



Total Solution Provider in Saw Device

SD-0881T2-C45

Band 5, SAW Duplexer
Revision 1 : April 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	-30	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Input Power at Tx Port	dBm	29dBm, Ta=+50°C, 50kh, CW		
Antenna Impedance(single ended)	Ω	50//8.2nH		
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	824.0 ~ 849.0	dB	-	1.5	1.9
Ripple	824.0 ~ 849.0	dB _{p-p}	-	0.3	0.9
VSWR of Ant Port	824.0 ~ 849.0	-	-	1.5	2.0
VSWR of Tx Port	824.0 ~ 849.0	-	-	1.7	2.0
Attenuation	DC ~ 750.0	dB	25	33	-
	779.0 ~ 804.0	dB	30	40	-
	860.0 ~ 870.0	dB	3	7	-
	869.0 ~ 894.0	dB	45	50	-
	1574.0 ~ 1577.0	dB	45	50	-
	1648.0 ~ 1698.0	dB	40	49	-
	2472.0 ~ 2547.0	dB	25	33	-

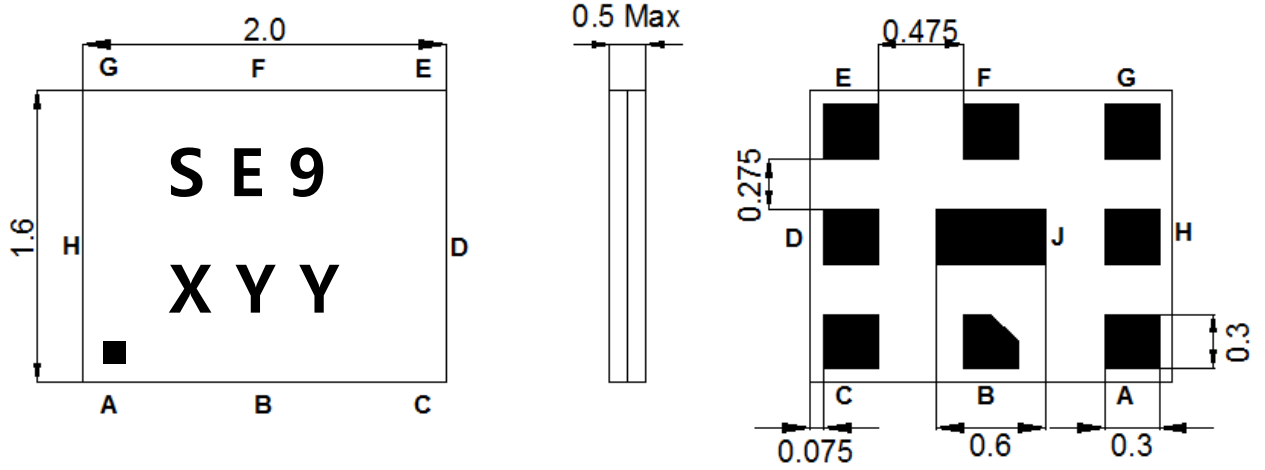


Ant to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	869.0 ~ 894.0	dB	-	1.8	2.4
Ripple	869.0 ~ 894.0	dB _{p-p}	-	0.6	1.4
VSWR of Ant Port	869.0 ~ 894.0	-	-	1.7	2.0
VSWR of Rx Port	869.0 ~ 894.0	-	-	1.7	2.0
Attenuation	779.0 ~ 804.0	dB	51	57	-
	824.0 ~ 849.0	dB	51	54	-

Tx to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	824.0 ~849.0	dB	55	58	-
	849.0 ~ 869.0	dB	12	14	-
	869.0 ~ 894.0	dB	47	51	-

Notes : (1) With Matching Network .

