



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
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## Product Specifications Approval Sheet

Issued Date: May , 09, 2018

Product Name: SAW Filter 915 MHz SMD 3.0x3.0 mm(BW=1MHz)

TST Parts No.:TA1392A

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

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

Checked by:\_\_\_\_\_ Kazuma Lee *Kazuma Lee*

Approval by:\_\_\_\_\_ Andy Yu *Andy Yu*

Date:\_\_\_\_\_ 05, 09, 2018

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 915 MHz

MODEL NO.:TA1392A

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)



Electrostatic Sensitive Device

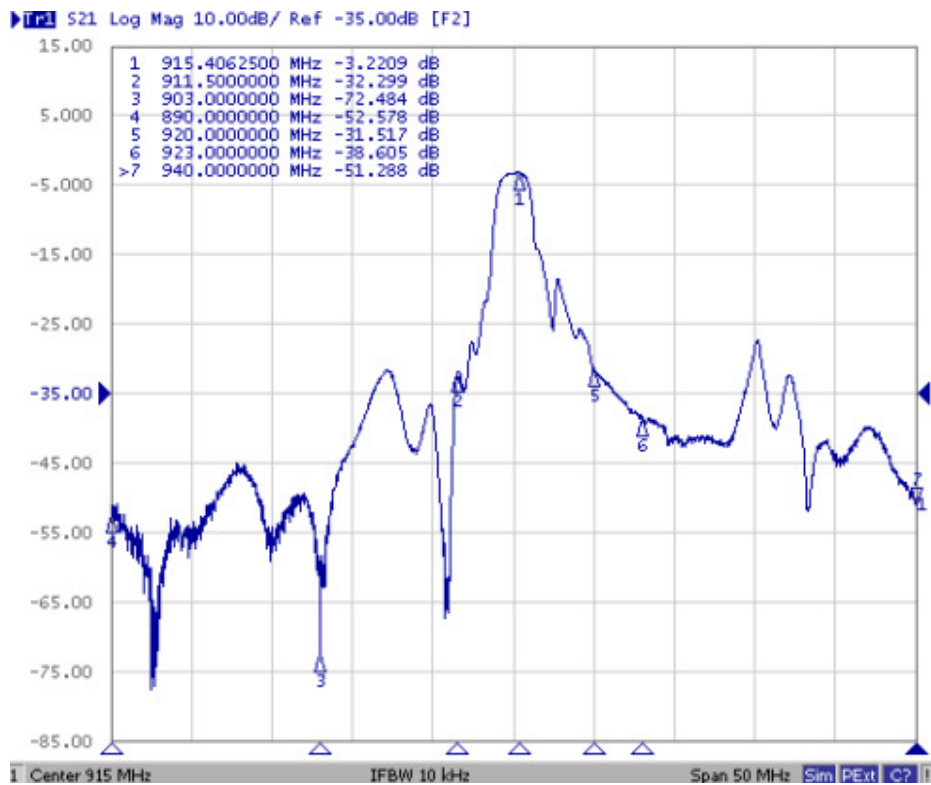
### B. ELECTRICAL CHARACTERISTICS:

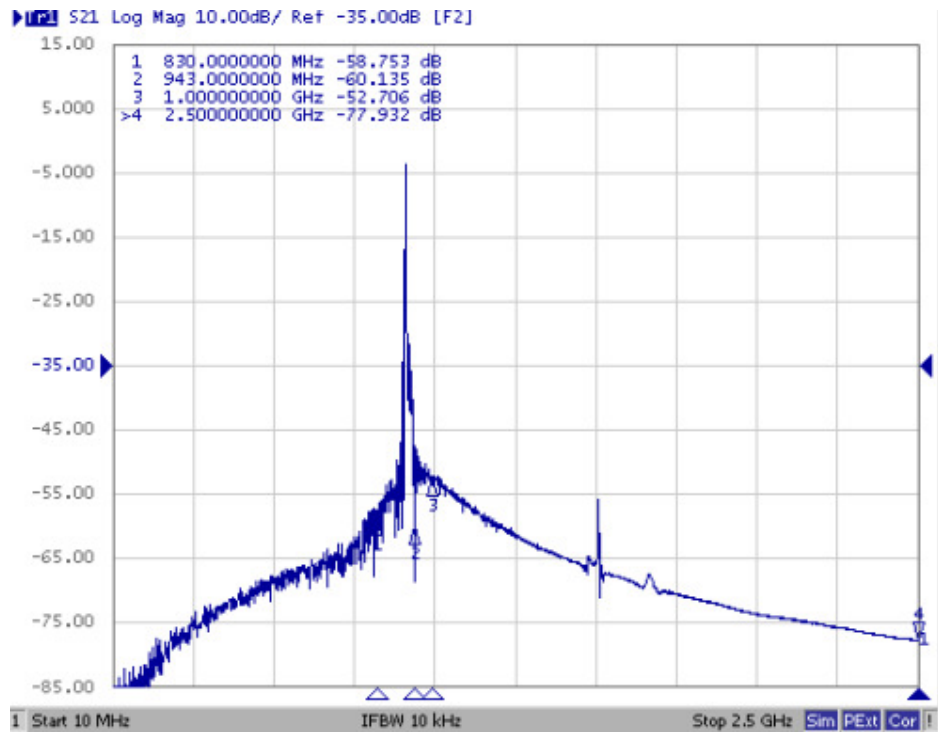
Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	915	-
3dB BW	MHz	-	2.0	-
Minimum insertion loss IL(min)				
Exclude loss in matching elements *1)	dB	-	2.7	4.0
Incl. loss of matching elements(Q=89) *2)	dB	-	3.9	5.0
Passband (relative to IL <sub>min</sub> ) *1)				
914.50 ~ 915.50 MHz	dB	-	0.4	2.5
914.30 ~ 915.70 MHz	dB	-	1.0	5.0
Attenuation (relative to IL <sub>min</sub> ) *1)				
10.000 ~ 830.00 MHz	dB	47	53	-
830.00 ~ 890.00 MHz	dB	41	46	-
890.00 ~ 903.00 MHz	dB	36	42	-
903.00 ~ 911.50 MHz	dB	19	28	-
920.00 ~ 923.00 MHz	dB	19	28	-
923.00 ~ 943.00 MHz	dB	19	24	-
943.00 ~ 1000.0 MHz	dB	37	43	-
1000.0 ~ 2500.0 MHz	dB	43	48	-
Impedance at Fc, Input *1) Z <sub>in</sub> = R <sub>in</sub> //C <sub>in</sub> Z <sub>s</sub>	Ω	354Ω//1.88pF		
Impedance at Fc, Output *1) Z <sub>out</sub> = R <sub>out</sub> //C <sub>out</sub> Z <sub>L</sub>	Ω	334Ω//1.93pF		

\*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.

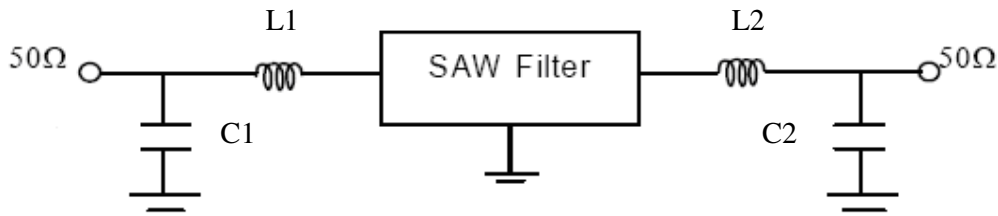
### C. Frequency Characteristics :





### D. MEASUREMENT CIRCUIT:

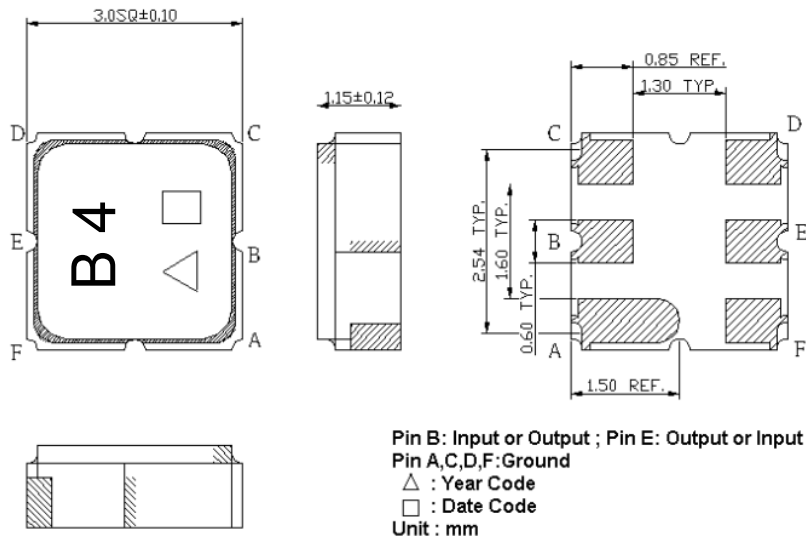
The matching circuit is ideal by simulation



