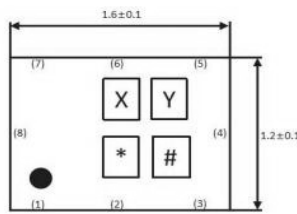
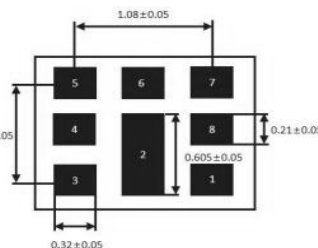


Specification Sheet

Customer Name	XXXX	CUST P/N	NA
Approval No.	PD	Temwell P/N	STSD-718-773-S1612W
Lot No.		Date	2025.04.17
Description	SAW Duplexer	Version	A1

(1)Size Diagram (Unit : MM)

Top View 	Side View 	Bottom View 	<table> <tr> <th>PinNo.</th><th>Description</th></tr> <tr> <td>3</td><td>Tx</td></tr> <tr> <td>1</td><td>Rx</td></tr> <tr> <td>6</td><td>Antenna</td></tr> <tr> <td>2,4,5,7,8</td><td>Ground</td></tr> <tr> <td>Tolerance</td><td>±0.1mm</td></tr> </table>	PinNo.	Description	3	Tx	1	Rx	6	Antenna	2,4,5,7,8	Ground	Tolerance	±0.1mm
PinNo.	Description														
3	Tx														
1	Rx														
6	Antenna														
2,4,5,7,8	Ground														
Tolerance	±0.1mm														

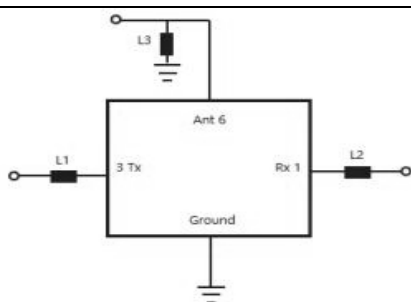
(2)Electrical Specifications

Item			Specification		
Parameter	MHz	Unit	Min.	Typical	Max.
Center Frequency	-	MHz	-	718 / 773	-
Insertion Loss	703.25-732.75	dB	-	2.5	3.3
	758.25-787.75	dB	-	2.8	3.5
Ripple Deviation	703.25-732.75	dB	-	1.6	1.9
	758-788	dB	-	1.5	1.9
VSWR of Tx Port	703-733	-	-	1.6	2.0
VSWR of Rx Port	758-788	-	-	1.7	2.0
VSWR of Ant Port	703-733	-	-	1.6	2.0
	758-788	-	-	1.7	2.0
Attenuation (703-733)	10-670	dB	29	34	-
	670-694	dB	26	31	-
	694-695	dB	12	28	-
	695-698	dB	11	26	-
	758-788	dB	52	57	-
	788-803	dB	19	24	-
	859-894	dB	35	41	-
	1225-1250	dB	24	29	-
	1406-1466	dB	24	29	-
	1559-1563	dB	23	28	-
	1565.42-1573.37	dB	23	28	-
	1573.37-1577.47	dB	23	28	-
	1577.47-1585.42	dB	23	28	-
	1597.55-1605.89	dB	25	29	-
	1805-1880	dB	25	29	-
	1930-1995	dB	25	30	-
	2010-2025	dB	26	31	-
	2109-2199	dB	20	25	-
	2400-2484	dB	20	26	-
	2570-2620	dB	20	26	-
	2812-2932	dB	18	24	-
	4900-5950	dB	13	18	-
Attenuation (758-788)	10-703	dB	45	52	-
	703-733	dB	45	53	-
	824-849	dB	35	40	-

	880-915	dB	48	53	-
	1710-1785	dB	40	46	-
	1850-1910	dB	40	45	-
	1920-1980	dB	40	45	-
	2400-2496	dB	45	54	-
	2496-2690	dB	45	54	-
	4900-5900	dB	40	49	-
Isolation	703-733	dB	52	55	-
	758-788	dB	53	56	-
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
Tx	L1 : 12 nH (Ideal inductor)
Rx	L2 : 5.0 nH (Ideal inductor)
Ant	L3 : 9.7 nH (Ideal inductor)

Figure 1 Electrical Characteristics: Tx to Ant.

