



# 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

Issued Date: March , 12, 2013


Product Name: SAW Filter 315 MHz SMD 3.0x3.0 mm (BW=0.36MHz)

TST Parts No.:TA1564A

Customer Parts No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Paul Ni 

Approval by: \_\_\_\_\_ Bob Chan 

Date: \_\_\_\_\_ 03, 12, 2013

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 315 MHz

MODEL NO.:TA1564A

REV. NO.: 1.0

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 6V
3. Operating Temperature: -40°C to +95°C
4. Storage Temperature: -40°C to +95°C

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device

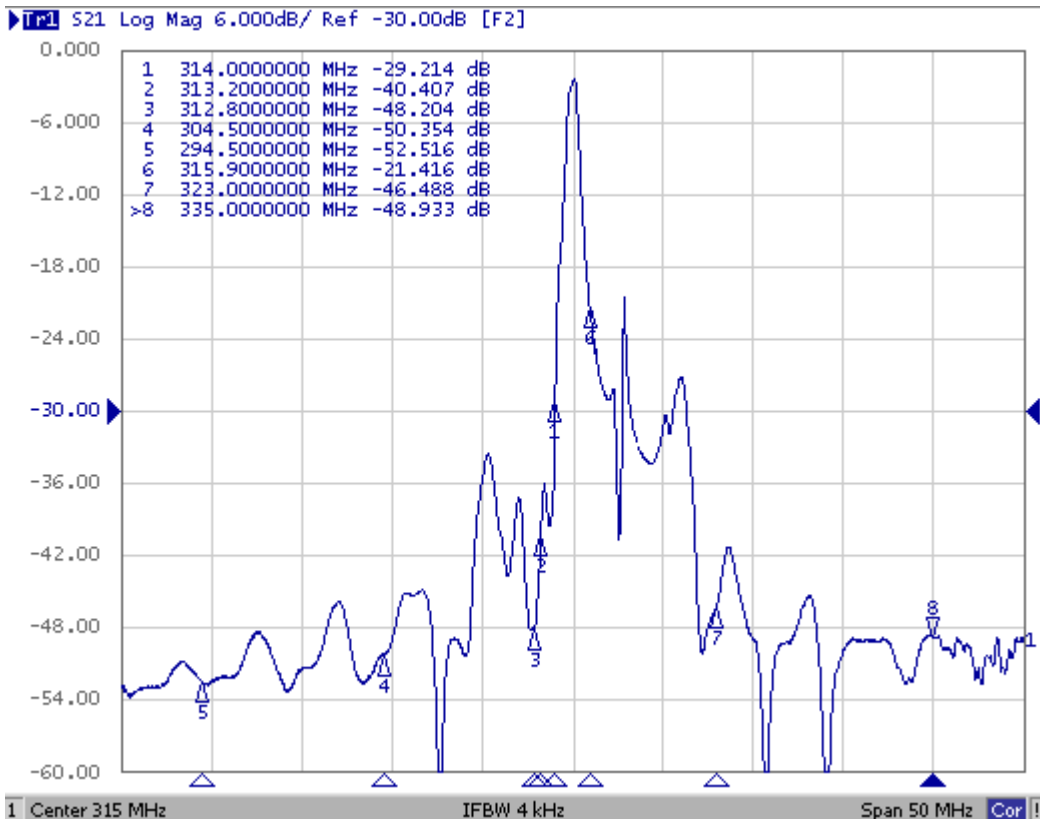
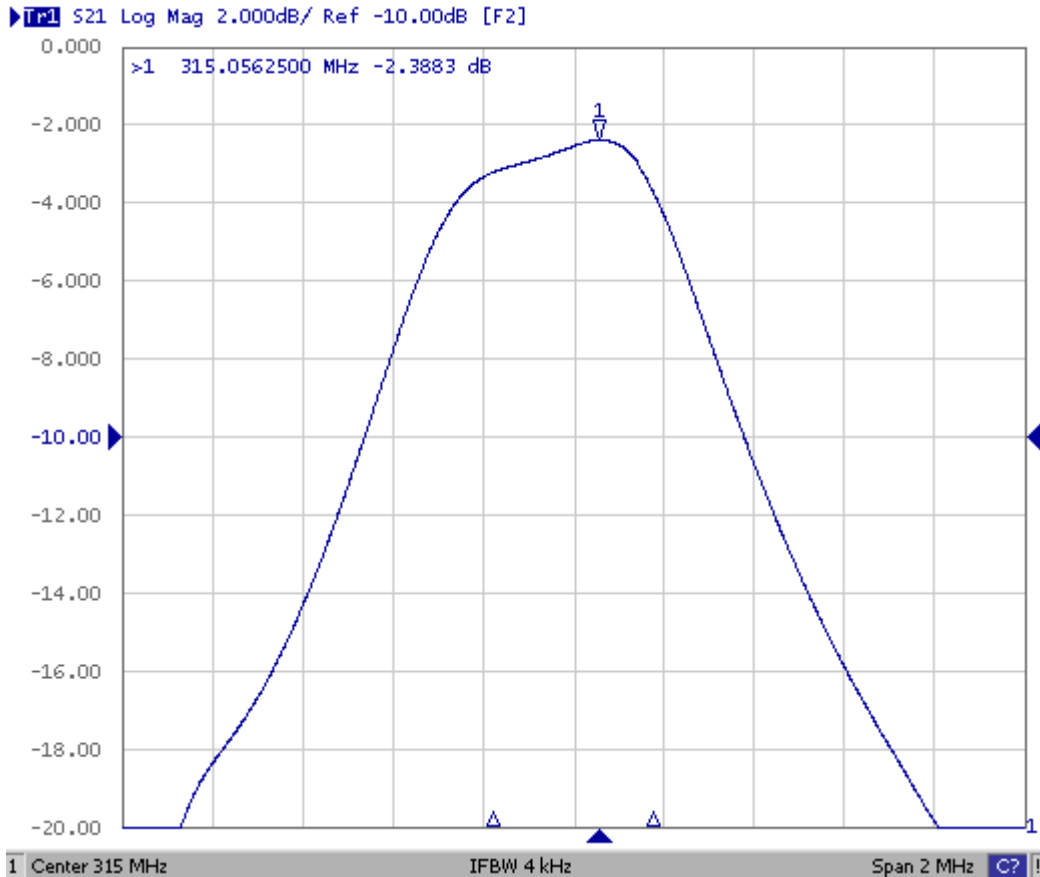
### B. ELECTRICAL CHARACTERISTICS:

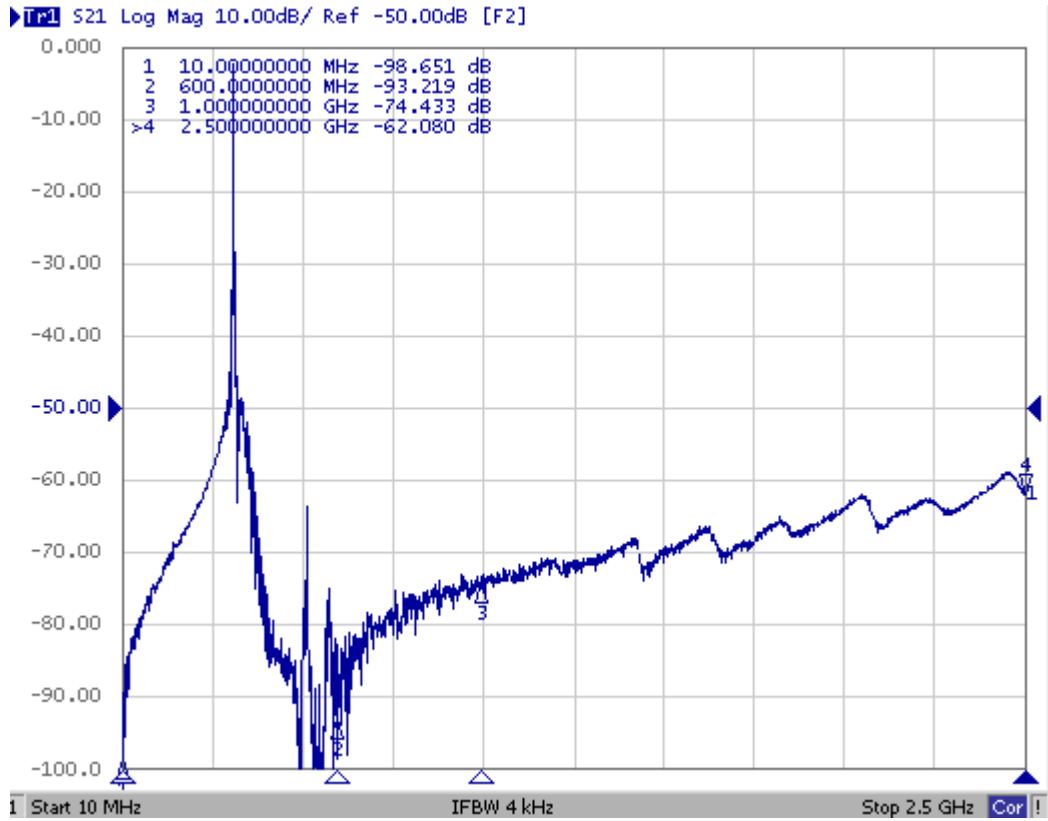
Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	315	-
3dB BW	KHz	-	560	-
Minimum insertion loss IL(min)				
Incl. loss of matching elements(Q=71) *1)	dB	-	2.4	3.4
Exclude loss in matching elements *2)	dB	-	2.1	3.1
Passband (relative to IL <sub>min</sub> ) *1)				
314.82 ~ 315.18 MHz	dB	-	1.1	3.5
Attenuation (relative to IL <sub>min</sub> ) *1)				
10.000 ~ 294.50 MHz	dB	42	49	-
294.50 ~ 304.50 MHz	dB	37	44	-
304.50 ~ 312.80 MHz	dB	24	31	-
312.80 ~ 313.20 MHz	dB	29	36	-
313.20 ~ 314.00 MHz	dB	20	27	-
315.90 ~ 323.00 MHz	dB	12	16	-
323.00 ~ 335.00 MHz	dB	33	39	-
335.00 ~ 600.00 MHz	dB	40	46	-
600.00 ~ 1000.0 MHz	dB	60	70	-
1000.0 ~ 2500.0 MHz	dB	50	56	-
Impedance at Fc, Input *1) Z <sub>in</sub> = R <sub>in</sub> //C <sub>in</sub> Z <sub>s</sub>	Ω	181Ω//1.38 pF		
Impedance at Fc, Output *1) Z <sub>out</sub> = R <sub>out</sub> //C <sub>out</sub> Z <sub>L</sub>	Ω	190Ω//1.30 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.

