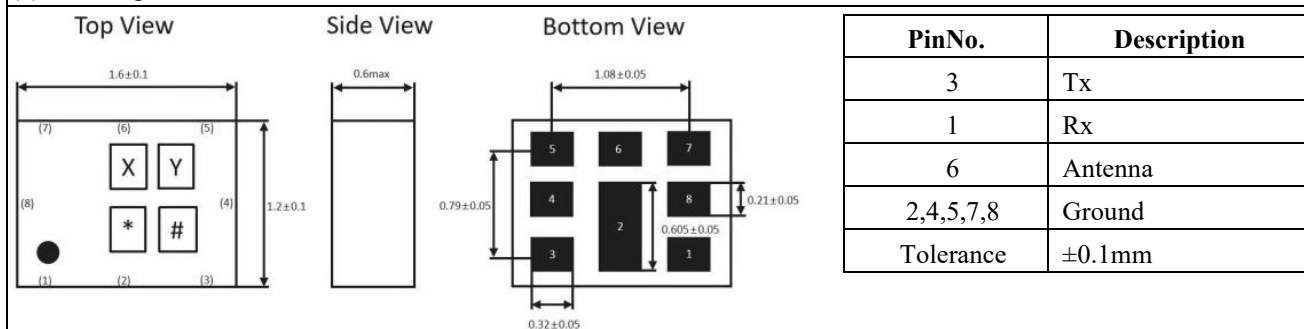


Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSD-1882-1962-S1612W
Lot No.		Date	2025.04.17
Description	SAW Duplexer	Version	A1

(1)Size Diagram (Unit : MM)



(2)Electrical Specifications

Item			Specification		
Parameter	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	1882.5 / 1962.5	-
Insertion Loss	1852.5-1912.5	dB	-	2.4	3.2
	1930-1995	dB	-	2.8	3.4
Ripple Deviation	1852.5-1912.5	dB	-	1.2	2.2
	1930-1995	dB	-	1.9	2.7
VSWR of Tx Port	1852.5-1912.5	-	-	1.7	2.0
VSWR of Rx Port	1930-1995	-	-	1.7	2.1
VSWR of Ant Port	1852.5-1912.5	-	-	1.7	2.0
	1930-1995	-	-	1.7	2.1
Attenuation (1852.5-1912.5)	10-616	dB	40	46	-
	617-652	dB	40	45	-
	699-716	dB	40	44	-
	728-768	dB	38	43	-
	852-894	dB	36	41	-
	1166-1187	dB	35	39	-
	1225-1250	dB	35	39	-
	1559-1563	dB	42	48	-
	1565.42-1573.37	dB	42	48	-
	1573.37-1577.47	dB	42	48	-
	1577.47-1585.42	dB	42	48	-
	1597.55-1605.89	dB	45	50	-
	1930.25-1989.75	dB	45	50	-
	1930.25-1994.75	dB	45	50	-
	2110-2200	dB	42	47	-
	2350-2360	dB	35	41	-
	2402-2483	dB	32	37	-
	2496-2690	dB	30	35	-
	3300-3800	dB	13	18	-
	3700-3830	dB	15	20	-
	4900-5950	dB	7	12	-
	5550-5745	dB	7	12	-
Attenuation (1930-1995)	10-662	dB	45	50	-
	663-698	dB	45	49	-
	699-862	dB	40	46	-

