TAI-SAW TECHNOLOGY CO., LTD.
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Name: SAW Filter 1223 MHz GPS L2 SMD 1.1×0.9 mm (BW = 52 MHz)

TST Parts No.: TA2309A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Sam Lin _____

Approved by:_____ Andy Yu _____

Date:_____ 2018/09/14 _____

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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SAW Filter 1223 MHz GPS L2 SMD 1.1×0.9 mm (BW 52 MHz)

MODEL NO.: TA2309A REV. No.:2.0

A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm
2. DC voltage: 0 V
3. Operating Temperature: -40℃ to +105℃
4. Storage Temperature: -40℃ to +105℃
5. ESD: 100V(MM) 200V(HBM)
6. Moisture Sensitive Level: Level 3 (MSL3)

RoHS Compliant
Lead free
Lead-free soldering

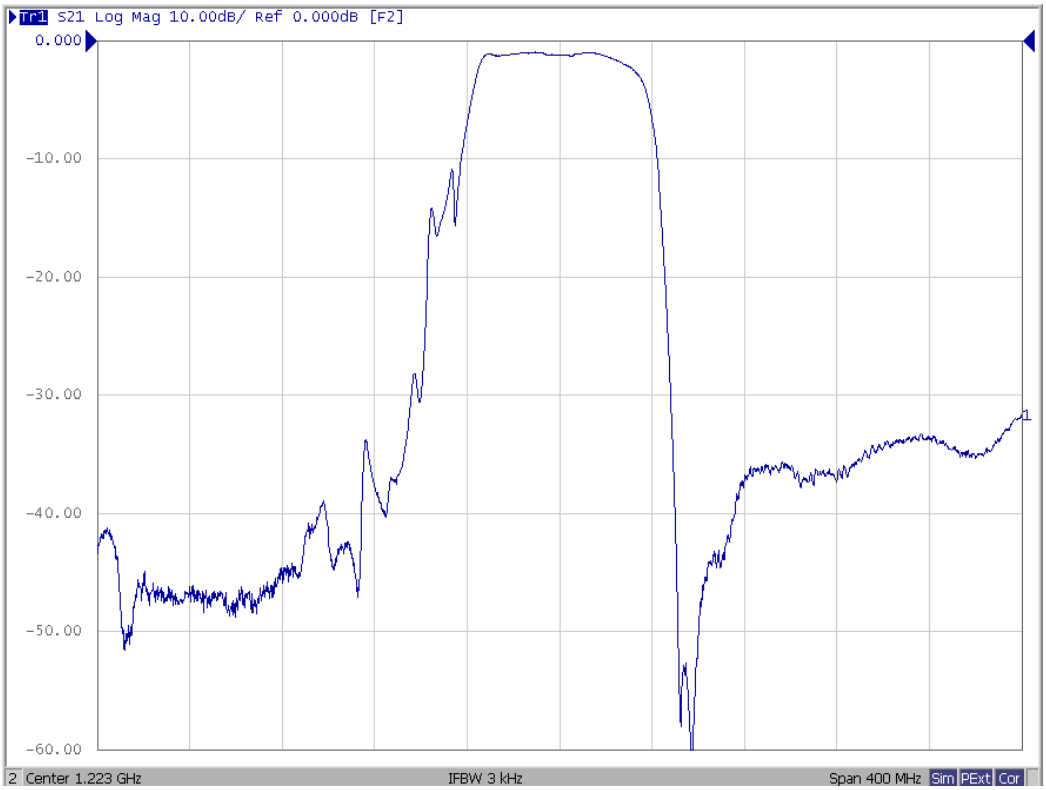
Electrostatic **S**ensitive **D**evice (**ESD**)

B. ELECTRICAL CHARACTERISTICS:

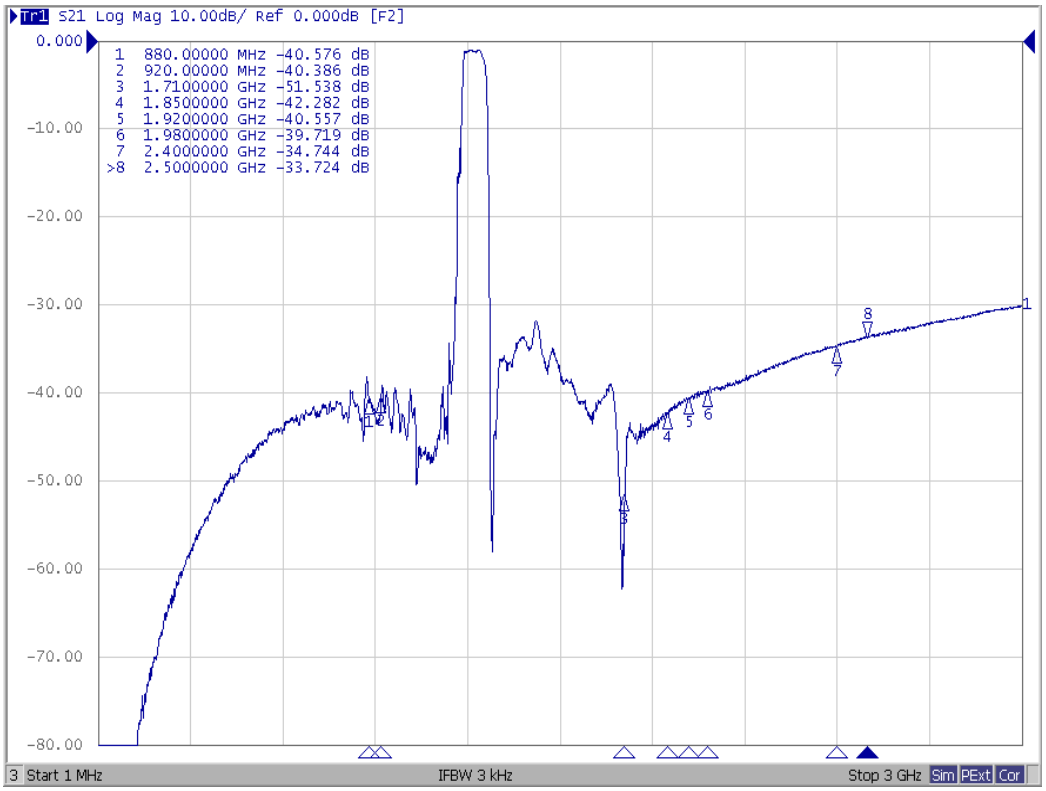
Item	Unit	Min.	Typ.	Max.
Center frequency	MHz	-	1223	-
Insertion Loss (1197 ~ 1249 MHz)				
At -40℃ to +85℃		-	1.8	2.6
At -40℃ to +105℃		-	1.8	2.8
Group Delay Ripple				
1197 ~ 1217 MHz	ns	-	5.0	7
1217 ~ 1237 MHz	ns	-	4.5	7
1242 ~ 1249 MHz	ns	-	3.0	7
1197 ~ 1249 MHz (Each 2 MHz Bandwidth)	ns	-	2	5
Attenuation (reference level from 0 dB)				
880 ~ 920 MHz	dB	35	38	-
1710 ~ 1850 MHz	dB	40	42	-
1850 ~ 1920 MHz	dB	40	42	-
1920 ~ 1980 MHz	dB	38	41	-
2400 ~ 2500 MHz	dB	30	34	-
Temperature Coefficient of Frequency	ppm/℃	-	-36	-

