TAI-SAW TECHNOLOGY CO., LTD.
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Issued Date:

Product Name: SAW IF Filter 138.24 MHz

TST Parts No.: TB0820A (package 7.0mm x5.0 mm)

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Kazuma Lee _____

Approval by:_____ Andrew Lee _____

Date:_____ 12 / 07 / 2009 _____

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.

TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

IF SAW Filter 138.24MHz(BW=77MHz) SMD 7.0X5.0mm
MODEL NO.: TB0820A REV. NO.1

RoHS Compliant
Lead free
Lead-free soldering

A. MAXIMUM RATING:

1.Operating Temperature: -10°C ~ 80°C
2. Storage Temperature: -40°C ~ +85°C
3. Input Power Level : 10 dBm

B. Characteristics :

Item	Unit	Min	Typ	Max
Center Frequency	MHz	-	138.24	-
Insertion Loss, IL	dB	-	25.0	26.0
Upper -0.6dB frequency	MHz	176.74	178.77	-
Lower -0.6dB frequency	MHz	-	97.78	99.74
Upper -30dB frequency	MHz	-	186.90	190.4
Lower -30dB frequency	MHz	86.08	94.80	-
Amplitude Ripple Fc+/- 38.5MHz	dB	-	0.52	0.85
Amplitude Ripple at any 5MHz adjacent segment within 77 MHz	dB	-	0.3	0.5
Group delay variation at any 5MHz adjacent segment within 77 MHz	nS	-	10	20
Relative Attenuation				
DC~80MHz	dB	30	40	-
195~280MHz	dB	30	34	-
280~420MHz	dB	20	24	-
420~600MHz	dB	30	35	-
Source/Load Impedance	Ohms	-	50	-
Temperature coefficient	ppm/C	-	-72	-

C. Frequency Characteristics :

(1) Narrow band Response:(span 200MHz)

