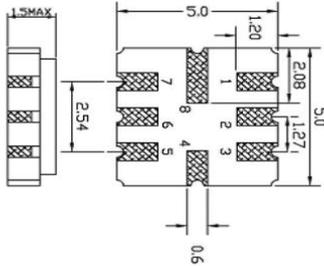


Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSF-868B1P3-S5050W
Lot No.		Date	2025.06.24
Description	SAW Filter (BandPass)	Version	A1

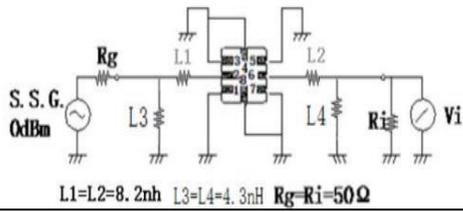
(1) Size Diagram (Unit : MM)


PinNo.	Description
2	Input
6	Output
1,3,4,5,7,8	Ground
Tolerance	±0.1mm

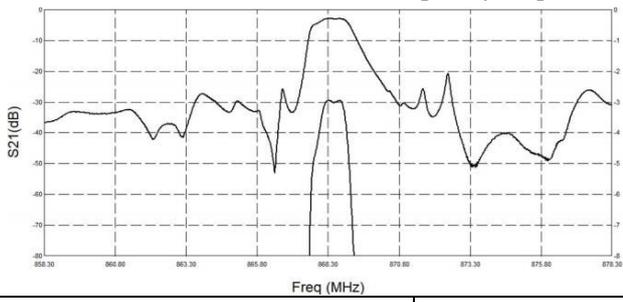
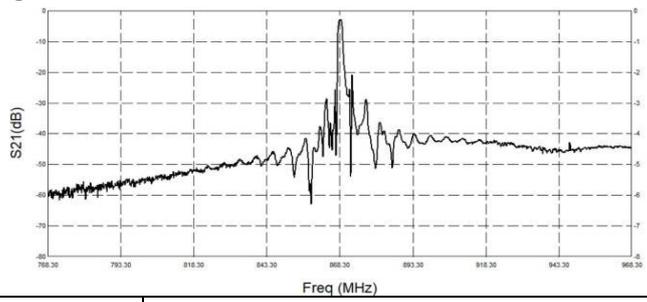
(2) Electrical Specifications

Parameter	Item		Specification		
	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	868.275	-
Insertion Loss	868.075-868.475	dB	-	5.4	6.0
Ripple Deviation	868.075-868.475	dB	-	0.5	1.0
1dB Bandwidth	-	MHz	0.7	0.9	-
3dB Bandwidth	-	MHz	1.0	1.3	-
Group Delay	868.275	ns	-	450	1500
Group Delay	867.925-868.625	ns	-	200	250
Attenuation	848	dB	30	48	-
	866	dB	20	35	-
	870	dB	15	20	-
	888	dB	30	42	-
Operation Temperature	-40°C~+85°C	°C	-	-	-
Storage Temperature	-40°C~+85°C	°C	-	-	-
RF Power Dissipation	20	dBm	-	-	-

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

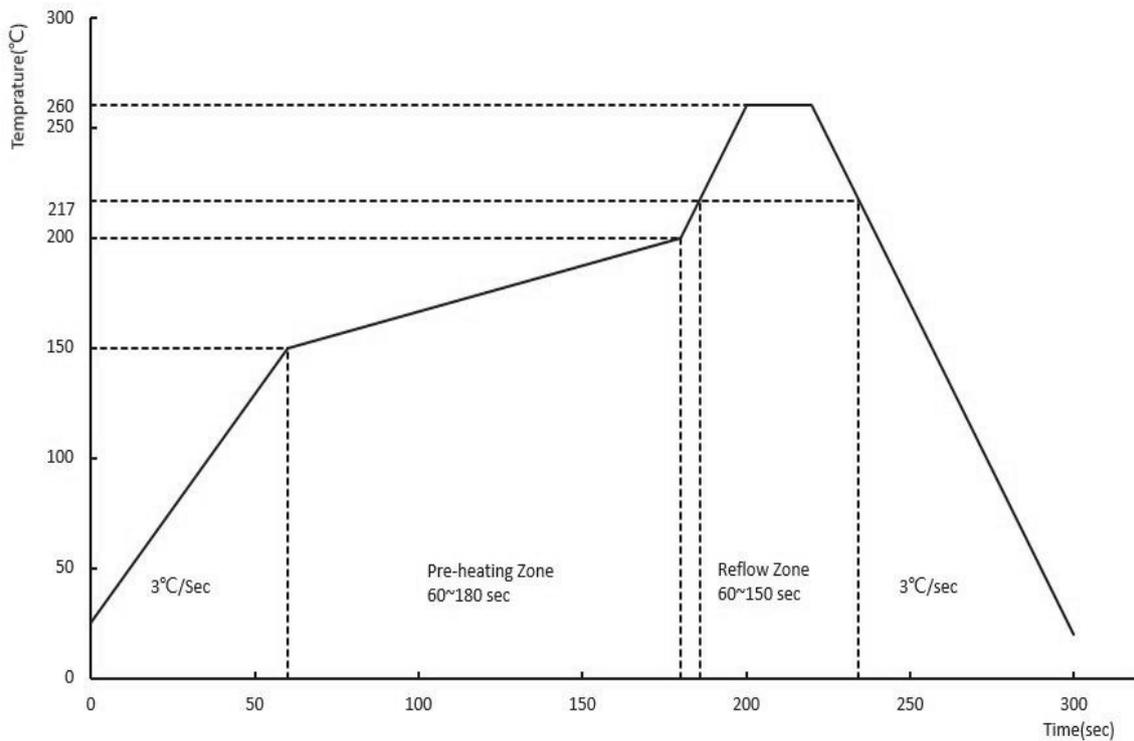
(3) Test Circuit


Port	Matching component
Input	R1: 50Ω
Output	R2: 50Ω

Figure 1. Electrical Characteristics: Frequency response

Figure 2. Electrical Characteristics: Narrowband


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	