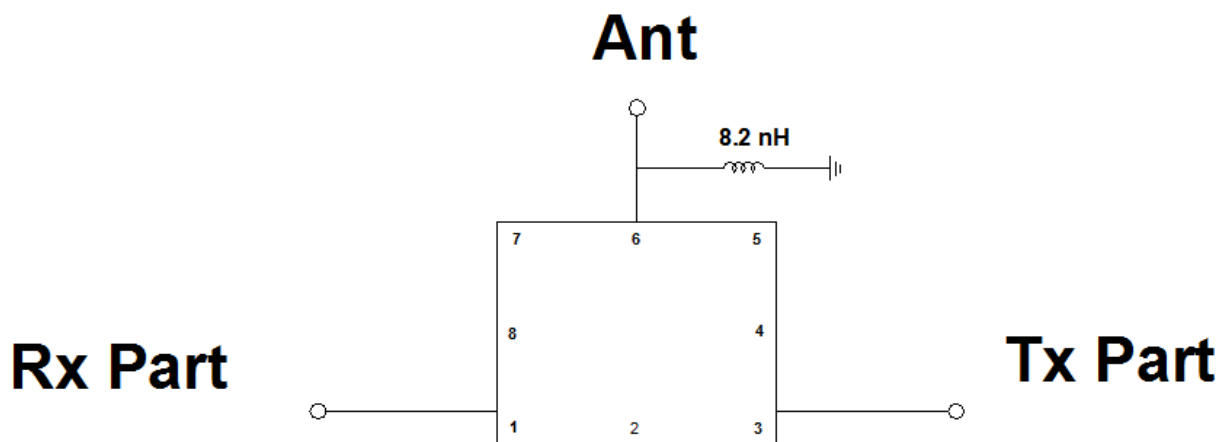
Package Dimensions



Marking Descriptions	
S	SAWNICS
E9	Series Number
X	Date Code(Year+Month)
YY	Lot No

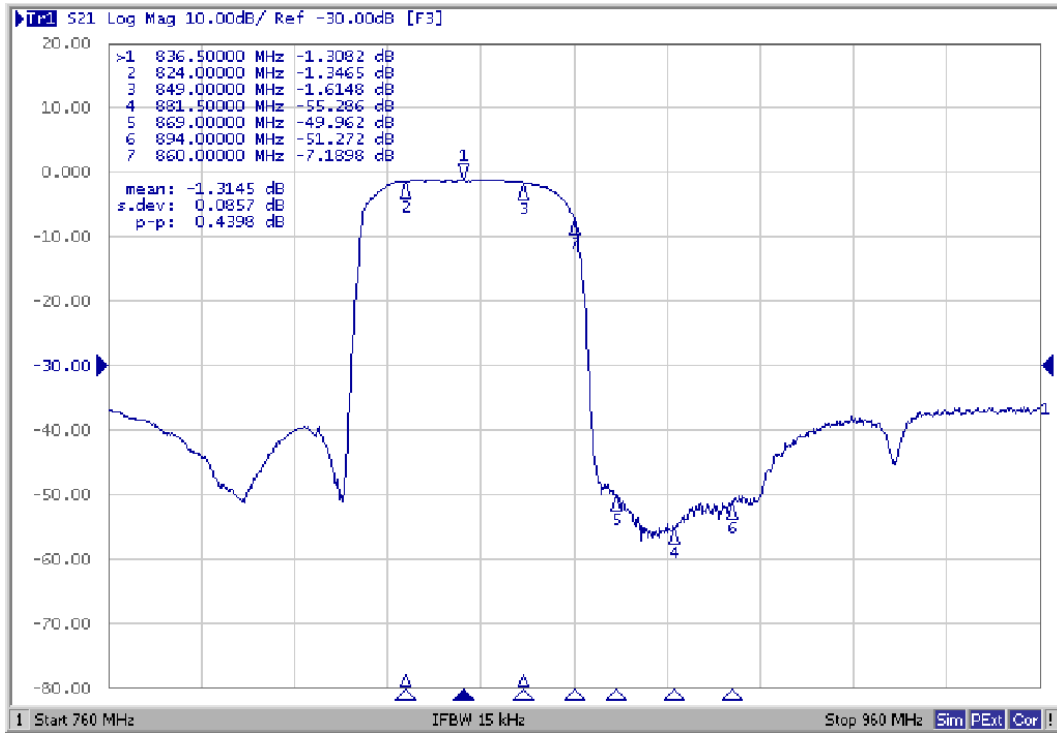
Pin Description	
B,D,E,G,H	Ground
F	Ant
C	Tx (836.5MHz)
A	Rx (881.5MHz)