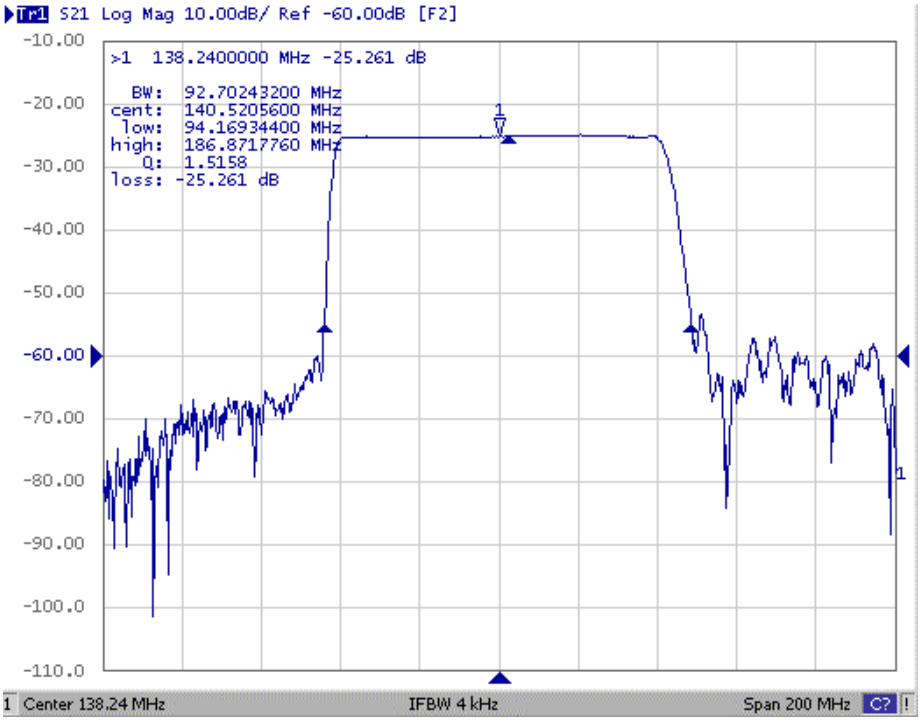


Fig1. Horizontal: 20MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

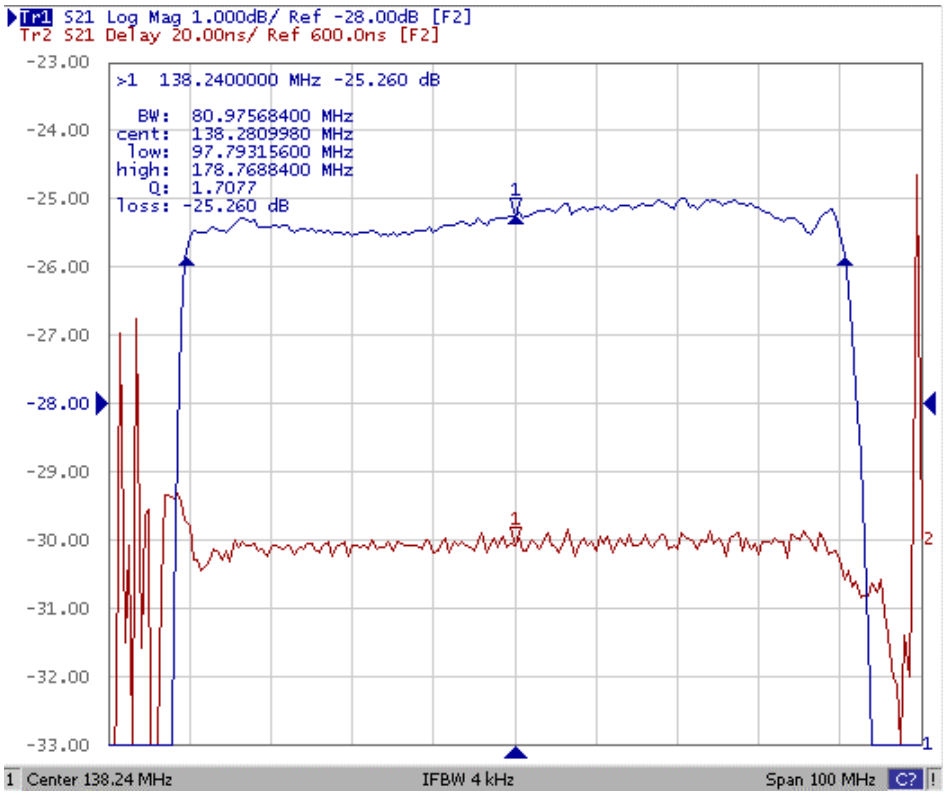


Fig2. Horizontal: 10MHz/Div Vertical: 1dB/Div
Vertical: 20ns/Div

(3) Wide band Response:(span 600MHz)

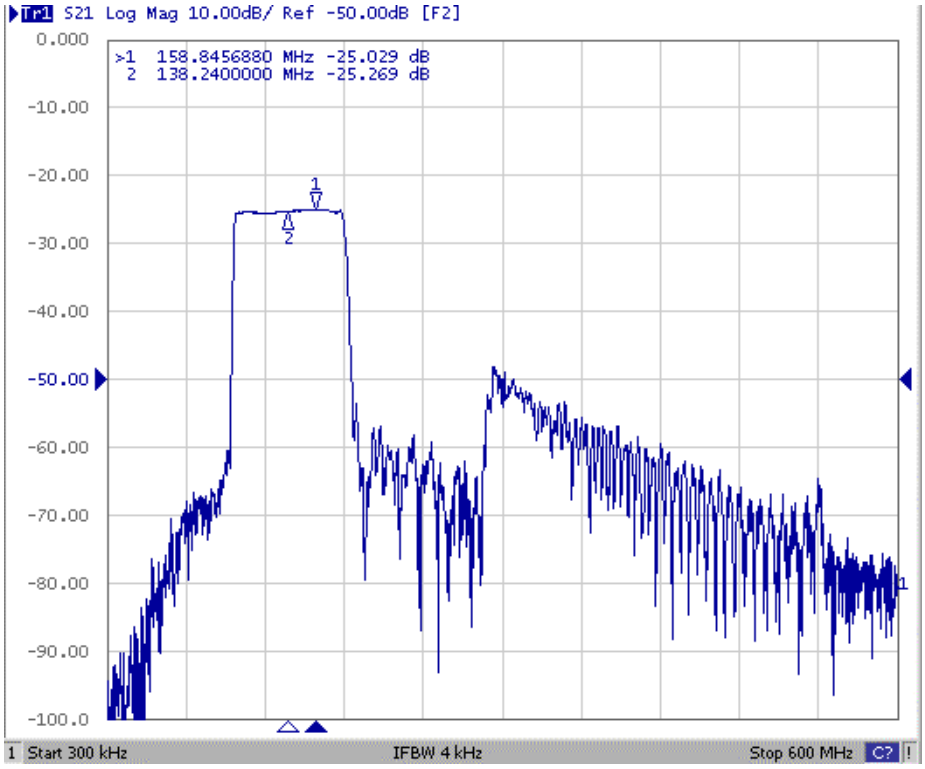
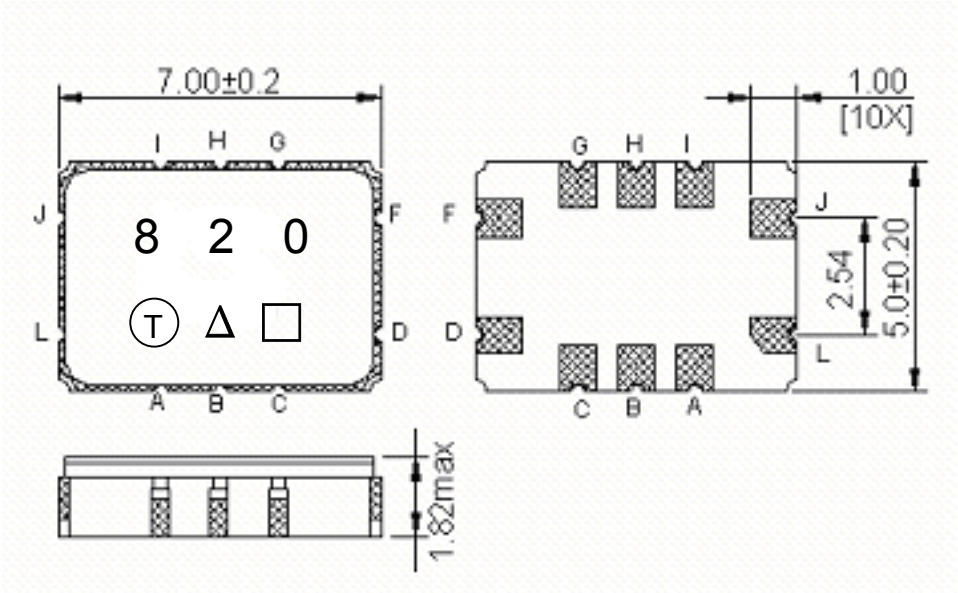