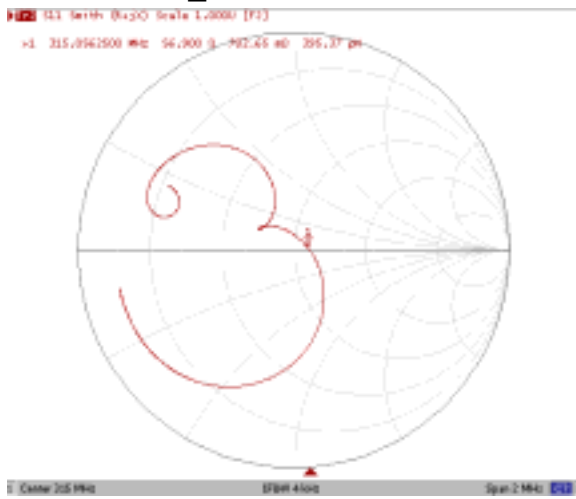
\*2) : The matching circuit is ideal by simulation.

### C. Frequency Characteristics :

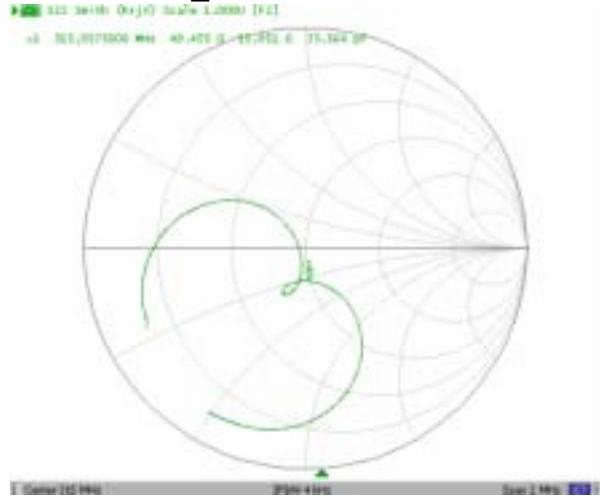




Smith Chart\_S11 :

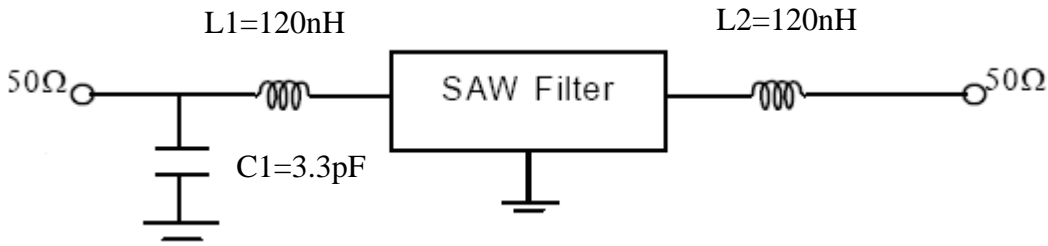


Smith Chart\_S22 :

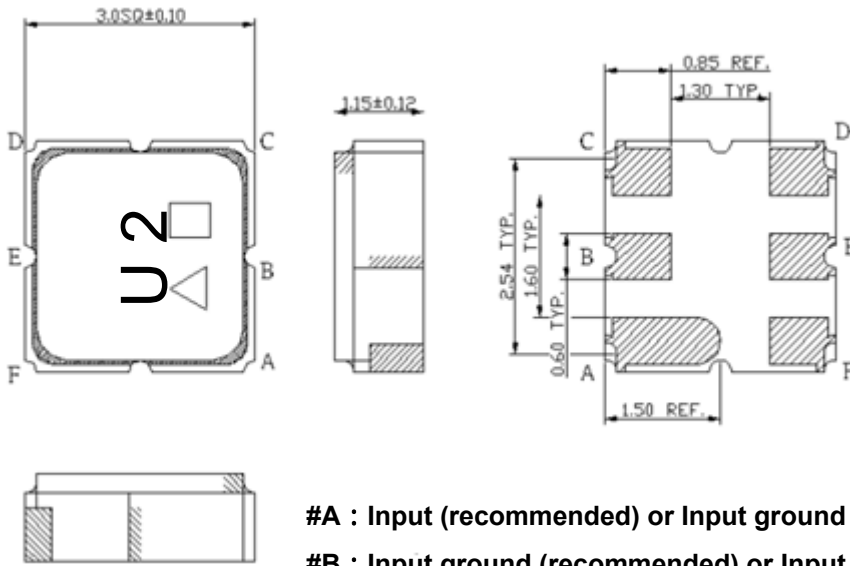


**D. MEASUREMENT CIRCUIT:**

The matching circuit is real by actual passive components.