Testing Environment

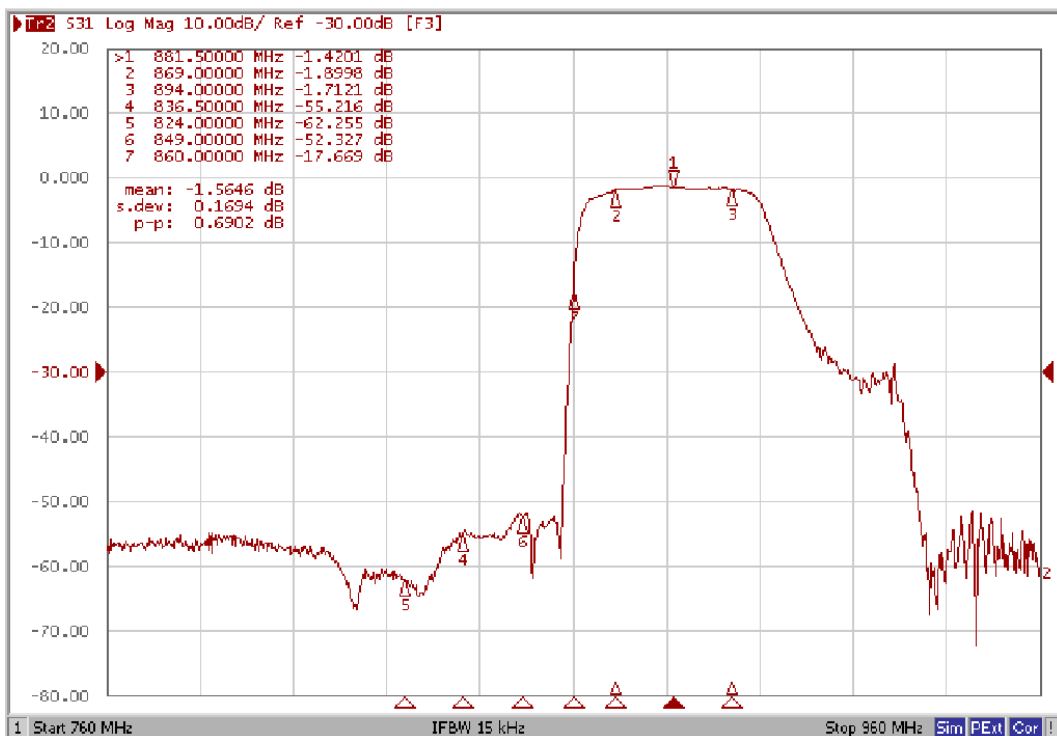


□ Frequency Characteristics

