



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Name: SAW Filter 314.67 MHz (BW 0.96MHz) SMD 3X3 mm

TST Parts No.: TA1615A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang 

Approval by: _____ Bob Chau 

Date: _____ 2014/5/29

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 314.67MHz

MODEL NO.:TA1615A

REV. NO.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +105°C

RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single) : $Z_s = 50 \Omega$

Terminating load impedance(single) : $Z_L = 50 \Omega$

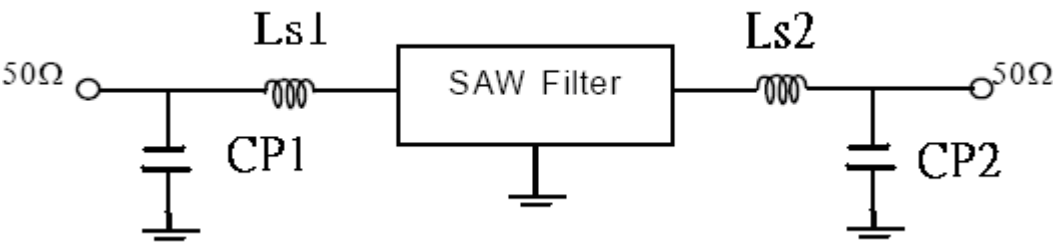
Item	Unit	Min	Type.	Max
Center Frequency F_c	MHz	-	314.67	-
Minimum Insertion Loss α_{min}				
Incl. Loss in matching elements (314.24 ~ 315.10 MHz)	dB		1.9	2.7
Excl. Loss in matching elements (314.24 ~ 315.10 MHz)	dB		1.0	1.8
Pass Band (Relative to α_{min})				
314.24 ~ 315.10 MHz ¹			1.1	2.5
314.19 ~ 315.15 MHz ²			1.3	3.0
Relative Attenuation (Relative to α_{min}) α_{rel}				
10 ~ 250 MHz	dB	45	53	
250 ~ 295 MHz	dB	35	41	
295 ~ 305 MHz	dB	32	37	
305 ~ 313.4 MHz	dB	13	17	
316 ~ 318 MHz	dB	13	15	
318 ~ 323 MHz	dB	13	17	
323 ~ 330 MHz	dB	25	30	
330 ~ 340 MHz	dB	32	35	
340 ~ 600 MHz	dB	35	40	
600 ~ 1000 MHz	dB	50	55	
1000 ~ 2500 MHz	dB	50	55	
Package size	mm	SMD 3x3		

Impedance for pass band matching				
Input: $Z_{IN} = Ls1/Cp1$	nH		120/10	
Output: $Z_{OUT} = Ls2/Cp2$	nH		120/10	

- 1) 314.47 ... 315.49 MHz for extended temperature range −40 °C to +125 °C.
- 2) 314.45 ... 315.51 MHz for extended temperature range −40 °C to +125 °C.

