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Approval Sheet For Product Specification

Issued Date:

Product Name: SAW IF Filter 525MHz

TST Parts No.: TB0651A

Customer Parts No.: _____

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

Checked by: _____ Kazuma Lee 

Approval by: _____ Francis Chen 

Date: _____ 2008/12/08



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SAW Filter 525MHz 54 MHz BW (SMD 5×5 mm)

MODEL NO.: TB0651A

REV. NO.1

A. MAXIMUM RATING:

- 1.Storage Temperature: -40°C to 85°C
- 2.Operating Temperature: -20°C to 70°C
3. Input Power Level : 10 dBm

RoHS Compliant
Lead free
Lead-free soldering

B. Characteristics :

Item	Unit	Min.	Type.	Max.
Center frequency, Fc	MHz	-	525	-
Insertion Loss 498 to 552 MHz	dB	-	15.4	16.5
Passband Variation 498 to 552 MHz	MHz	-	1.5	3
Relative Attenuation at 454MHz	dB	20	42	-
Relative Attenuation at 558MHz	dB	-	34	-
Temp Coefficient	ppm/K	-	-76	-

C. Frequency Characteristics:

Wideband Response:(span 300MHz)

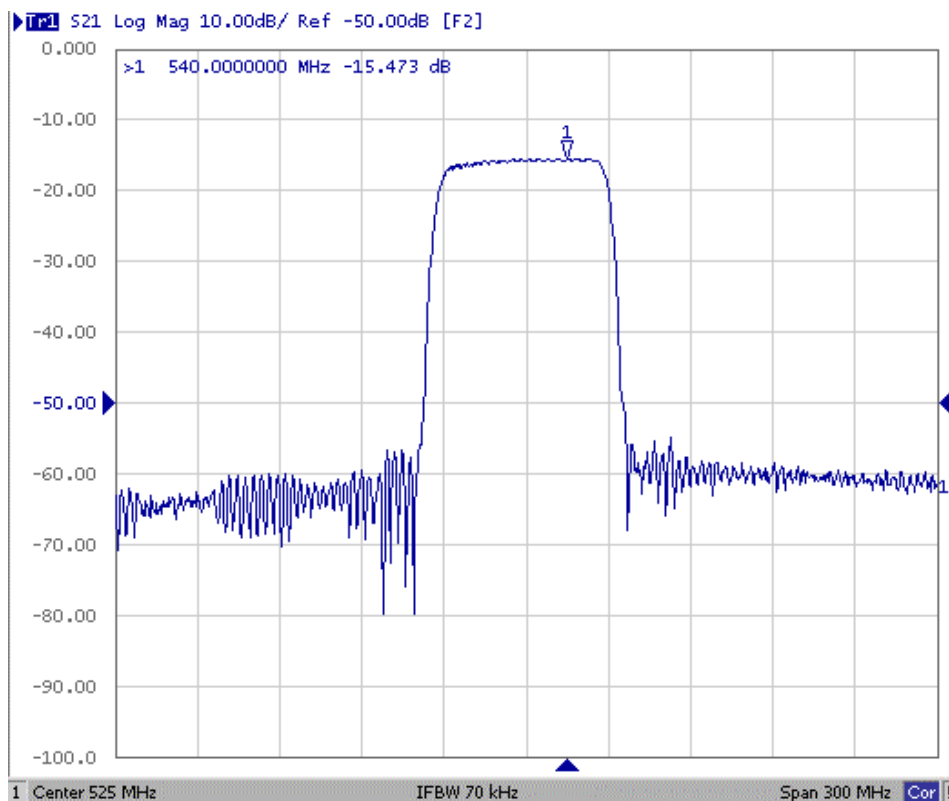


Fig1. Horizontal: 30MHz/Div Vertical: 10dB/Div

Passband Response:(span 100MHz)

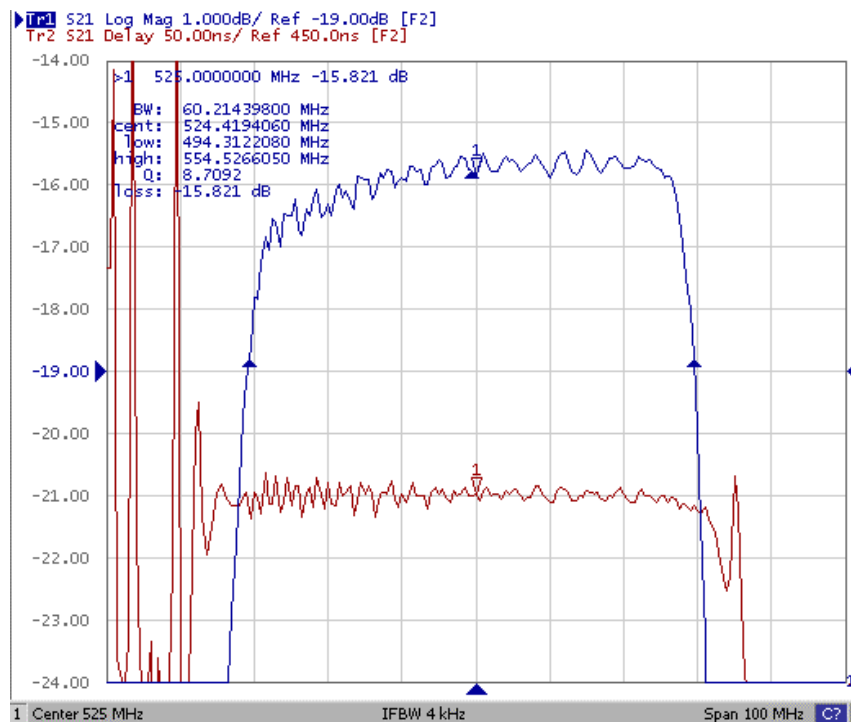
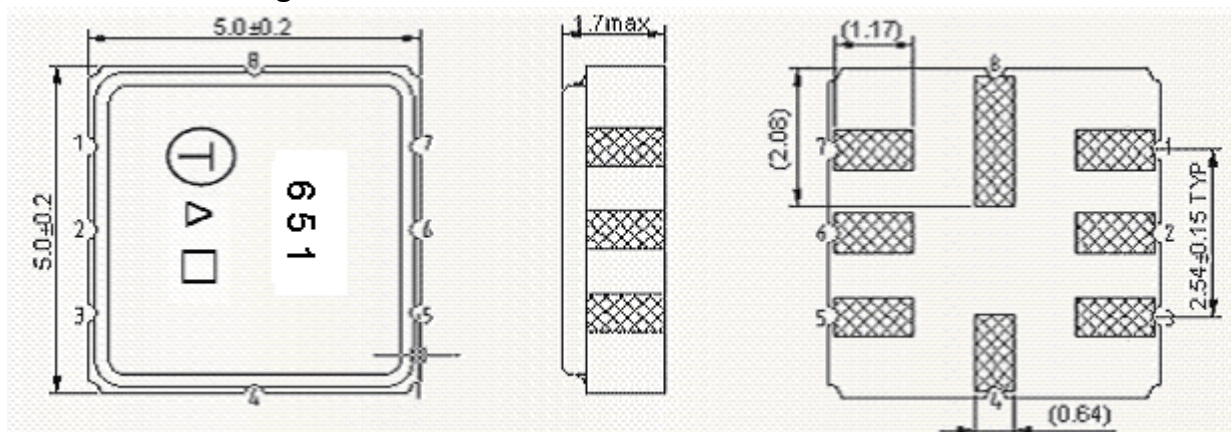


