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

Approval Sheet For Product Specification

Issued Date:

Product Name: IF SAW Filter 456 MHz(SMD 7.0X5.0mm)

TST Parts No.:TB0471A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____Andy Lee_____

Approval by:_____Francis Chen_____

Date:_____2007/03/19_____

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IF SAW Filter 456 MHz SMD 7X5mm

MODEL NO.: TB0471A Rev No.1

A. MAXIMUM RATING:

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

RoHS Compliant
Lead free
Lead-free soldering

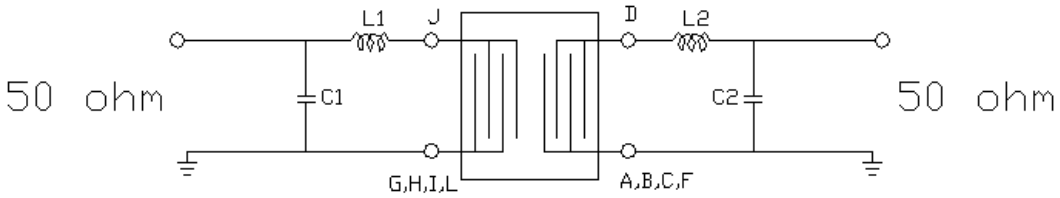
B. Characteristics :

1. Ambient Temperature: 25 °C
2. Optimal Source Impedance(Balanced): 200 ohm
3. Optimal Load Impedance(Balanced): 200 ohm

Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency F_C	MHz	-	456	-	-
Minimum Insertion Loss	dB	-	12.4	15.5	-
Return Loss (Fc±1.5MHz)	dB	9	15	-	-
1dB Bandwidth	MHz	-	6.2	-	-
30dB Bandwidth	MHz	-	7.7	-	-
Passband Ripple (Fc±1.5MHz)	dB	-	0.4	1	-
Group Delay Ripple (Fc±1.5MHz)	nS	-	36	200	-
Attenuation:(Reference level from minimum insertion loss)					dB
1) 10 MHz….256 MHz	dB	30	65	-	-
2) 256 MHz ~ 360 MHz	dB	45	59	-	-
3) 360 MHz ~ 416 MHz	dB	45	55	-	-
4) 416MHz ~ 445.1 MHz	dB	35	47	-	-
5) 466.9 MHz ~496 MHz	dB	35	46	-	-
6) 496 MHz ~ 656 MHz	dB	35	50	-	-
7) 656 MHz ~ 1000 MHz	dB	30	55	-	-
Temp Coefficient	ppm/° C^2	-0.036			

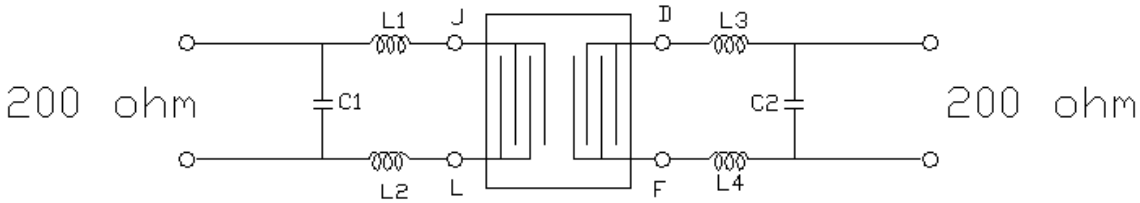
C. Measurement Circuit:

(1) Single end 50 ohm to Single end 50 ohm



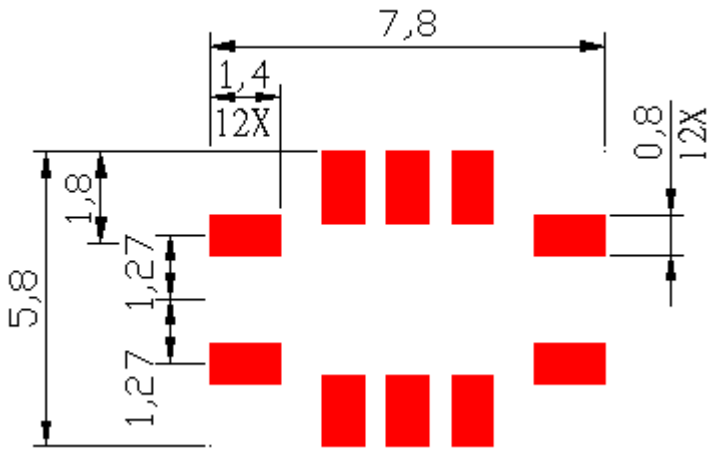
L1=12nH C1=18pF L2=12nH C2=18pF

(2) Balanced 200 ohm to Balanced 200 ohm



L1=L2=8nH C1=18pF L3=L4=8nH C2=18pF

D. PCB FOOTPRINT:



E. Frequency Characteristics :

(1) S21 Response

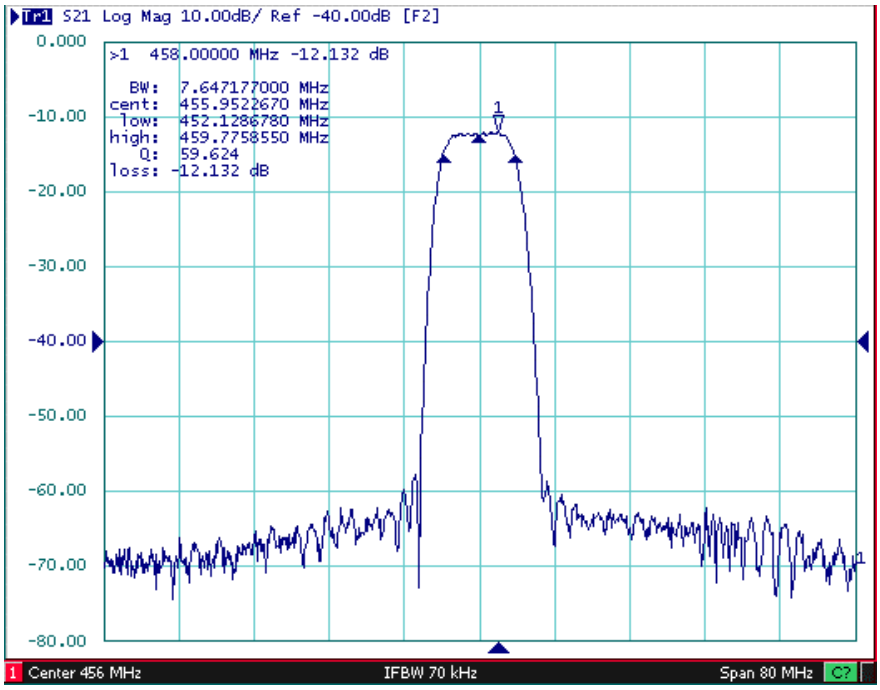


Fig1. Horizontal: 8MHz/Div Vertical: 10dB/Div

