



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Description: 70 MHz 4.0MHz BW SMD 13.3 x 6.5 mm SAW IF Filter

TST Part No.: TB1027A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee

Approved by: _____ Francis Chen

Date: _____ 11 / 08 / 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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Low-Loss 70 MHz IF SAW Filter (SMD 13.3×6.5 mm)

Model No.: TB1027A

Rev. No.:1

A. Maximum Rating:

RoHS Compliant
Lead free
Lead-free soldering

1. Input Power Level: +20 dB_m
2. Operating Temperature: -30°C to +80°C
3. Storage Temperature: -40°C to +85°C

Electrostatic Sensitive Device

B. Electrical Characteristics:

Reference Temperature Ta = 25°C

Parameters	Unit	Min.	Typical	Max.
Center frequency, Fc	MHz	69.8	70	70.2
Insertion Loss, IL	dB	-	9.6	12.0
1 dB Bandwidth	MHz	3.4	3.9	-
3 dB Bandwidth	MHz	4.0	4.6	-
40 dB Bandwidth	MHz	-	7.6	8.2
Relative Attenuation:				
10 to 62 MHz	dB	40	51	-
78 to 140 MHz	dB	40	44	-
Amplitude ripple within Fc ± 1.5 MHz	dB	-	0.7	1.0
Group Delay ripple within Fc ± 1.5 MHz	nsec	-	100	220
Substrate Material	-	-	YZ-LN	-
Temperature Coefficient of frequency	ppm/ °C	-	-94	-

