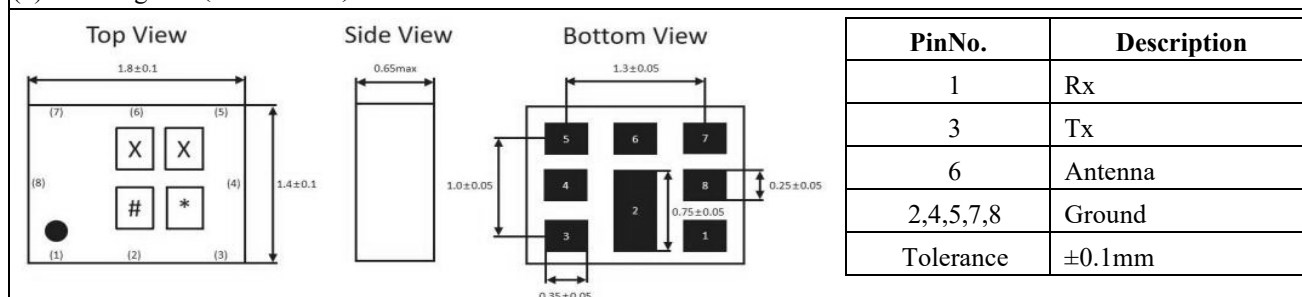


Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSD-1880-1960-S1814W
Lot No.		Date	2025.04.17
Description	SAW Duplexer	Version	A1

(1)Size Diagram (Unit : MM)



(2)Electrical Specifications

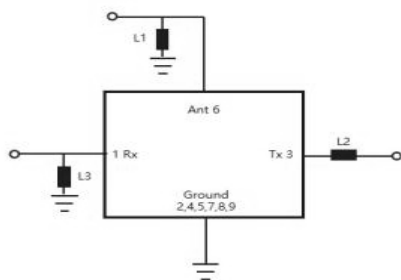
Item			Specification		
Parameter	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	1880 / 1960	-
Insertion Loss	1850-1910	dB	-	1.6	2.8
	1930-1990	dB	-	2.7	3.5
Ripple Deviation	1850-1910	dB	-	1.0	2.0
	1930-1990	dB	-	1.5	2.5
Return Loss	1850-1910	dB	-	15	9.5
	1930-1990	dB	-	15	9.5
Attenuation (1850-1910)	10-728	dB	44	49	-
	728-768	dB	43	48	-
	859-894	dB	40	45	-
	1226-1250	dB	34	39	-
	1559-1563	dB	34	39	-
	1565.4-1577.5	dB	34	39	-
	1573.4-1577.5	dB	35	40	-
	1577.5-1585.4	dB	35	40	-
	1597.6-1605.9	dB	36	41	-
	1930-1990	dB	45	57	-
	2110-2200	dB	45	50	-
	2350-2360	dB	37	41	-
	2400-2500	dB	33	38	-
	3700-3830	dB	27	32	-
	5254-5455	dB	14	19	-
Attenuation (1930-1990)	5520-5845	dB	16	21	-
	699-716	dB	56	61	-
	777-787	dB	53	58	-
	814-849	dB	51	56	-
	1850-1910	dB	48	53	-
	2305-2315	dB	53	58	-
	2400-2500	dB	56	61	-
Isolation	4900-5950	dB	20	25	-
	1850-1910	dB	49	52	-
Operation Temperature	1930-1990	dB	48	59	-
	-20℃~+85℃	℃	-	-	-
Storage Temperature	-40℃~+85℃	℃	-	-	-
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
Rx	L3 : 4.3 nH (Ideal inductor)
Tx	L2 : 2.5 nH (Ideal inductor)
Ant	L1 : 3.0 nH (Ideal inductor)

Figure 1 Electrical Characteristics: Tx to Ant.