**E.OUTLINE DRAWING:**

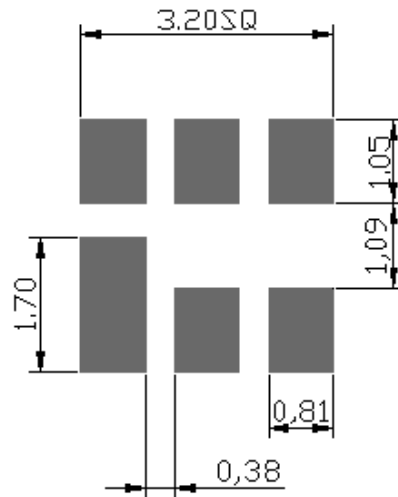


- #A : Input (recommended) or Input ground
  - #B : Input ground (recommended) or Input
  - #D : Output (recommended) or Output ground
  - #E : Output ground (recommended) or Output
  - #C、 F : Ground
  - Δ : Year Code(2013->3, ..., 2019->9)
  - : Data Code(Follow the table provided by planer each year )
- 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

\*3) The recommended pin configuration offers better suppression of electrical crosstalk.

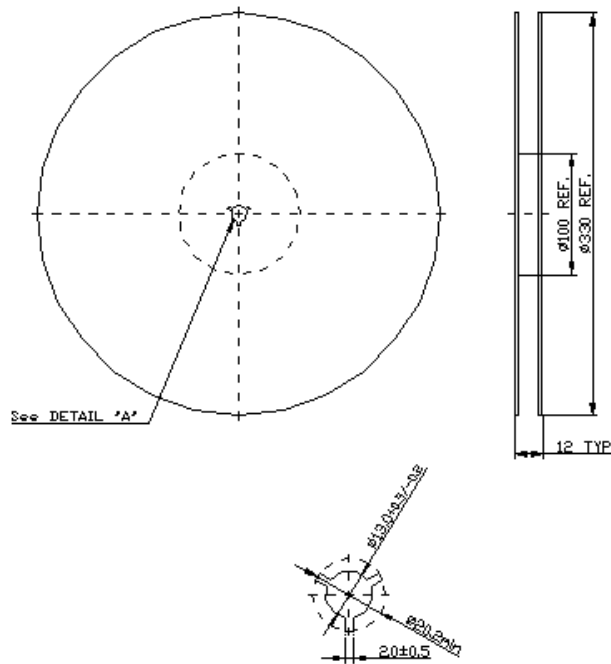
**F. PCB Footprint:**



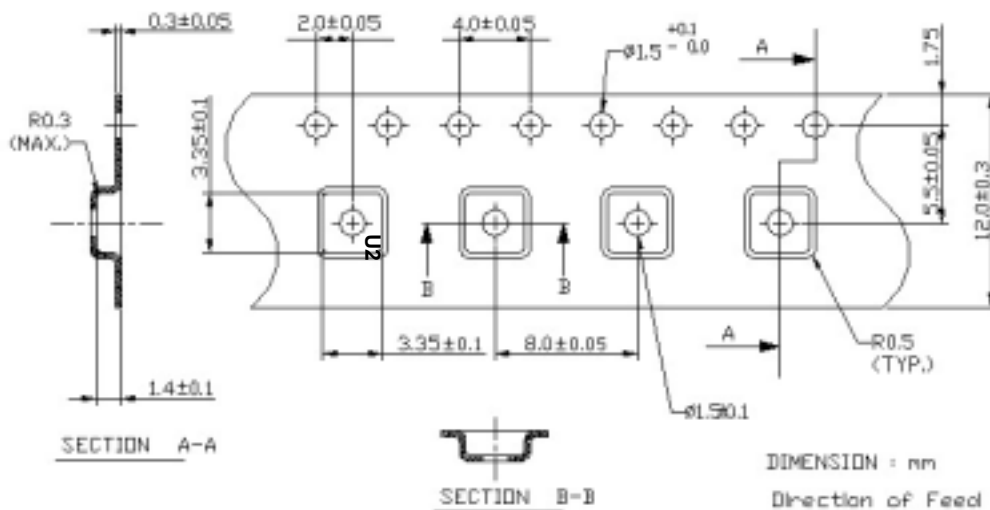
**G. PACKING:**

**1. REEL DIMENSION**

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



**2. TAPE DIMENSION**



## H. RECOMMENDED REFLOW PROFILE :