C. Frequency Characteristics:

(1) Frequency Response

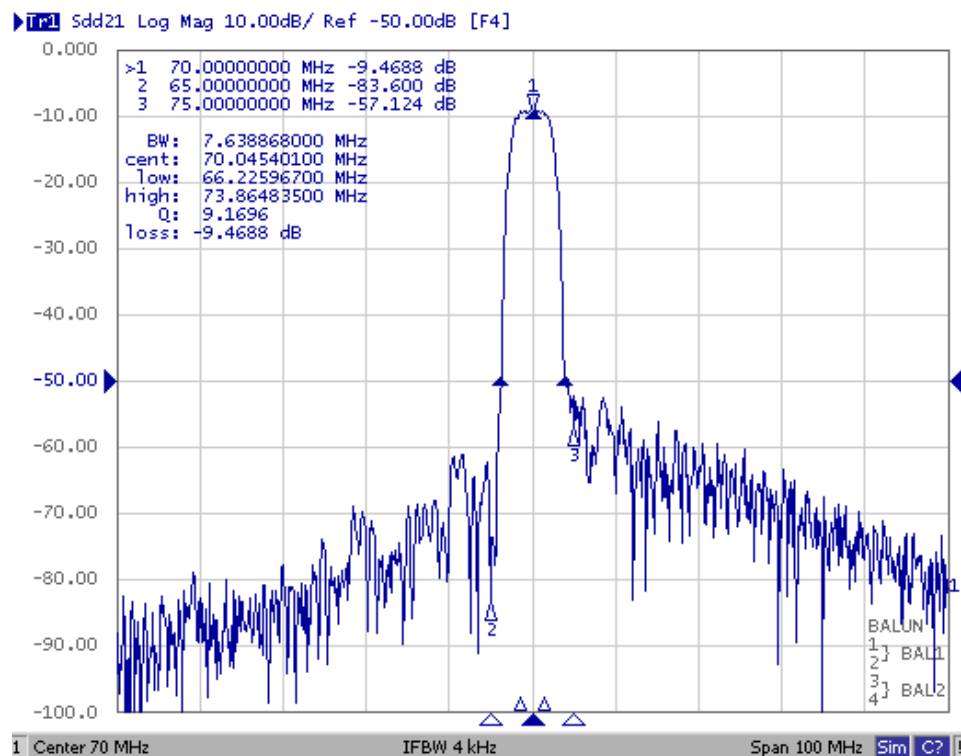


Fig1. Horizontal: 10MHz/Div Vertical: 10dB/Div

(2) Passband response and Group Delay Variation

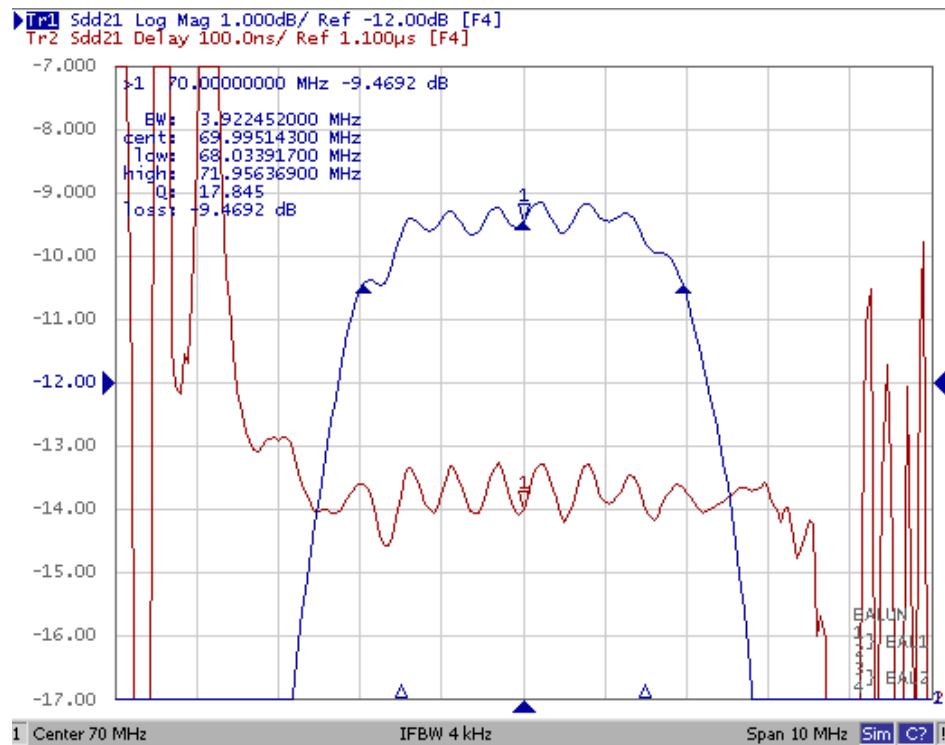
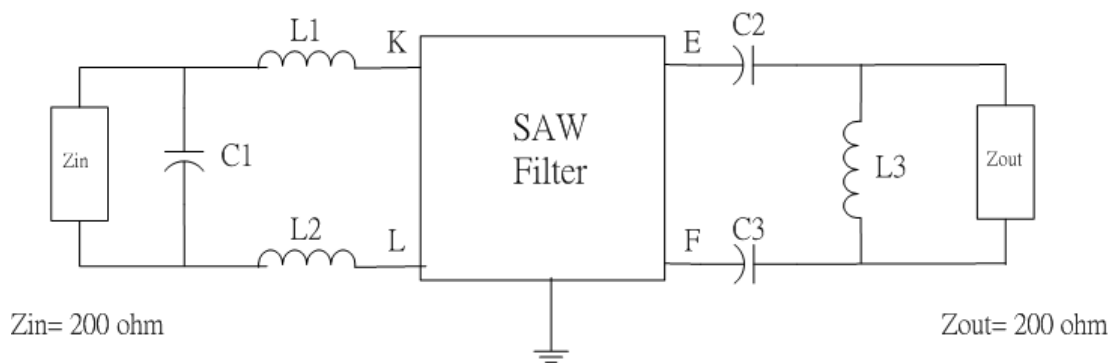


Fig2. Horizontal: 1MHz/Div Vertical: 1dB/Div
Vertical: 100ns/Div

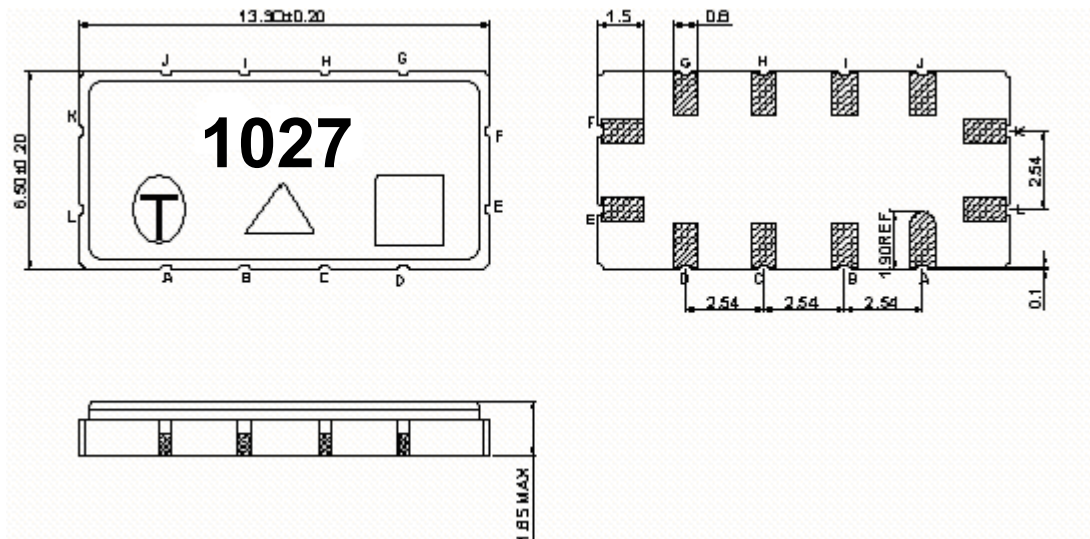
D. Measurement Circuit:



$$L1=L2=82 \text{ nH} \quad L3=270 \text{ nH} \quad C1=27 \text{ pF} \quad C2=C3=56 \text{ pF}$$