Fig3. Horizontal: 60MHz/Div Vertical: 10dB/Div

D. Outline Drawing:



Pin J –RF input

Pin L –RF input ground

Pin D –RF output

Pin F –RF output ground

Pin A,B,C,G,H,I - Ground

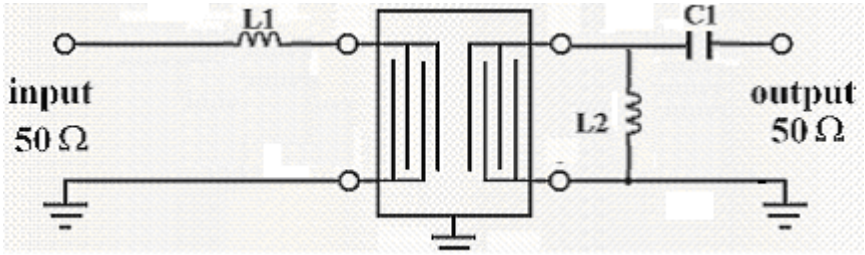
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

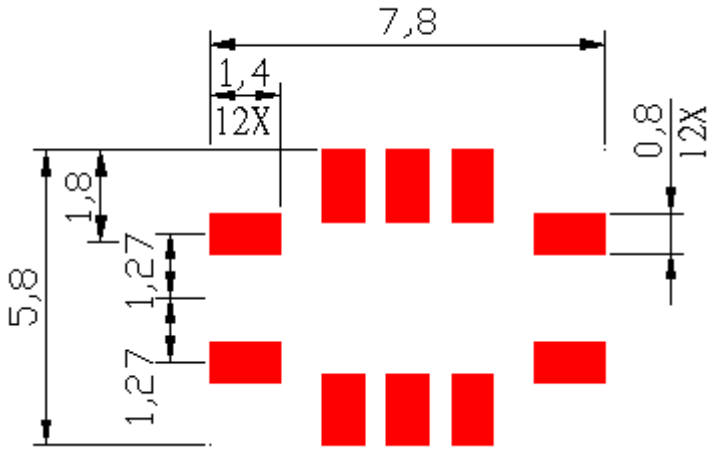
Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	B	b

