



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Name: 156.8MHz IF SAW Filter (BW=15 MHz)

TST Parts No.: TB0399B (AEC-Q200 compliant)

Customer Parts No.: _____

Customer signature required

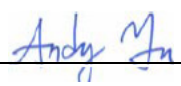
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ V.J Fanchian 

Approval by: _____ Andy Yu 

Date: _____ 2017.04.25

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 156.8MHz (SMD 13.3×6.5 mm)

Model No.: TB0399B

Rev. No.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. Operating Temperature: -40°C to +85°C
3. Storage Temperature: -40°C to +125°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

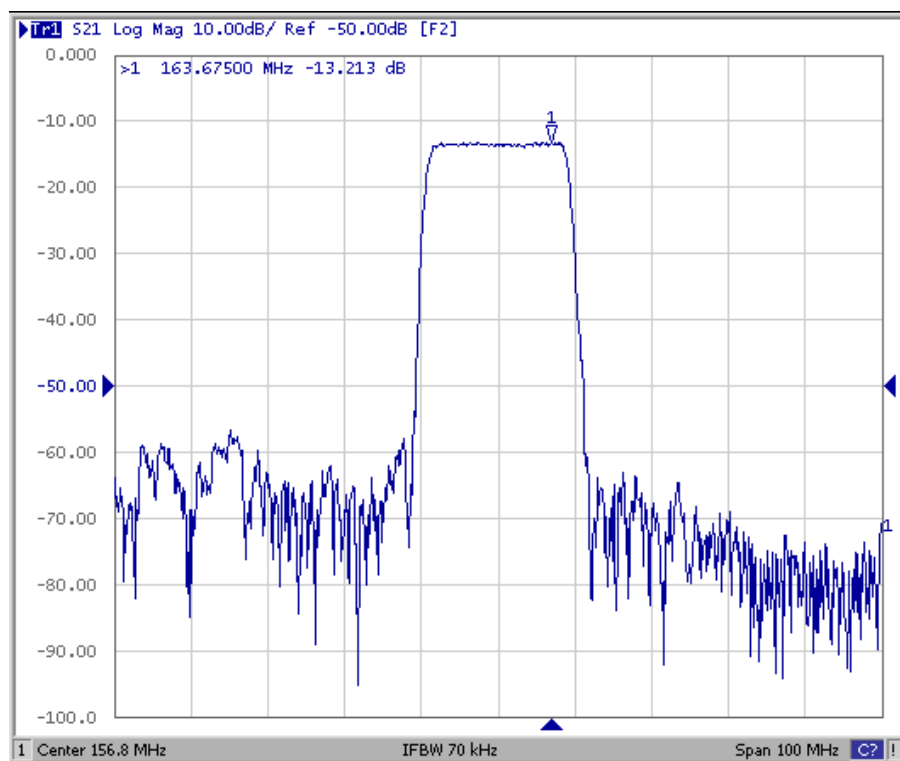
B. Characteristics :

1. Ambient Temperature: 25 °C

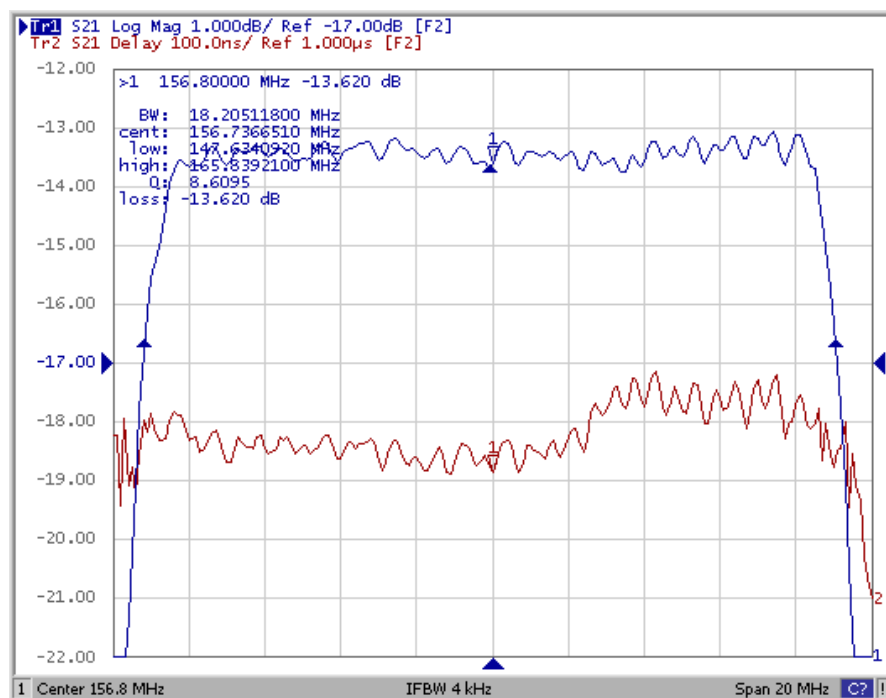
Characteristics			Value			Note
			Min.	Typ.	Max.	
Center frequency	F_C	MHz	-	156.8	-	-
Minimum Insertion loss	I.L.	dB	-	12.5	14	-
Ripple ($F_C+7.5\text{MHz} \sim F_C-7.5\text{MHz}$)		MHz	-	0.7	1.2	
3 dB Bandwidth		MHz	15	18.1	-	
40 dB Bandwidth		MHz	-	22.0	23	
Substrate Material				YZLNO ₃		
Temperature Coefficient		ppm/°C		-94		
Relative Rejection (Reference to Minimum Insertion loss)						
1)10~144MHz		dB	40	44		
2)170~326MHz		dB	40	48		

C. Frequency Characteristics :

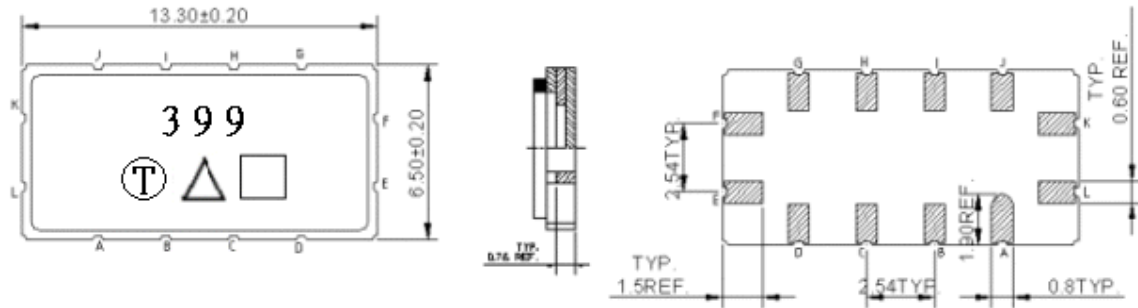
(1) Frequency Response: (span:100MHz)



(2) Passband response and Group Delay Variation: (span:20MHz)



D. Outline Drawing:



Pin K: RF Balance input +

Pin L: RF Balance input -

Pin E: RF Balance output +

Pin F: RF Balance output -

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

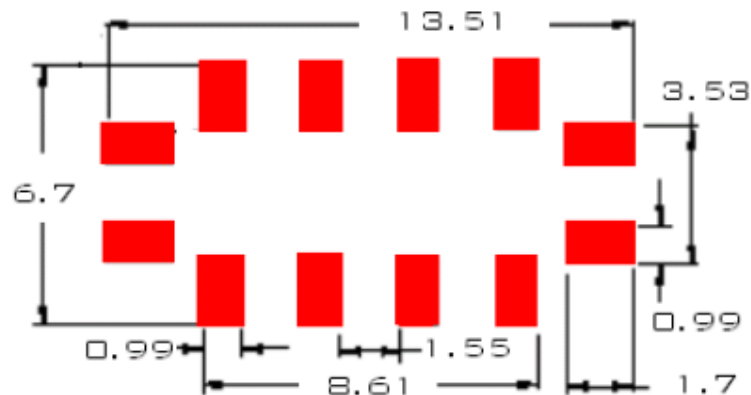
□ : Week Code (Follow the table from planner each year)

