



TAI-SAW TECHNOLOGY CO., LTD.

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

Product Description: SAW Filter 1688.42 MHz SMD 3.0X3.0 mm (BW=46MHz)

TST Part No.: TA0727B

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Bob Chau 

Approved by: _____ Francis Chen 

Date: _____ 11, 18, 2011

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 1688.42 MHz

MODEL NO.:TA0727B

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -50°C to +95°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (differential) : $Z_s = 150 \ \Omega \ // \ 39 \text{ nH}$

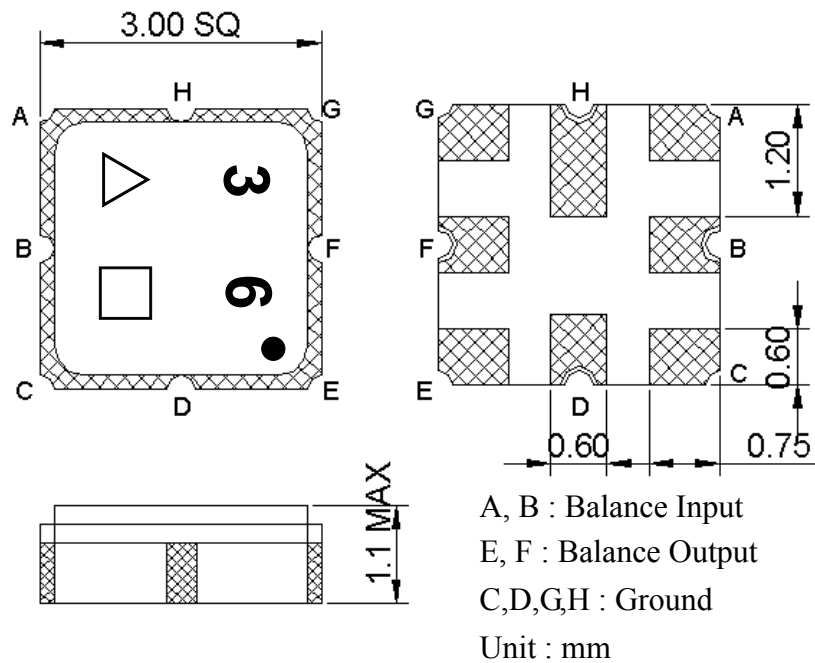
Terminating load impedance (differential) : $Z_L = 150 \ \Omega \ // \ 39 \text{ nH}$

Item	Unit	Min.	Typ.	Max.	Note
Center Frequency Fc	MHz	-	1688.42	-	-
Bandwidth at -2 dB	MHz	46	59	-	-
Insertion Loss in 1665.42~1711.42 MHz	dB	-	2.7	5	-
Amplitude ripple (1665.42 MHz ~ 1711.42 MHz)	dB	-	0.8	2	-
Phase error (1665.42 MHz ~ 1711.42 MHz) (3)	deg	-	1.1	5	-
Group Delay ripple(1665.42 MHz ~ 1711.42 MHz)	ns	-	8	25	-
I/O VSWR (1665.42 MHz ~ 1711.42 MHz)		-	1.8	2.5	-
CMDR (1665.42 MHz ~ 1711.42 MHz)	dB	22	26	-	-
Attenuation (1)					
50 ~ 1606.36 MHz	dB	44	50	-	-
1770.48 ~ 1810.5 MHz	dB	46	55	-	-
1810.5 ~ 4250 MHz	dB	35	41	-	-
4250 ~ 6000 MHz	dB	30	38	-	-

Notes :

- (1). The amplitude reference is insertion loss at Fc.
- (2). The amplitude ripple is defined as the max. level – min. level over any 30 MHz block of the given bandwidth.
- (3). The phase error is measured over any 30 MHz block of the given bandwidth.

