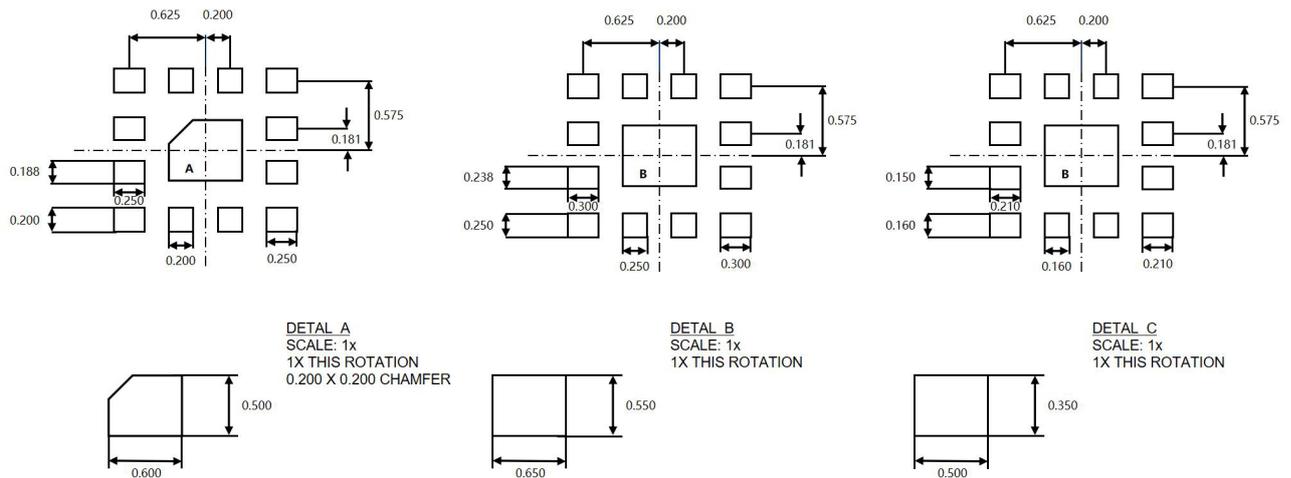
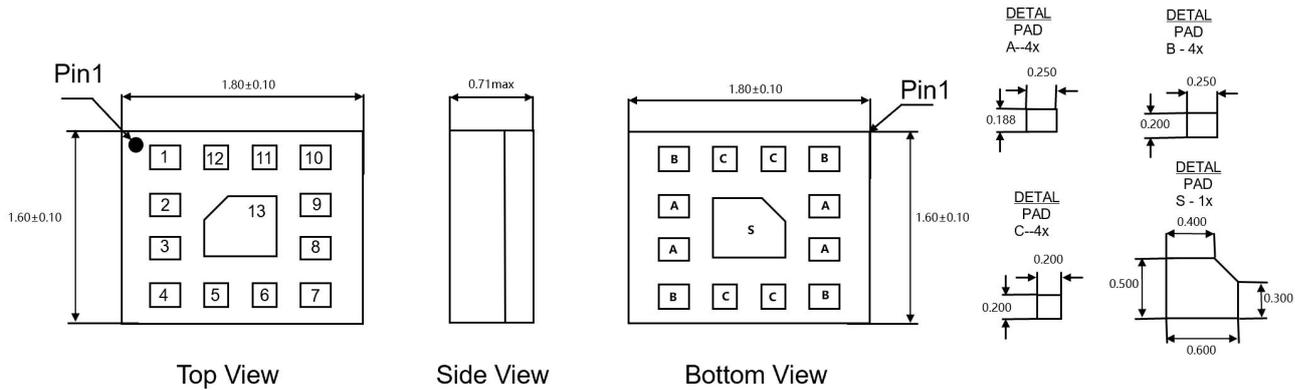


Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSF-6535B1180-S1816W
Lot No.		Date	2025.06.13
Description	SAW Filter (BandPass)	Version	A1

(1) Size Diagram and PCB Mounting Pattern (Unit : MM)