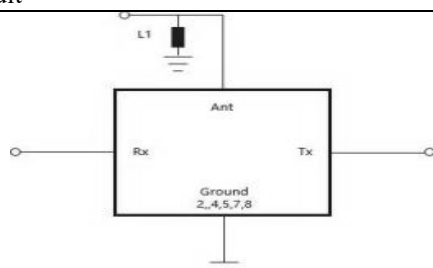
	1710.15-1779.85	dB	40	45	-
	1850.25-1909.75	dB	48	53	-
	1850.25-1914.75	dB	25	31	-
	2055-2080	dB	40	46	-
	2305-2315	dB	38	43	-
	2402-2483	dB	40	44	-
	2496-2690	dB	38	43	-
	3300-3800	dB	45	52	-
	3860-3990	dB	45	50	-
	4900-5950	dB	45	50	-
	5790-5985	dB	45	52	-
Isolation	1852.5-1912.5	dB	50	52	-
	1932.5-1992.5	dB	50	53	-
Operation Temperature	-20°C~+85°C	°C	-	-	-
Storage Temperature	-40°C~+85°C	°C	-	-	-
RF Power Dissipation	+29	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
Ant	L1 : 6.7 nH (Ideal inductor)

Figure 1 Electrical Characteristics: Tx to Ant.

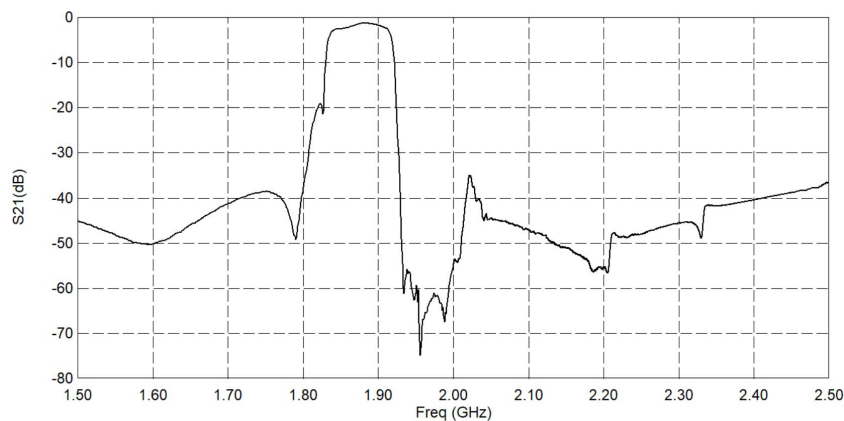


Figure 2 Electrical Characteristics: Tx to Ant.

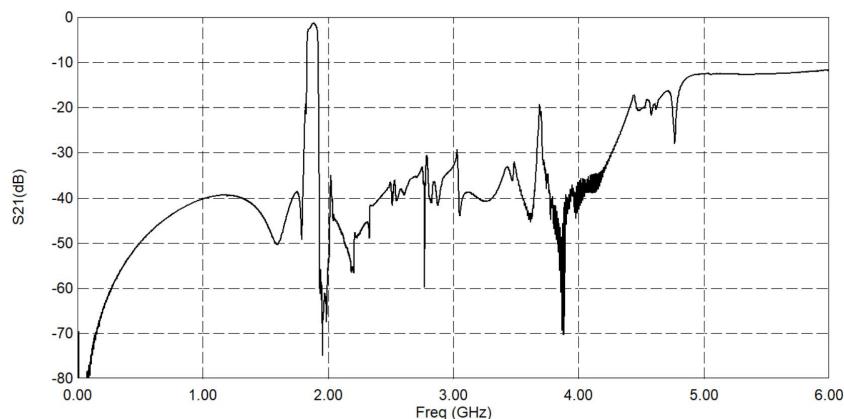


Figure 3 Electrical Characteristics: Ant to Rx.