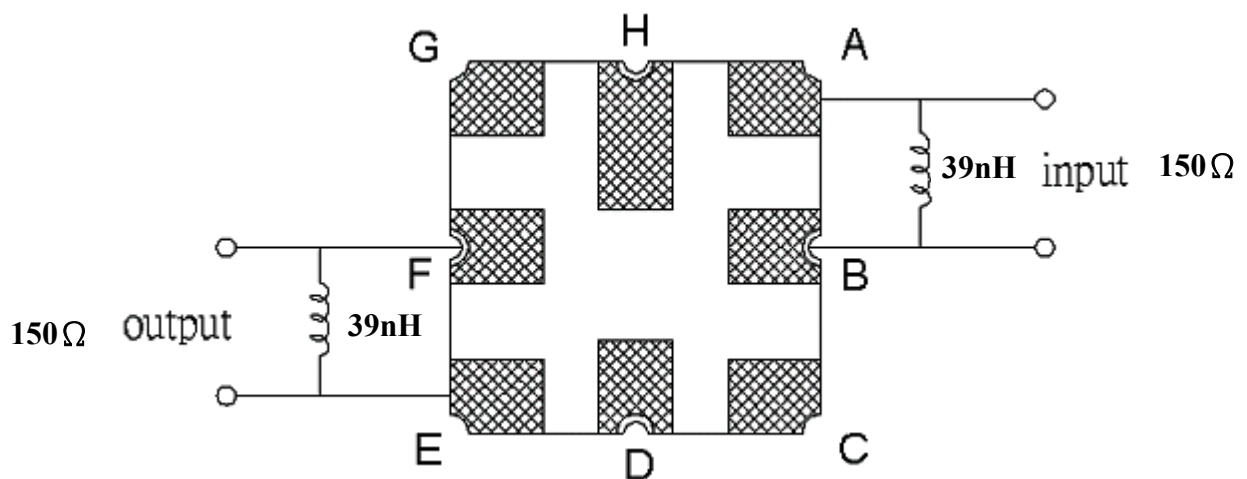
C.OUTLINE DRAWING:



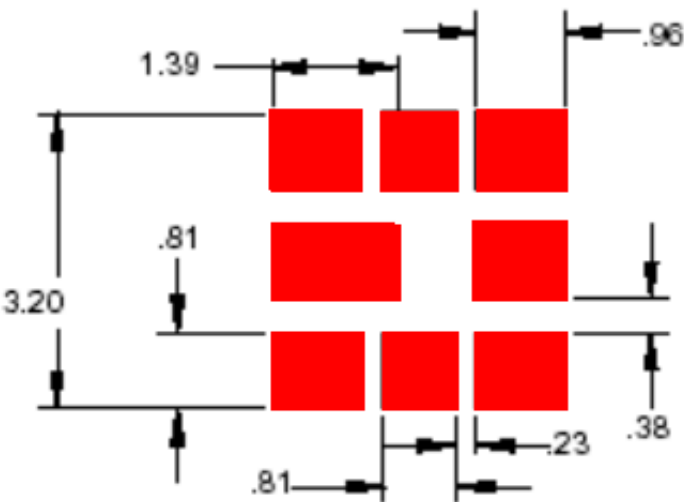
△ : Year Code (2009->9, 2010->0,..., 2018->8)

□ : Date Code (W01->A, W02->B,... W27->a,..., W52->z)