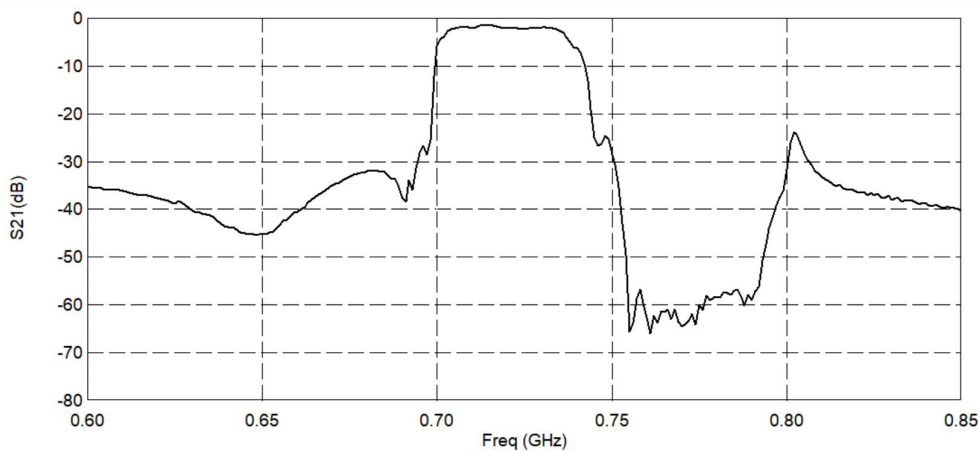


Figure 2 Electrical Characteristics: Tx to Ant.

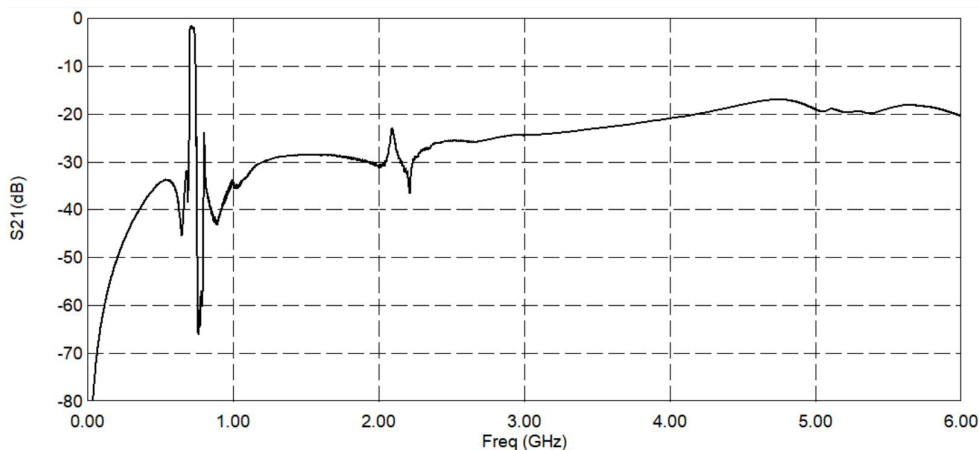


Figure 3 Electrical Characteristics: Ant to Rx.

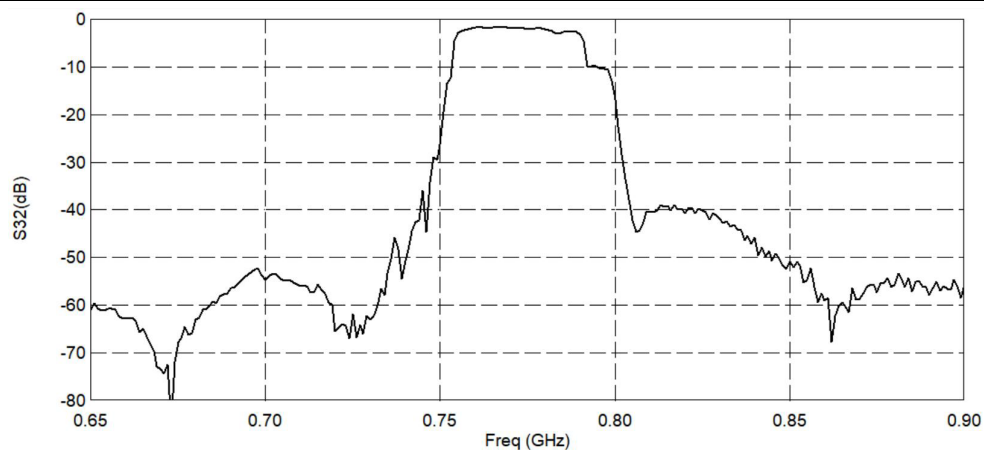


Figure 4 Electrical Characteristics: Ant to Rx.

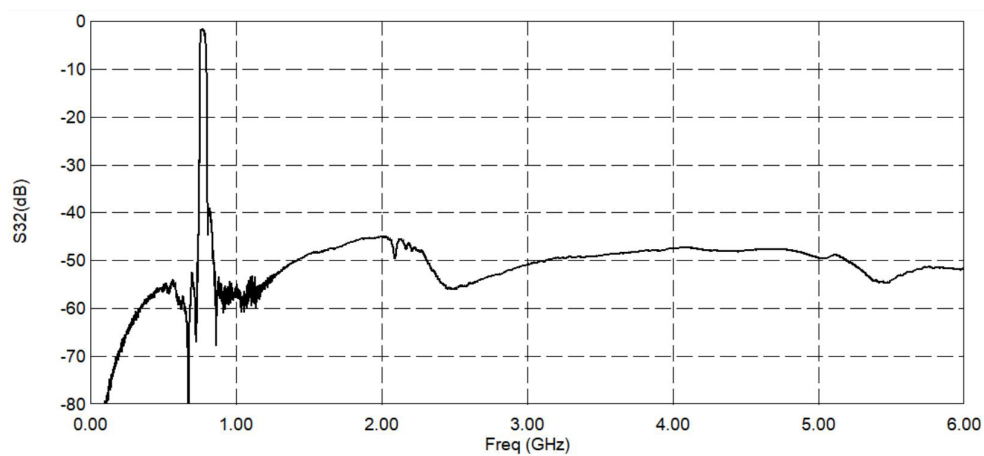


Figure 5 Electrical Characteristics: Tx to Rx.

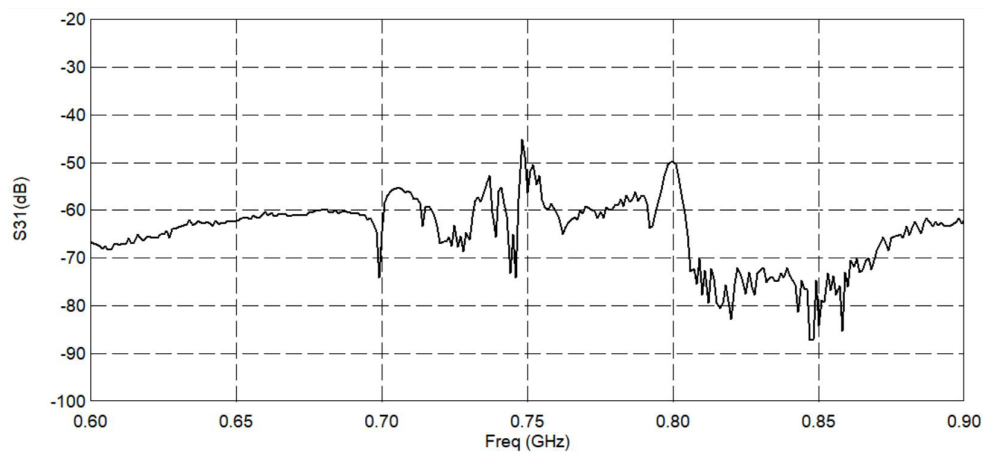


Figure 6 Electrical Characteristics: Tx to Rx.

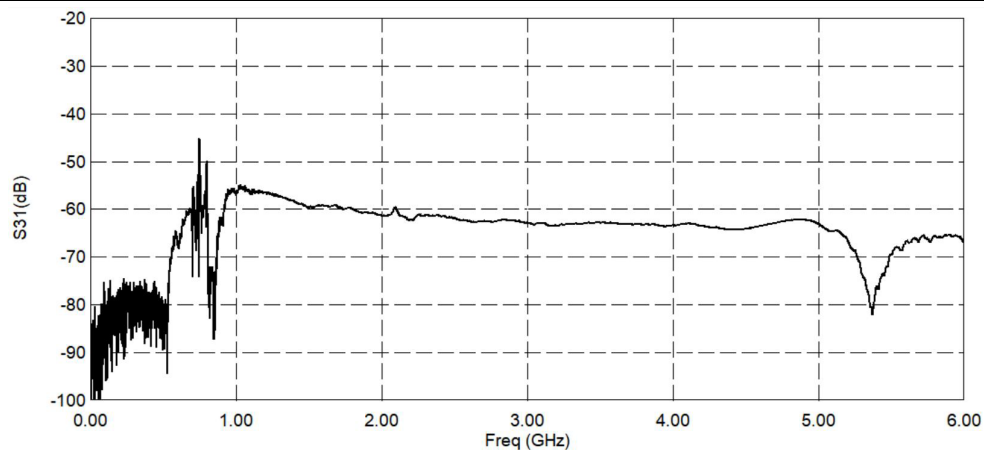
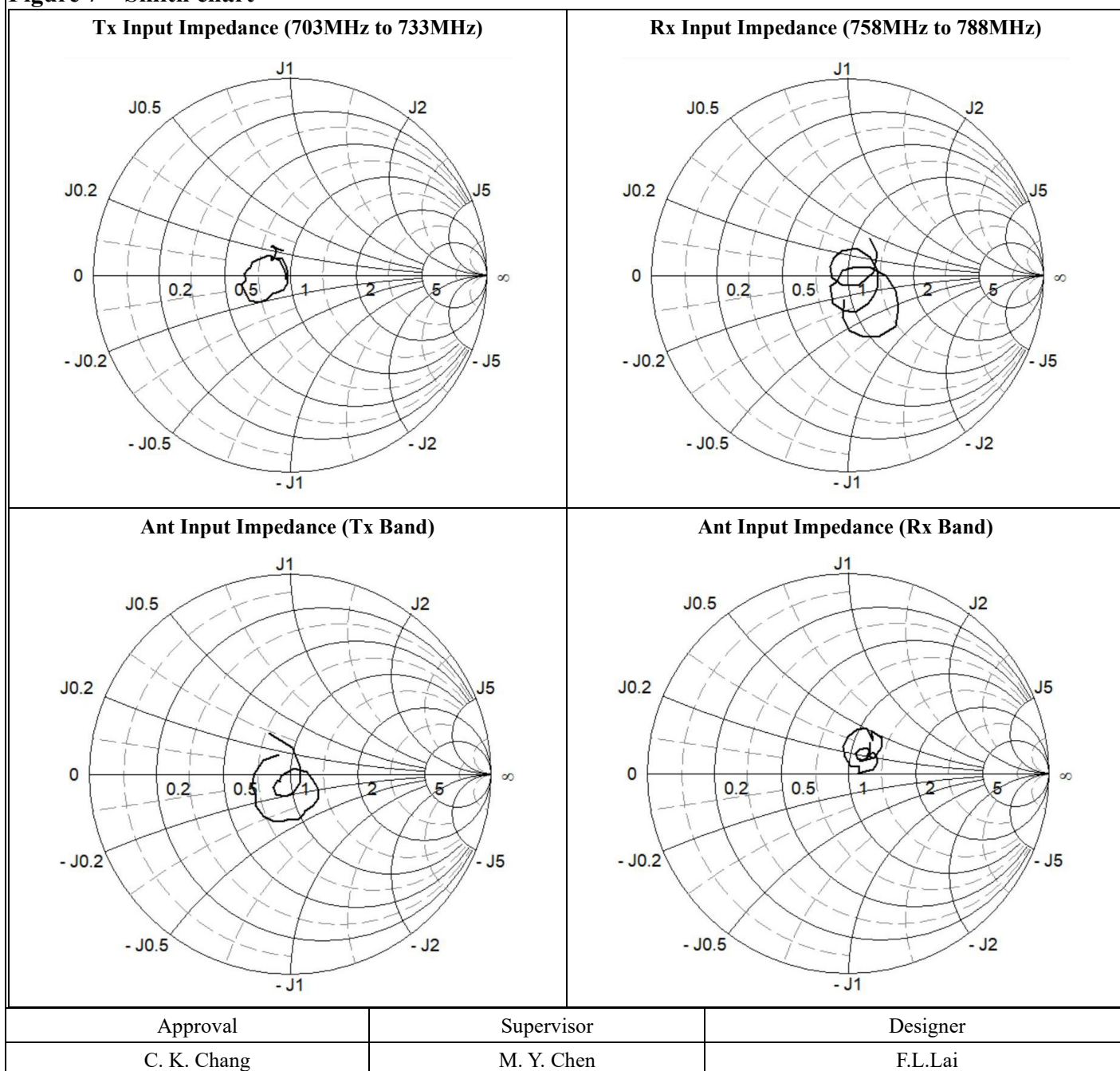
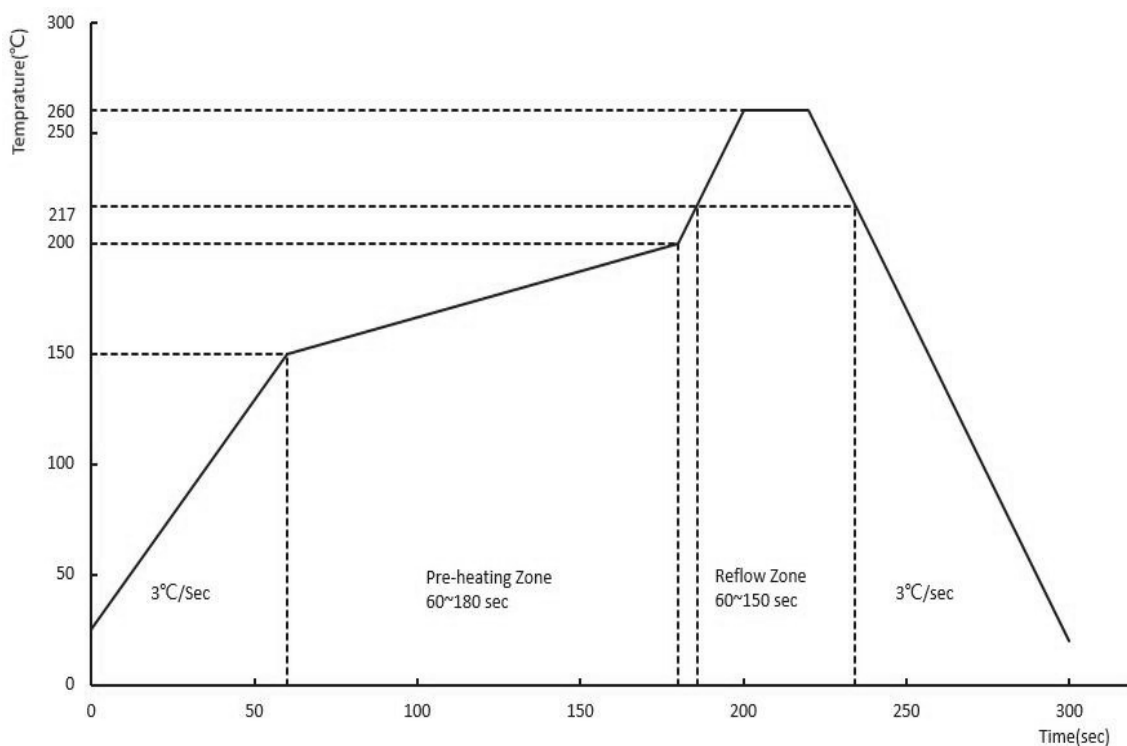


Figure 7 Smith chart



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	