Fig2. Horizontal: 10MHz/Div Vertical 1: 1dB/Div
Vertical 2: 50nS/Div

D. Outline Drawing:



#1 –Input

#2 –Input ground

#5 – Output

#6 – Output ground

#3,4,7,8 – Ground

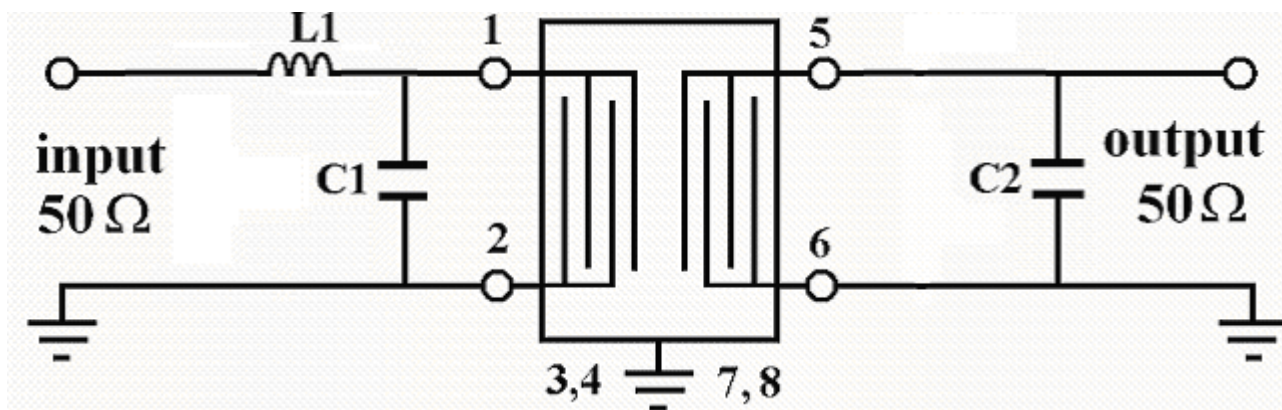
□ : Week Code (Follow the table from planner each year)

Unit : mm

△ : Product / Year Code

Year	2005 2009	2006 2010	2007 2011	2008 2012
Product Code	B	b	<u>B</u>	<u>b</u>

E. Matching Circuit: 50 Ohm single ended Input - 50 Ohm single ended Output



$$L1=8.2\text{nH}; C1=2\text{pF}; C2=3\text{pF}$$

Technical drawing of a 651 TYP. component, showing a top view and a cross-section A-A.

Top View Dimensions:

- Overall width: 12.0 ± 0.3
- Overall length: 17.5
- Distance between centers of the first two units: 5.3
- Distance between centers of the last two units: 5.3
- Distance between the center of the second unit and the center of the third unit: 8.0
- Distance from the left edge to the center of the first unit: 5.3
- Distance from the right edge to the center of the last unit: 5.3
- Hole diameter: $\phi 15 \pm 0.1$
- Unit label: 651 TYP.

Cross-section A-A Dimensions:

- Top flange thickness: 1.3 ± 0.05
- Top flange width: 2.0
- Bottom flange thickness: 2
- Bottom flange width: 2
- Angle: 3°
- Radius: $R11.3$ [MAX.]

Other Notes:

- Section A-A is indicated by arrows pointing to the cross-section.
- Radius $R1.5$ [TYP.] is noted near the bottom right corner.
- Direction of feed is indicated by an arrow pointing to the right.

The graph displays the temperature profile over a 360-second period. The temperature starts at 25°C, rises to a peak of 260°C at 220 seconds, and then decreases to 110°C at 360 seconds. The temperature remains relatively stable at 25°C for the first 20 seconds, then rises sharply to 145°C by 40 seconds. It then fluctuates between 155°C and 175°C until 150 seconds, after which it rises to the peak of 260°C at 220 seconds. Following the peak, the temperature drops sharply to 145°C by 280 seconds and then continues to decrease to 110°C at 360 seconds.

Time (Sec)	Temp (Deg C)
0	25
20	25
40	145
60	150
80	155
100	155
120	170
140	175
160	195
180	220
200	250
220	260
240	250
260	175
280	145
300	145
320	130
340	120
360	110