C. Frequency Characteristics :

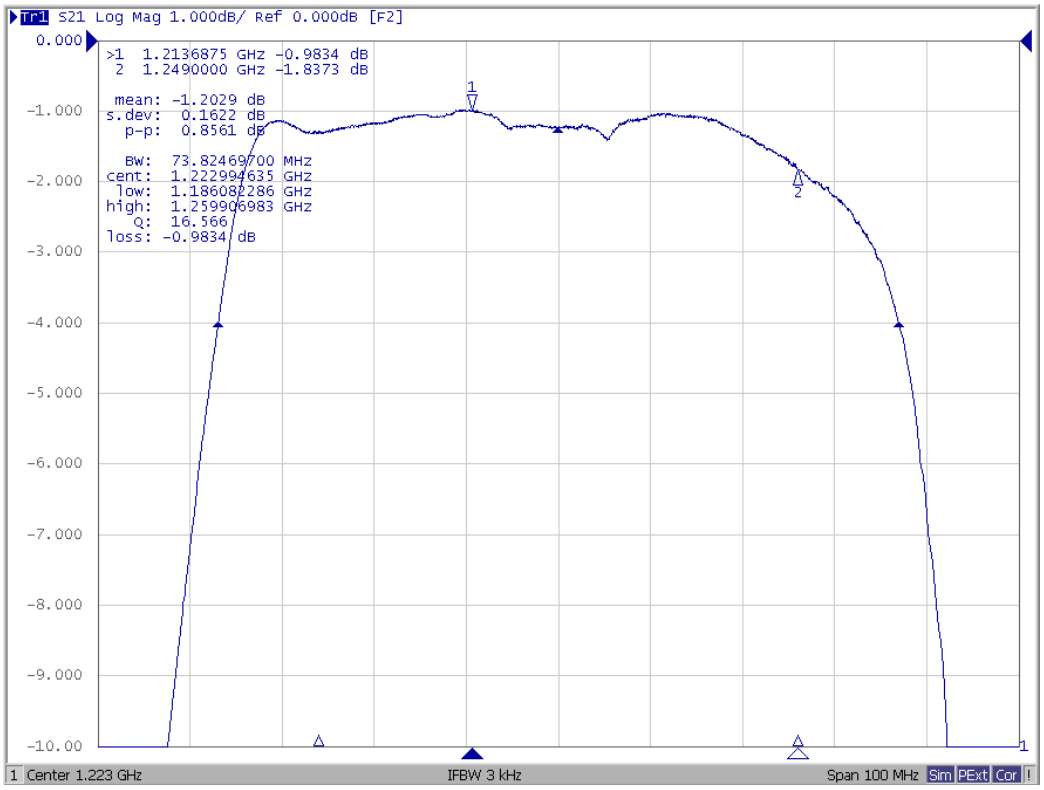
S21dB Span 400 MHz



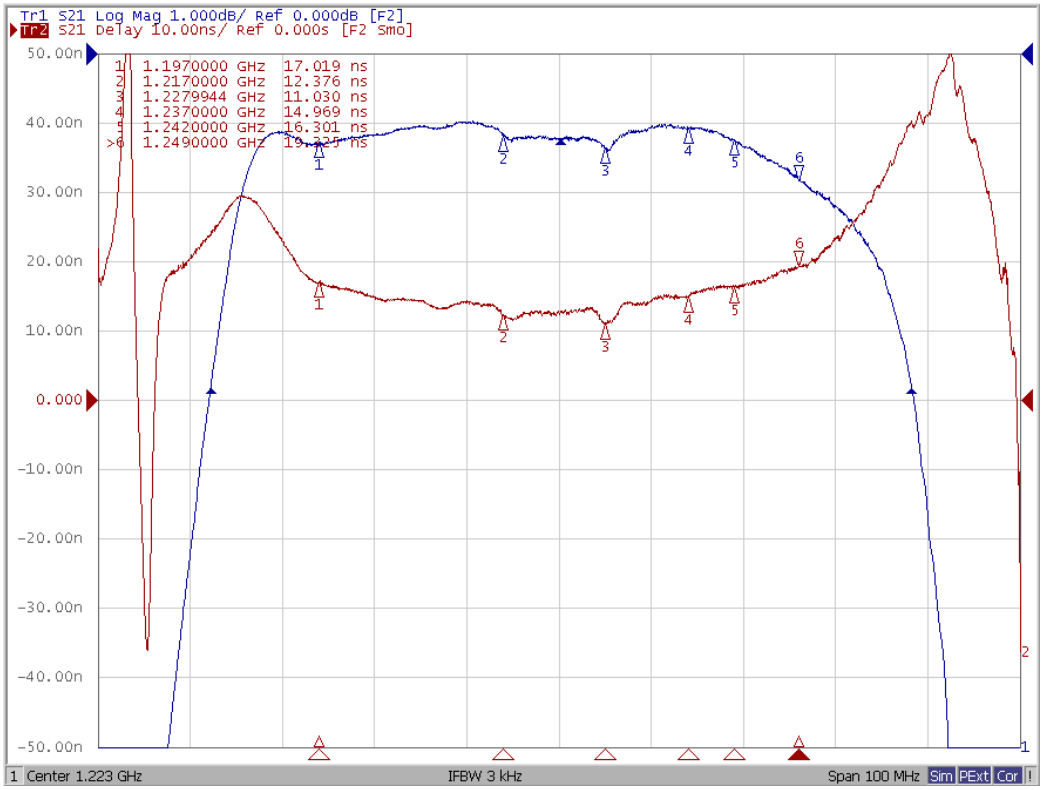
S21dB Span 2500 MHz



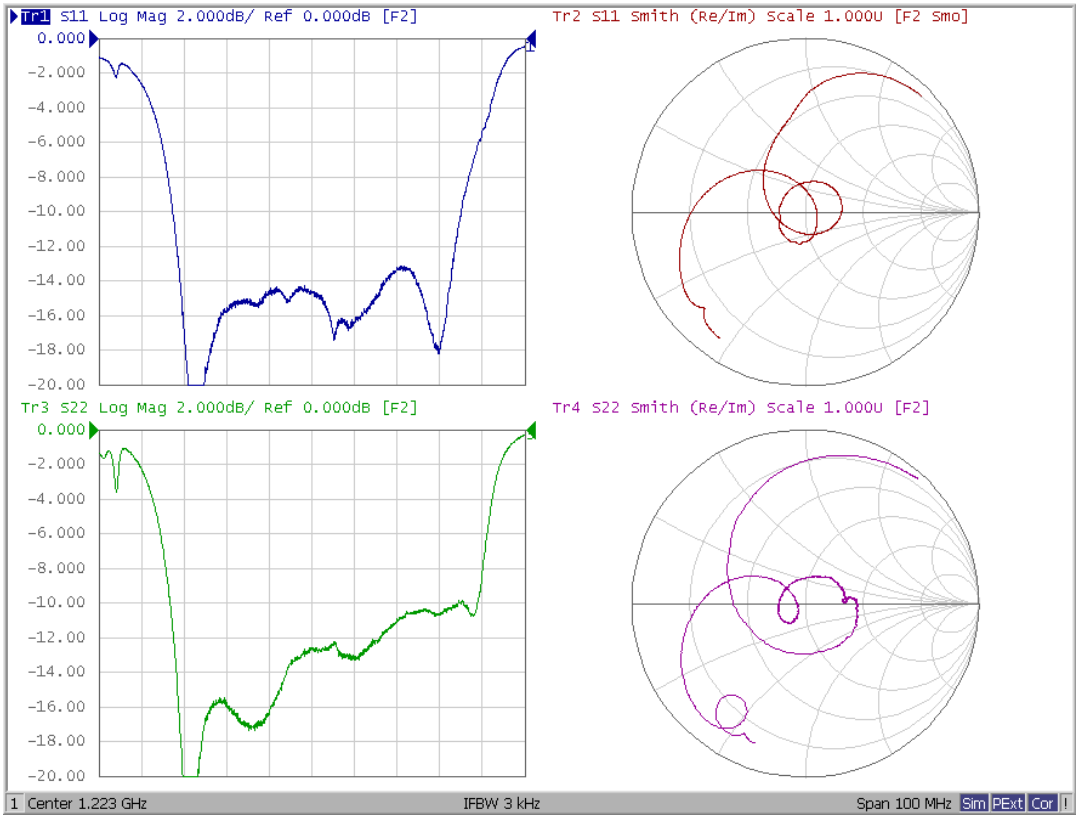
Ripple Span 100 MHz



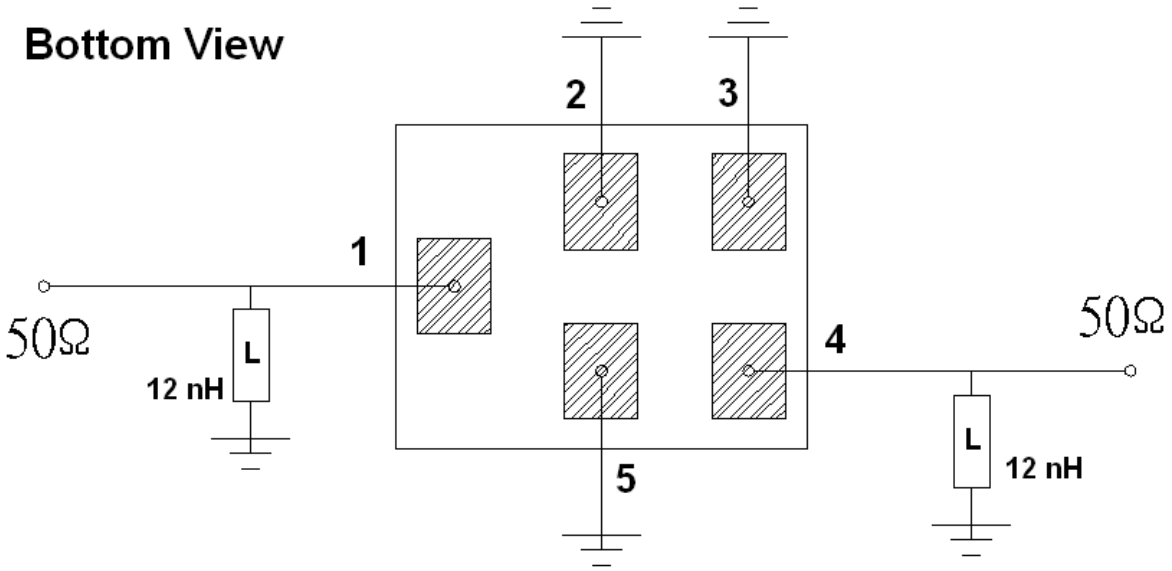
Group Delay



Reflective Function