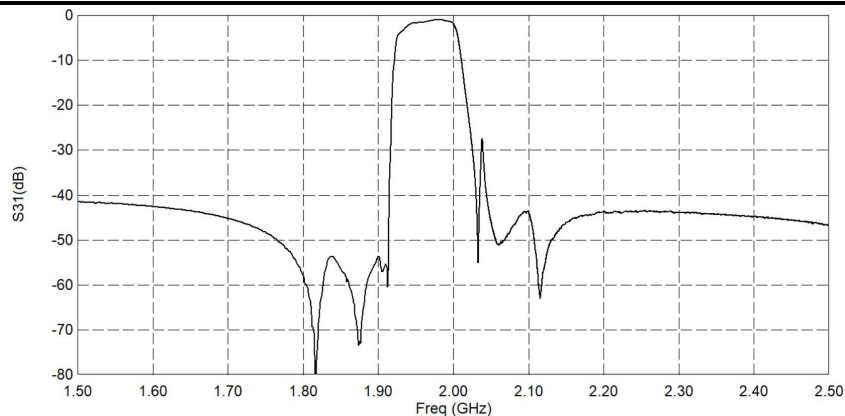


Figure 4 Electrical Characteristics: Ant to Rx.

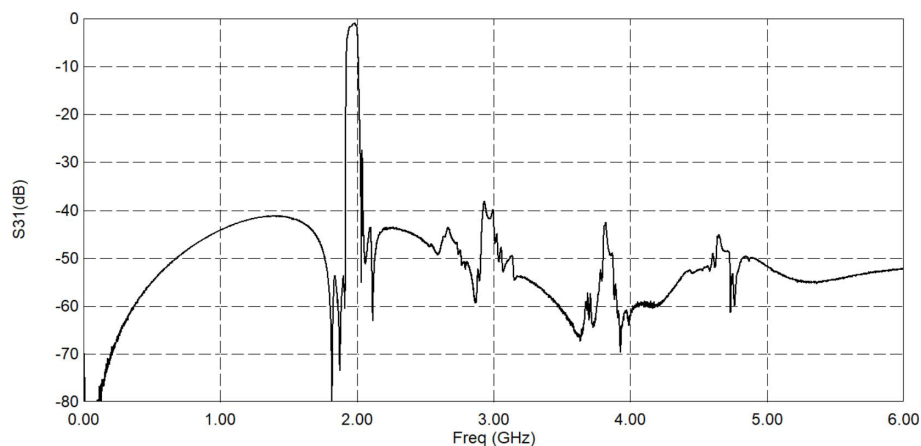


Figure 5 Electrical Characteristics: Tx to Rx.

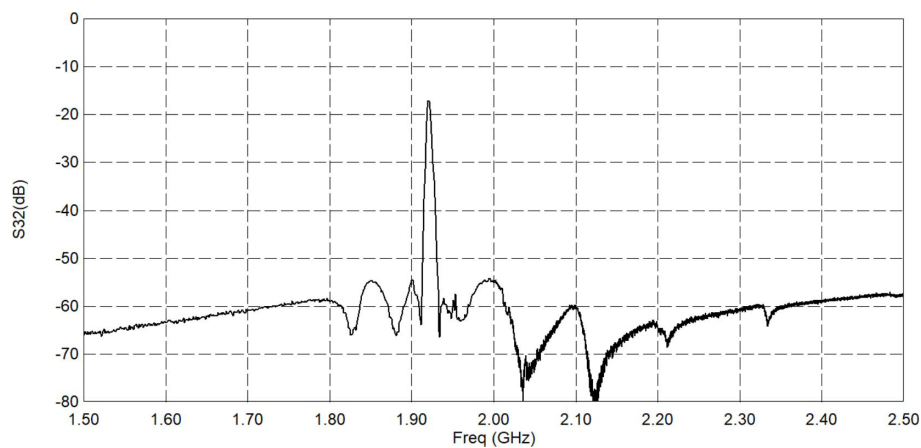


Figure 6 Electrical Characteristics: Tx to Rx.

