



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.

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Product Specifications Approval Sheet

Product Description: 978MHz 1MHz BW SMD 3.0X3.0mm SAW RF Filter

TST Part No.: TA1797A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee *Kazuma Lee*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 10/11/2017

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 978 MHz

MODEL NO.:TA1797A

REV. NO : 2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 6V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

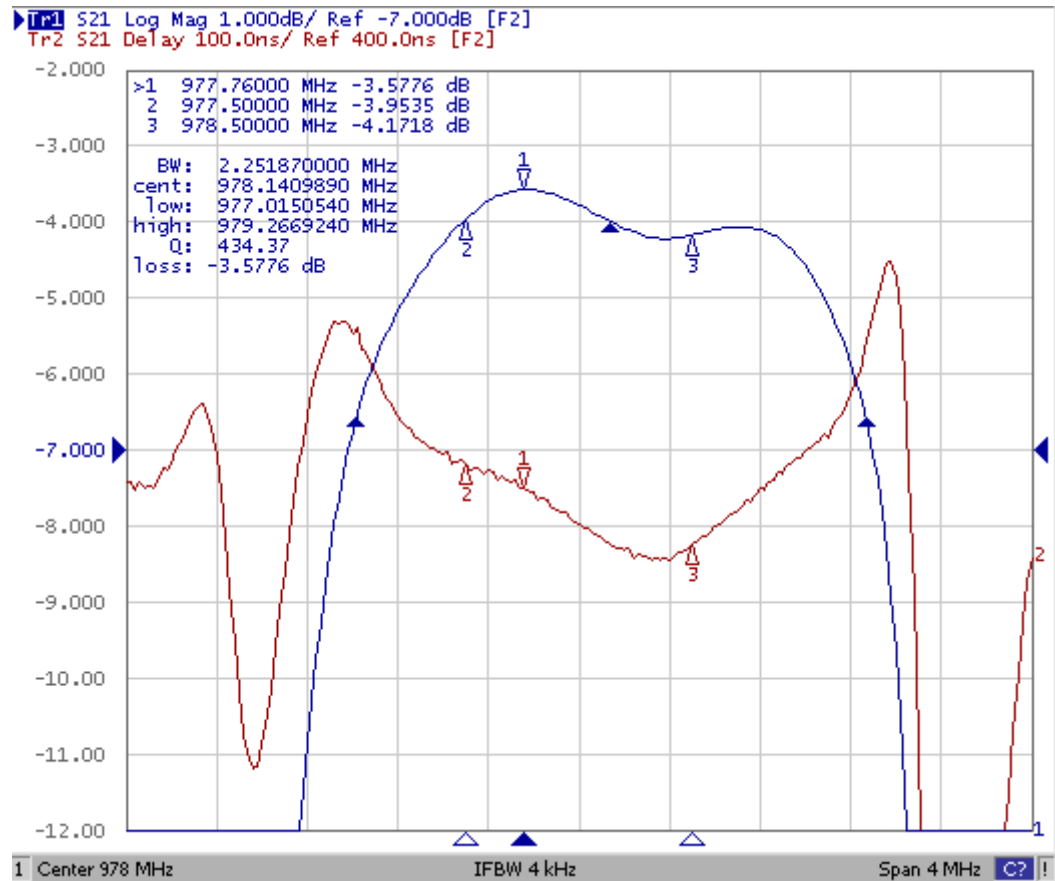
B. ELECTRICAL CHARACTERISTICS:

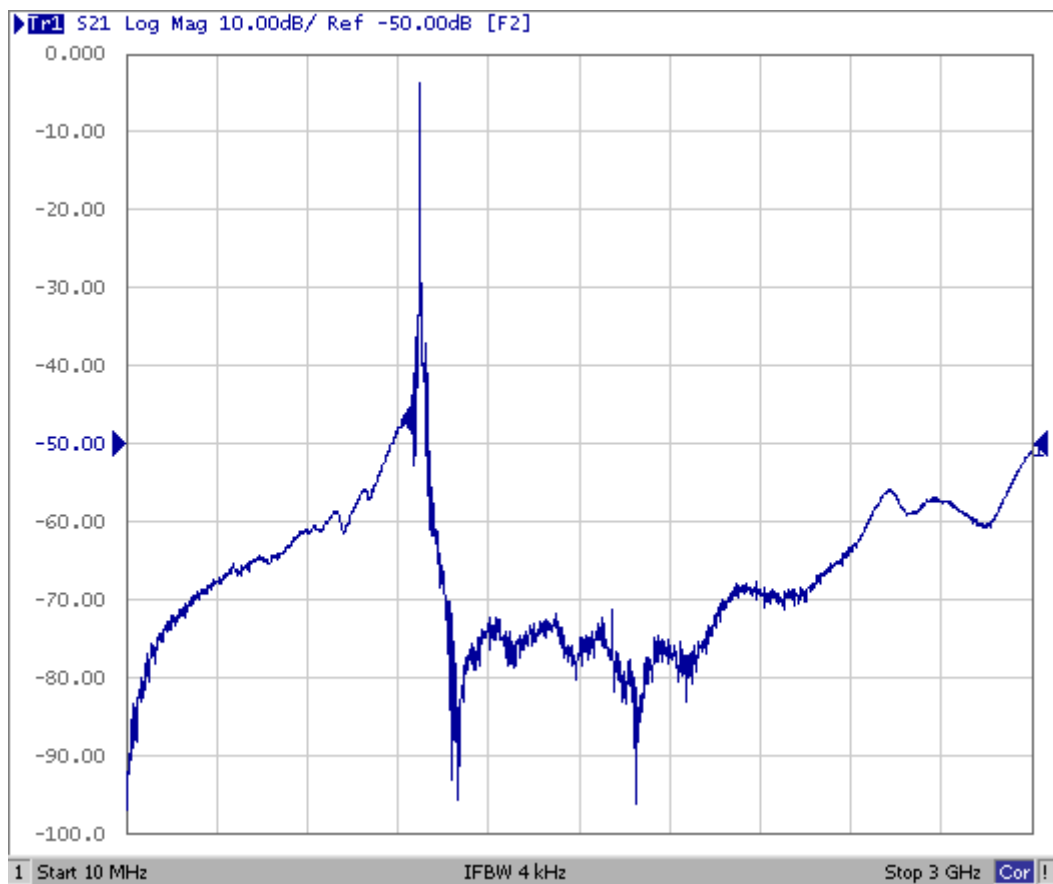
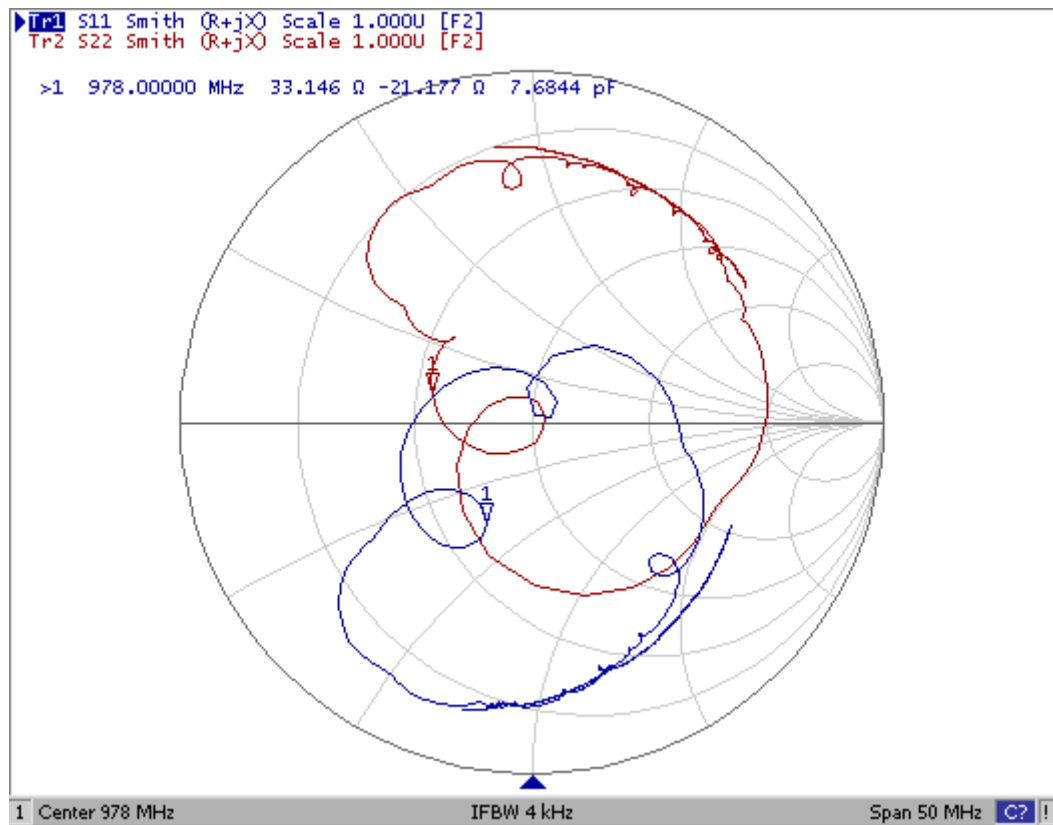
Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	977.5	978	978.5
3dB BW	MHz	-	2.2	-
Minimum insertion loss IL(min)				
Exclude loss in matching elements *1)	dB	-	3.3	3.6
Incl. loss of matching elements(Q=90) *2)	dB	-	3.5	3.9
Passband (relative to IL_{min}) *2)				
977.375 ~ 978.625 MHz	dB	-	0.6	3.0
Attenuation (relative to IL_{min}) *2)				
15.000 ~ 893.50 MHz	dB	39	49	-
893.50 ~ 958.50 MHz	dB	36	44	-
958.50 ~ 966.50 MHz	dB	34	42	-
966.50 ~ 975.50 MHz	dB	17	27	-
980.50 ~ 986.50 MHz	dB	10	17	-
986.50 ~ 1004.50 MHz	dB	22	30	-
1004.50 ~ 1023.5 MHz	dB	36	51	-
1023.5 ~ 2023.5 MHz	dB	38	57	-
2023.5 ~ 2523.5 MHz	dB	55	60	-
Impedance at Fc, Input *2) Zin = Rin//Cin Zs	Ω	686Ω//1.60pF		
Impedance at Fc, Output *2) Zout = Rout//Cout ZL	Ω	298Ω//1.70pF		

*1) : The matching circuit is ideal by simulation.

*2) : The matching circuit is real by actual passive components.
0805 Coilcraft CS series chip conductor is used for inductor.
0402 muRata GRM series is used for capacitor.

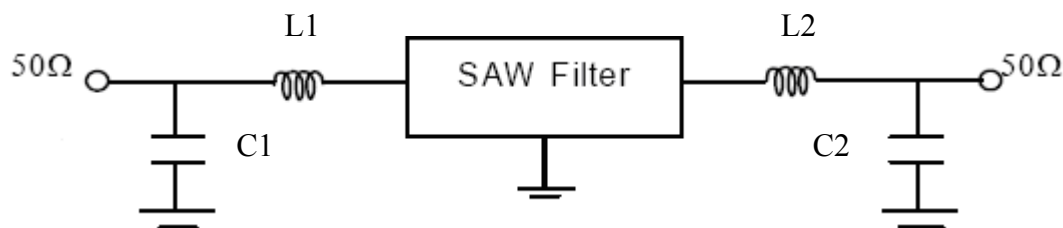
C. FREQUENCY CHARACTERISTICS :





D. MEASUREMENT CIRCUIT:

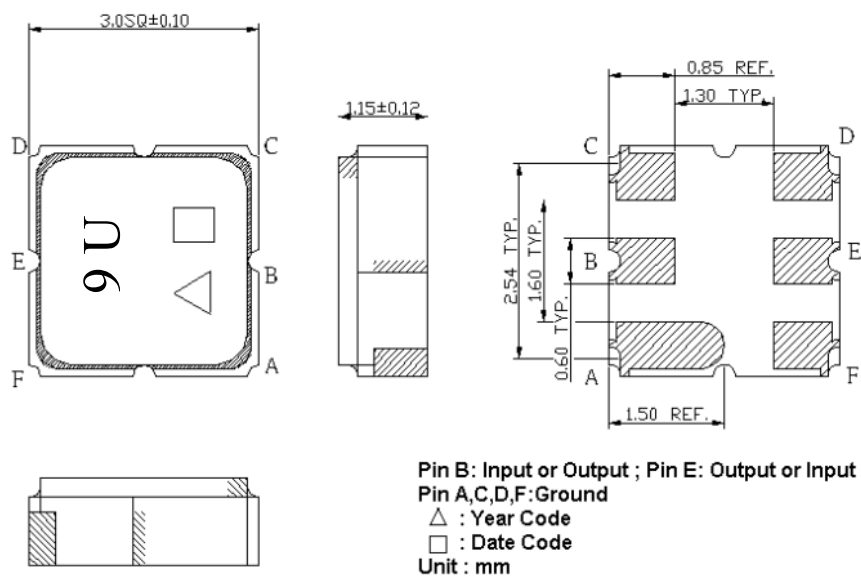
The matching circuit is realized by actual passive components.