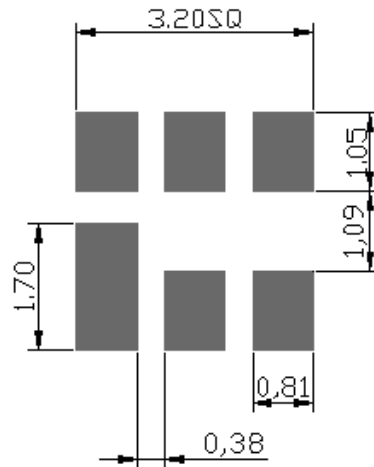
L1 : 34nH , L2 : 33nH (Ideal value)

C1 : 1.6 pF , C2 : 1.6pF (Ideal value)

### E.OUTLINE DRAWING:

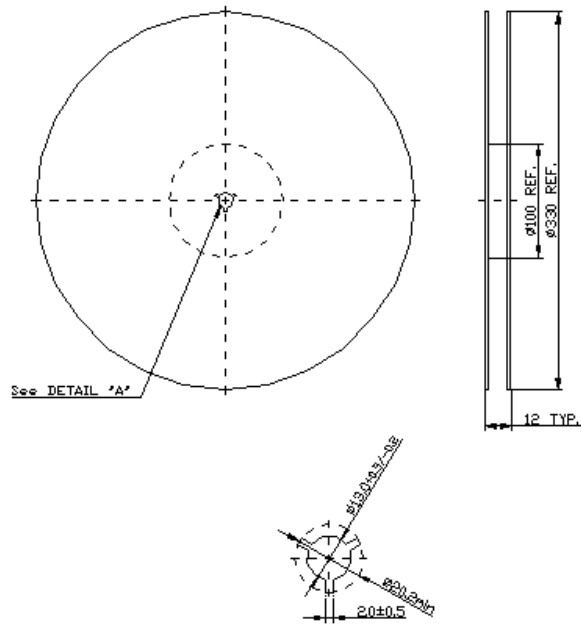


### F. PCB Footprint:

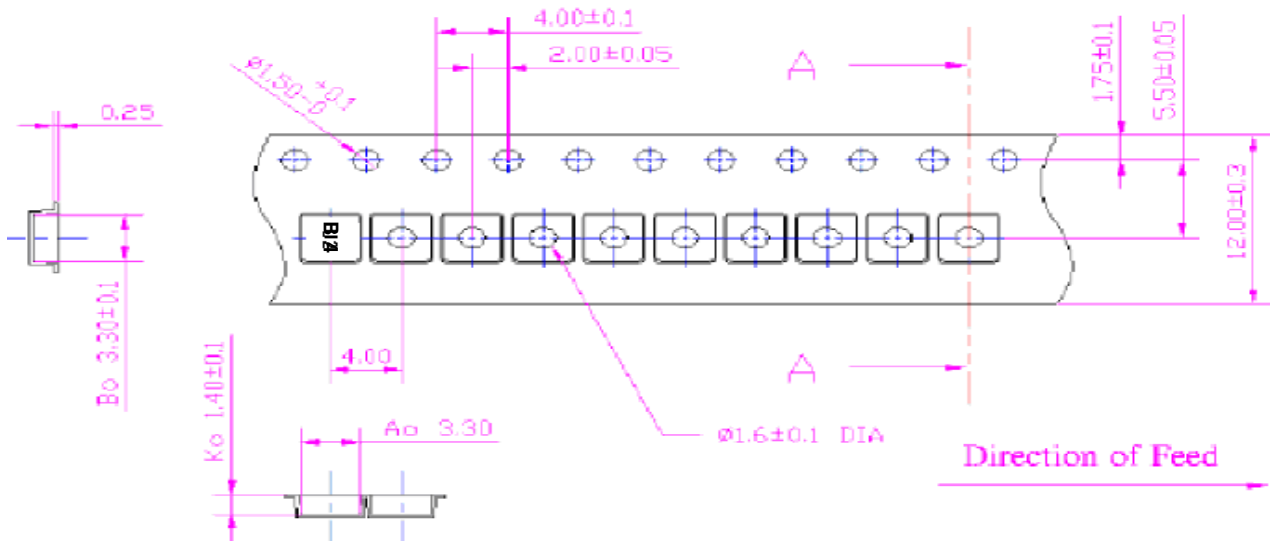


**G. PACKING:**

**1. REEL DIMENSION**



**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.