Unit : mm

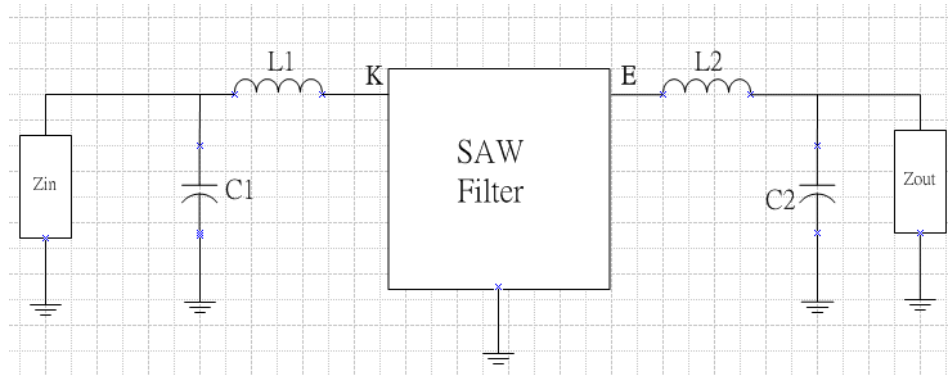
△ : Product / Year Code

Year	2017 2021	2018 2022	2019 2023	2020 2024
Product Code	B	b	<u>B</u>	<u>b</u>

E. PCB Footprint:



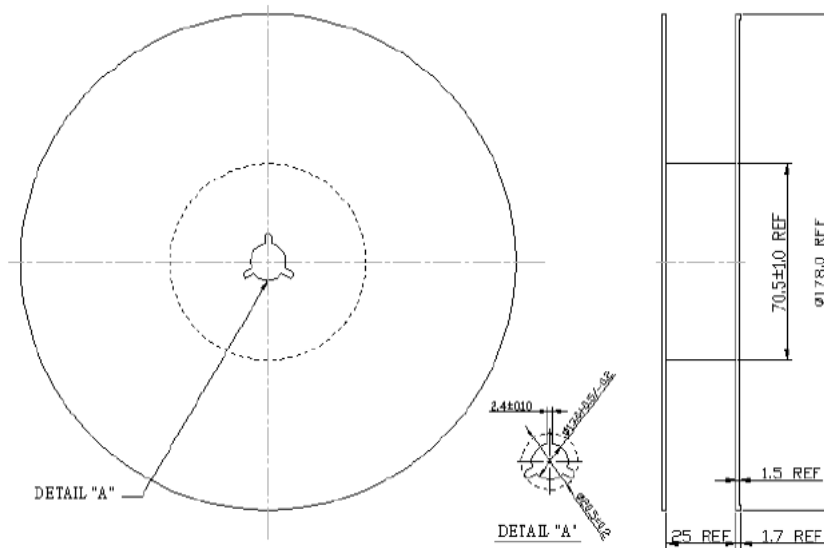
F. Matching Circuit:



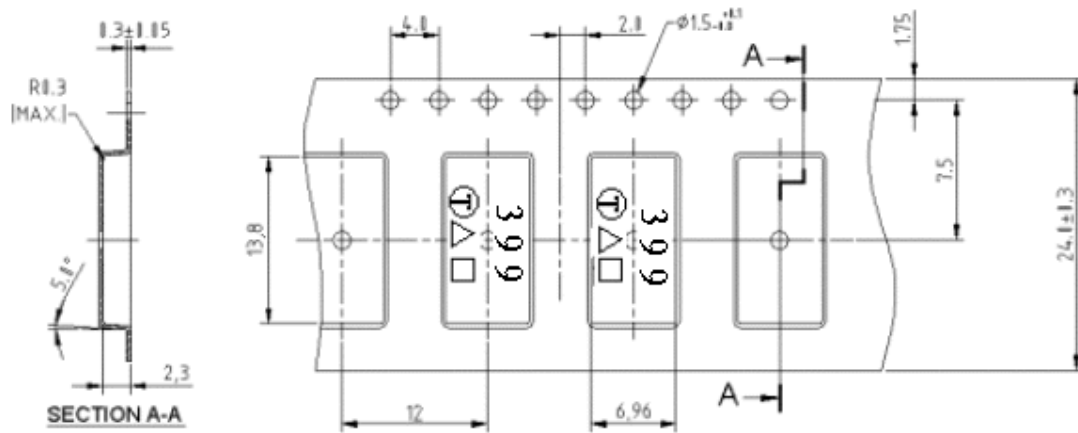
Z_{in} : 50 ohm, Z_{out} : 50 ohm.
 $L1=82\text{nH}$, $C1=24\text{pF}$, $L2=47\text{nH}$, $C2=15\text{pF}$

G. Packing:

(1). REEL DIMENSION:



(2). TYPE DIMENSION:



H. Recommended Reflow Profile:

