

# Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSF-2442B78-S1109W
Lot No.		Date	2025.06.23
Description	SAW Filter (BandPass)	Version	A1

## (1) Size Diagram (Unit : MM)

Pin Configuration	
1	Input
4	Output
2,3,5	Ground

## (2) Electrical Specifications

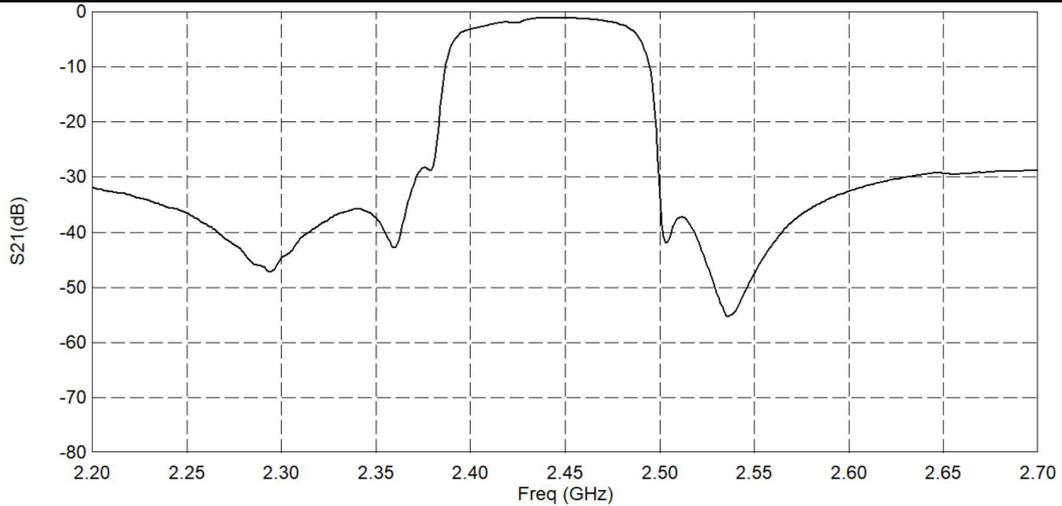
Parameter	Item		Specification		
	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	2442	-
Insertion Loss	2403~248	dB	-	2.5	3.0
	2406~2478	dB	-	1.7	2.2
Inband Ripple	2401~2483	dB	-	1.5	3.7
VSWR	2401~2483	-	-	1.6	2.2
Attenuation	10-1559	dB	23	30	-
	1710-1785	dB	23	30	-
	1805-1880	dB	20	30	-
	1850-1990	dB	18	30	-
	2110-2170	dB	20	25	-
	2302.5-2367.5	dB	27	30	-
	2370.5-2377.5	dB	25	33	-
	2500-2505	dB	6	30	-
	2507.5-2687.5	dB	9	38	-
	2555-2655	dB	25	30	-
2620-2690	dB	25	31	-	
2690-6000	dB	18	23	-	
Operation Temperature	-20°C~+85°C	°C	-	-	-
Storage Temperature	-40°C~+85°C	°C	-	-	-
RF Power Dissipation	+24	dBm	-	-	-
DC Voltage	3	V	-	-	-

Remark: Note 1: Test Temperature: 25°C±2°C  
 Note 2: Terminating source impedance: 50Ω. Terminating load impedance: 50Ω

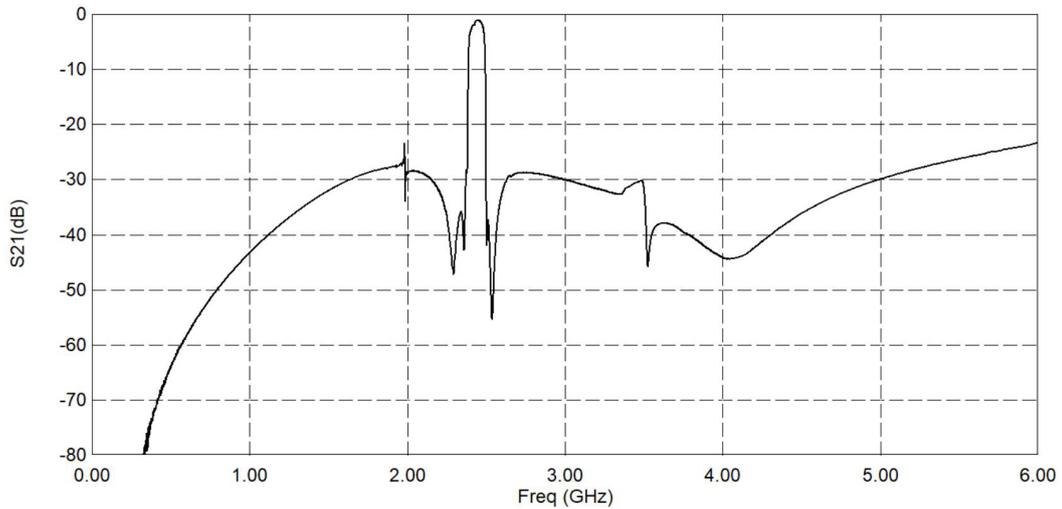
## (3) Test Circuit

Port	Matching Component
Input	L1 :4.3 nH ( Ideal inductor )
Output	L2 :4.3 nH ( Ideal inductor )

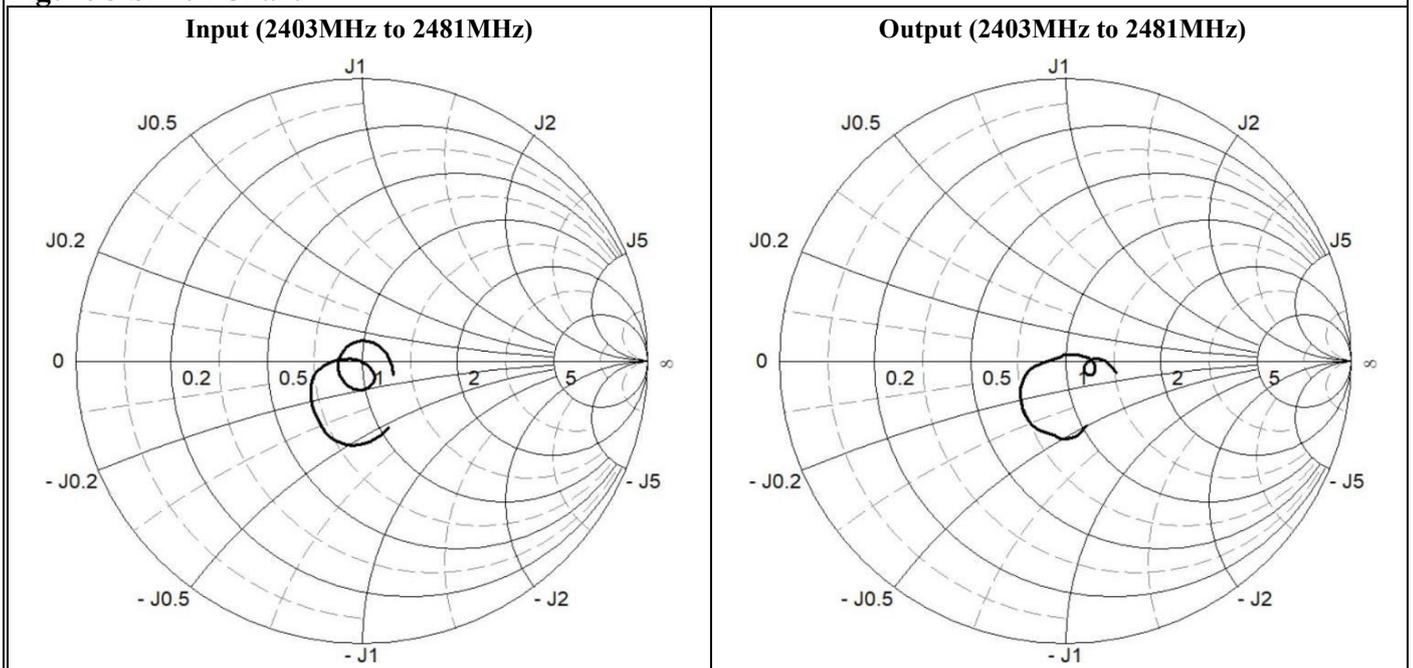
**Figure 1 Electrical Characteristics: Narrowband**



**Figure 2 Electrical Characteristics: Wideband**

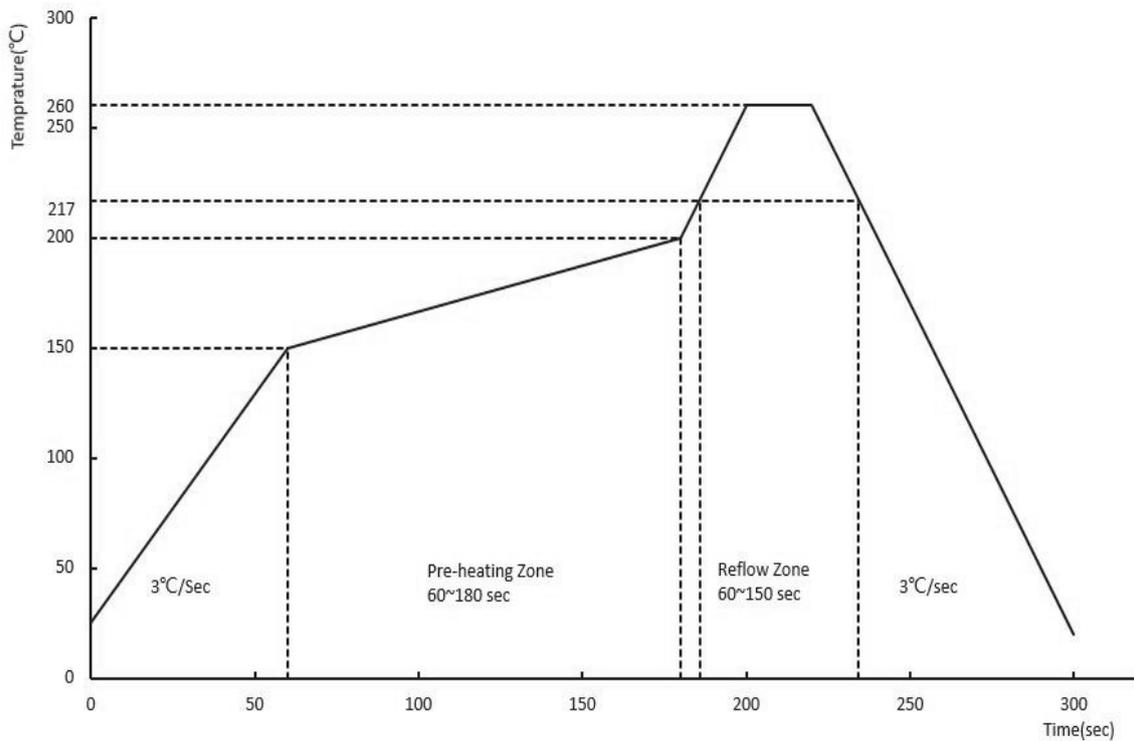


**Figure 3 Smith Chart**



Approval	Supervisor	Designer
C. K. Chang	M. Y. Chen	F.L.Lai

## Recommended SMT Solder Profile



## Reliability

No.	Test item	Test condition	
1	Temperature Storage	Temperature: 85°C±2°C , Duration: 250h , Recovery time: 2h±0.5h Temperature: -40°C±3°C , Duration: 250h ,Recovery time: 2h±0.5h	
2	Humidity Test	Conditions: 60°C±2°C ,90~95%RH	Duration:250h
3	Thermal Shock	Heat cycle conditions: TA=-40°C±3°C, TB=85°C±2°C, t1=t2=30min, Switch time: ≤3min, Cycle time: 100 times, Recovery time: 2h±0.5h.	
4	Vibration Fatigue	Frequency of vibration:10~55Hz Directions: X,Y and Z	Amplitude:1.5mm Duration: 2h
5	Drop Test	Cycle time:10times	Height:1.0m
6	Solder Ability Test	Temperature:245°C±5°C Depth: DIP--2/3, SMD--1/5	Duration:3.0s--5.0s
7	Resistance to Soldering Heat	Thickness of PCB:1mm , Solder condition: 260°C±5°C , Duration:10±1s Temperature of Soldering Iron: 350°C±10°C, Duration: 3~4s, Recovery time : 2 ± 0.5h	