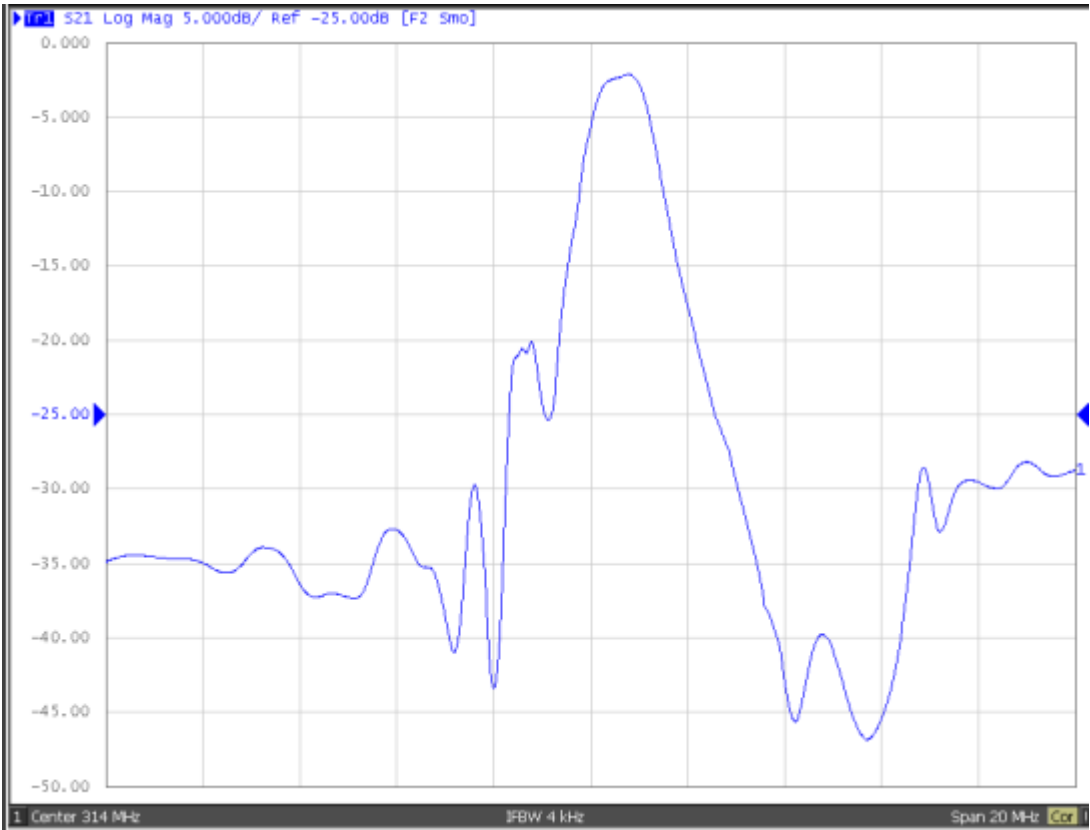
C.. TEST CIRCUIT:

The matching circuit is

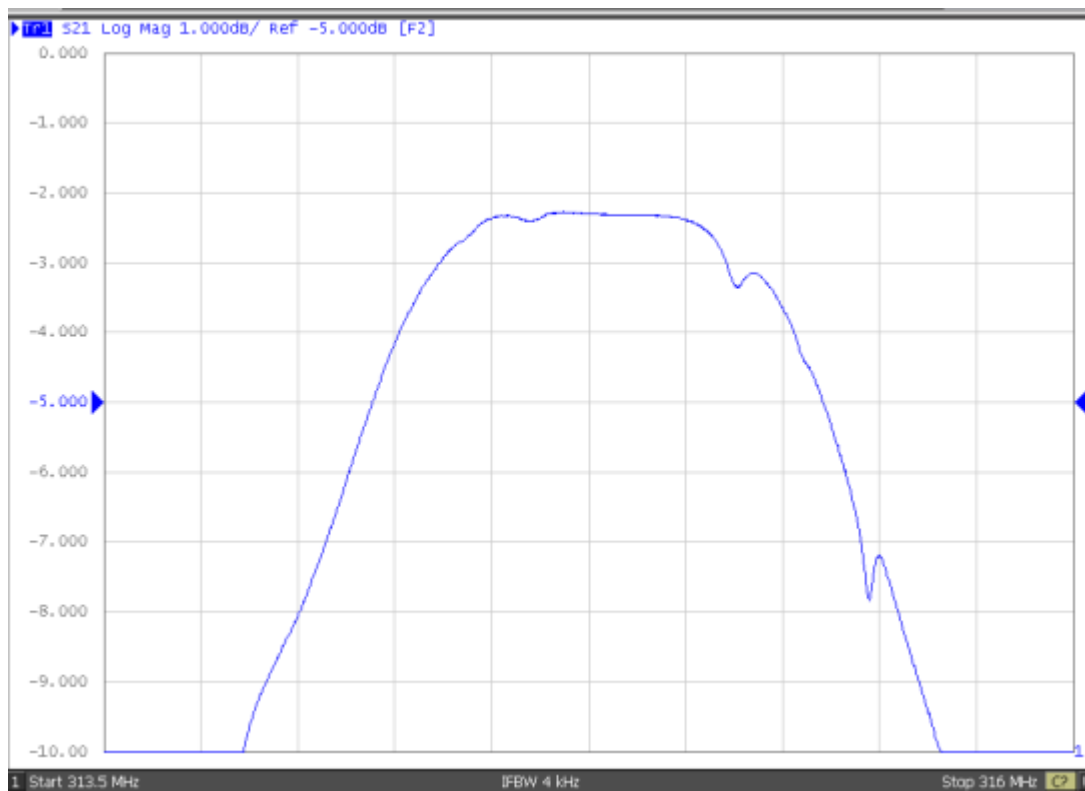


Ls1=Ls2=120nH;Cp1=Cp2=10pF

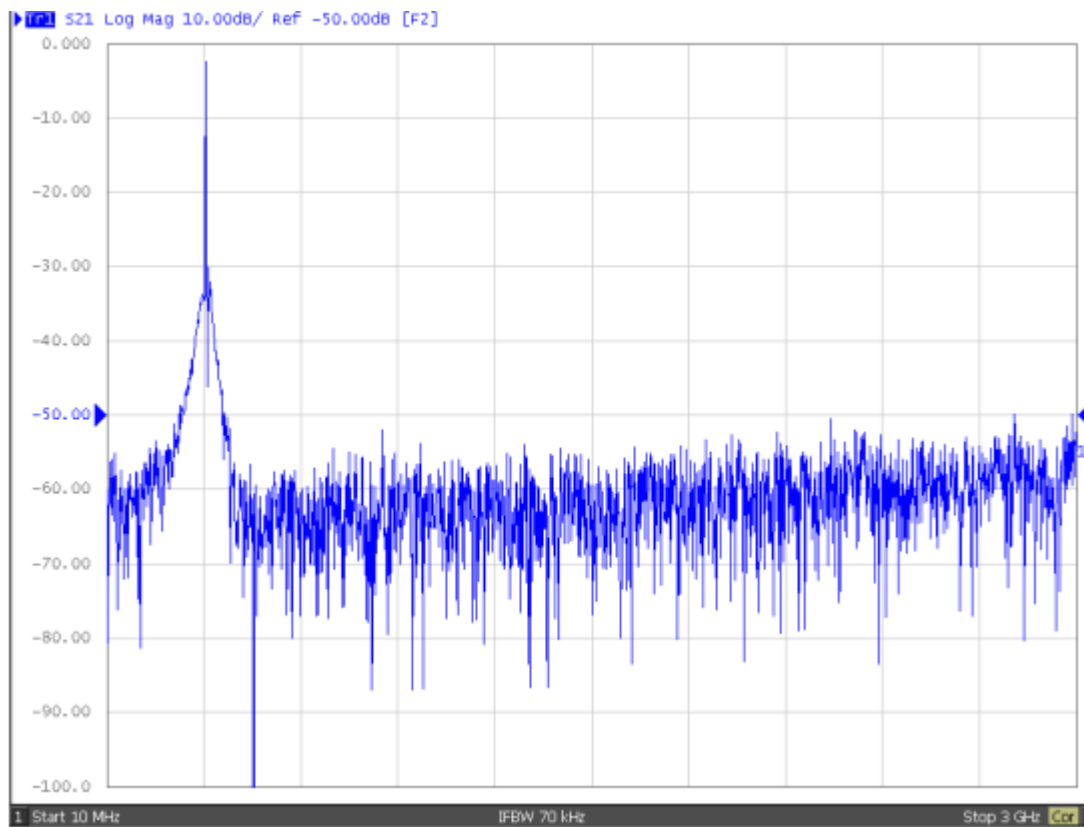
D. Frequency Characteristics :
S21 response: span 20 MHz