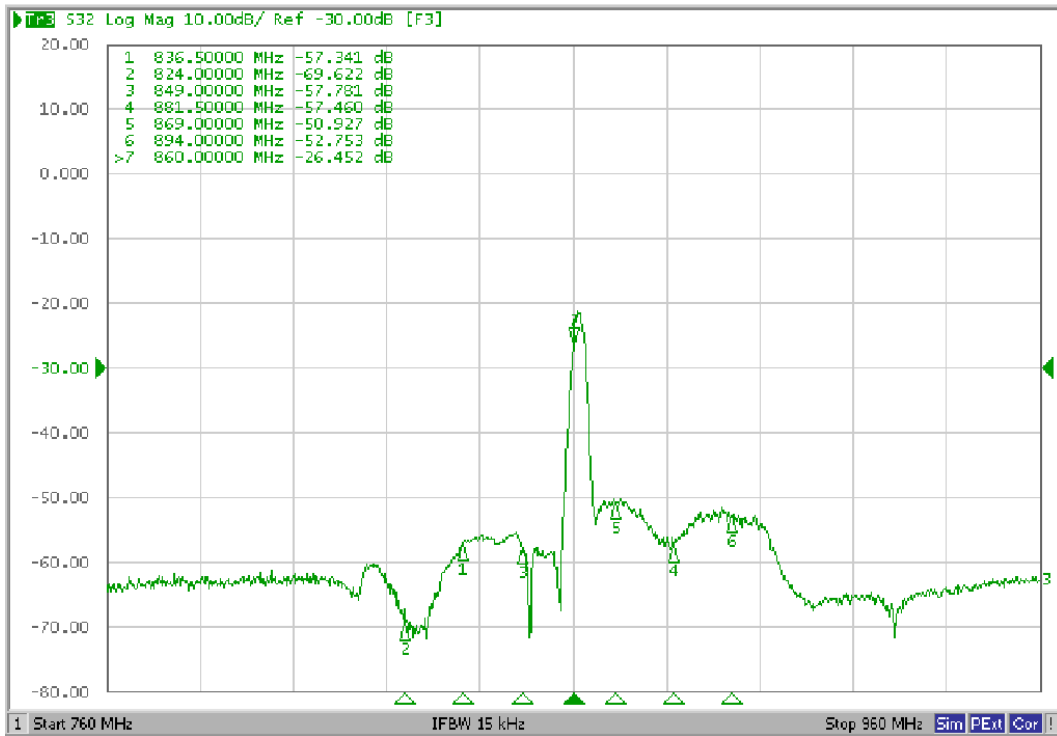
Tx to Ant



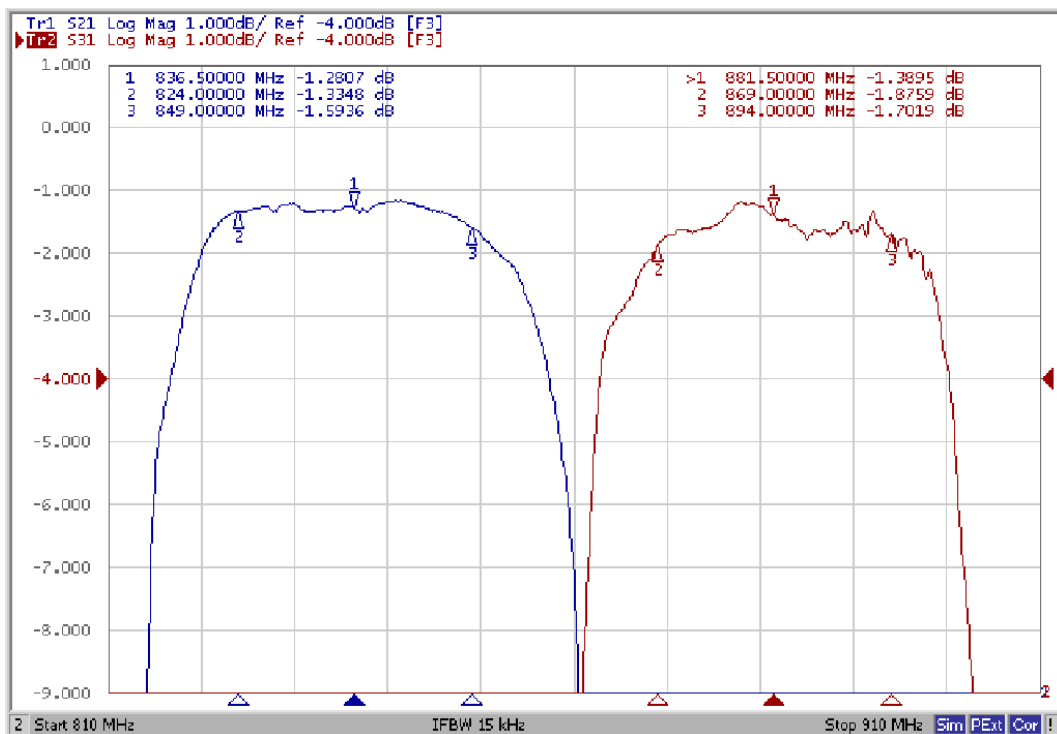
Ant to Rx



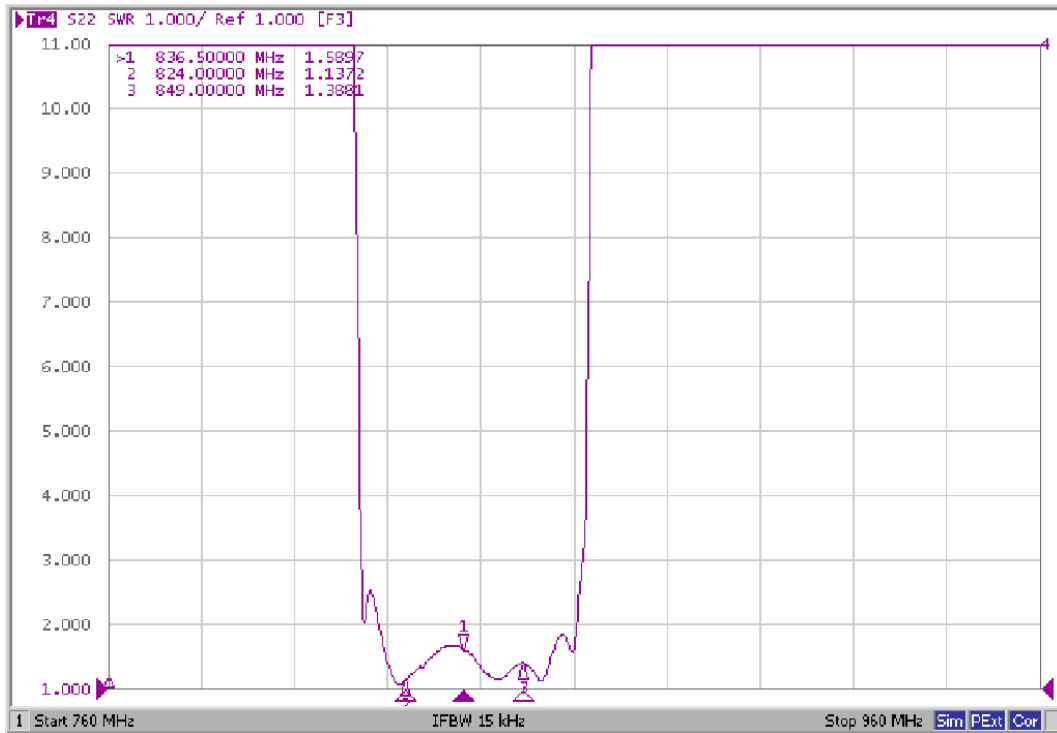
Isolation



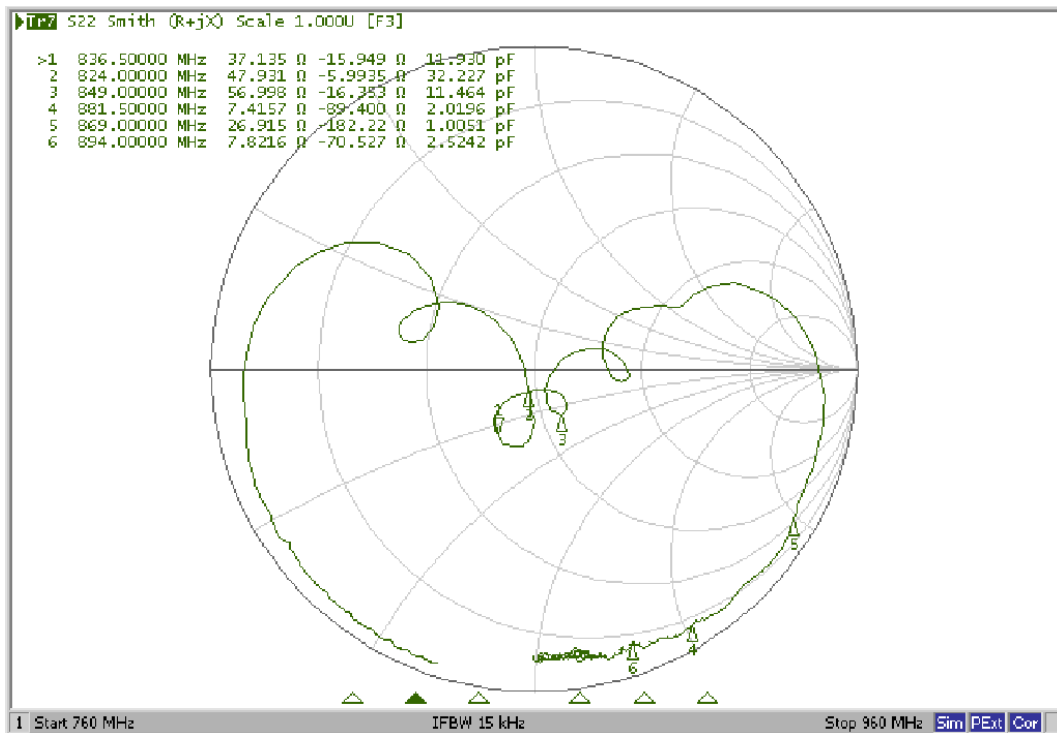
Ripple



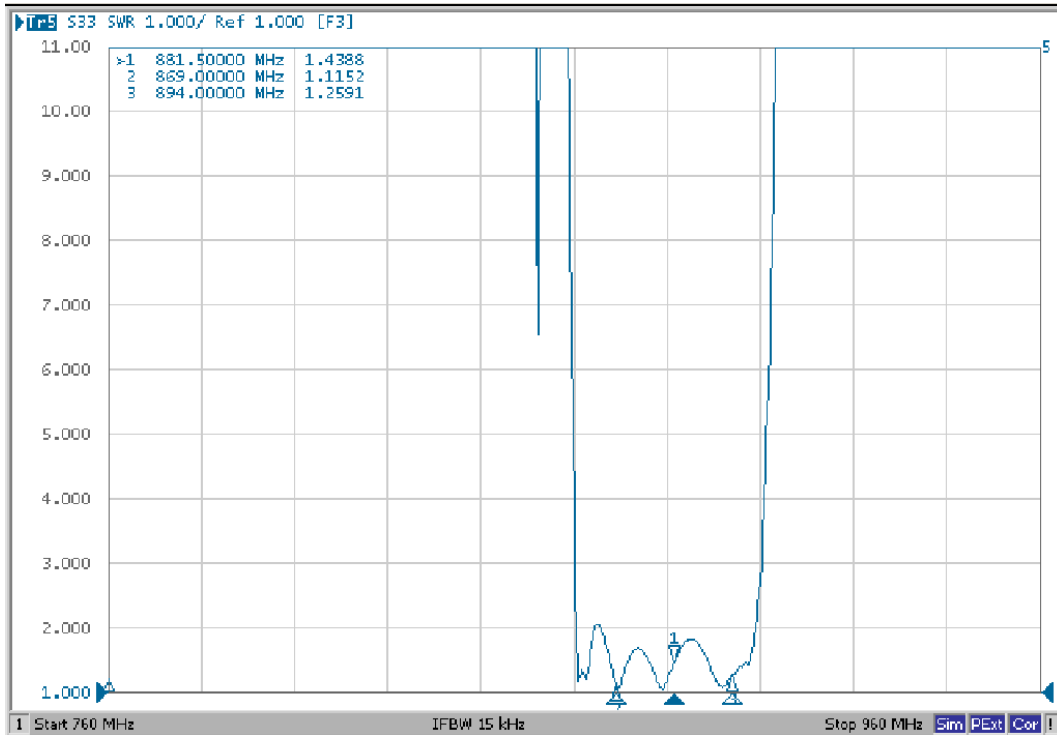
VSWR (Tx Port)



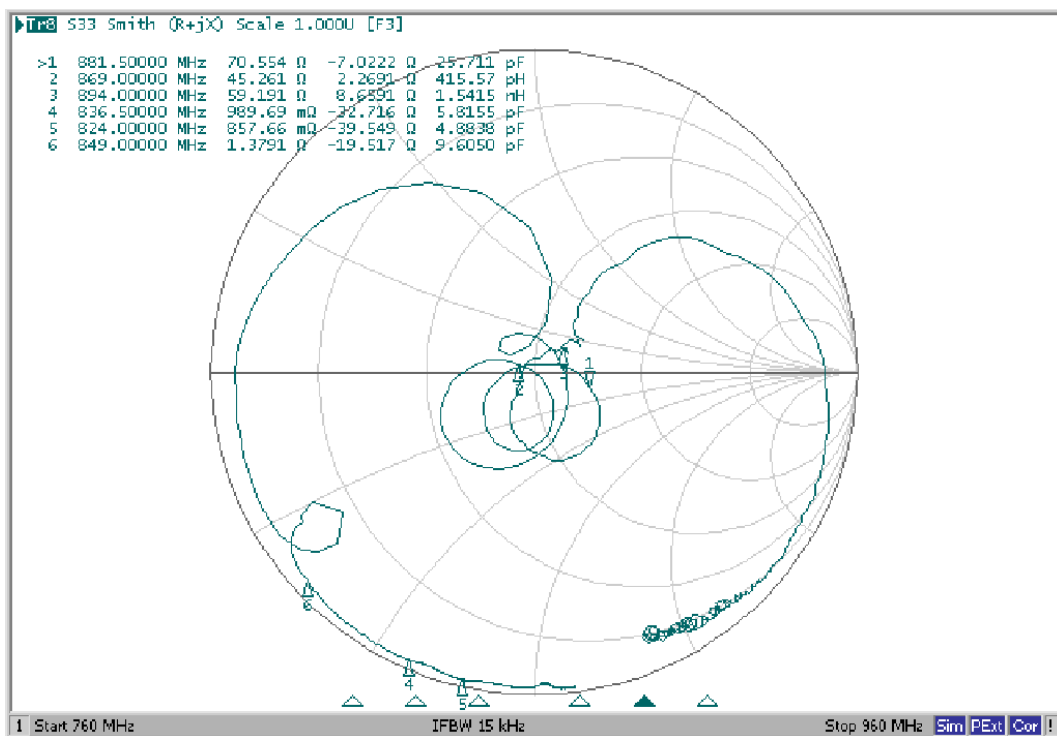
Smith Chart (Tx Port)



