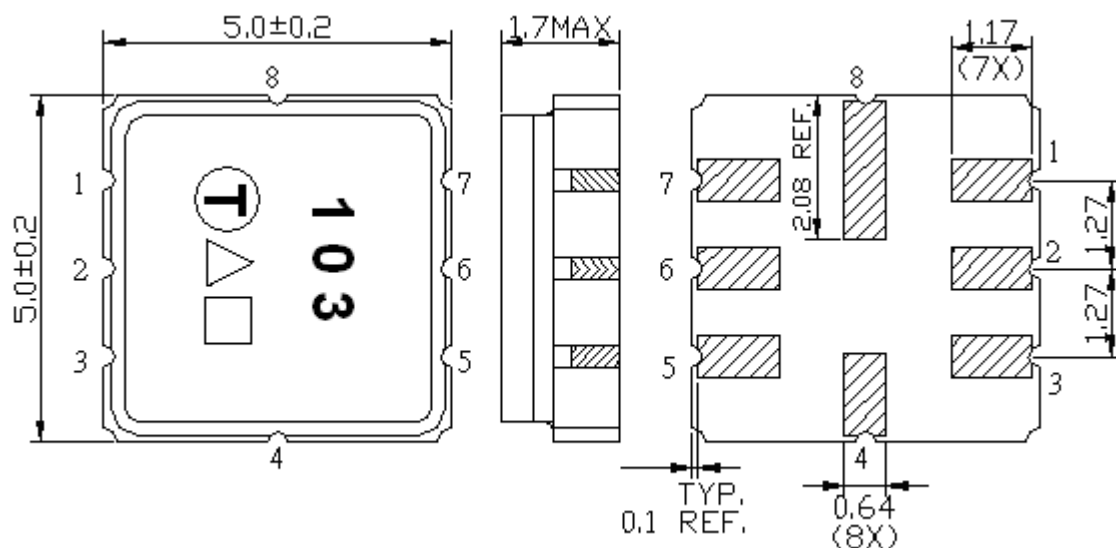
Fig-2 Group Delay

D. MATCHING CONFIGURATION:



Note1: The values of components for matching circuit will vary slightly due to parasitic capacitor of PCB

D. OUTLINE DRAWING:



#2 –Input

#1 –Input ground

#6 – Output

#5 – Output ground

#3,4,7,8 – Ground

□ : Week Code

△ : Product / Year Code

Unit : mm

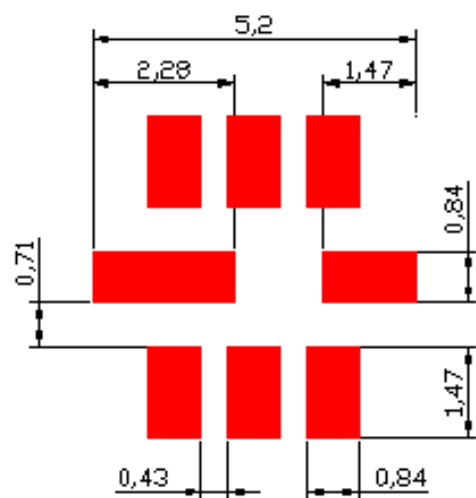
Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

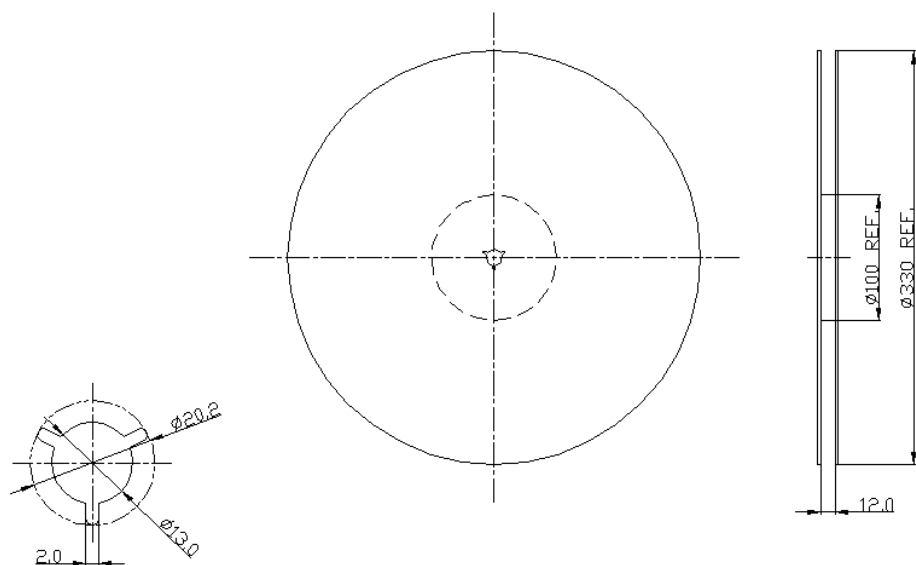
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

E. PCB FOOTPRINT:

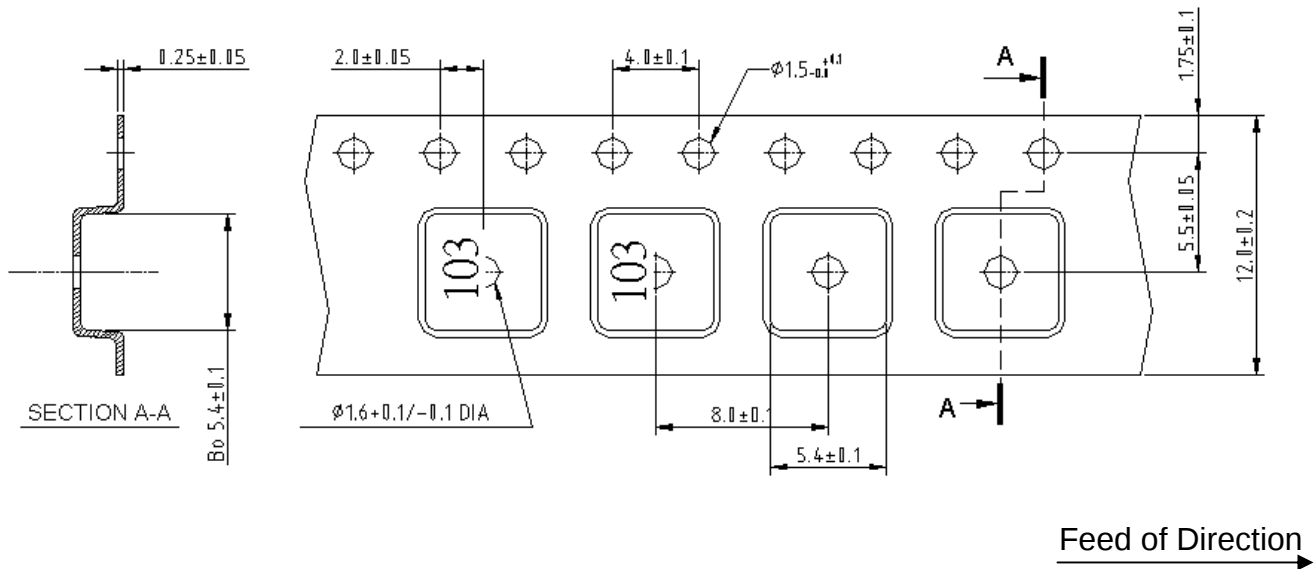


F. PACKING:

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



2. TAPE DIMENSION



G. 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 $245 \sim 260^{\circ}\text{C}$ peak (min. 10sec).
4. Time : 2 times.

