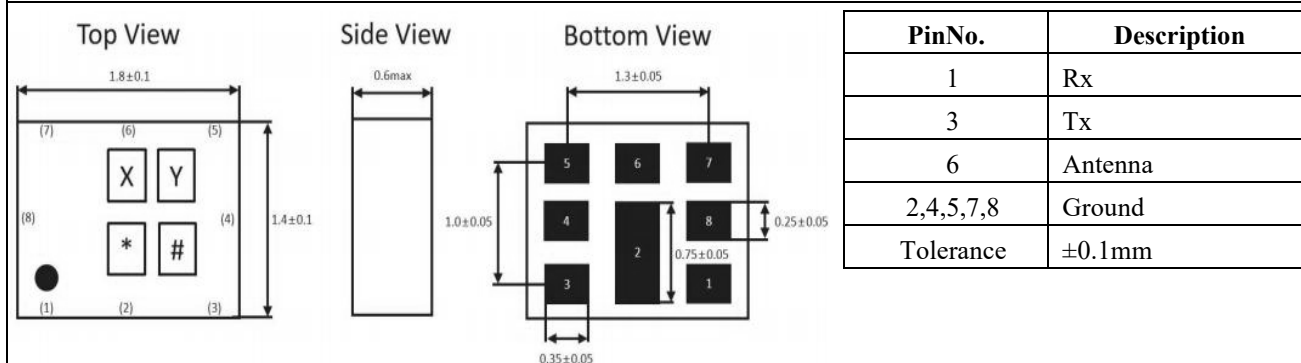


Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSD-2535-2655-S1814W
Lot No.		Date	2025.04.17
Description	SAW Duplexer	Version	A1

(1)Size Diagram (Unit : MM)

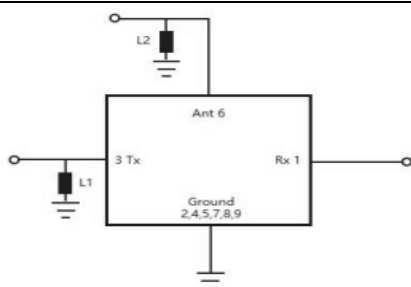


(2)Electrical Specifications

Item			Specification		
Parameter	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	2535 / 2655	-
Insertion Loss	2500-2570	dB	-	1.8	2.4
	2620-2690	dB	-	2.0	2.8
Ripple Deviation	2500-2570	dB	-	0.9	2.0
	2620-2690	dB	-	0.6	2.0
VSWR of Tx Port	2500-2570	-	-	1.7	2.0
VSWR of Rx Port	2620-2690	-	-	1.9	2.1
VSWR of Ant Port	2500-2570	-	-	1.7	2.0
	2620-2690	-	-	1.9	2.1
Attenuation (2500-2570)	10-718	dB	53	62	-
	832-862	dB	49	57	-
	1226-1250	dB	42	48	-
	1559-1563	dB	38	44	-
	1565.4-1573.4	dB	38	44	-
	1573.4-1577.5	dB	38	43	-
	1577.5-1585.4	dB	38	43	-
	1597.6-1605.9	dB	38	43	-
	1605.9-1680	dB	37	42	-
	1710-1785	dB	37	42	-
	1805-1880	dB	36	41	-
	1900-1920	dB	36	41	-
	2010-2025	dB	36	41	-
	2110-2170	dB	37	42	-
	2401-2468	dB	43	43	-
	2590-2595	dB	2	4.2	-
	2595-2620	dB	2.4	8.8	-
	2620-2690	dB	45	53	-
	5000-5140	dB	25	40	-
	5100-5280	dB	20	40	-
	7500-7710	dB	20	32	-
Attenuation (2620-2690)	1-2500	dB	40	51	-
	1-45	dB	50	102	-
	718-748	dB	40	68	-

	814-849	dB	40	65	-
	832-862	dB	40	65	-
	880-915	dB	40	64	-
	1710-1785	dB	40	54	-
	2402-2470	dB	55	57	-
	2500-2570	dB	45	47	-
	2570-2600	dB	2.5	5.4	-
	4900-5950	dB	40	49	-
	7620-7830	dB	35	43	-
	7860-8070	dB	35	44	-
	10480-10760	dB	20	47	-
Isolation	1574-2500	dB	30	54	-
	2500-2570	dB	50	53	-
	2620-2690	dB	53	55	-
	5000-5140	dB	30	49	-
	7500-7710	dB	25	40	-
Operation Temperature	-20°C~+85°C	°C	-	-	-
Storage Temperature	-40°C~+85°C	°C	-	-	-
RF Power Dissipation	+30	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
Tx	L1 : 10.7 nH (Ideal inductor)
Ant	L2 : 4.5 nH (Ideal inductor)

Figure 1 Electrical Characteristics: Tx to Ant.

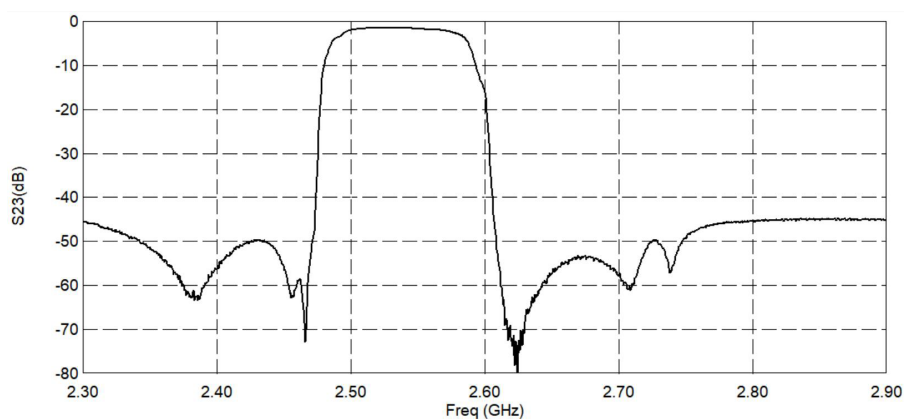


Figure 2 Electrical Characteristics: Tx to Ant.

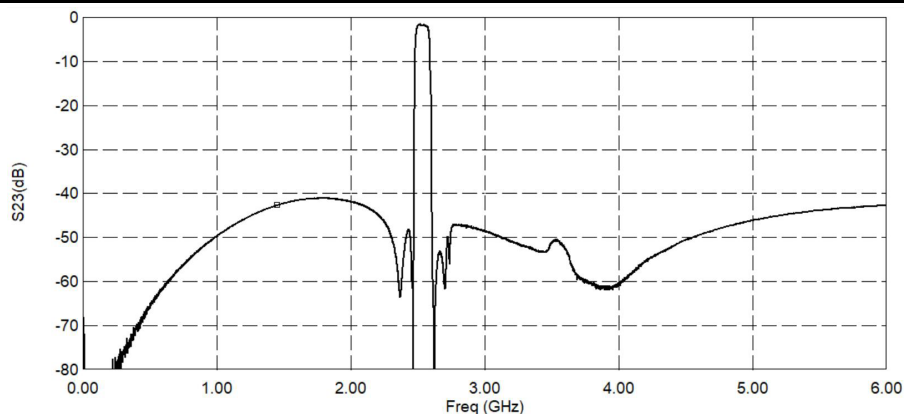


Figure 3 Electrical Characteristics: Ant to Rx.

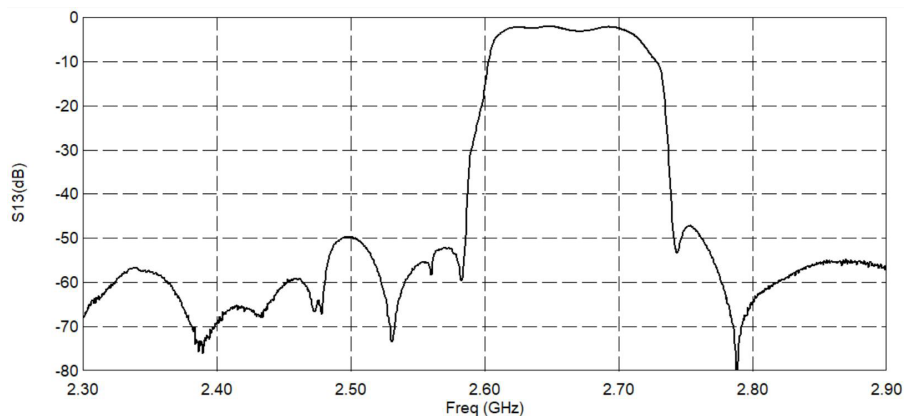


Figure 4 Electrical Characteristics: Ant to Rx.

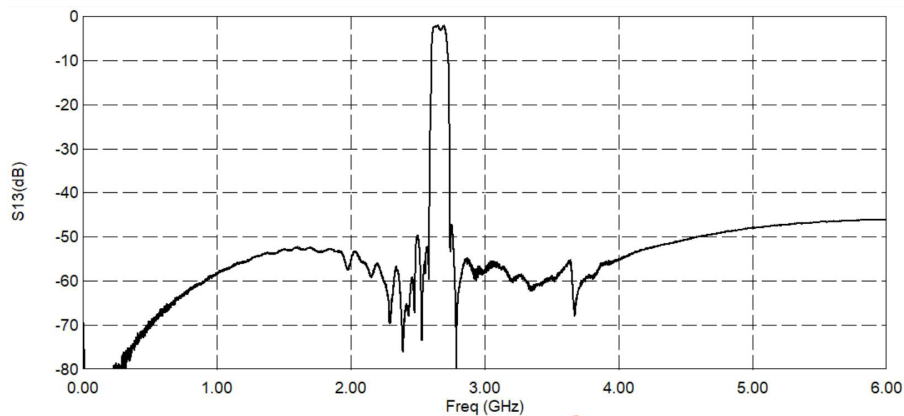


Figure 5 Electrical Characteristics: Tx to Rx.

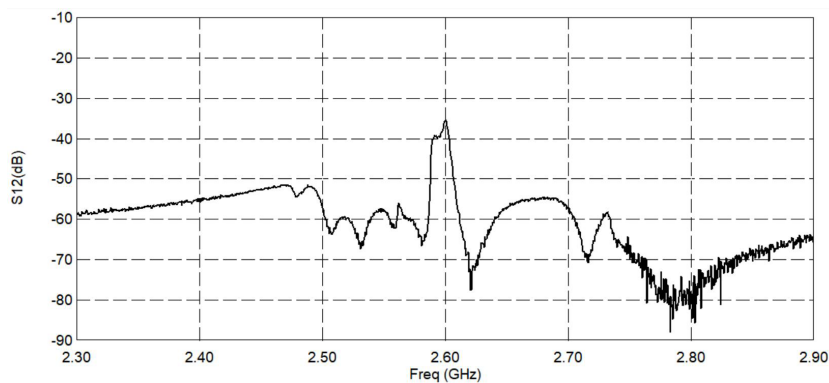


Figure 6 Electrical Characteristics: Tx to Rx.

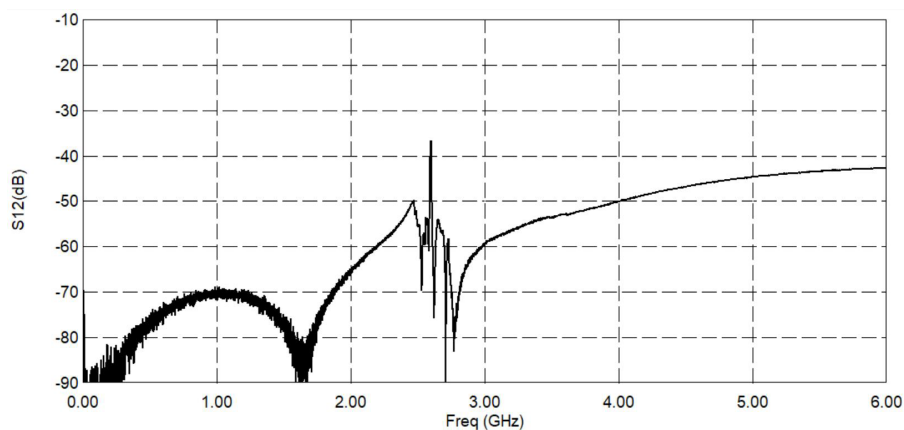
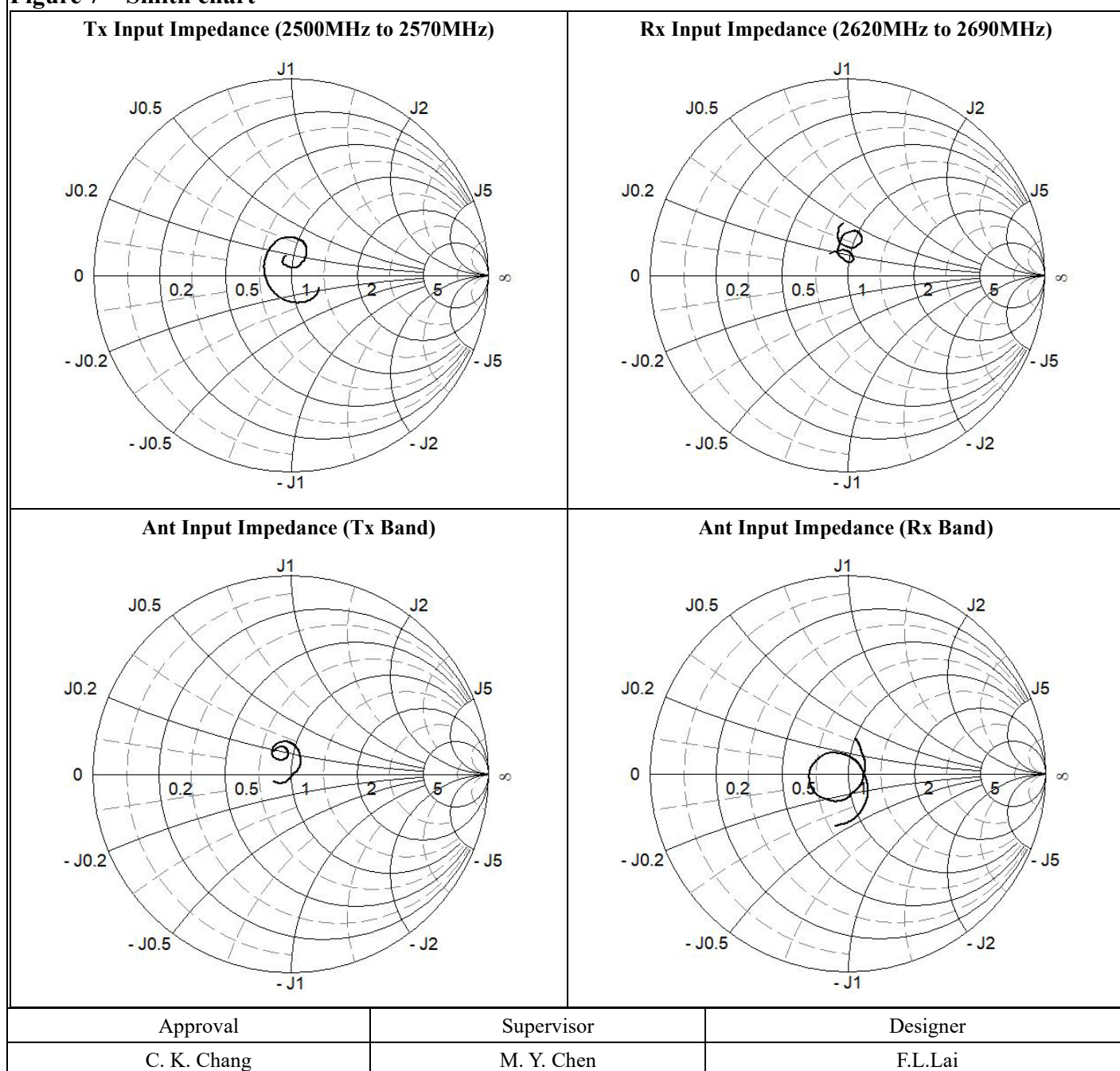
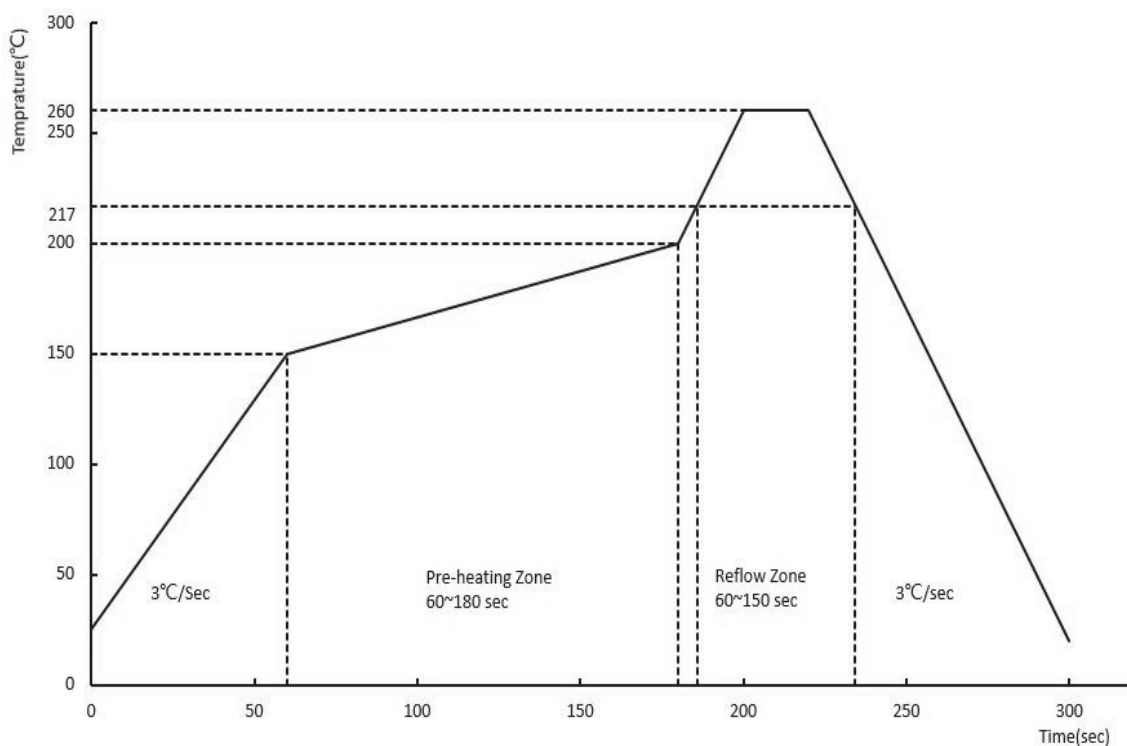


Figure 7 Smith chart



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	