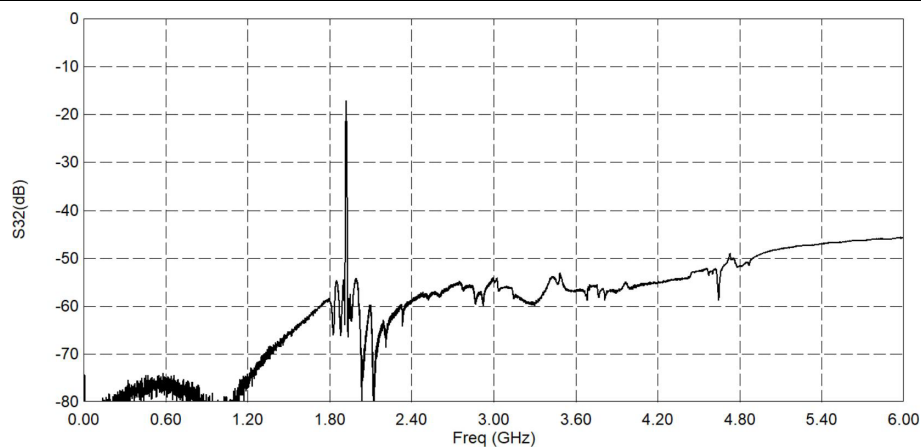
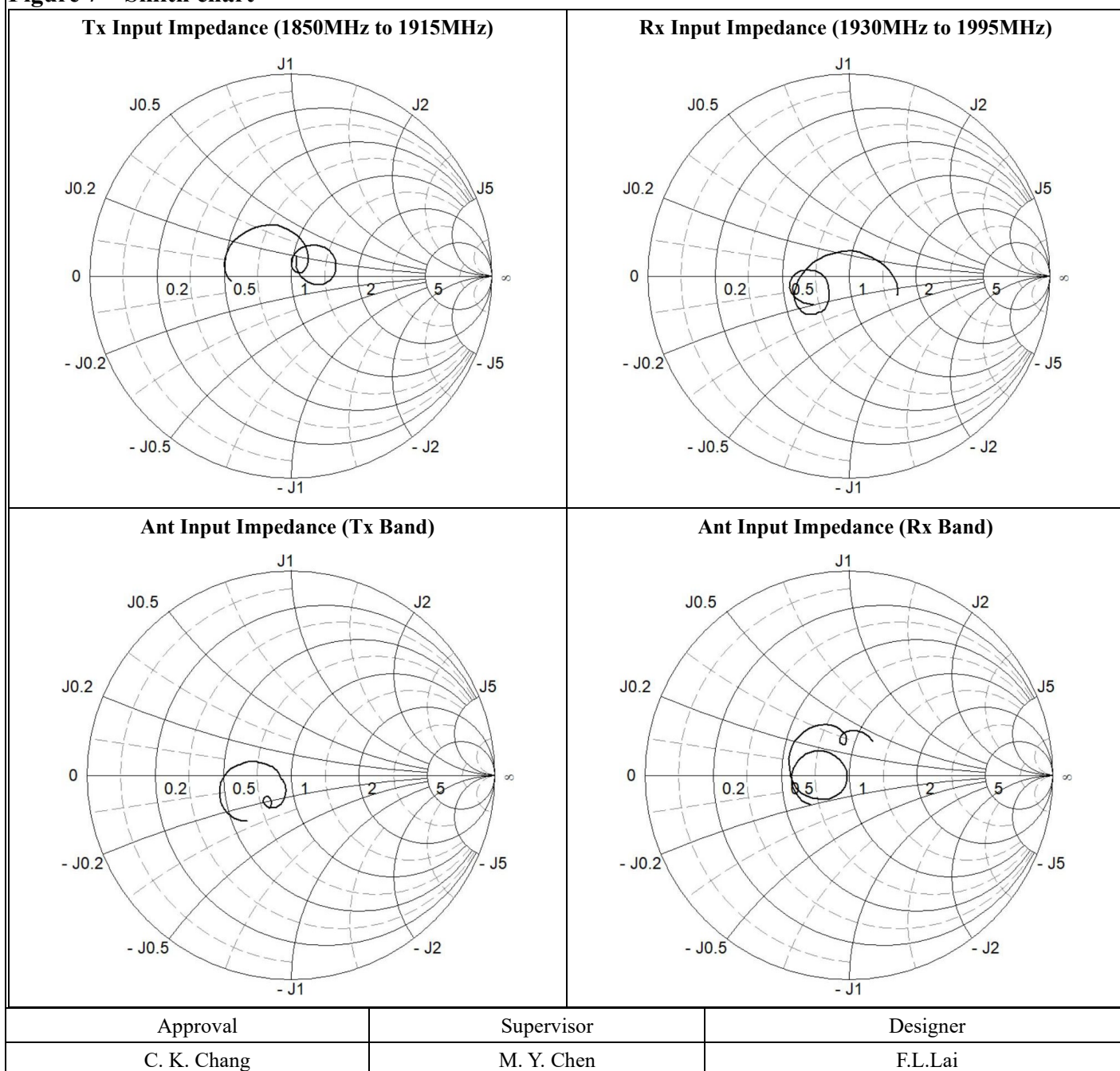
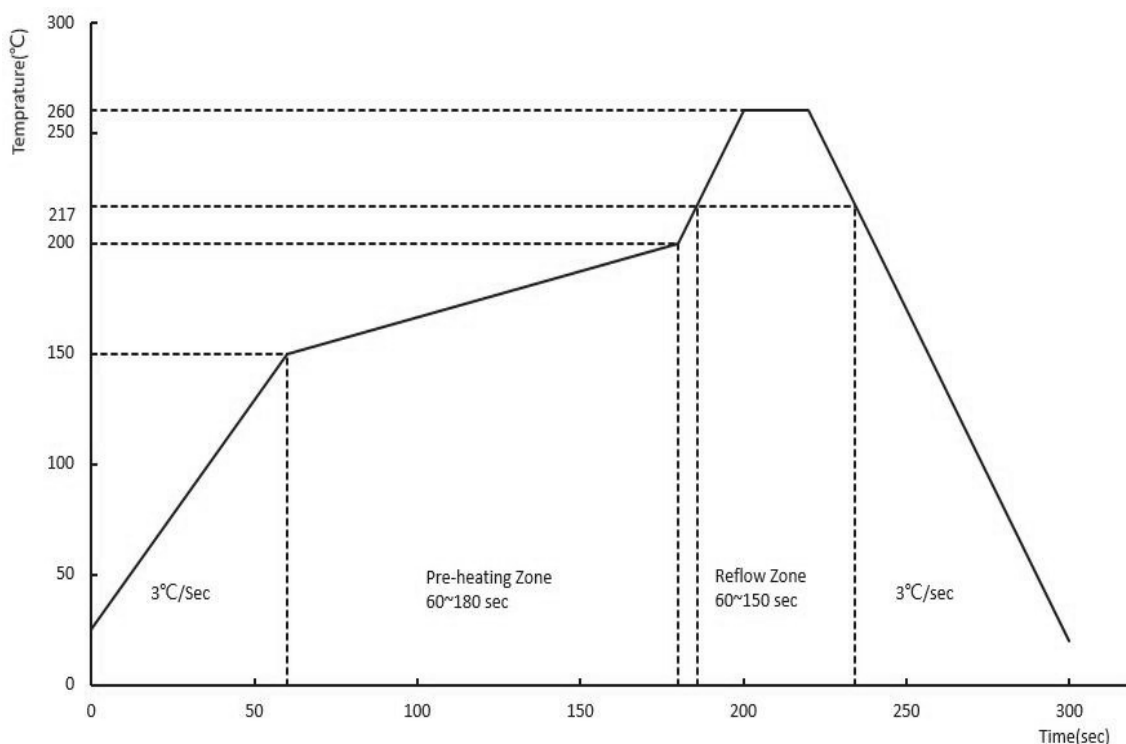


Figure 7 Smith chart



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	