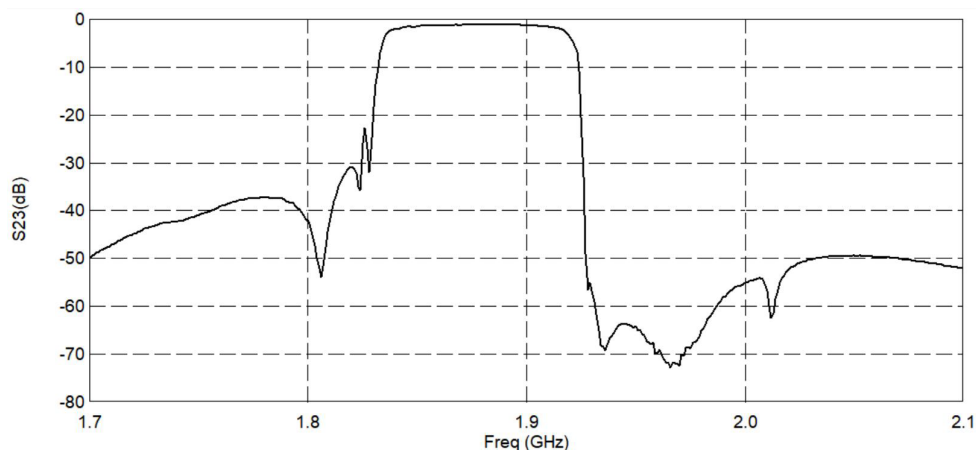


Figure 2 Electrical Characteristics: Tx to Ant.

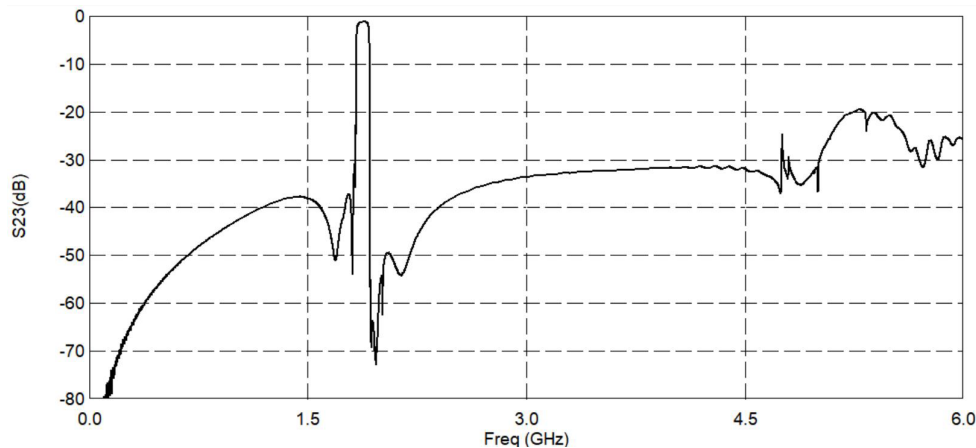


Figure 3 Electrical Characteristics: Ant to Rx.

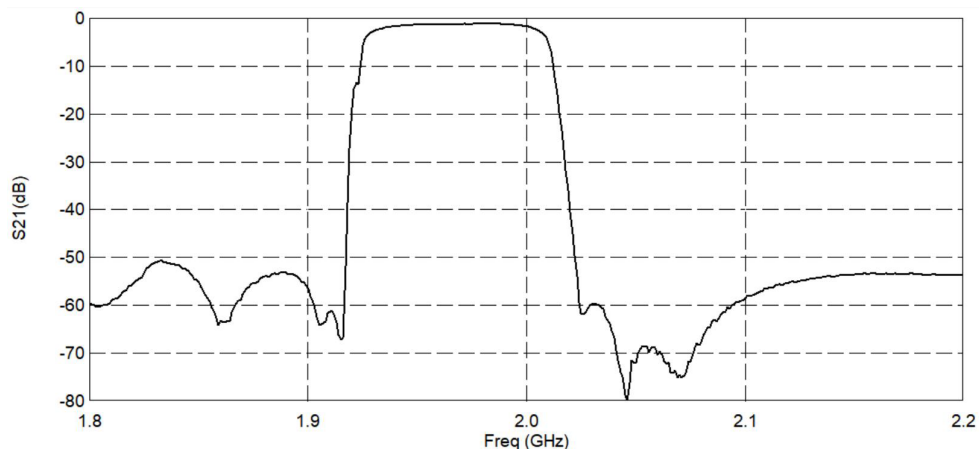


Figure 4 Electrical Characteristics: Ant to Rx.

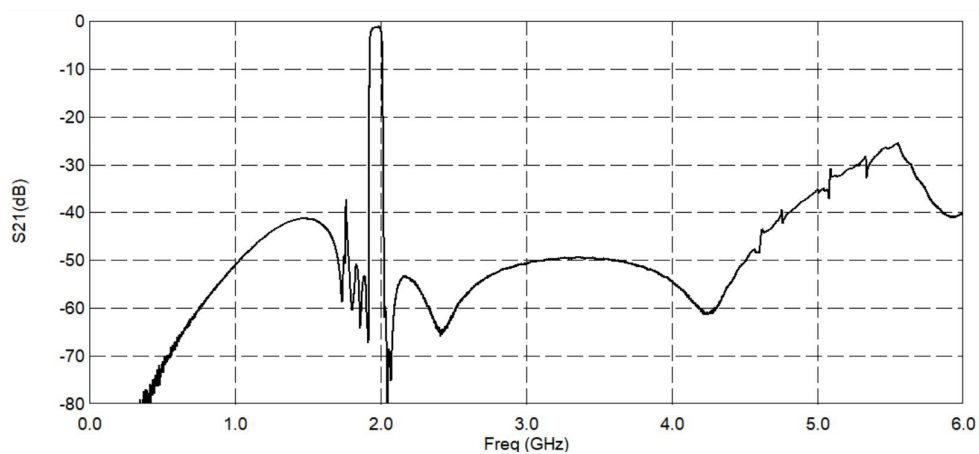


Figure 5 Electrical Characteristics: Tx to Rx.

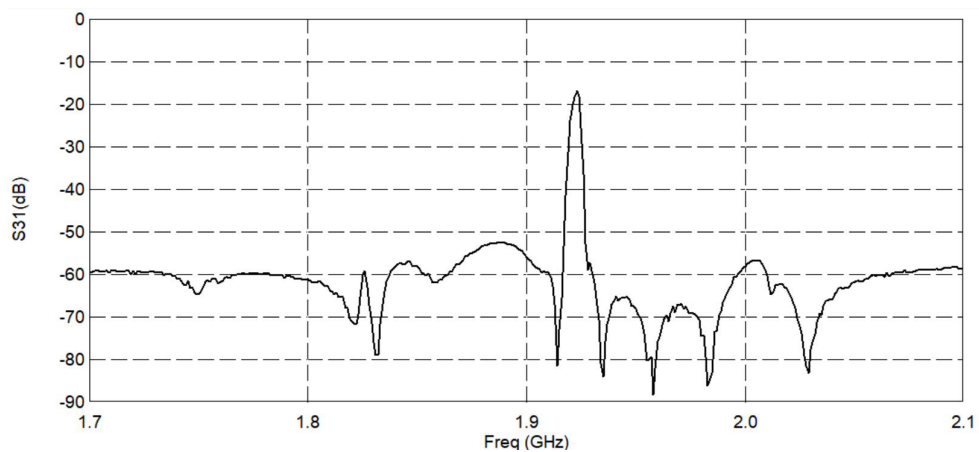


Figure 6 Electrical Characteristics: Tx to Rx.

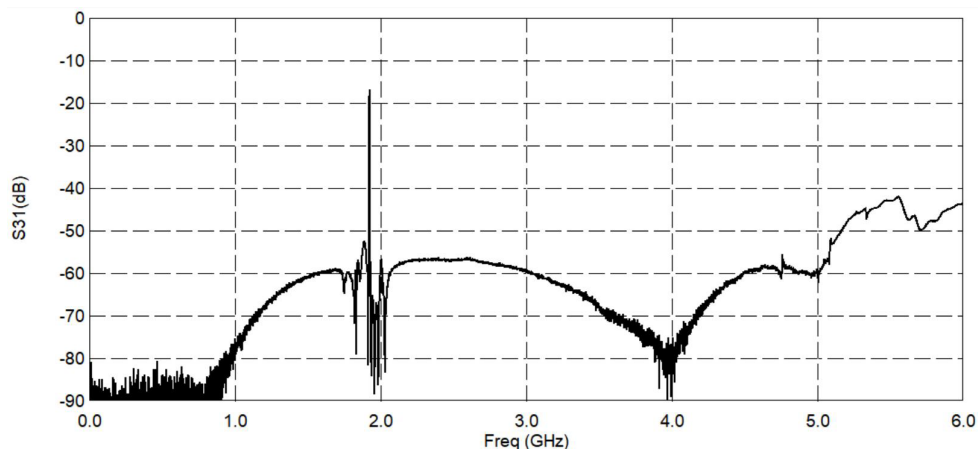
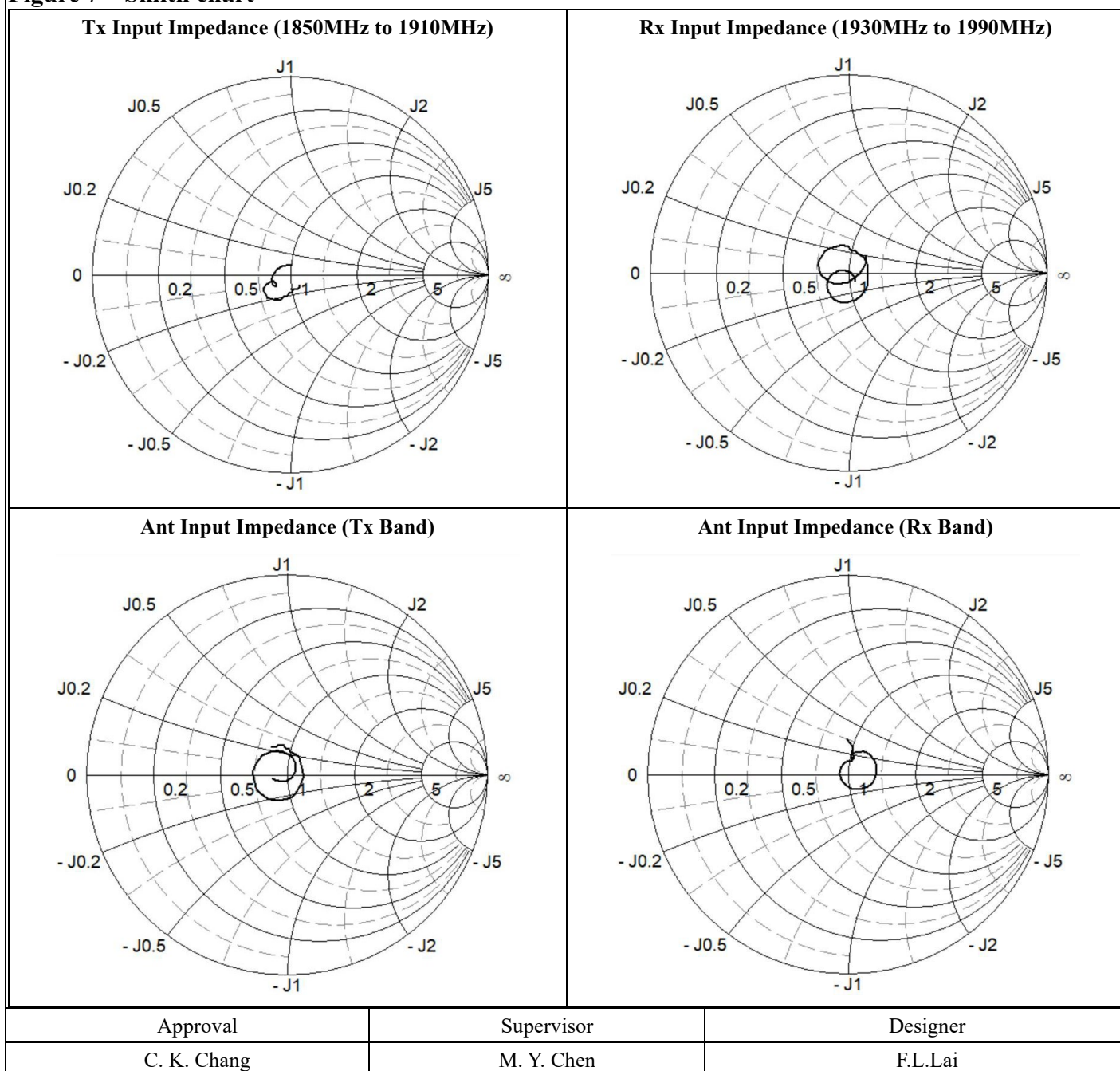
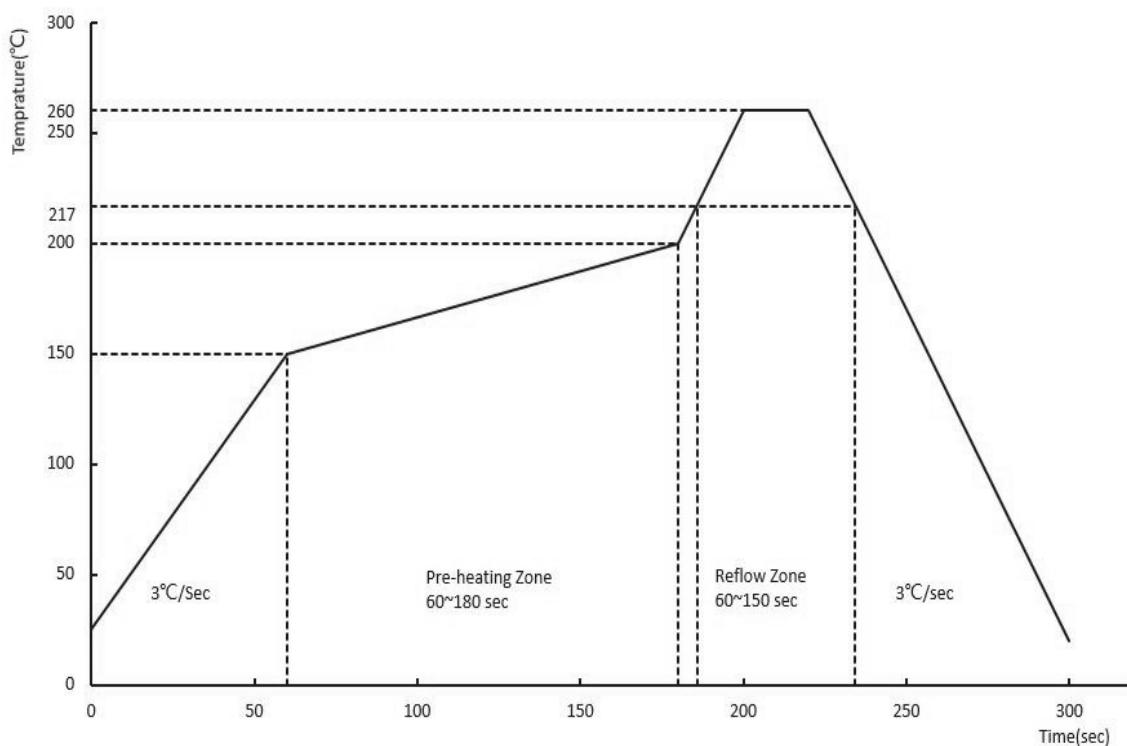


Figure 7 Smith chart



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	