(2) Passband Ripple

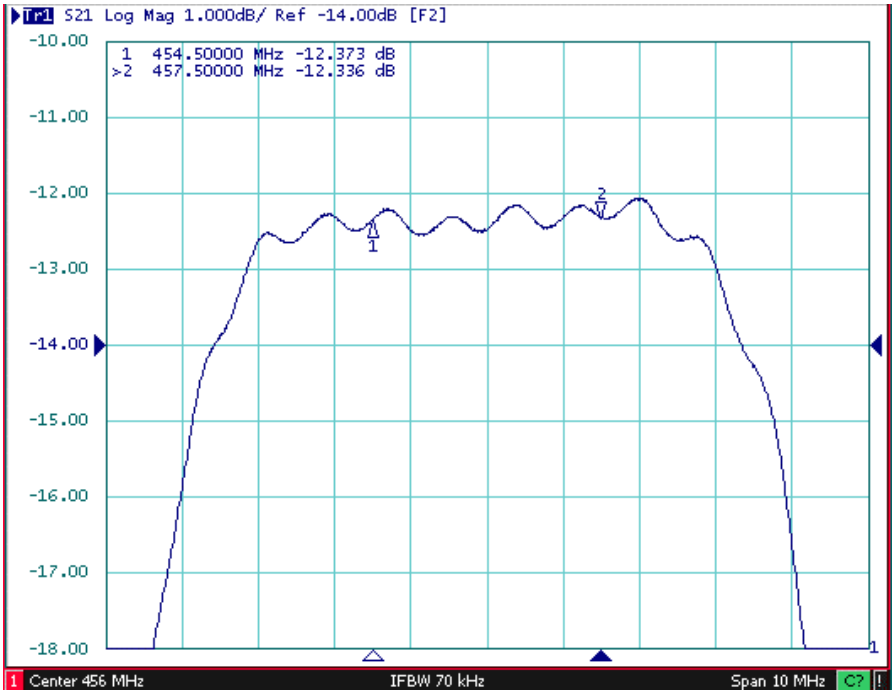


Fig2. Horizontal: 1MHz/Div Vertical: 1dB/Div

(3) Group Delay ripple

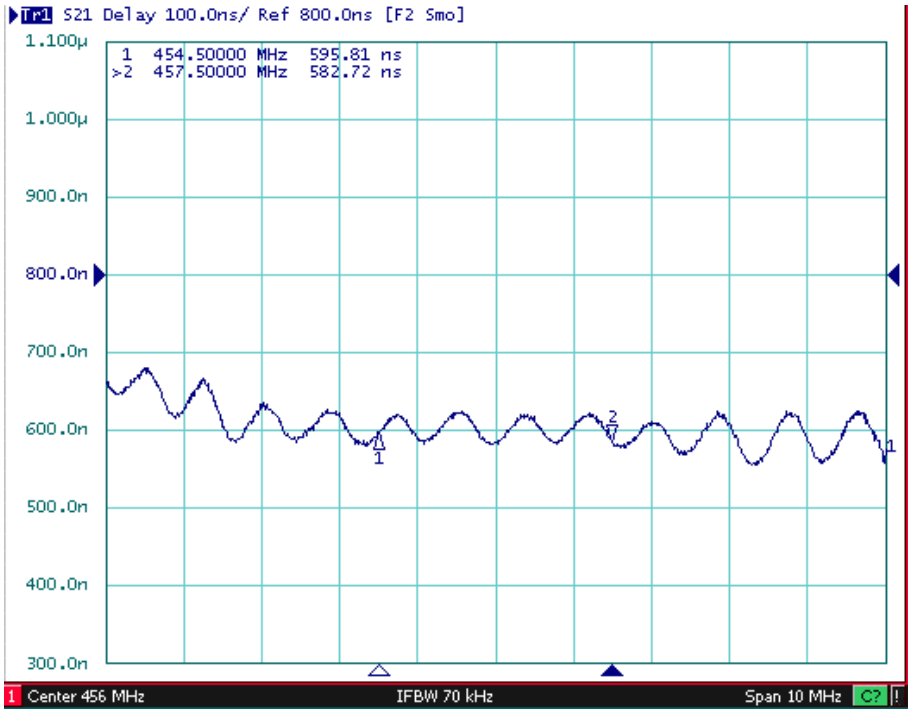


Fig3. Horizontal: 1MHz/Div Vertical: 100nS/Div

(4) Wideband Response

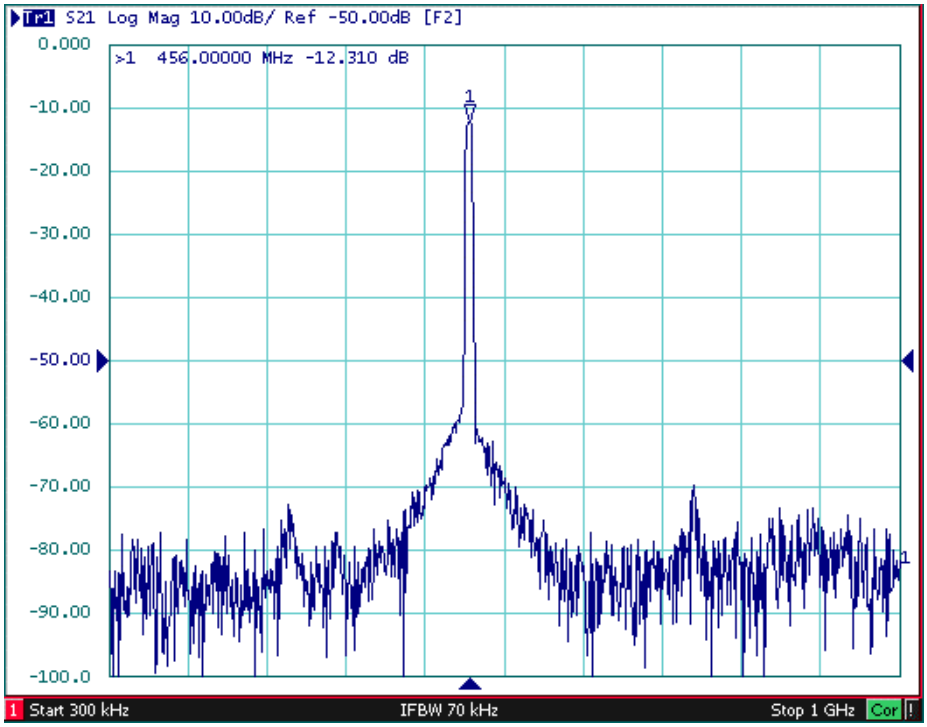
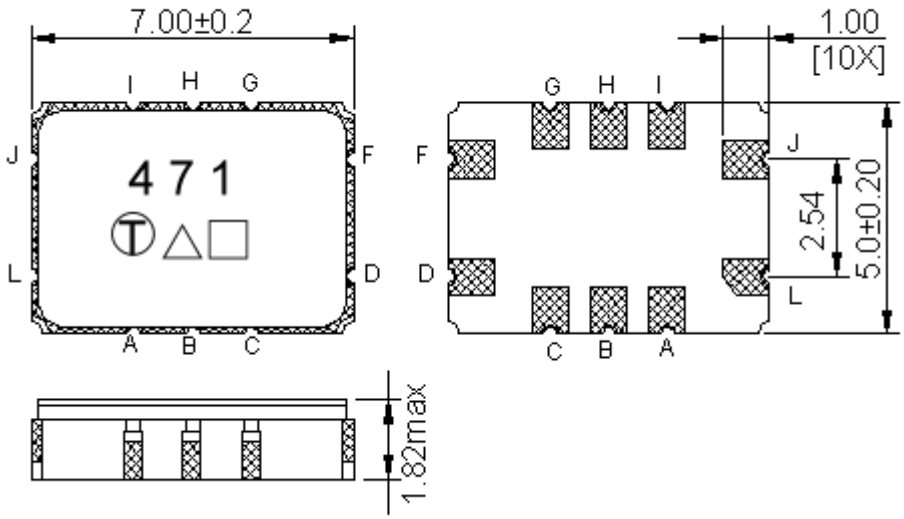


Fig4. Horizontal: 300kHz~1GHz Vertical: 10dB/Div

F. Outline Drawing:



Pin J,L : Balanced Input

Pin F,D : Balanced Output

Pin A,B ,C ,I,H,G : To be Ground

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

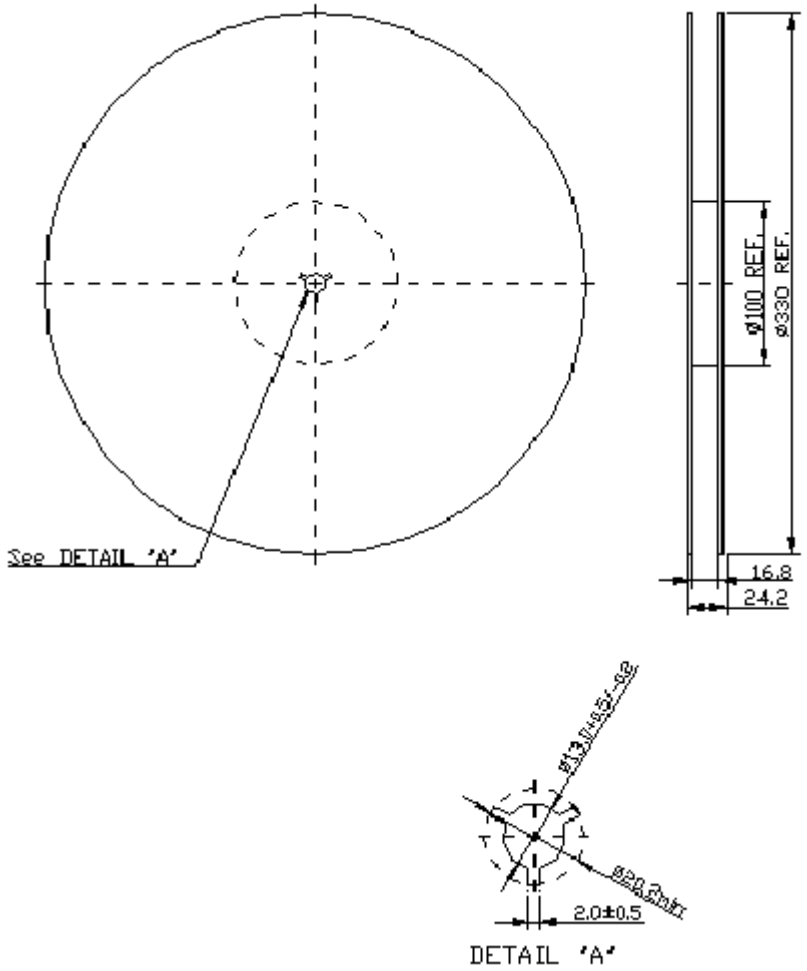
Unit : mm

△ : Product / Year Code○

Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	B	b

G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