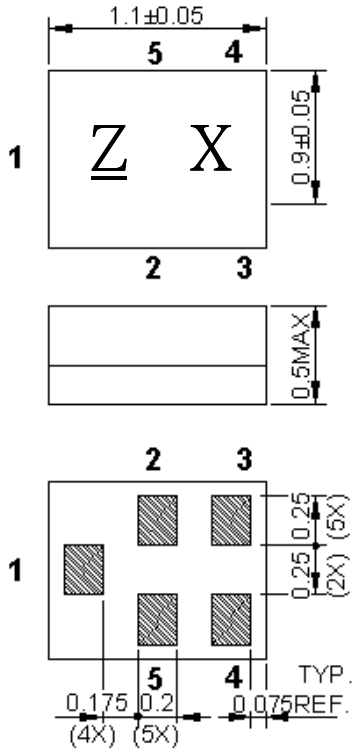
D. MEASUREMENT CIRCUIT:



Source Impedance: 50 Ω

Load Impedance: 50 Ω

E. OUTLINE DRAWING:



All tolerances are +/-0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.
1 to 5 : Pin No.
Unit : mm

Marking Descriptions	
Z	Series Number
X	Date Code(Year+Month)

Pin Description	
2, 3, 5	Ground
1	Input
4	Output

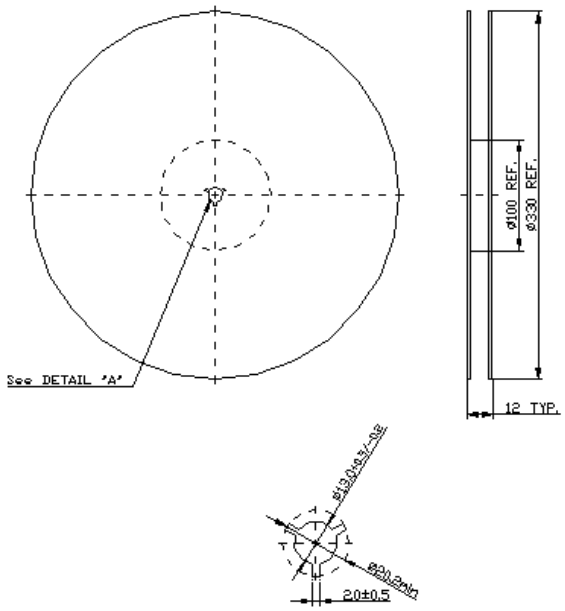
Date Code (year+month)

Year	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

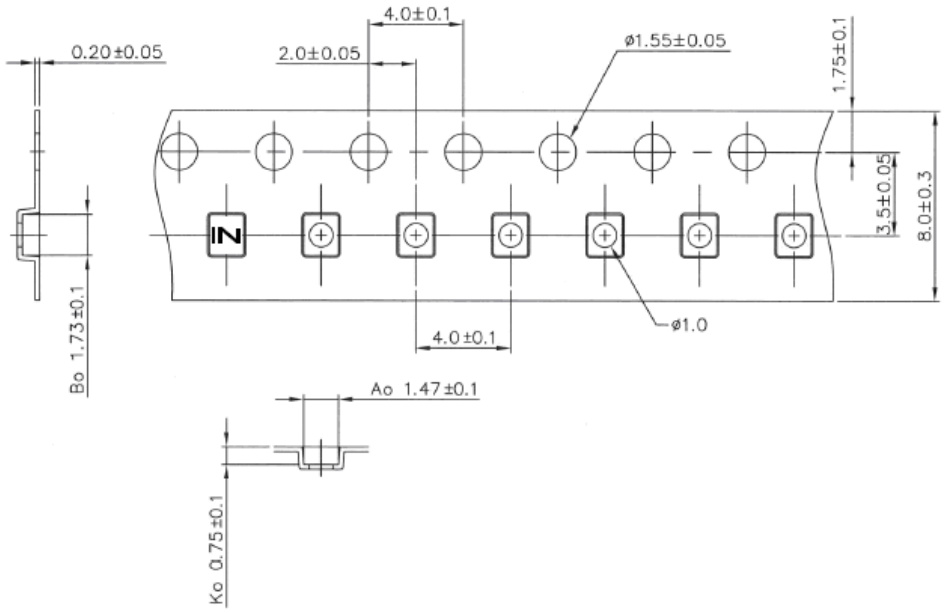
E. PACKING:

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