- All tolerances are ± 0.1 mm

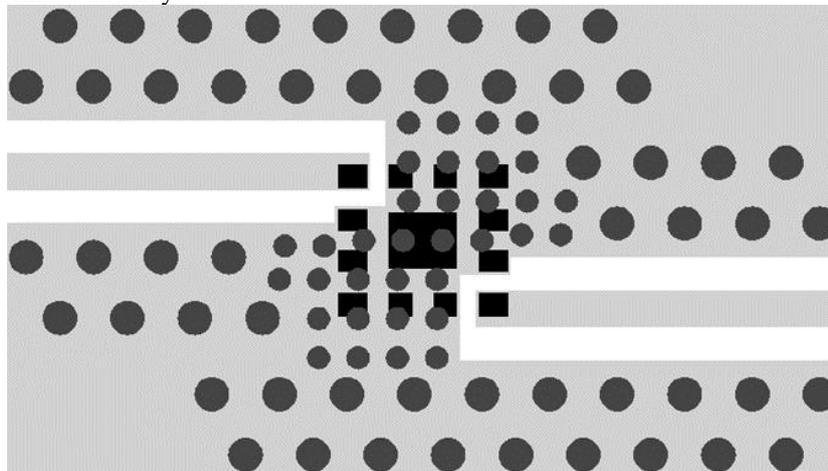


Recommended PCB Metal Top View

Recommended Solder Mask Opening Top View

Recommended Stencil Pattern Top View

- Evaluation Board Schematic and Layout



(2) Test Circuit

Pin No.	Label	Description
1	OUTPUT	RF Output matched to 50 Ω .
7	INPUT	RF Input matched to 50 Ω .
Other Pads	GND	RF/DC ground. Use the recommended via pattern to minimize inductance and thermal resistance. Refer to PCB Mounting Pattern for suggested footprint.

(3) Electrical Specifications

Parameter	Item		Specification		
	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	6535	-
Insertion Loss	5945-6265 (320MHz)	dB	-	3.2	3.4
	5945-6105 (160MHz)	dB	-	3.3	3.5
	6105-6265 (160MHz)	dB	-	3.0	3.2
	6265-6425 (160MHz)	dB	-	2.7	2.9
	6425-6875 (160MHz)	dB	-	2.6	2.8
	6105-6905 (320MHz)	dB	-	2.8	3.1
	6745-7065 (320MHz)	dB	-	2.5	2.7
	6875-7065 (160MHz)	dB	-	2.5	2.7
	7065-7105 (20MHz)	dB	-	2.8	3.0
7105-7125 (20MHz)	dB	-	2.8	3.0	
Inband Ripple	5945-7125	dB	-	1.5	1.5
VSWR of Ant Port	5945-7125	-	-	1.5	2.0
VSWR of TRx Port	5945-7125	-	-	1.6	2.0
Abslute Attenuation	30-1000	dB	40	44	-
	1000-2400	dB	32	35	-
	2400-2500	dB	30	34	-
	3300-3800	dB	30	35	-
	3800-4200	dB	30	35	-
	4400-4950	dB	31	33	-
	5170-5330 (160MHz)	dB	51	54	-
	5170-5330 (80MHz)	dB	50	53	-
	5490-5730 (80MHz)	dB	47	50	-
	5490-5650 (160MHz)	dB	48	51	-
	5735-5815 (80MHz)	dB	47	51	-
5815-5835 (20MHz)	dB	45	48	-	
8500-12000	dB	12	17	-	
Operation Temperature	-40℃~+105℃	℃	-	-	-
Storage Temperature	-40℃~+105℃	℃	-	-	-
RF Power Dissipation	+31	dBm	-	-	-
DC Voltage	3	V	-	-	-
Remark	Note 1: Test Temperature: 25℃±2℃ Note 2: Terminating source impedance: 50Ω. Terminating load impedance: 50Ω				

Figure 1 Electrical Characteristics: Passband

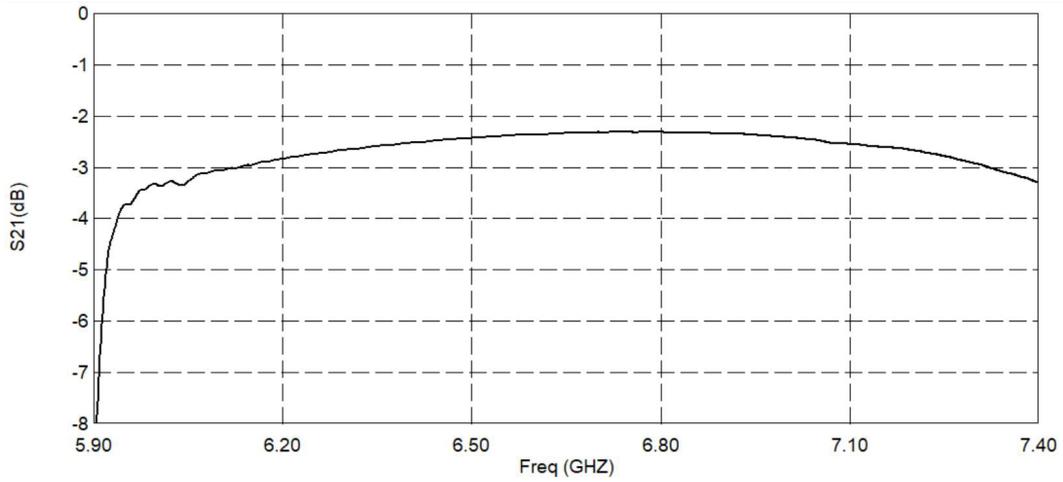


Figure 2 Electrical Characteristics: Narrowband

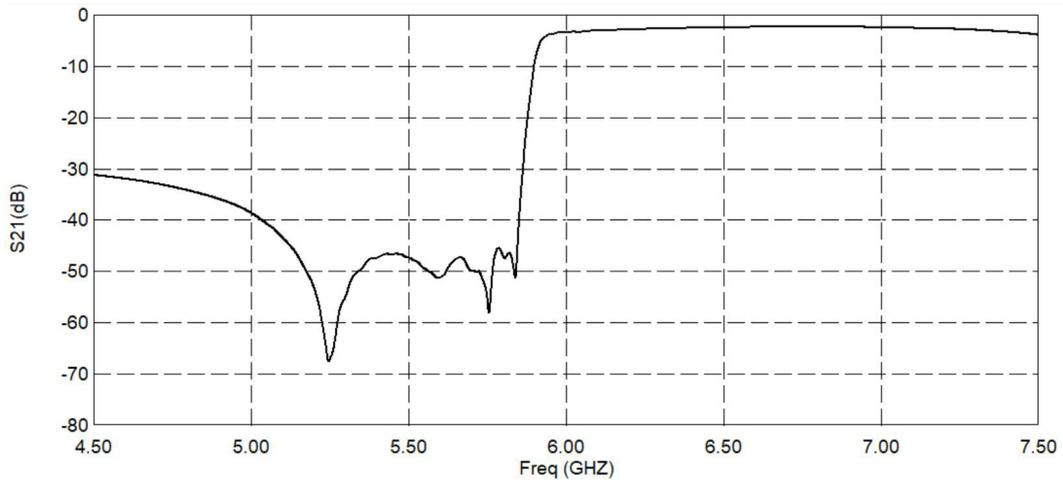


Figure 3 Electrical Characteristics: Wideband