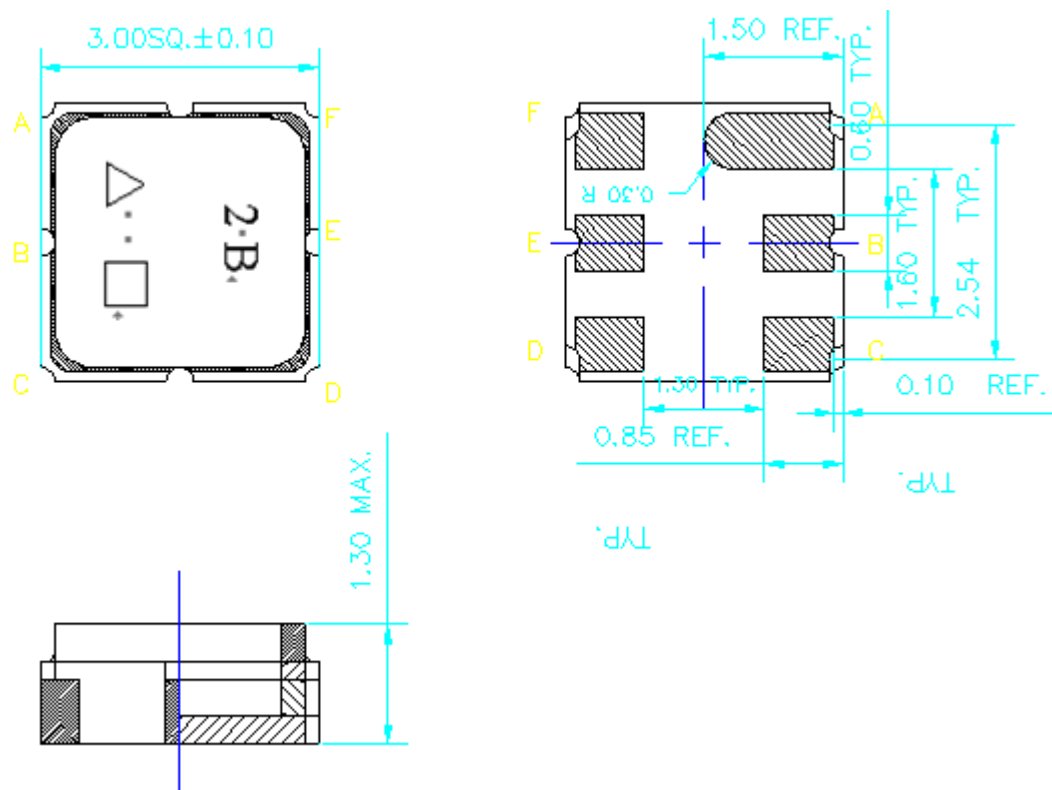
S21 response: span 3.5 MHz



S21 response: span 10MHz ~ 3G MHz



E.OUTLINE DRAWING:



#A: Input or input ground
#B: Input or input ground
#D: Output or output ground
#E: Output or output ground
#C.F Ground
△: Year code(ex 2008-> 8
□: Date code
Unit:mm