E. Outline Drawing:

Laser Marking



#K : RF input

#L : RF Input ground

#E : RF output

#F : RF balance output or to be ground

#A,B,C,D,G,H,I,J : Ground

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

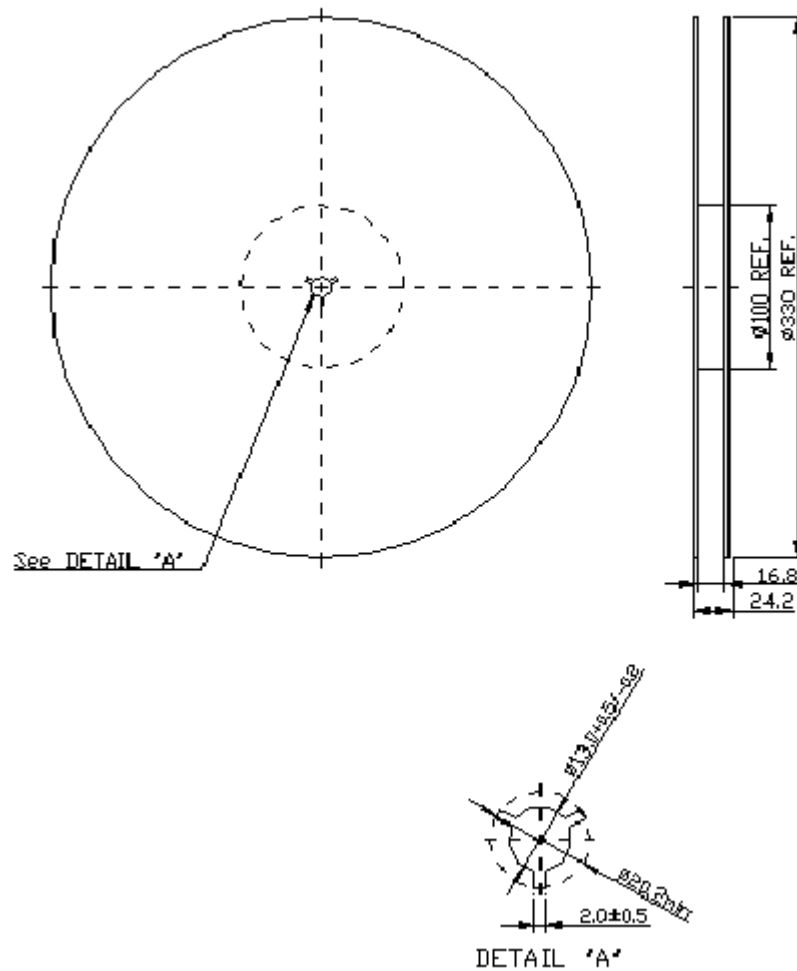
Unit: mm

△ : Product / Year Code

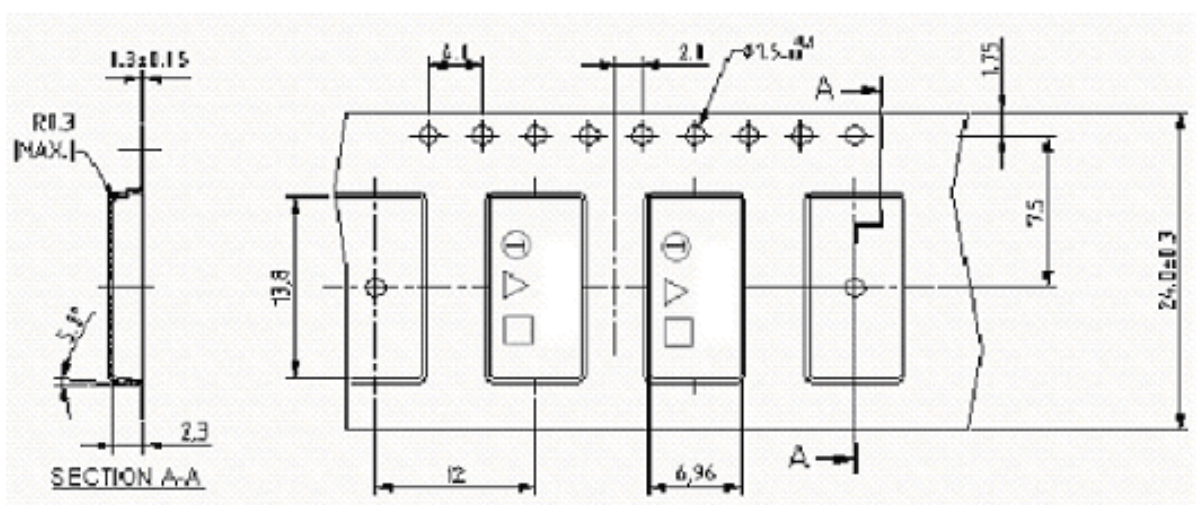
Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	B	b	<u>B</u>	<u>b</u>

F. Packing:

1. Reel Dimension



2. Tape Dimension



H. RECOMMENDED REFLOW PROFILE:

