

Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSF-897B30-S3030W
Lot No.		Date	2025.06.24
Description	SAW Filter (BandPass)	Version	A1

(1) Size Diagram (Unit : MM)

Unit : mm

PinNo.	Description
2	Input
5	Output
Others	Ground
Tolerance	±0.2mm

(3) Electrical Specifications

Item			Specification		
Parameter	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	887.5	-
Insertion Loss	887.5	dB	-	1.6	2.0
Insertion Loss	880-915	dB	-	2.3	3.0
Ripple	880-915	dB	-	0.8	1.1
Group Delay	880-915	ns	-	50	100
Attenuation	DC-840	dB	45	50	-
	958-1000	dB	40	42	-
	1000-2200	dB	40	45	-
	2200-2700	dB	28	32	-
	2700-3000	dB	22	25	-
VSWR	880-915	-	-	1.7:1	2.0:1
Operation Temperature	-40°C~+85°C	°C	-	-	-
Storage Temperature	-40°C~+125°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

$R_g = R_i = 50 \Omega$

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

Figure 1. Electrical Characteristics: Frequency response
Figure 2. Electrical Characteristics: Wideband

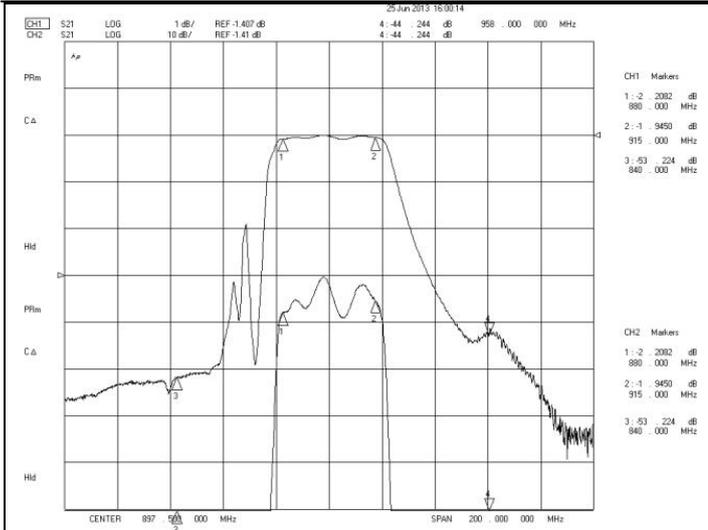


Figure 3. Delay Ripple & S11 VSWR

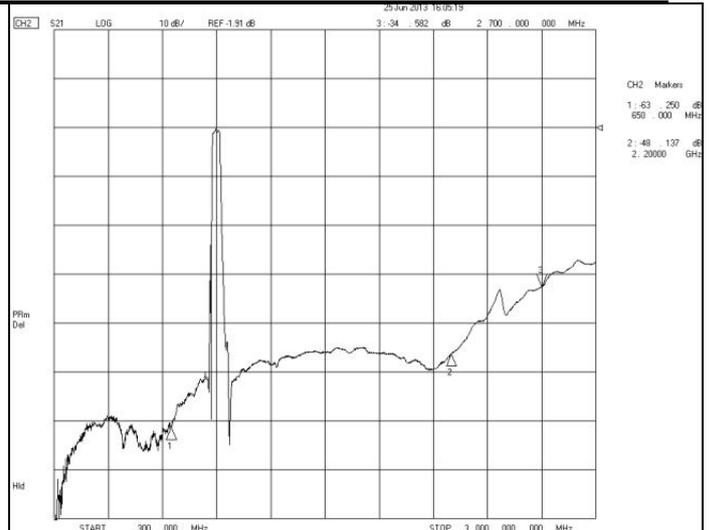


Figure 4. Phase Linearity & S22 VSWR

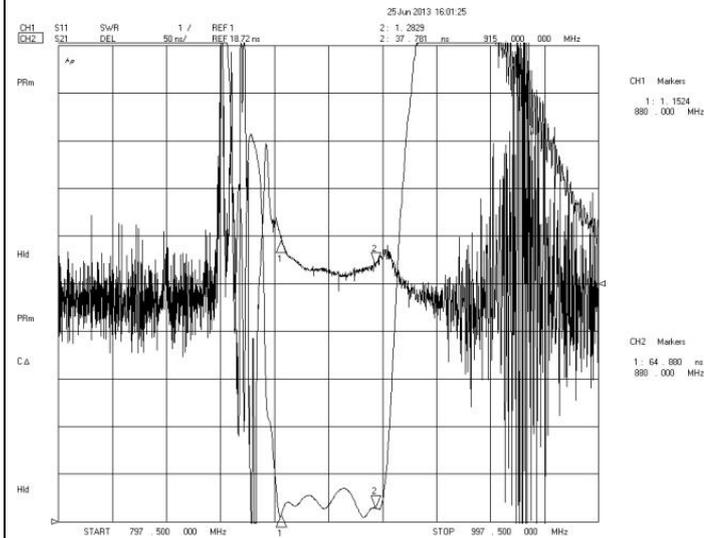
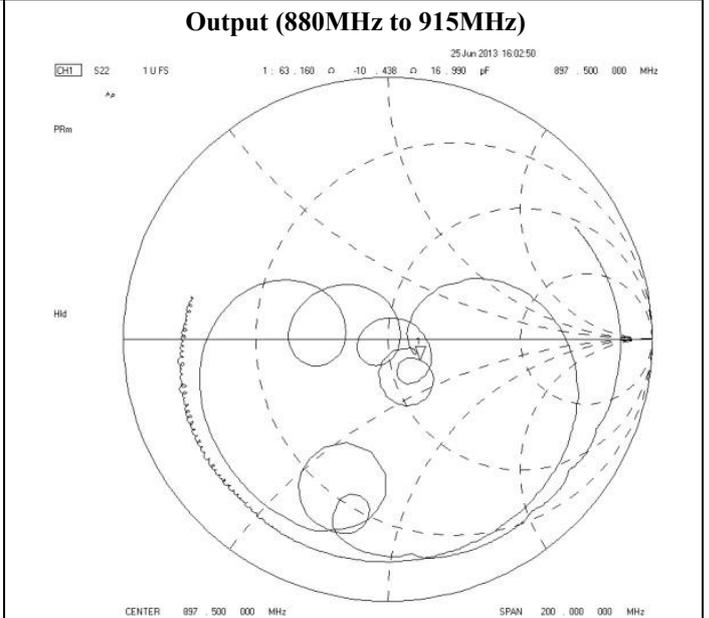
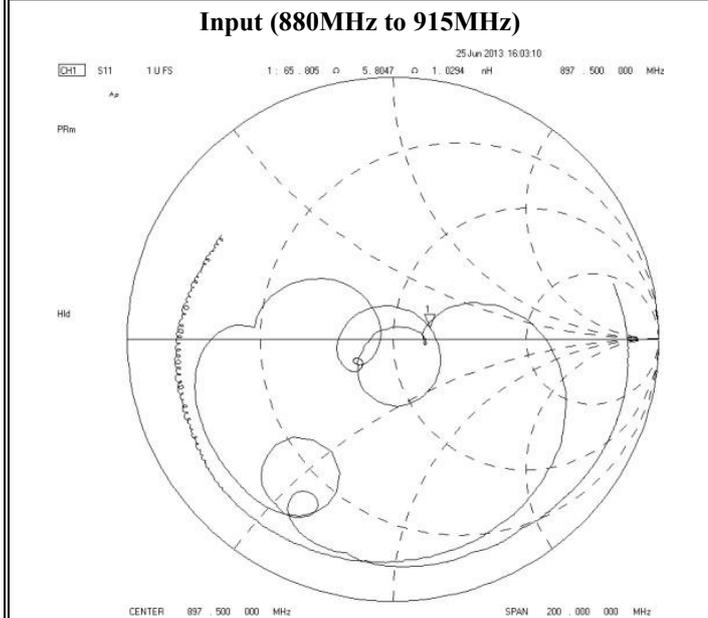
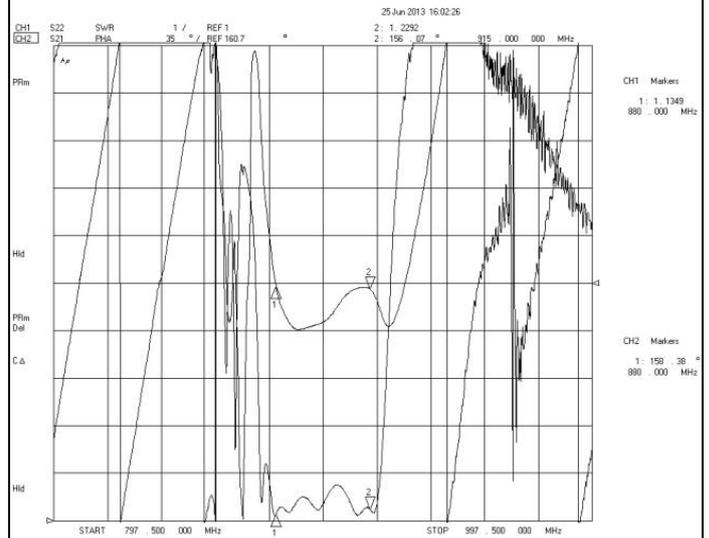
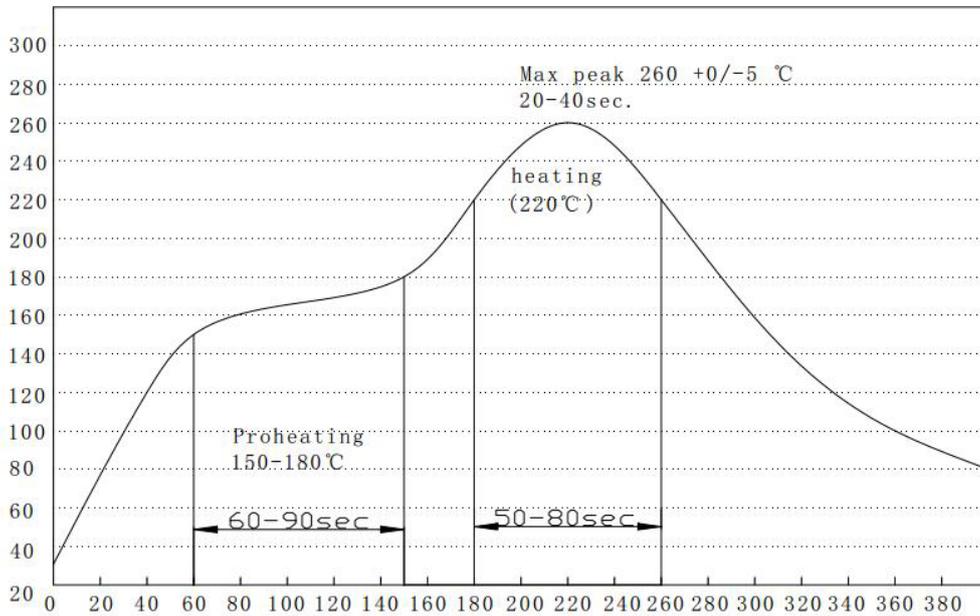


Figure 5 Smith Chart



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	