Data code : See the table

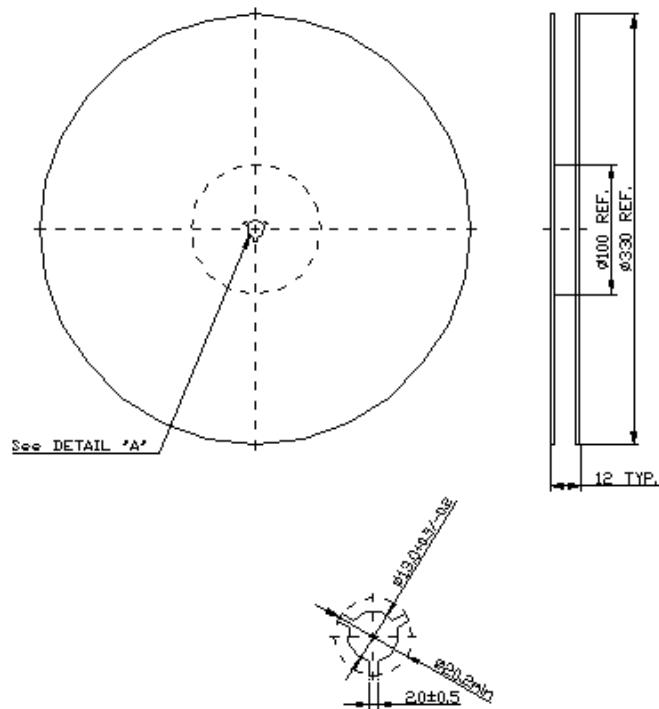
WK	01	02	...	26	27	28	...	52
Code	A	B	...	Z	a	b	...	z

△ Year code : See the table

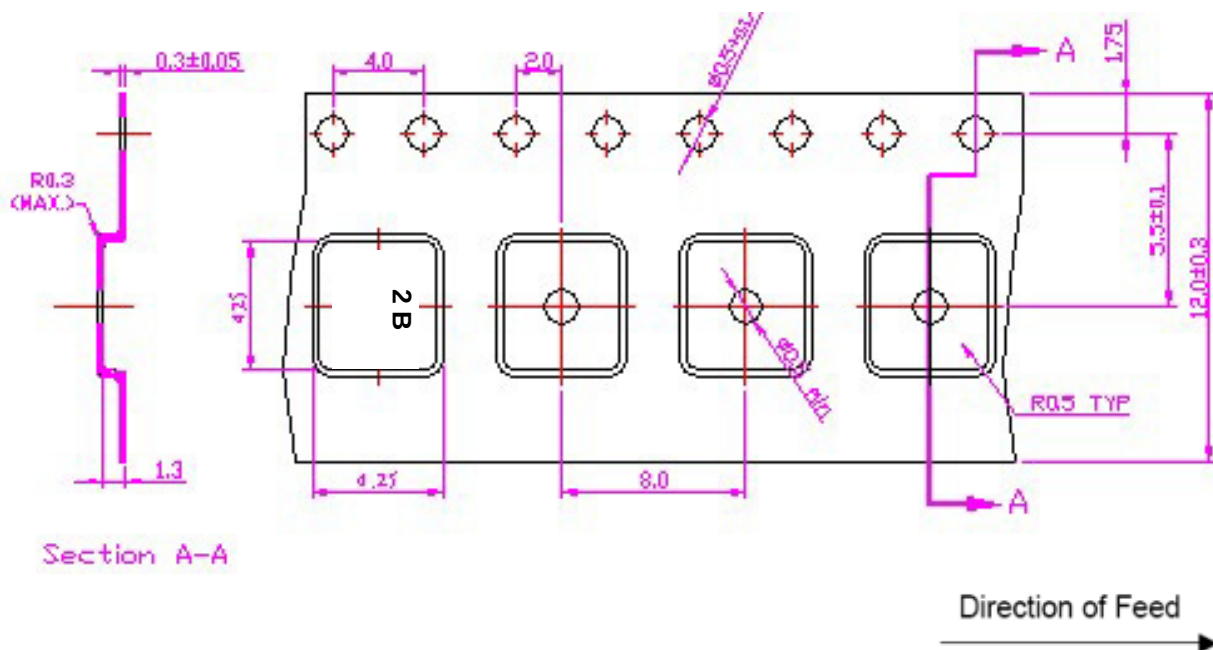
Year	2008	2009	2010	2011	...	2019	2020
Code	8	9	0	1	...	9	0

F. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



G. RECOMMENDED REFLOW PROFILE :

