



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: 400MHz 0.25MHzBW SMD 3.0x3.0 mm SAW RF Filter

TST Parts No.:TA1978A

Customer Parts No.:_____

Company:_____
Division:_____
Approved by :_____
Date:_____

Checked by:_____Kazuma Lee 

Approval by:_____Bob Chau 

Date:_____09/06/2016

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 400 MHz

MODEL NO.:TA1978A

REV. NO.: 2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 6V
3. Operating Temperature: -45°C to +125°C
4. Storage Temperature: -45°C to +125°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

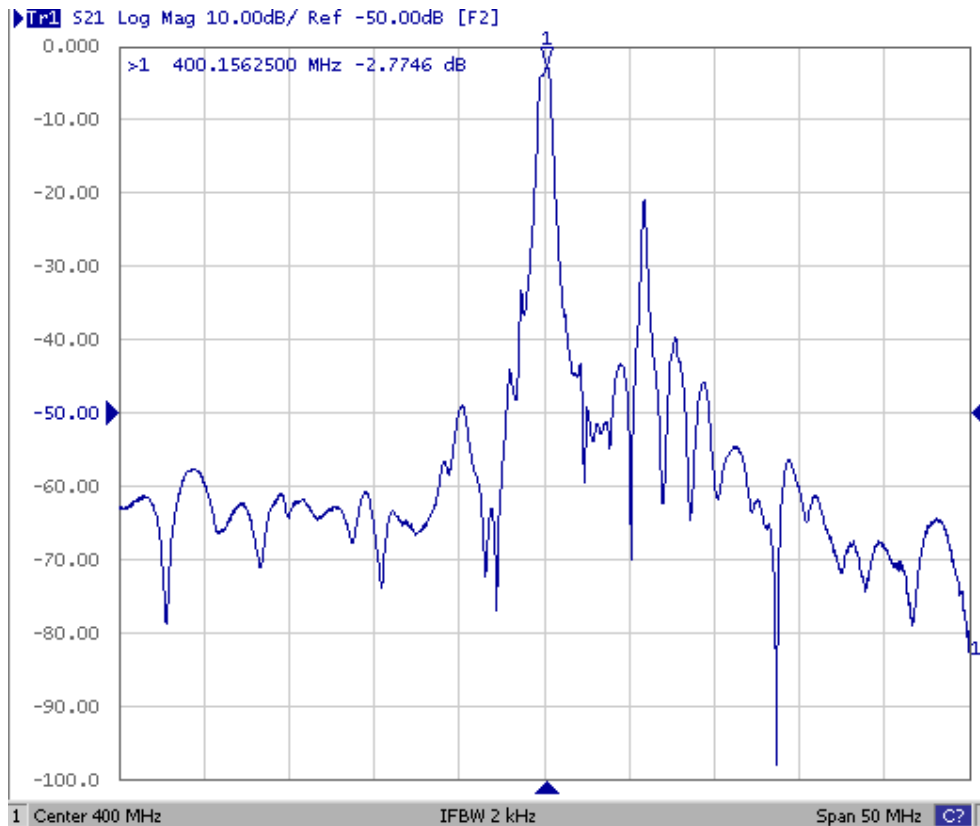
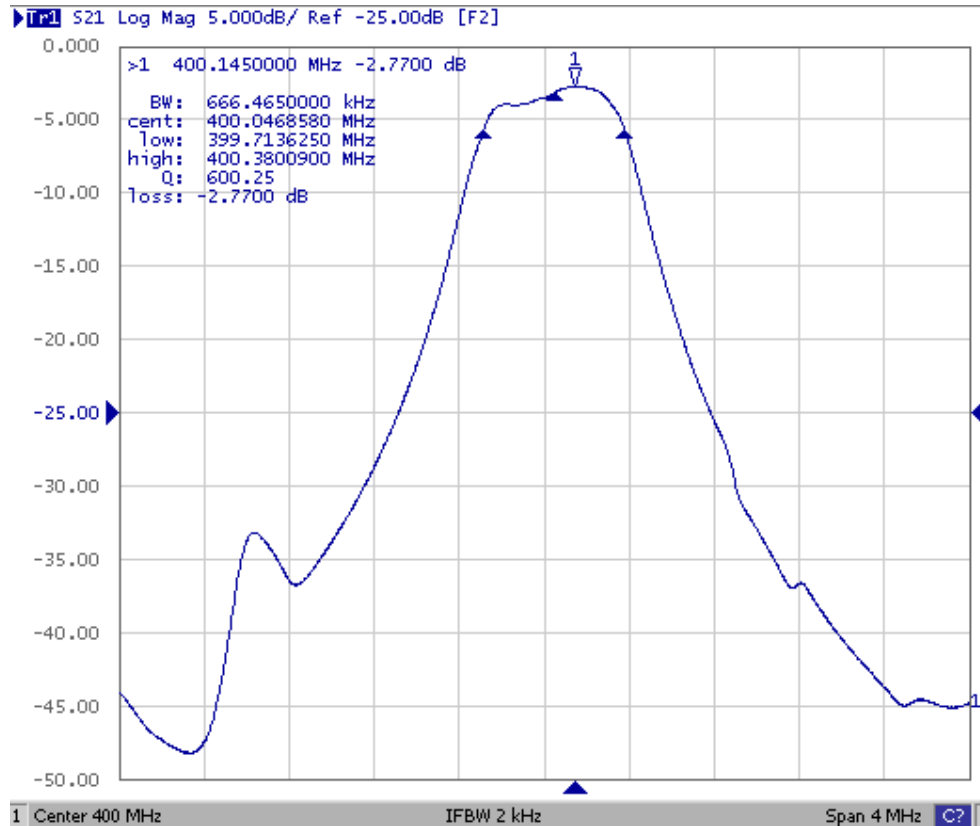
B. ELECTRICAL CHARACTERISTICS:

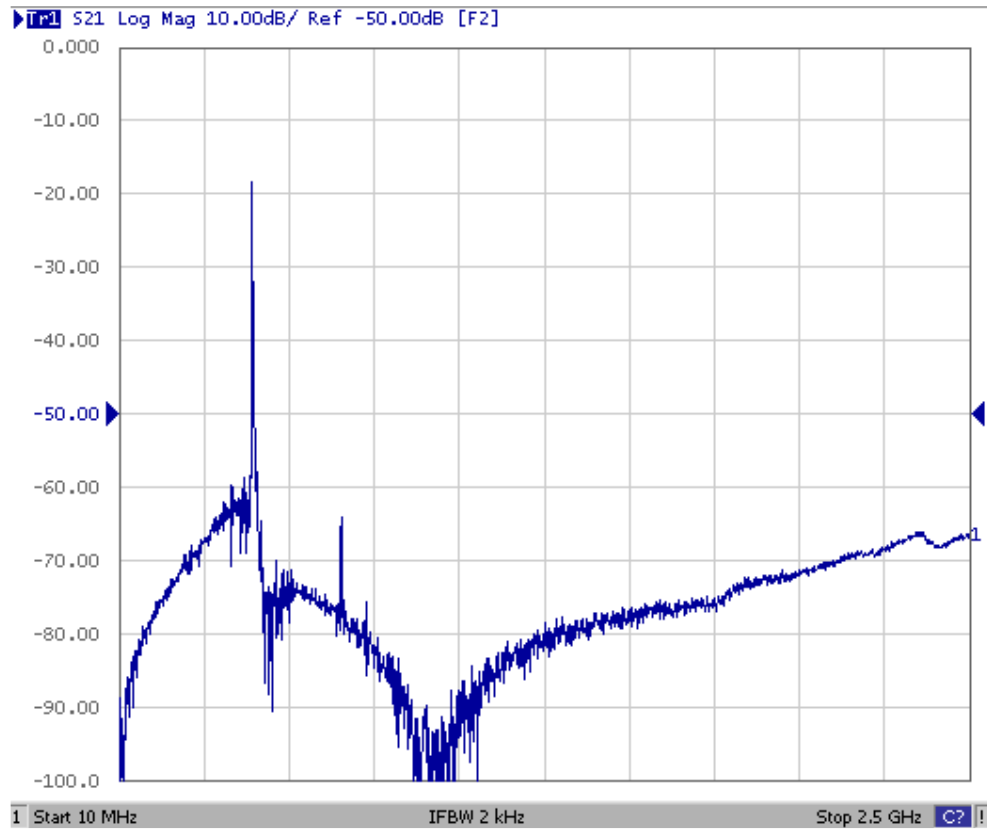
Ambient Temperature: 25°C

Item	Unit	Min.	Typ.	Max.
Center frequency F_c	MHz	-	400	-
3dB BW	KHz	-	666	-
Minimum insertion loss IL(min) Incl. loss of matching elements(Q=) *1)	dB	-	2.7	3.5
Passband (relative to IL_{min}) *1) 399.875 ~ 400.125 MHz	dB	-	1.2	3.0
Attenuation (relative to IL_{min}) *1)				
10.000 ~ 370.00 MHz	dB	50	57	-
370.00 ~ 390.00 MHz	dB	45	54	-
390.00 ~ 399.00 MHz	dB	22	30	-
399.00 ~ 399.30 MHz	dB	15	22	-
400.70 ~ 401.00 MHz	dB	15	19	-
401.00 ~ 408.00 MHz	dB	12	17	-
408.00 ~ 414.00 MHz	dB	35	40	-
414.00 ~ 468.00 MHz	dB	45	52	-
468.00 ~ 800.00 MHz	dB	50	60	-
800.00 ~ 1500.00 MHz	dB	60	70	-
1500.00 ~2500.00 MHz	dB	50	62	-
Impedance at F _c , Input *1) Z_{in} = R_{in}//C_{in} Z_s	Ω	328Ω//2.85 pF		
Impedance at F _c , Output *1) Z_{out} = R_{out}//C_{out} Z_L	Ω	328Ω//2.85 pF		

*1) : 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.

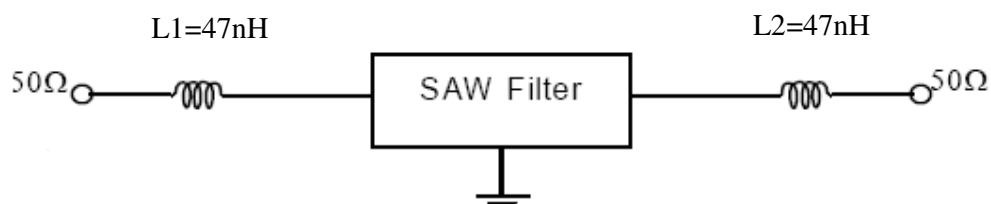
C. FREQUENCY CHARACTERISTICS:



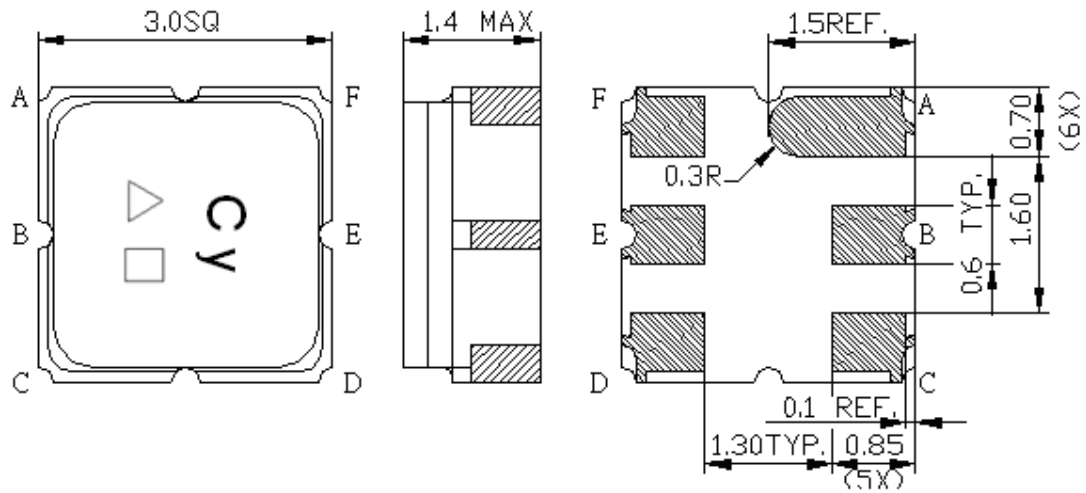


D. MEASUREMENT CIRCUIT:

The matching circuit is real by actual passive components.



E.OUTLINE DRAWING:



#A : Input (recommended) or Input ground

#B : Input ground (recommended) or Input

#D : Output (recommended) or Output ground

#E : Output ground (recommended) or Output

#C,F : Ground

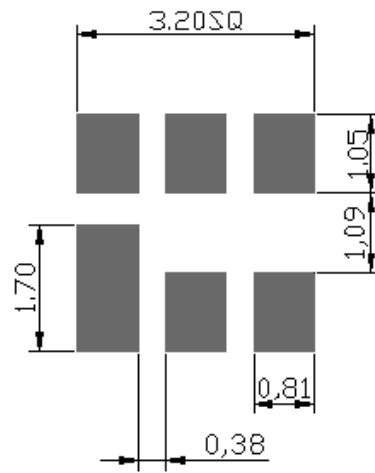
△ : Year Code(2013->3, ..., 2019->9, 2020->0, ...)

□ : Data Code

Unit : mm

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

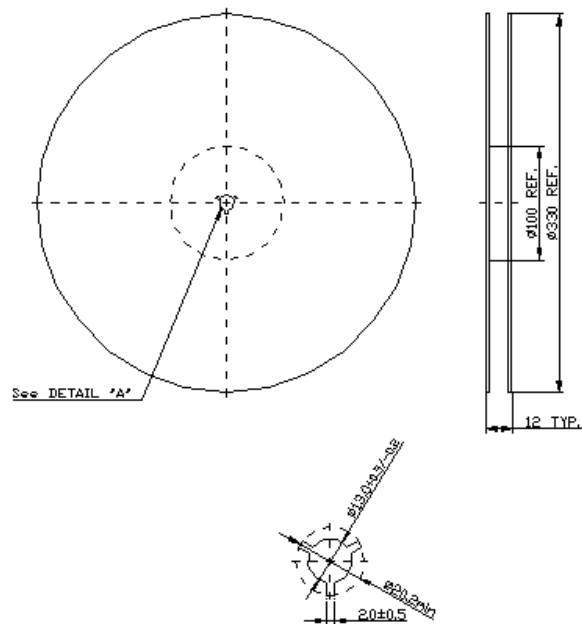
F. PCB FOOTPRINT:



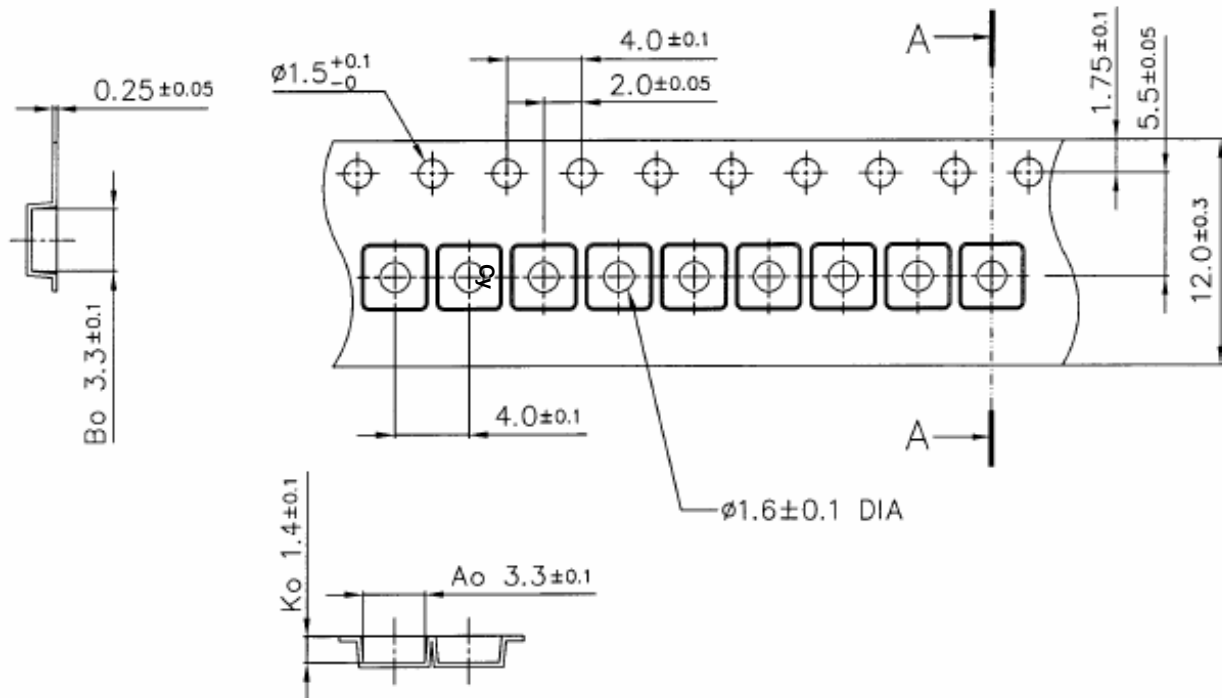
G. PACKING:

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 $260^{\circ}\text{C} +0/-5^{\circ}\text{C}$ peak (20~40sec).
4. Time: 2 times.