E. Matching Circuit:



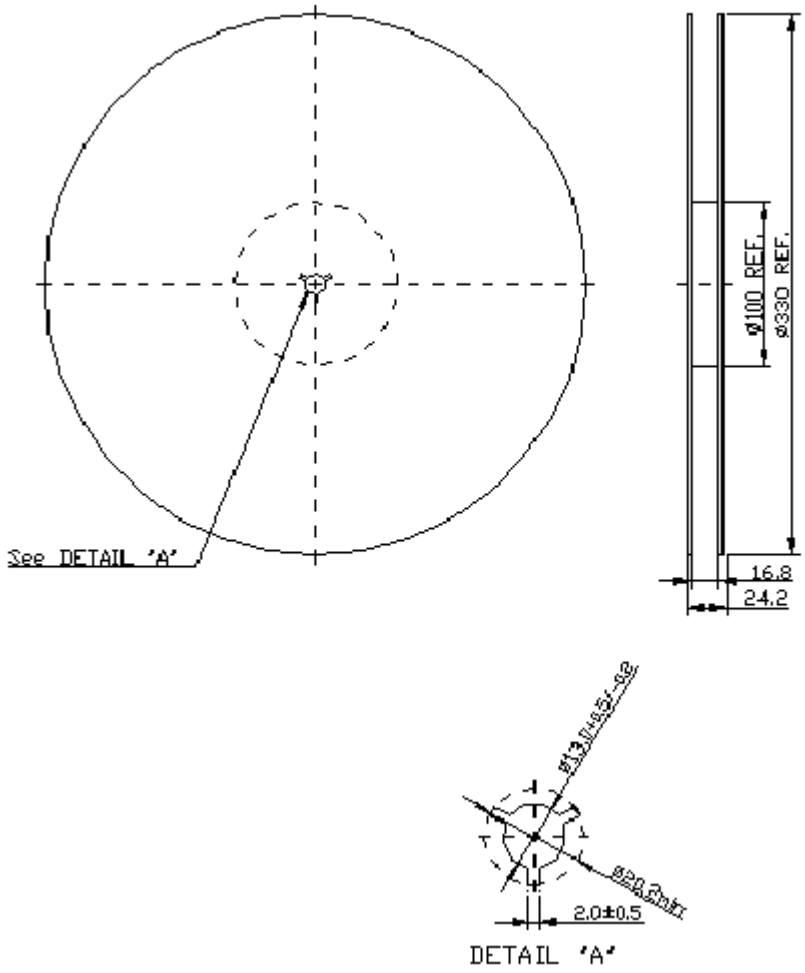
L1=47nH L2=120nH C1=56pF
Zin=50ohm Zout=50ohm

F. PCB Footprint:

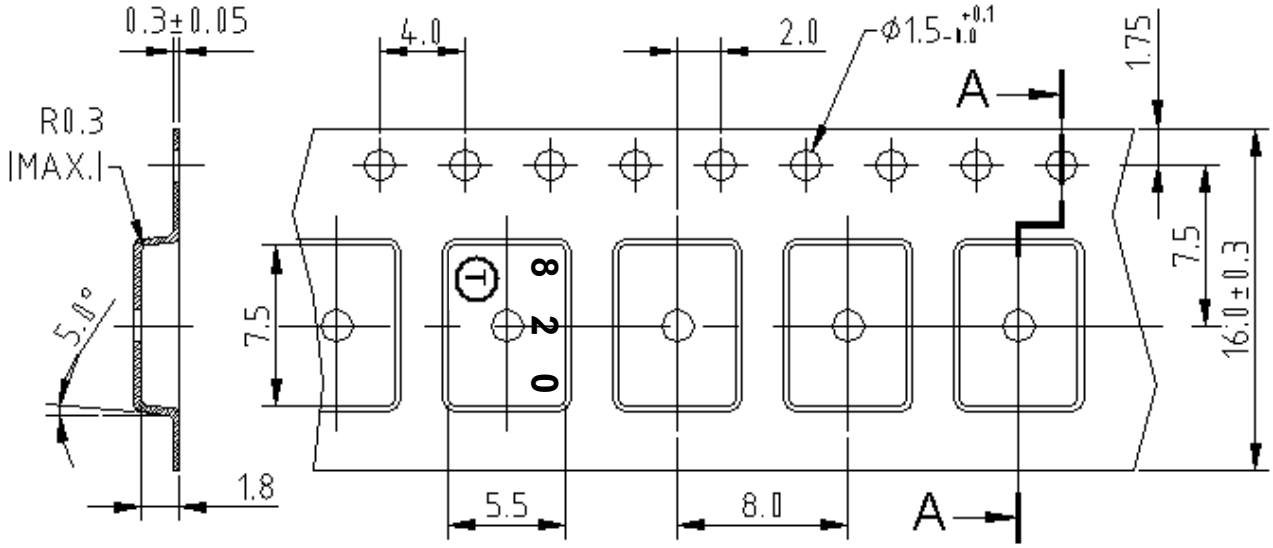


G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :