



Total Solution Provider in Saw Device

SD-0942T2-C45

Band 8, SAW Duplexer
Revision 1 : May 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	-20	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Input Power at Tx Port	dBm	29dBm, Ta=+50°C, 10000h, WCDMA modulation		
Antenna Impedance(single ended) ⁽¹⁾	Ω	50//7.5nH		
Tx Impedance(single ended)	Ω	50		
Rx Impedance (single ended)	Ω	50		
Package type		C45		
Length x Width	mm ²	2.0 x 1.6		
Height	mm	0.5		



Electrical Specification

Tx to Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	880.24 ~ 914.76	dB	-	2.1	3.2
	882.4 ~ 912.6	dB	-	1.9	2.4
Ripple	880.0 ~ 915.0	dB _{p-p}	-	1.1	2.8
VSWR of Ant Port	880.0 ~ 915.0	-	-	1.7	2.1
VSWR of Tx Port	880.0 ~ 915.0	-	-	2.0	2.3
Attenuation	10.0 ~ 728.0	dB	35	38	-
	728.0 ~ 798.0	dB	30	38	-
	927.4 ~ 957.6	dB	44	54	-
	1565.0 ~ 1607.0	dB	45	47	-
	1710.0 ~ 2170.0	dB	45	50	-
	2400.0 ~ 2745.0	dB	40	46	-
	5130.0 ~ 5825.0	dB	12	20	-

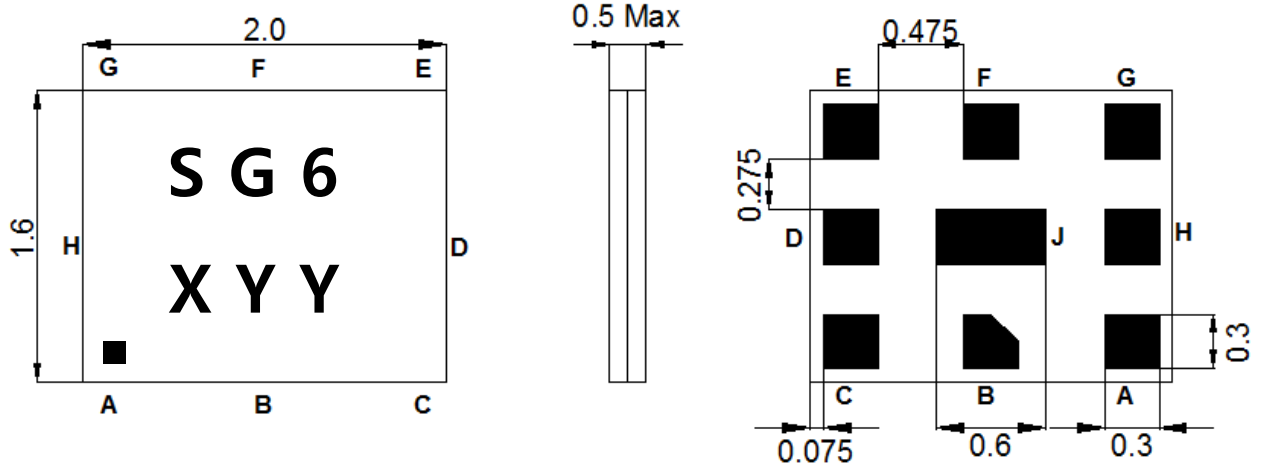


Ant to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	925.0 ~ 960.0	dB	-	2.1	2.9
	927.4 ~ 957.6	dB	-	2.0	2.4
Ripple	925.0 ~ 960.0	dB _{p-p}	-	1.0	2.2
VSWR of Ant Port	925.0 ~ 960.0	-	-	1.6	2.3
VSWR of Rx Port	925.0 ~ 960.0	-	-	1.9	2.3
Attenuation	699.0 ~ 798.0	dB	45	60	-
	882.4 ~ 912.6	dB	50	55	-
	1045.0 ~ 2880.0	dB	40	49	-

Tx to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	882.4 ~ 912.6	dB	55	57	-
	915.0 ~ 925.0	dB	16	20	-
	927.4 ~ 957.6	dB	51	55	-

Notes : (1) With Matching Network .

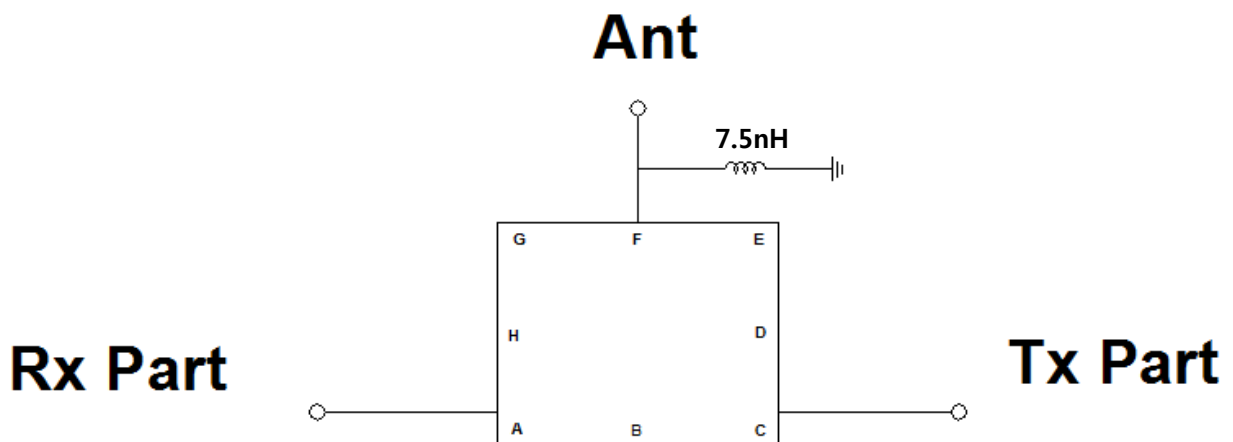
Package Dimensions



Marking Descriptions	
S	SAWNICS
G6	Series Number
X	Date Code(Year+Month)
YY	Lot No

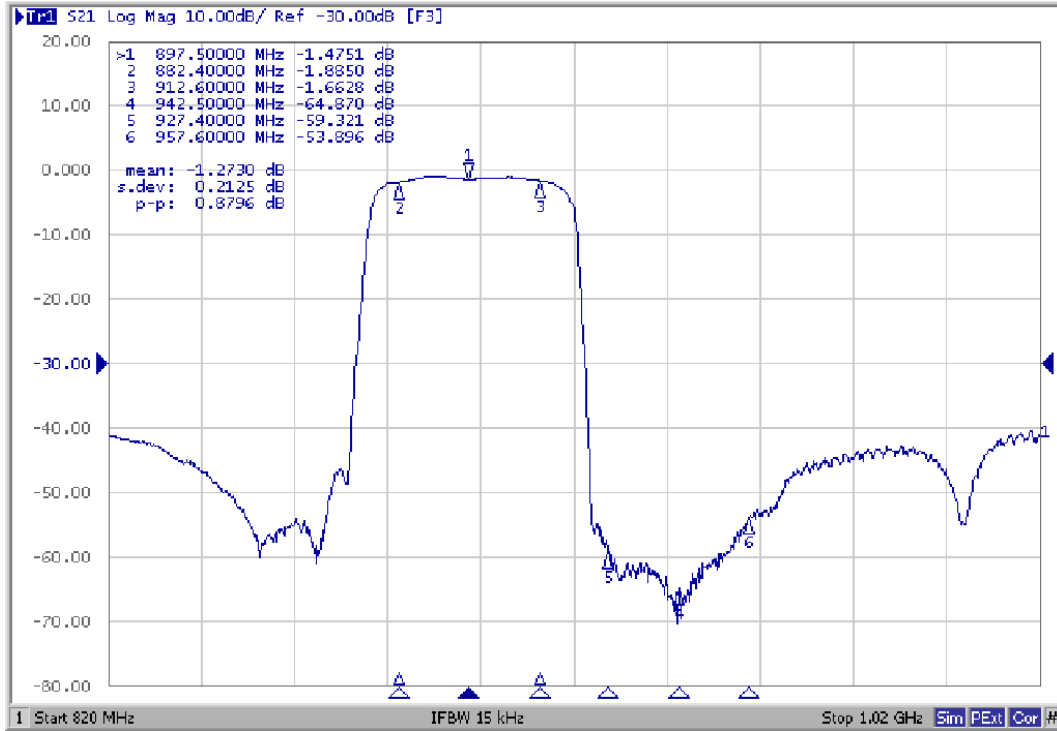
Pin Description	
B,D,E,G,H	Ground
F	Ant
C	Tx (897.5MHz)
A	Rx (942.5MHz)

Testing Environment

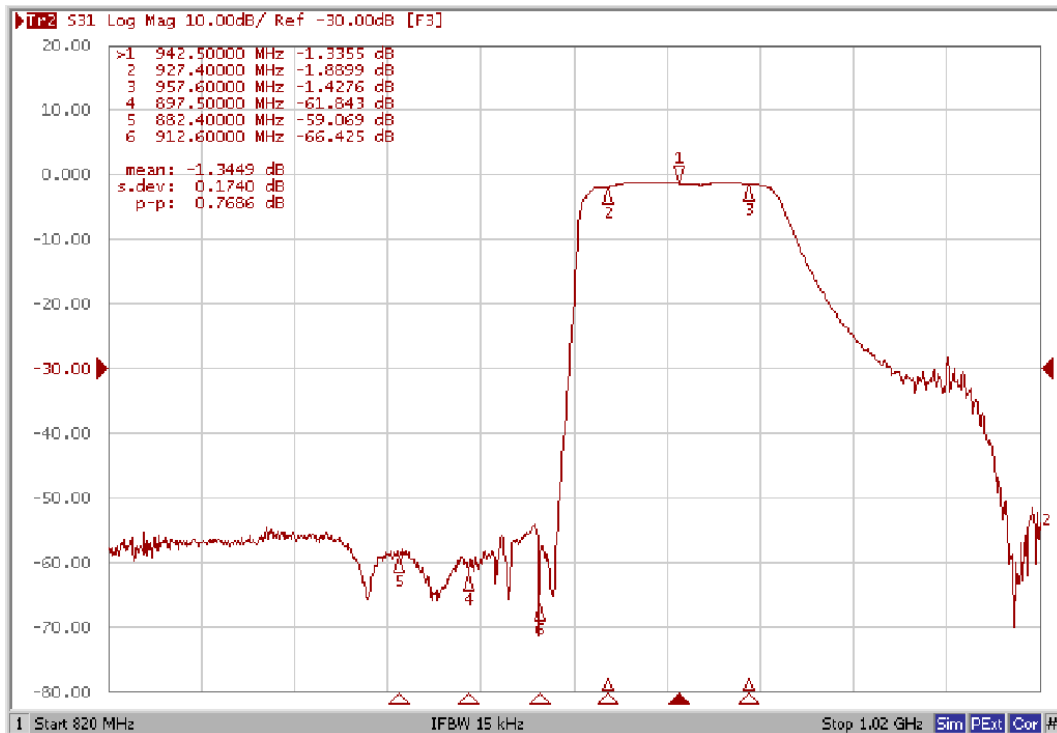


□ Frequency Characteristics

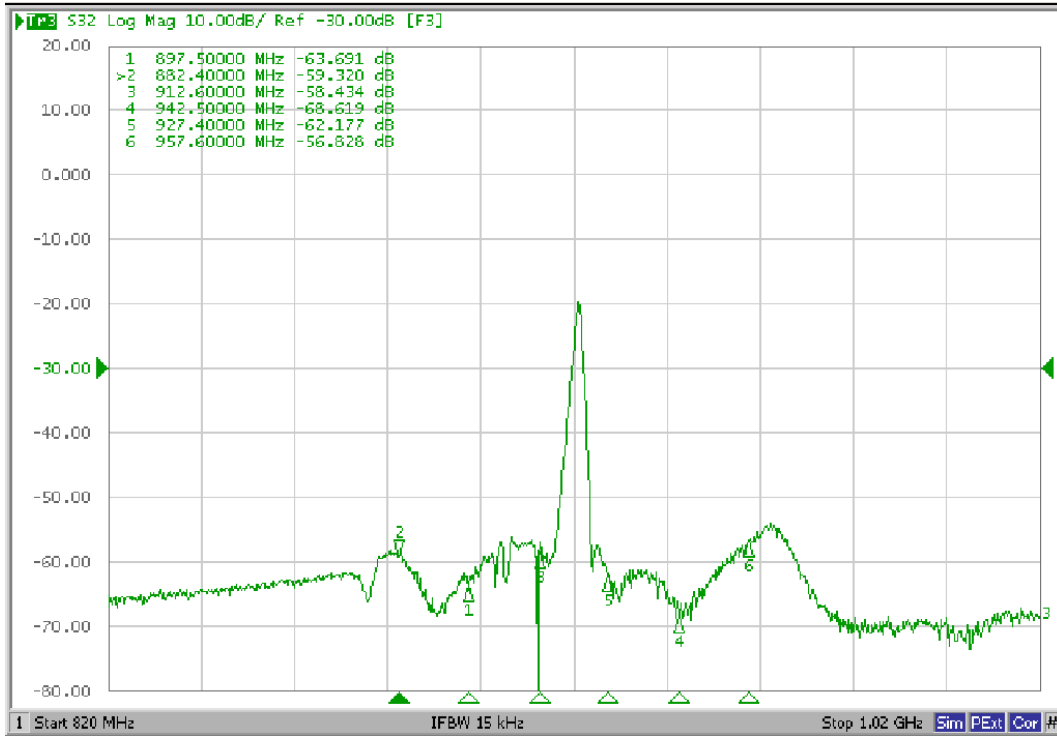
Tx to Ant



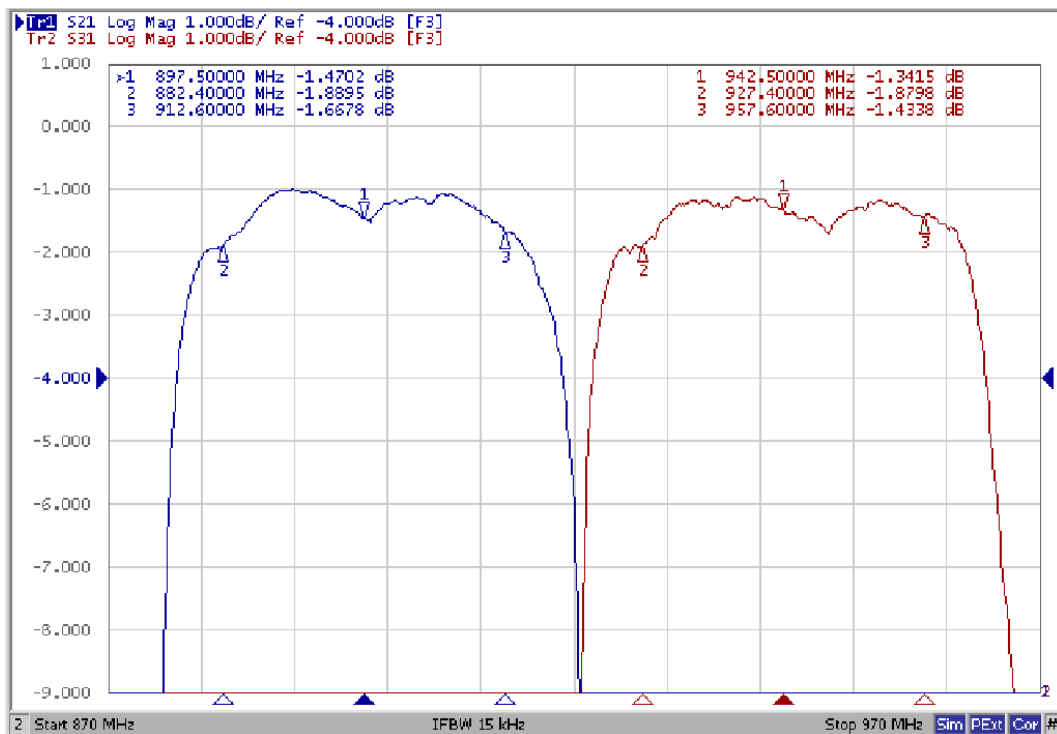
Ant to Rx



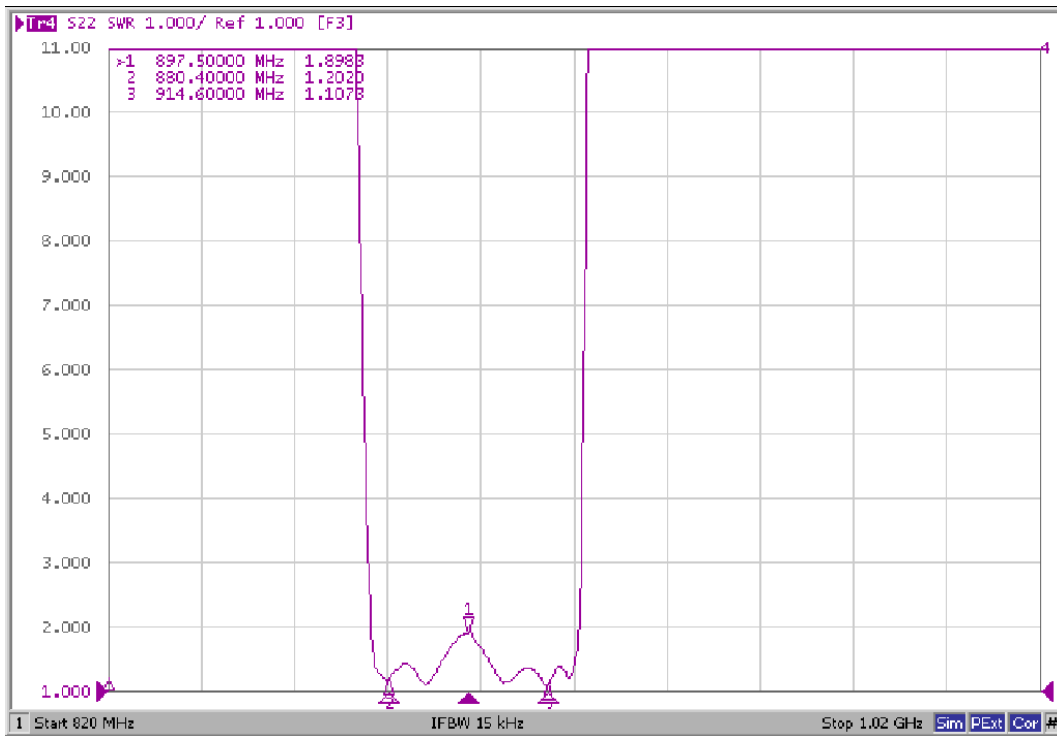
Isolation



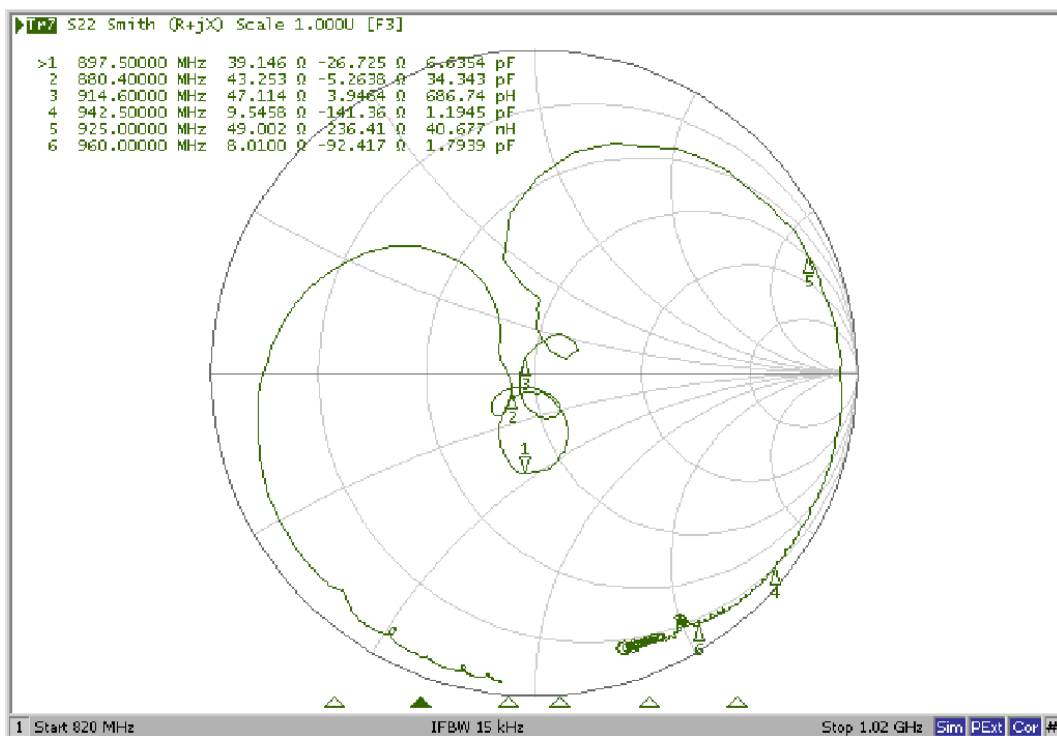
Ripple



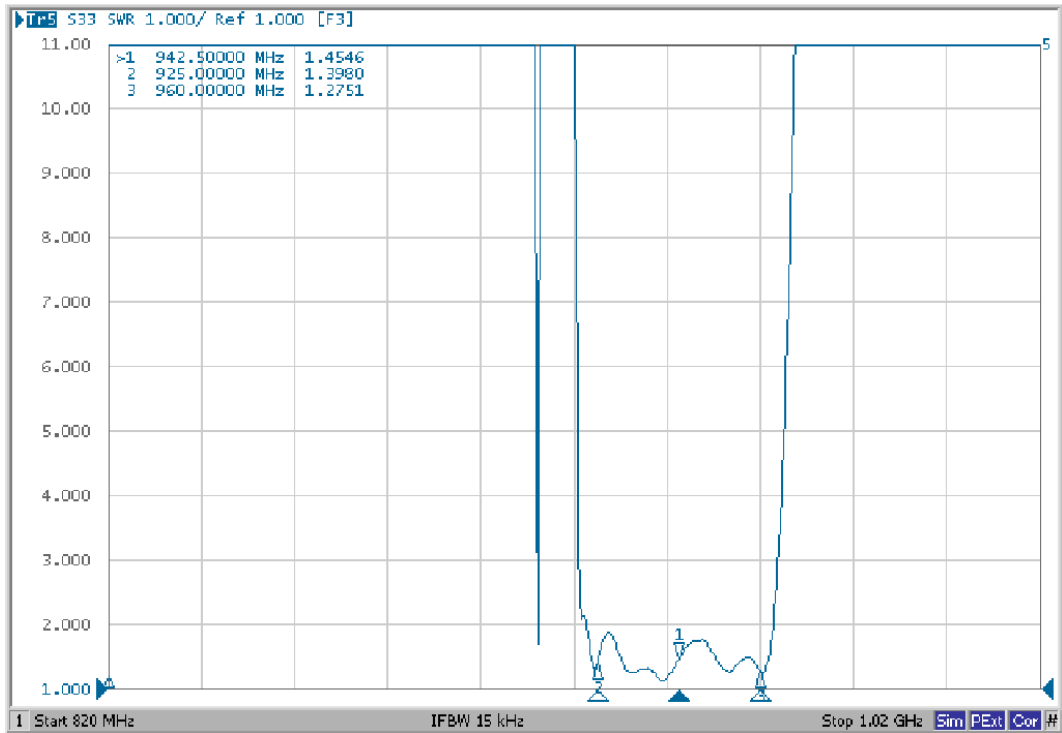
VSWR (Tx Port)



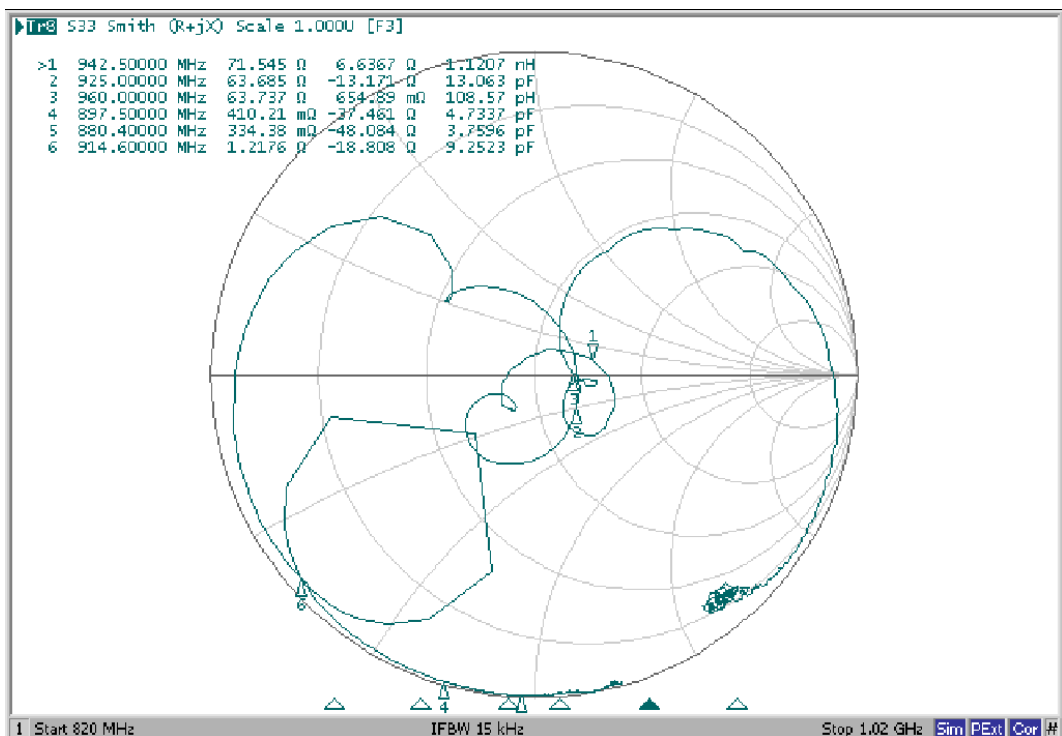
Smith Chart (Tx Port)



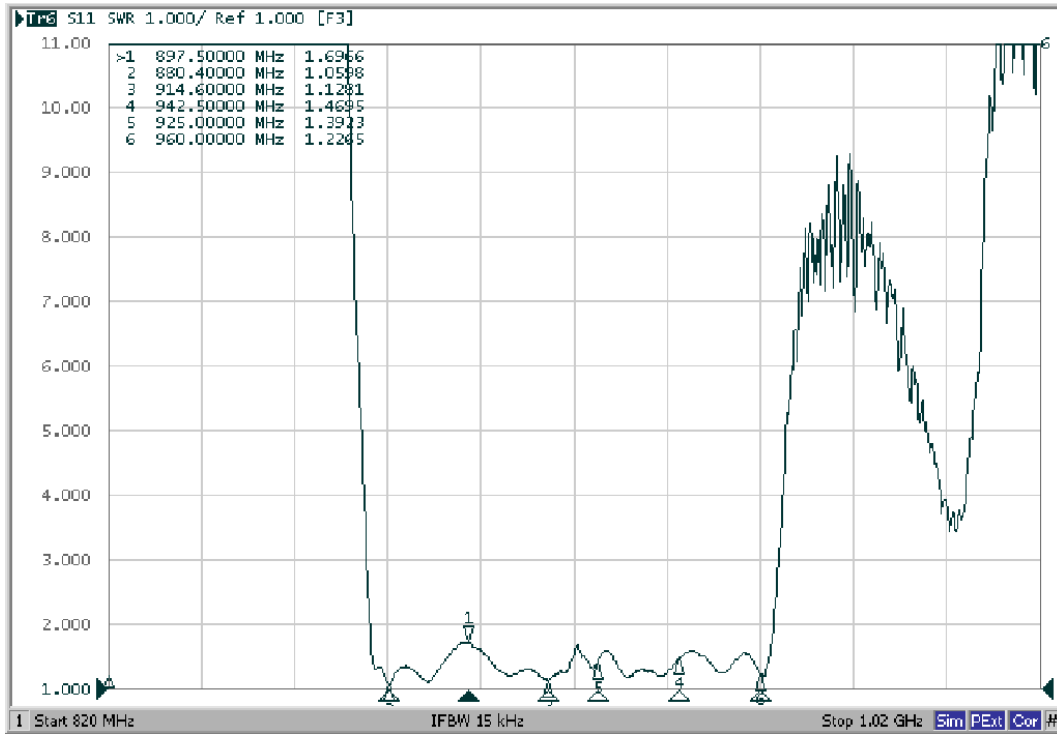
VSWR (Rx Port)



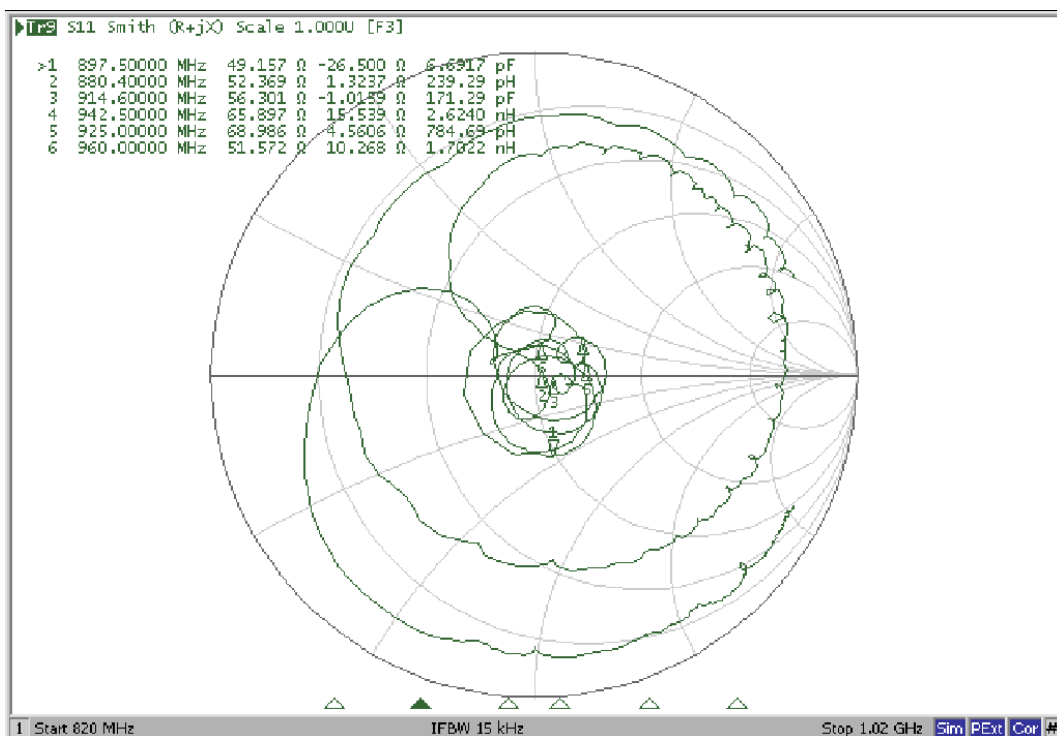
Smith Chart (Rx Port)



VSWR (ANT Port)



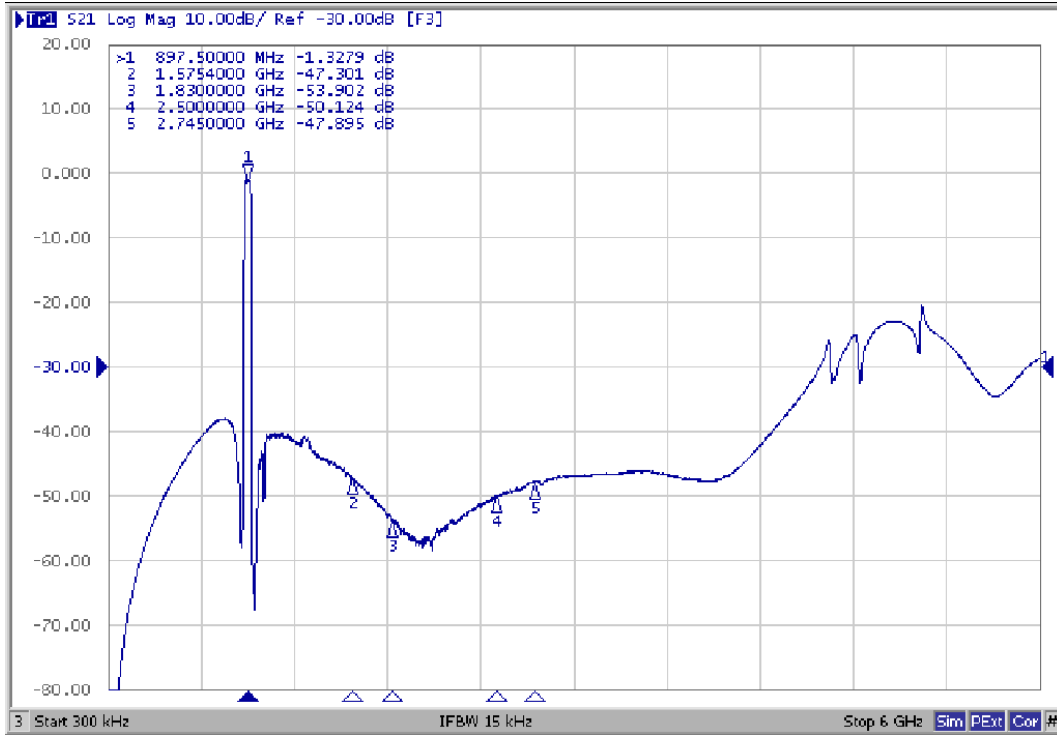
Smith Chart (ANT Port)





Wide Span

Tx



Rx