L1 : 20nH , L2 : 18nH

C1 : 5pF , C2 : 3pF

E. OUTLINE DRAWING:



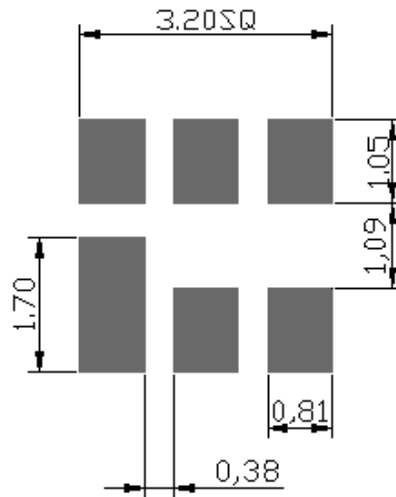
Δ Year code : See the table

Year	2013	2014	2015	2016	...	2019	2020
Code	3	4	5	6	...	9	0

□ Data code :

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

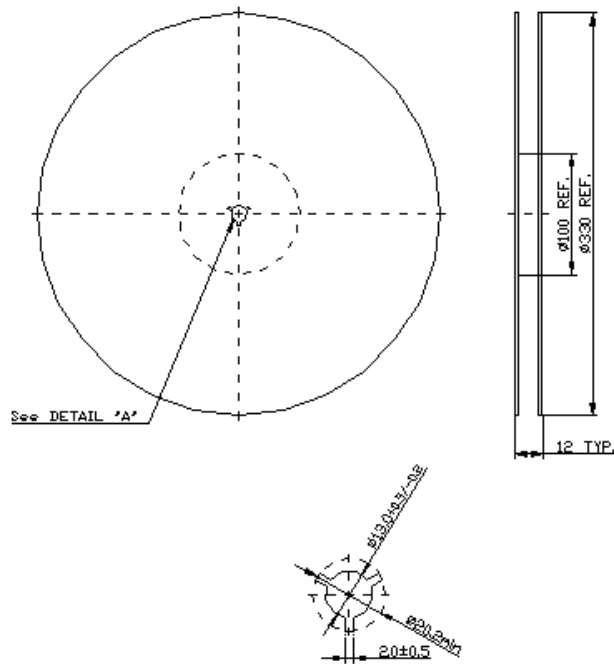
F. PCB FOOTPRINT:



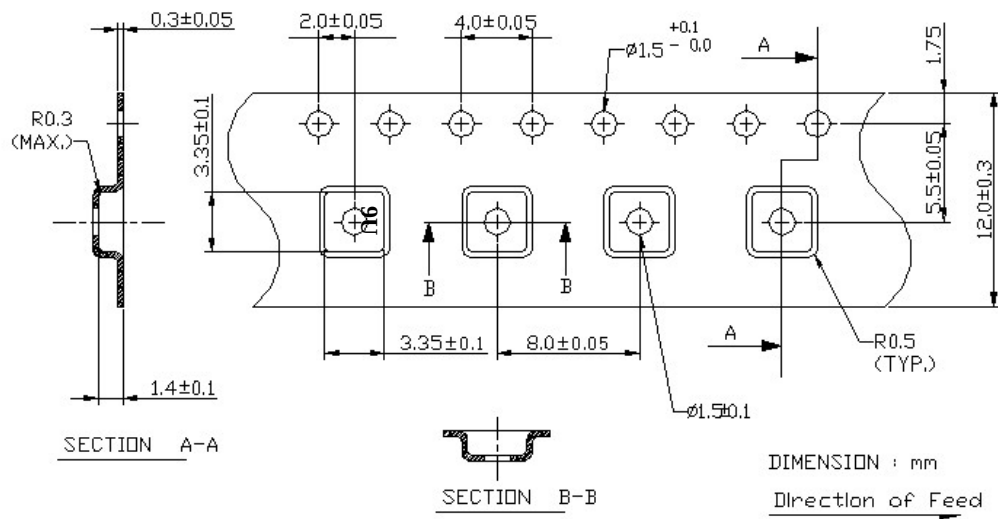
G. PACKING:

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity and FR-75M03 for MSL)



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.