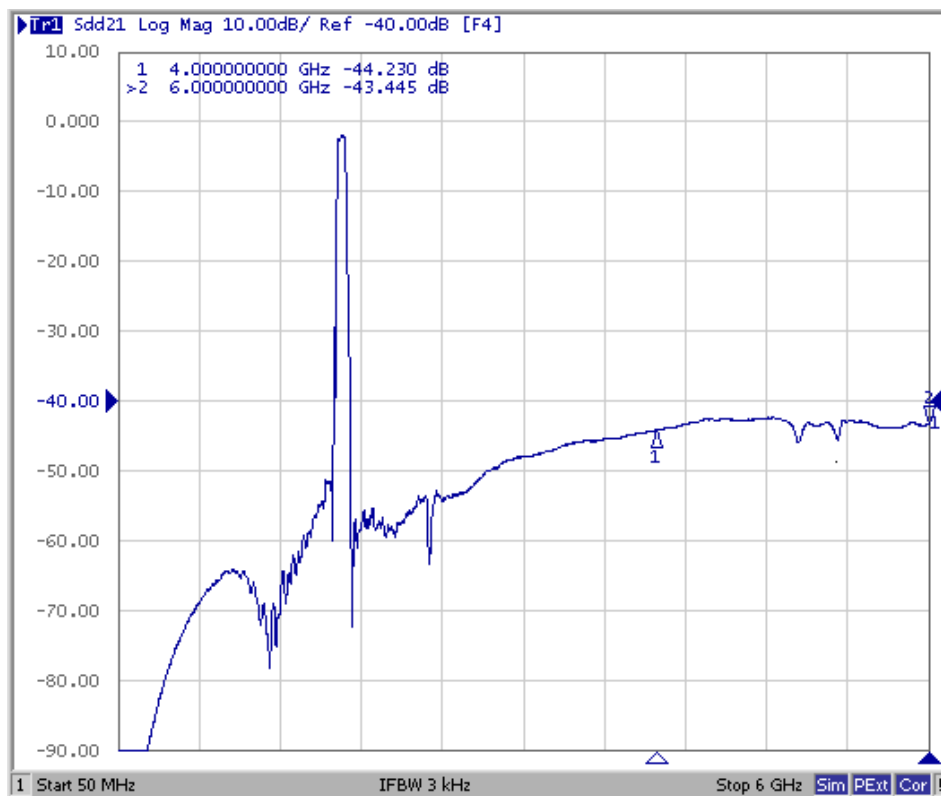
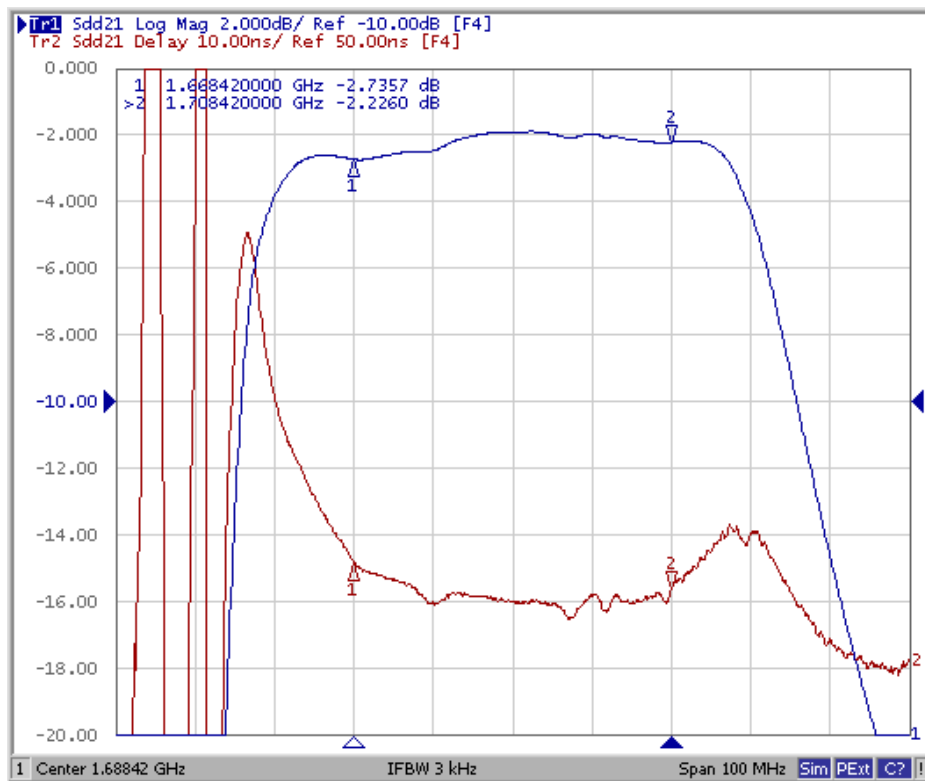
D. MEASUREMENT CIRCUIT:



E. PCB Footprint:

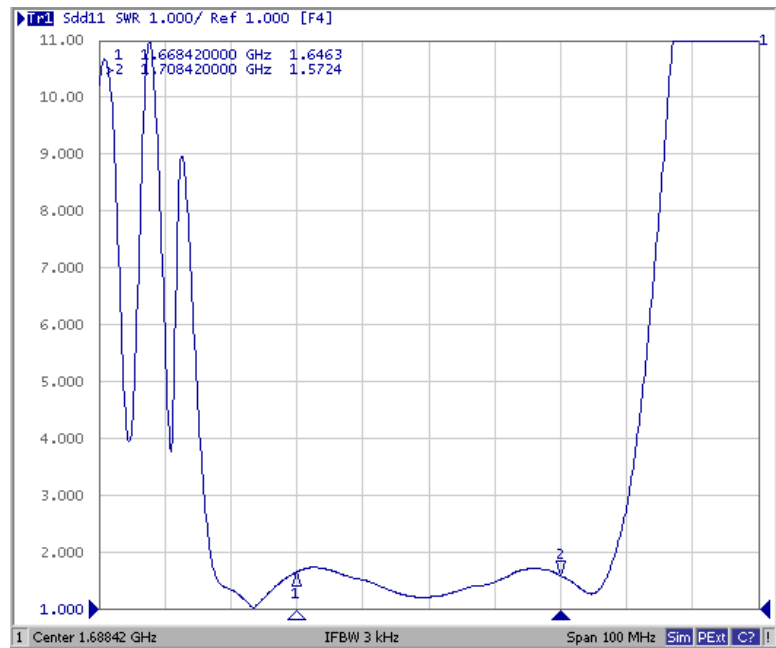


F. Frequency Characteristics :

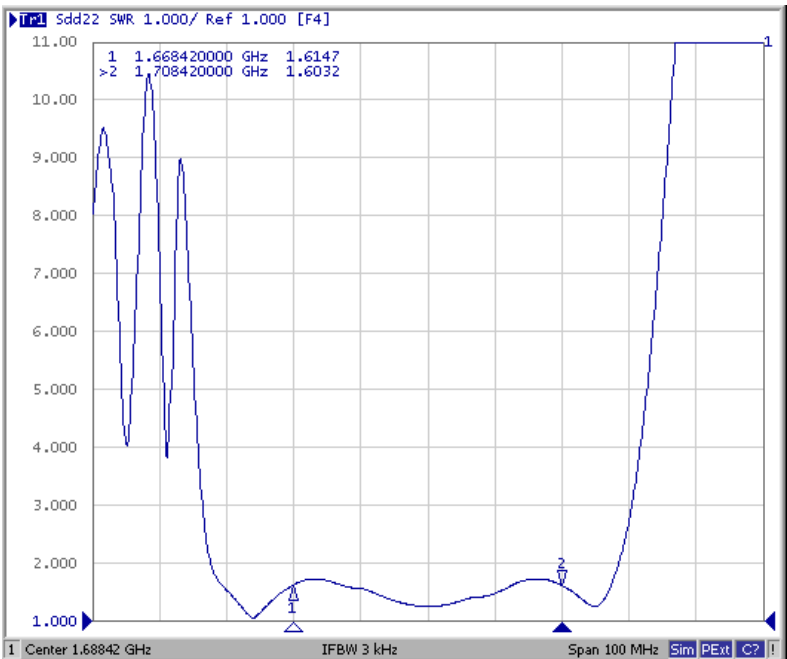


Reflection Functions :

S11



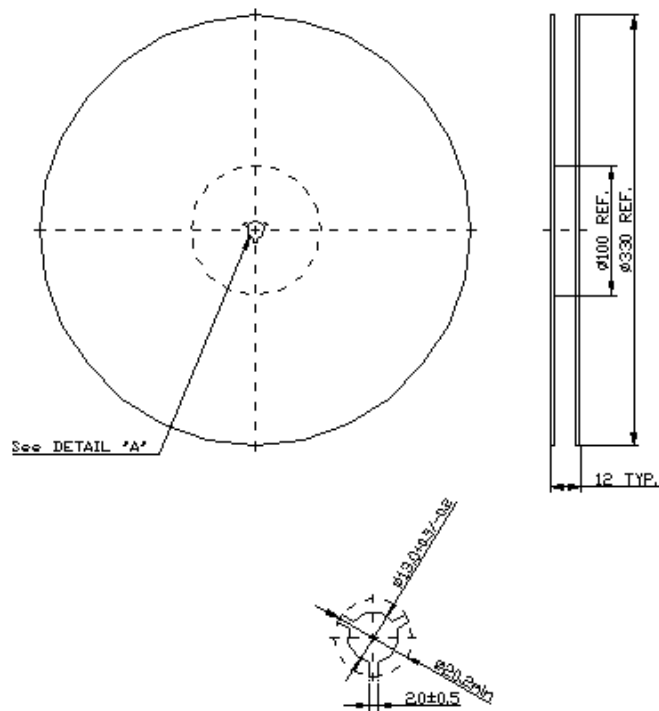
S22



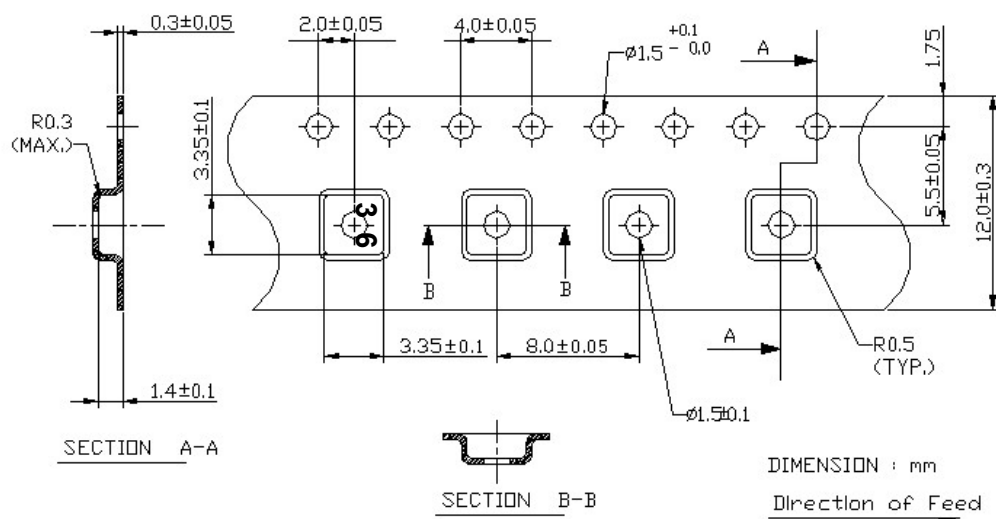
G. PACKING:

1. REEL DIMENSION

(Reel Count : 7''=1000 ; 13''=3000)



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 245~260°C peak (min. 10sec).
4. Time : 2 times.

