



*Total Solution Provider in Saw Device*

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# SD-1962T1-C45

Band 25, BAW Duplexer(Rx Single Port)  
Revision 0: November 2014



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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## □ Electrical Characteristics

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-10	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Input Power at Tx Port	dBm	29dBm, Ta=+50°C, 5kh, CW		
Antenna Impedance(single ended) <sup>(1)</sup>	Ω	50//5.1nH		
Tx Impedance(single ended) <sup>(1)</sup>	Ω	50		
Rx Impedance(single ended) <sup>(1)</sup>	Ω	50		
Package type		C45		
Length x Width	mm <sup>2</sup>	2.0 x 1.6		
Height	mm	0.57		



Electrical Specification

Tx to Ant		Specifications				Remarks
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum	
Insertion Loss	1850.0 ~ 1915	dB	-	2.4	4.0	
	1850.48 ~ 1909.52	dB	-	1.7	2.6	
	1850.625 ~ 1909.375	dB	-	1.9	3.0	
Ripple (any 5MHz)	1850 ~ 1915	dB <sub>p-p</sub>	-	0.7	2.4	
VSWR of Ant Port	1850 ~ 1915	-	-	1.7	2.3	
VSWR of Tx Port	1850 ~ 1915	-	-	1.8	2.3	
Attenuation	1559 ~ 1563	dB	35	40	-	
	1565.4 ~ 1573.4	dB	36	40	-	
	1573.4 ~ 1577.5	dB	36	40	-	
	1577.5 ~ 1585.4	dB	36	40	-	
	1597.6 ~ 1605.9	dB	36	41	-	
	1930 ~ 1995	dB	35	50	-	-10 to +25°C
		dB	44	50	-	+25 to +85°C
	2400 ~ 2500	dB	20	34	-	
	3700 ~ 3830	dB	20	27	-	
5550 ~ 5745	dB	15	19	-		

Ant to Rx		Specifications				Remarks
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum	
Insertion Loss	1930.48 ~ 1994.52	dB	-	2.9	4.5	
Ripple (any 5MHz)	1930.48 ~ 1994.52	dB <sub>p-p</sub>	-	0.8	2.5	
VSWR of Ant Port	1930.48 ~ 1994.52	-	-	1.8	2.4	
VSWR of Rx Port	1930.48 ~ 1994.52	-	-	2.0	2.5	
Attenuation	1850 ~ 1915	dB	45	54	-	
	2400 ~ 2500	dB	40	50	-	
	3860 ~ 3990	dB	40	58	-	
	5790 ~ 5985	dB	40	56	-	



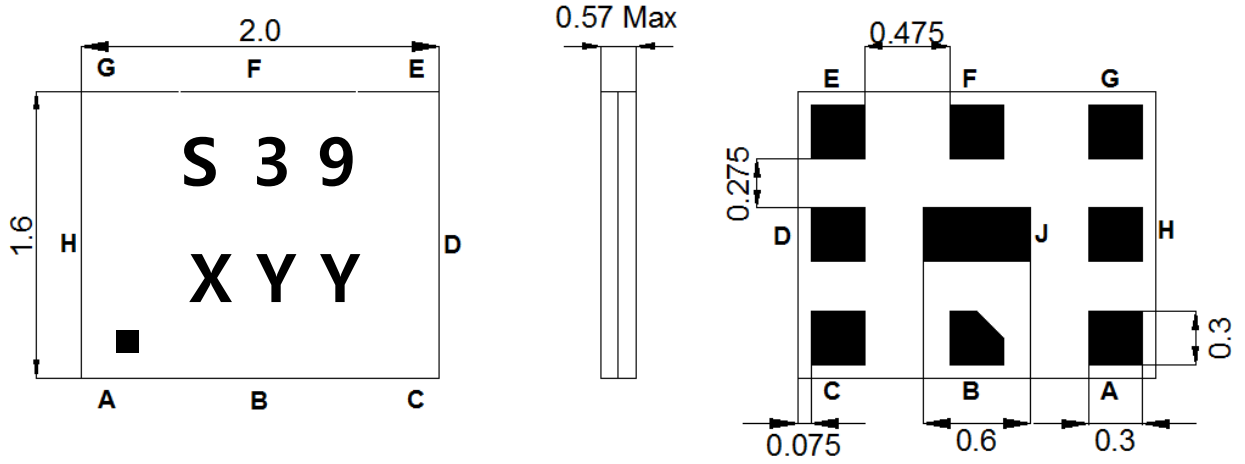
SD-1962T1-C45

Band 25, BAW Duplexer

Tx to Rx		Specifications				Remarks
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum	
Isolation	1850.48 ~ 1914.52	dB	51	56	-	-10 to +60℃
		dB	46	56	-	+60 to +85℃
	1931.25 ~ 1993.75	dB	45	51	-	

**Notes :** (1) With Matching Network

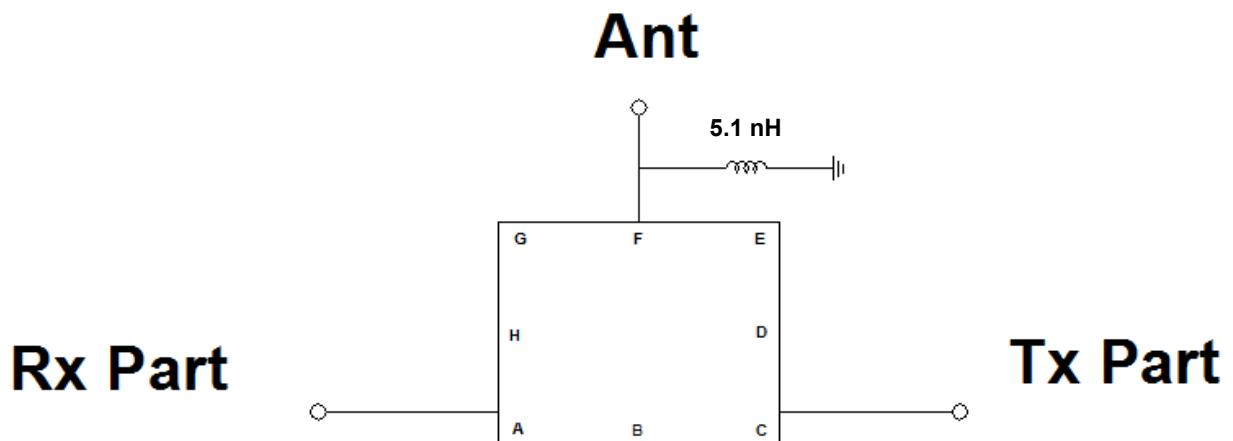
**Package Dimensions**



Marking Descriptions	
S	SAWNICS
39	Series Number
X	Date Code(Year+Month)
YY	Lot No

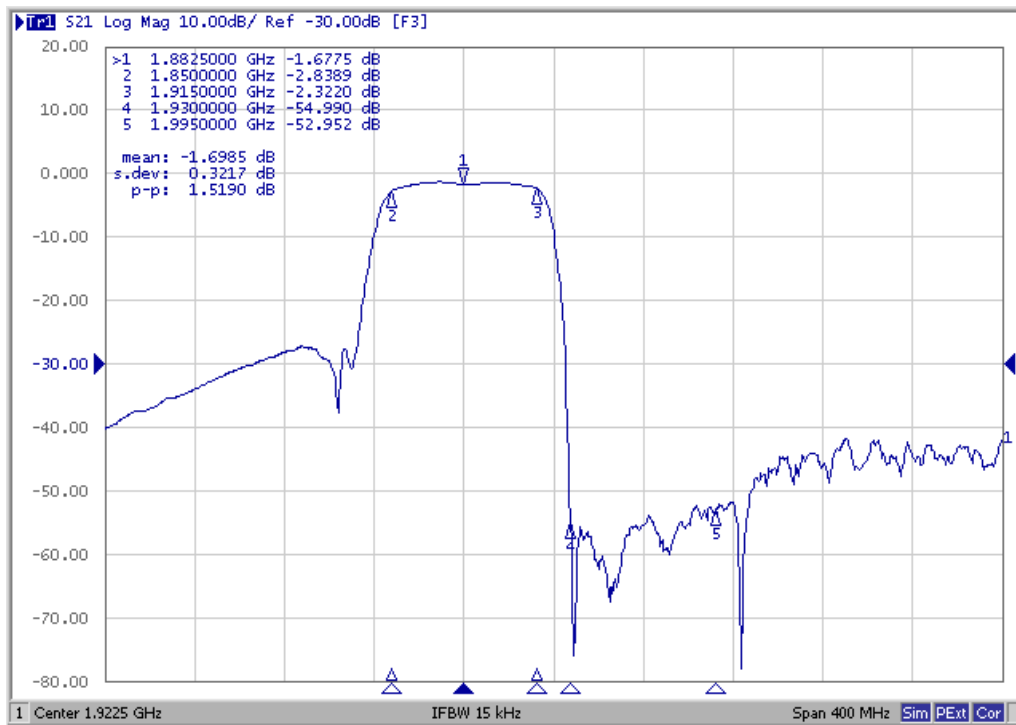
Pin Description	
B,D,E,G,H,J	Ground
F	Ant
C	Tx (1882.5MHz)
A	Rx (1962.5MHz)

**Testing Environment**

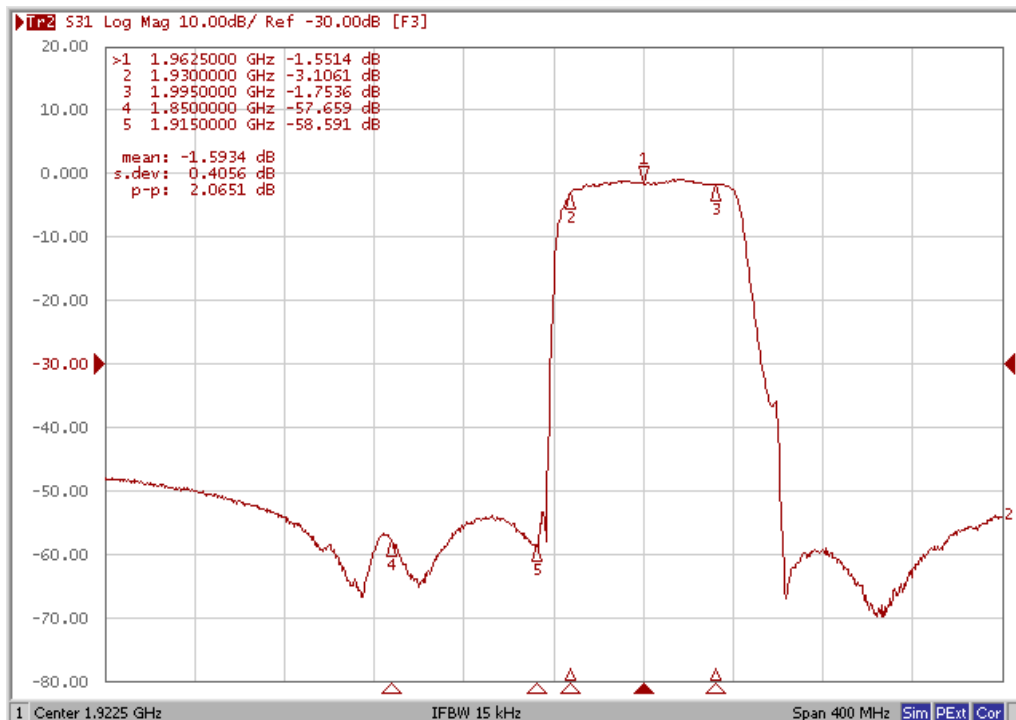


**□ Frequency Characteristics**

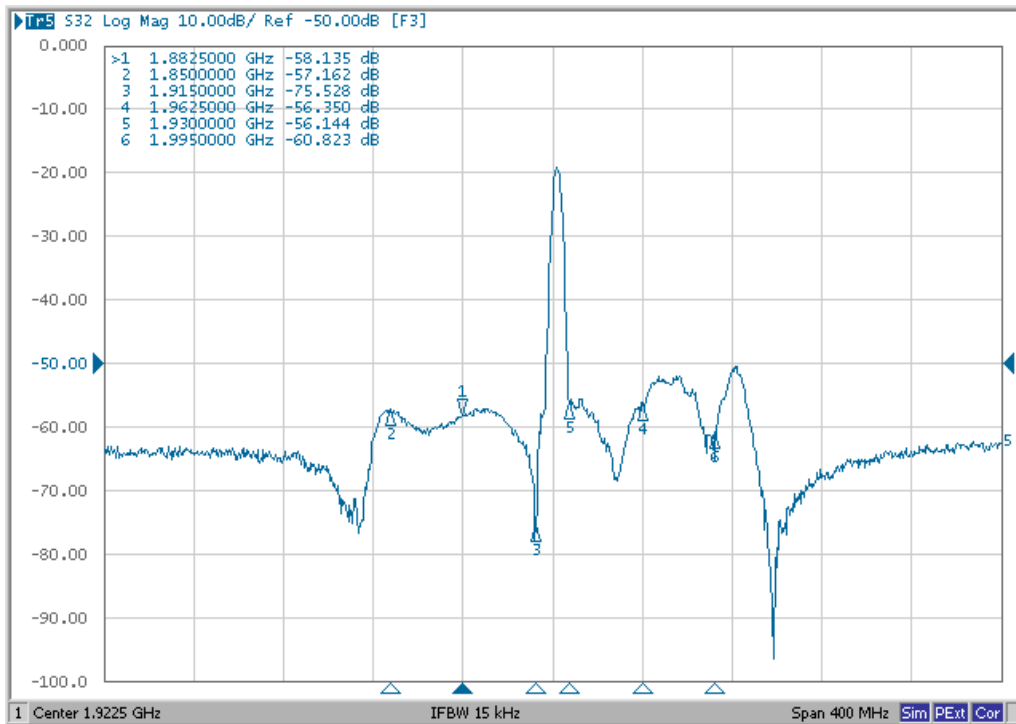
**Tx to Ant**



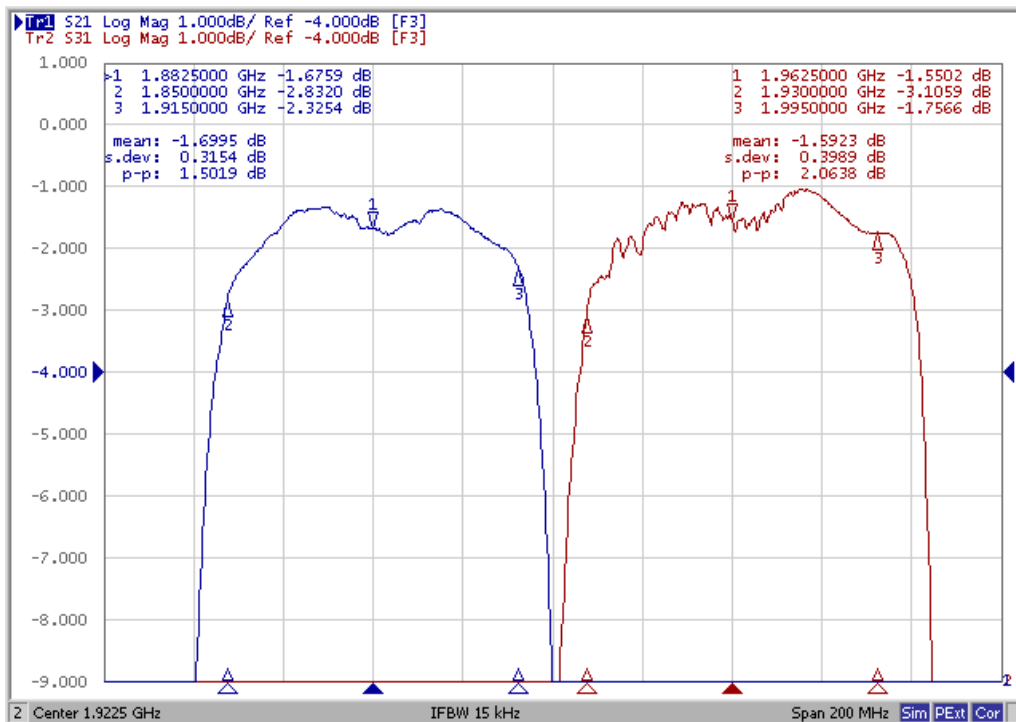
**Ant to Rx**



**Isolation**

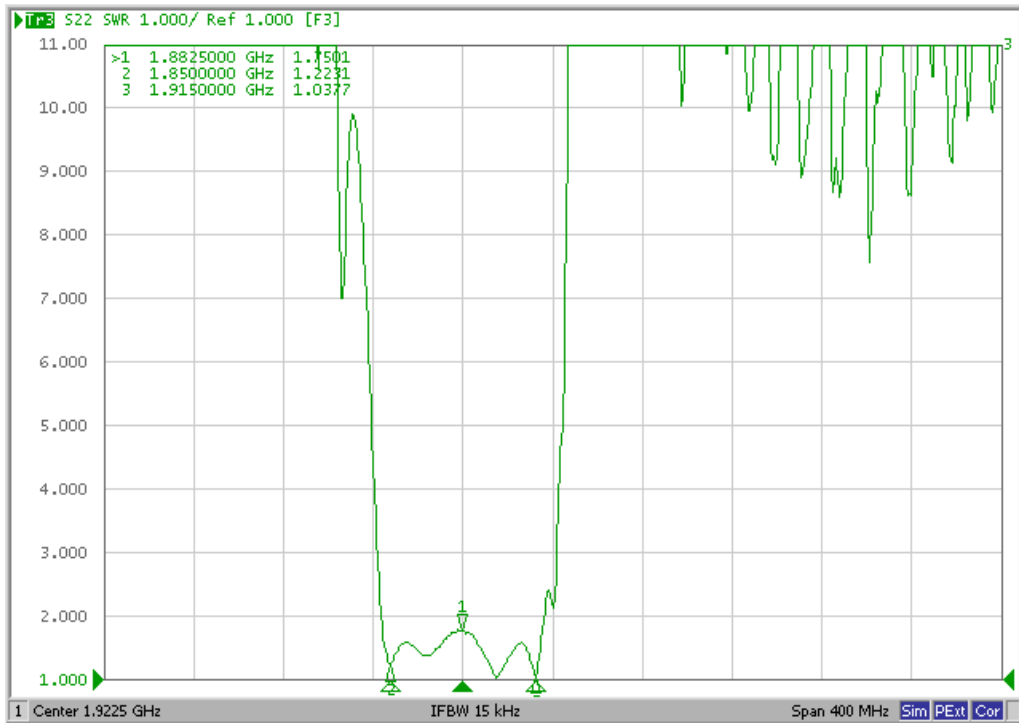


**Ripple**

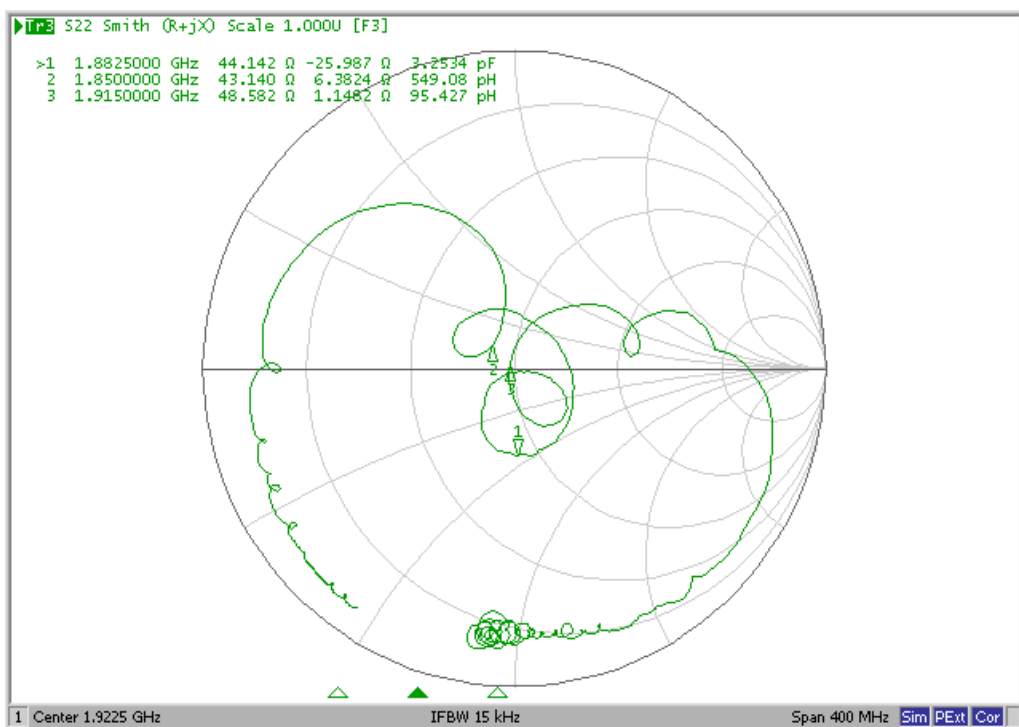




VSWR (Tx Port)



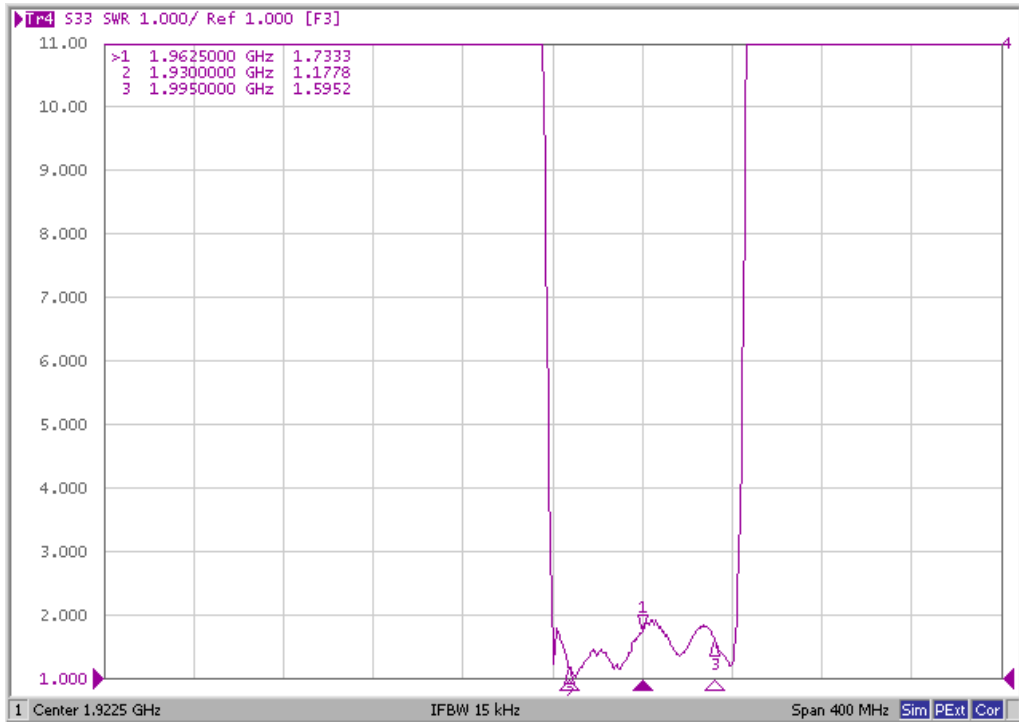
Smith Chart (Tx Port)



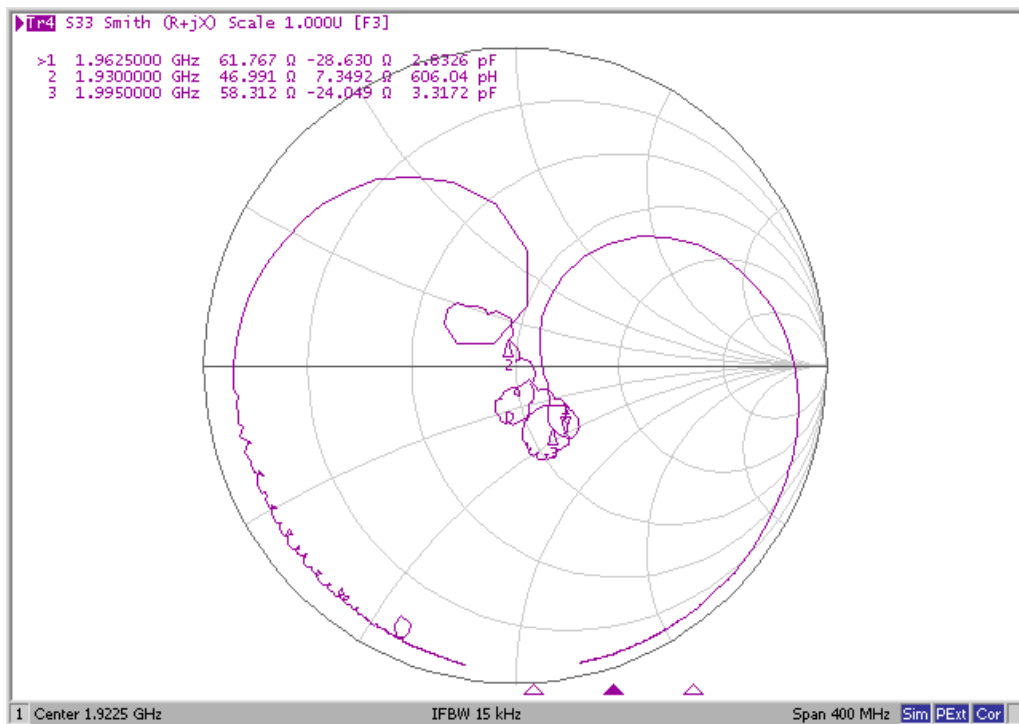




VSWR (Rx Port)

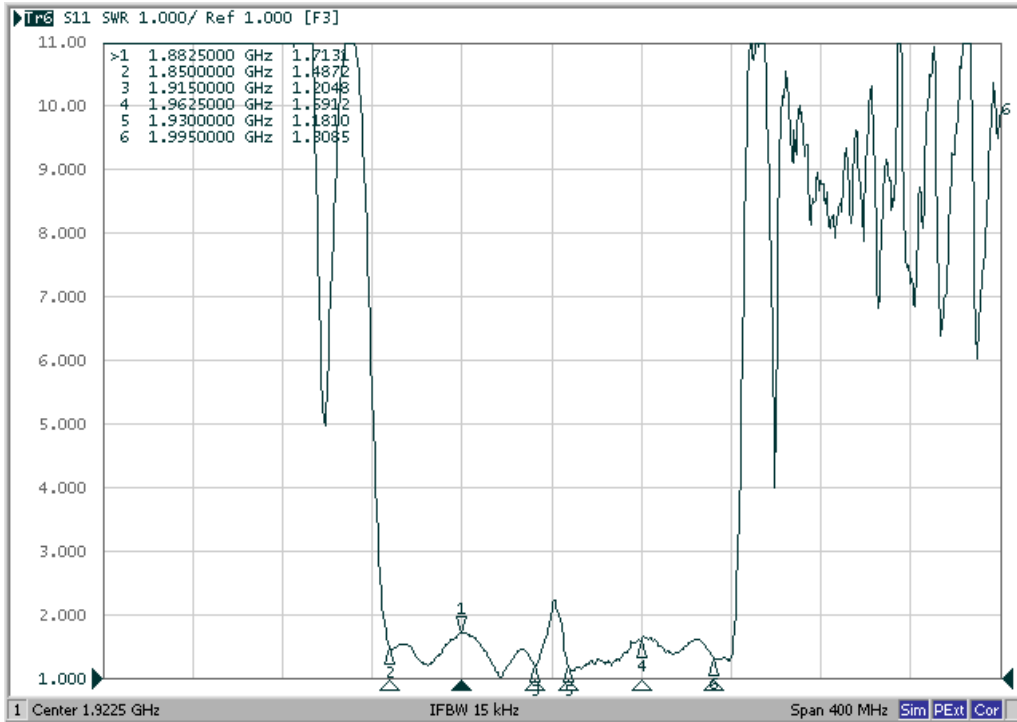


Smith Chart (Rx Port)

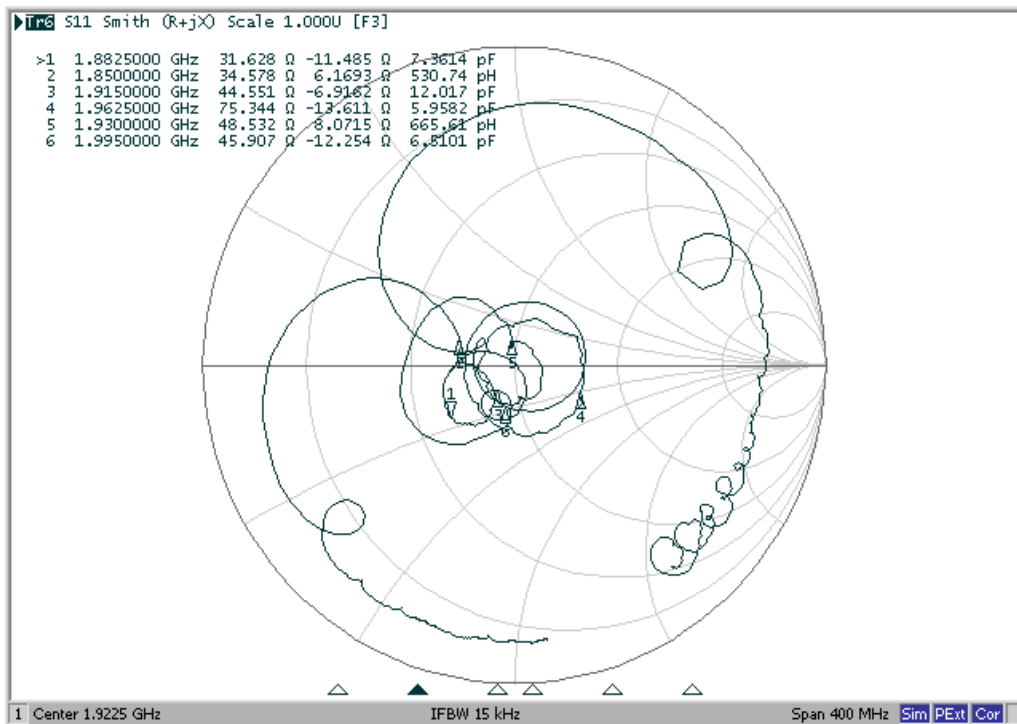




VSWR (ANT Port)



Smith Chart (ANT Port)





Wide Span