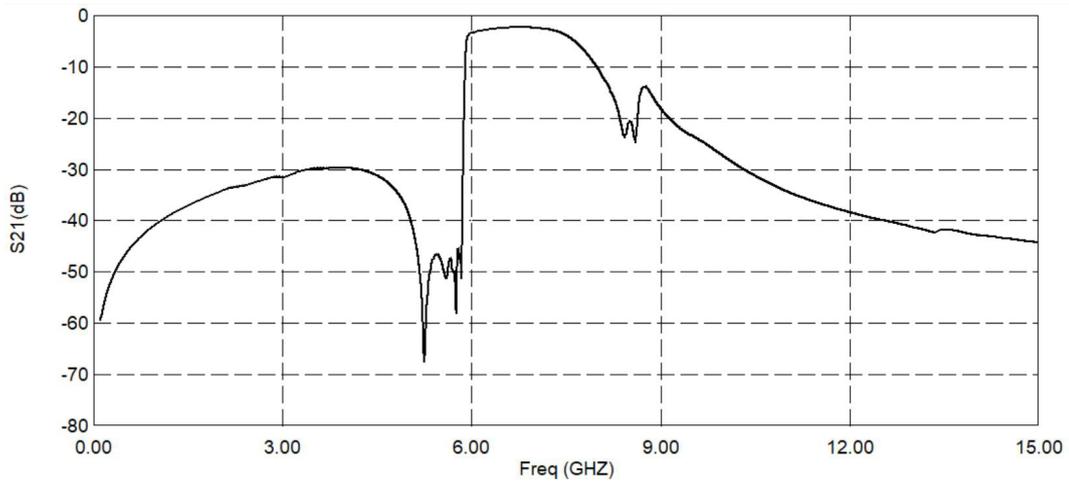


Figure 4 Electrical Characteristics: TRx Port Return Loss

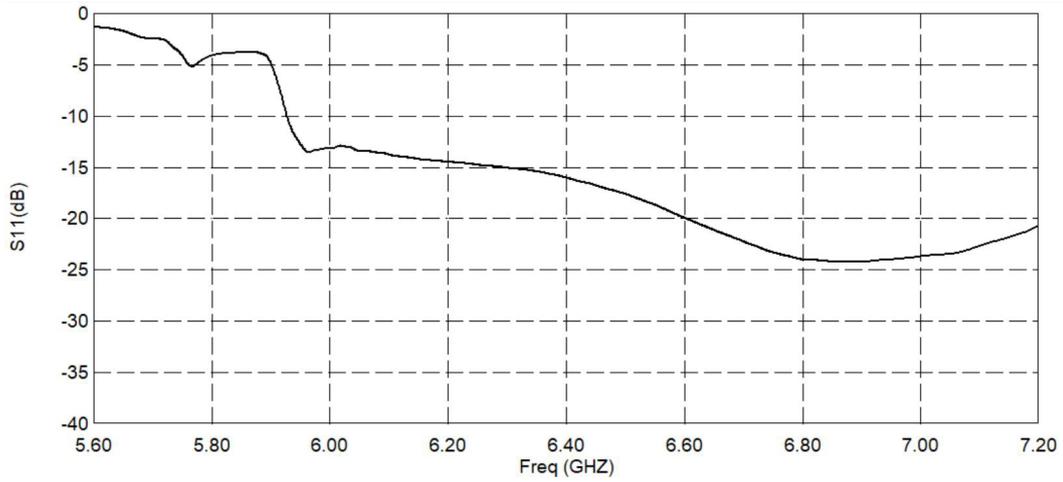


Figure 5 Electrical Characteristics: Ant Port Return Loss

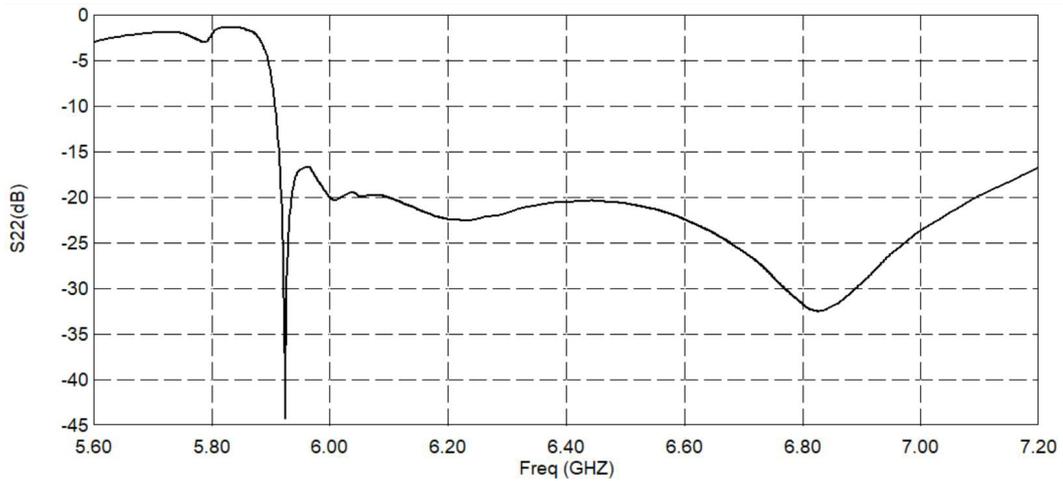
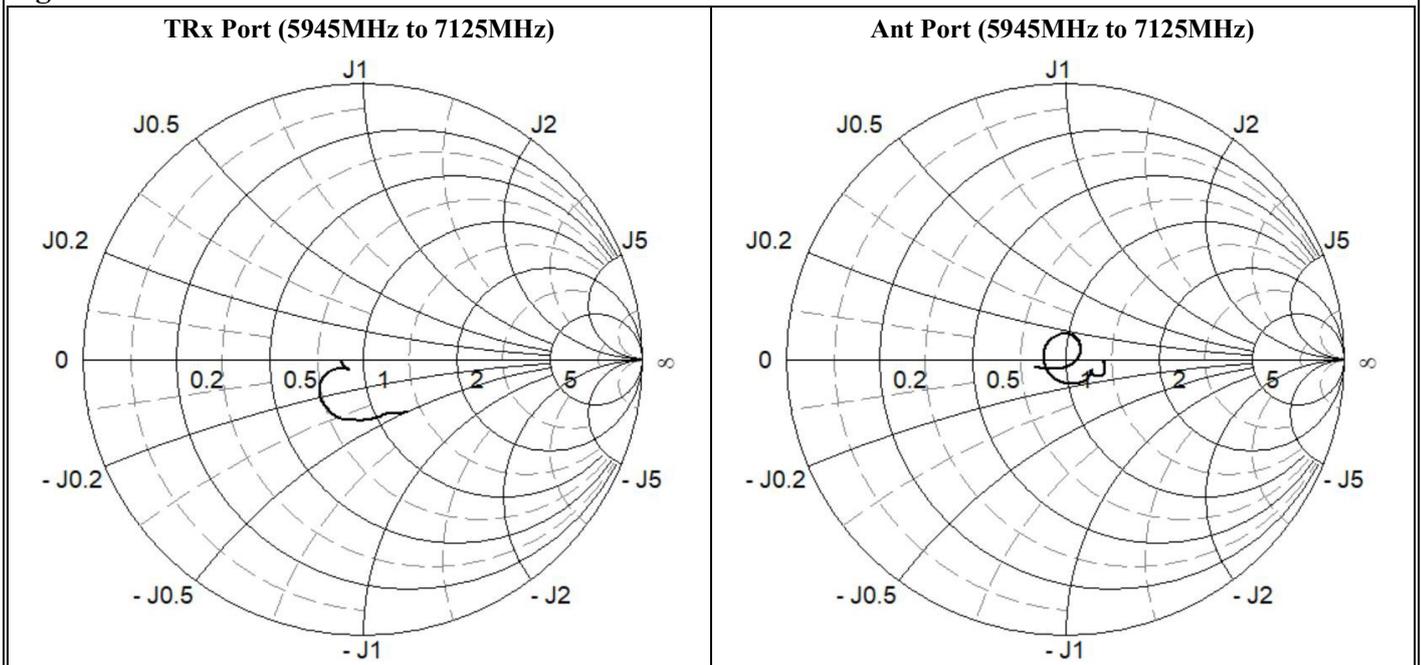
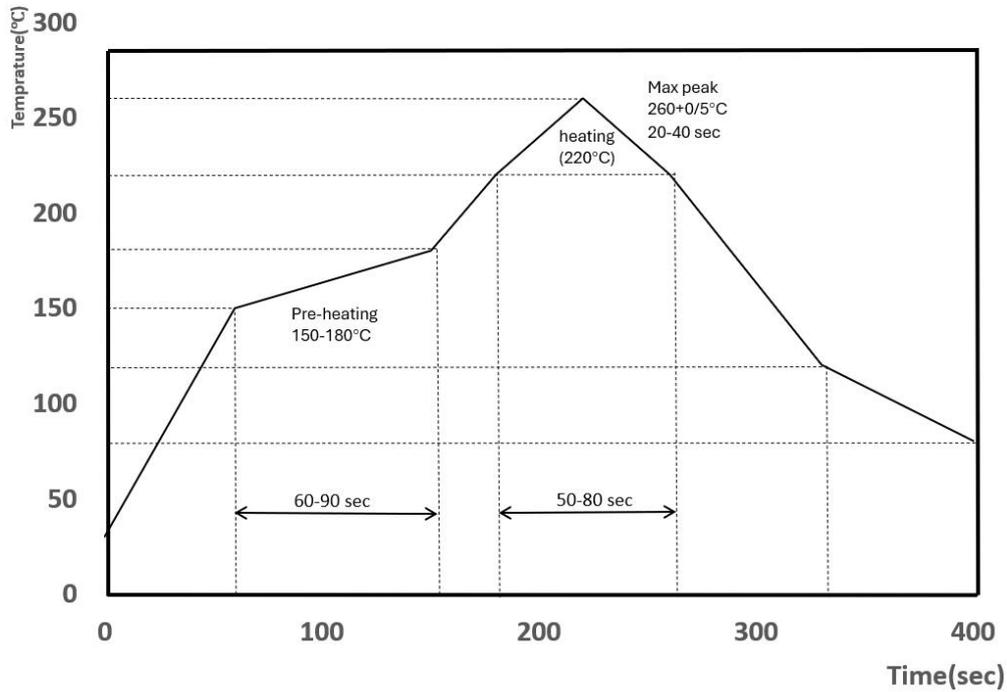


Figure 6 Smith Chart



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: 105°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	