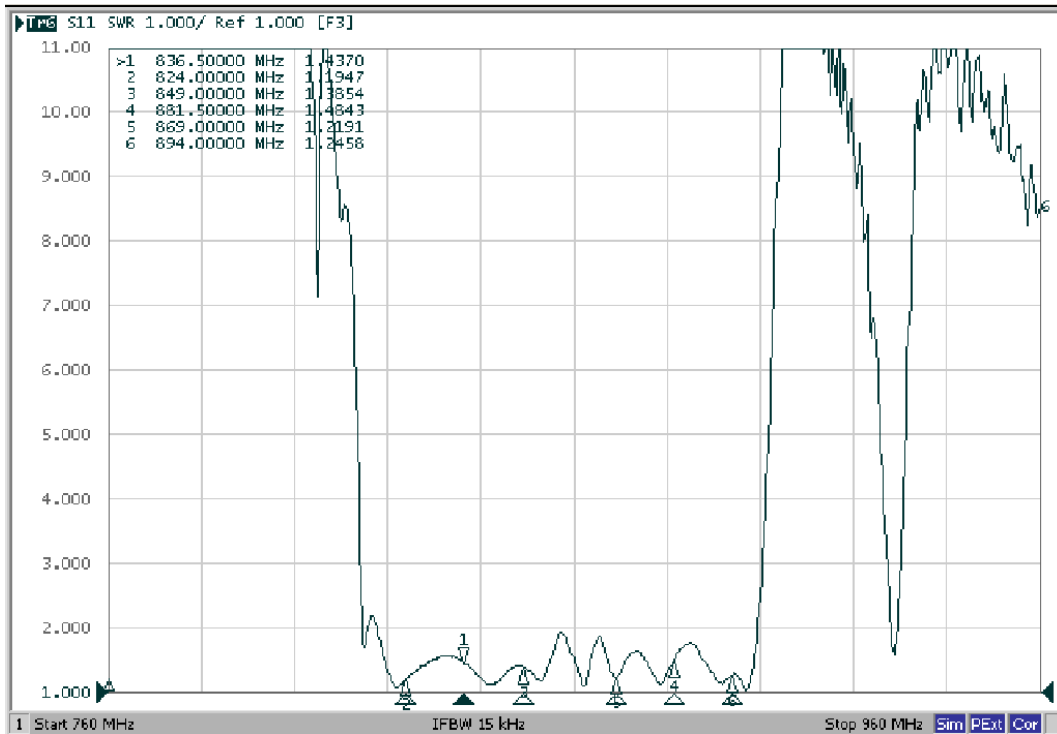
VSWR (Rx Port)



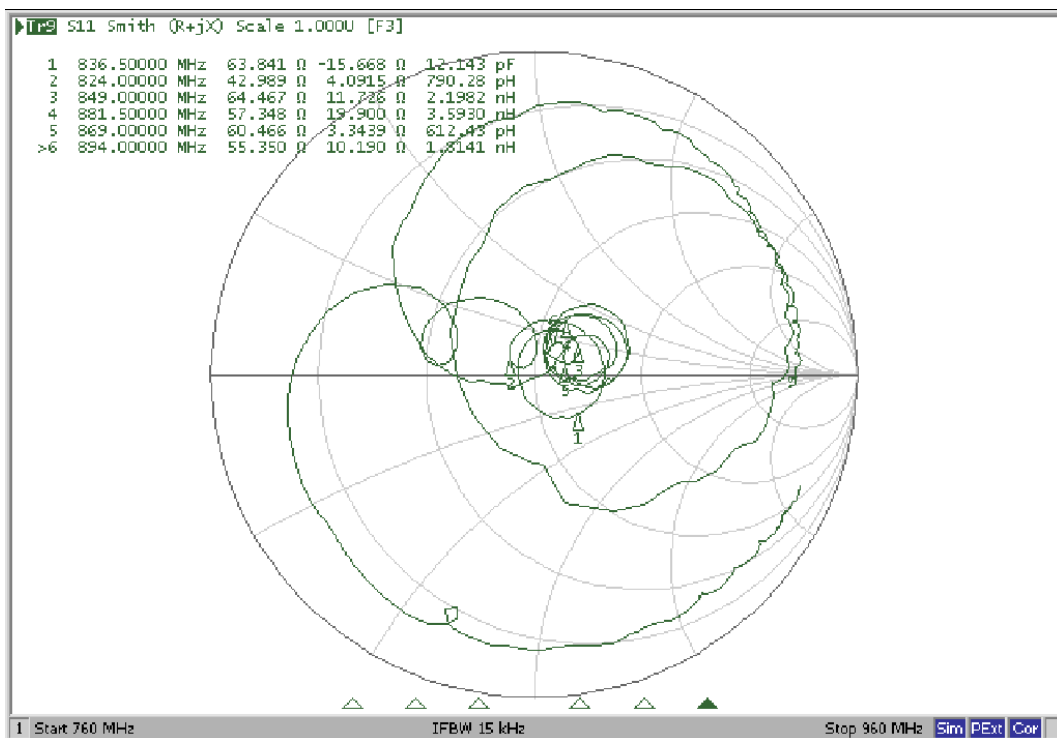
Smith Chart (Rx Port)



VSWR (ANT Port)



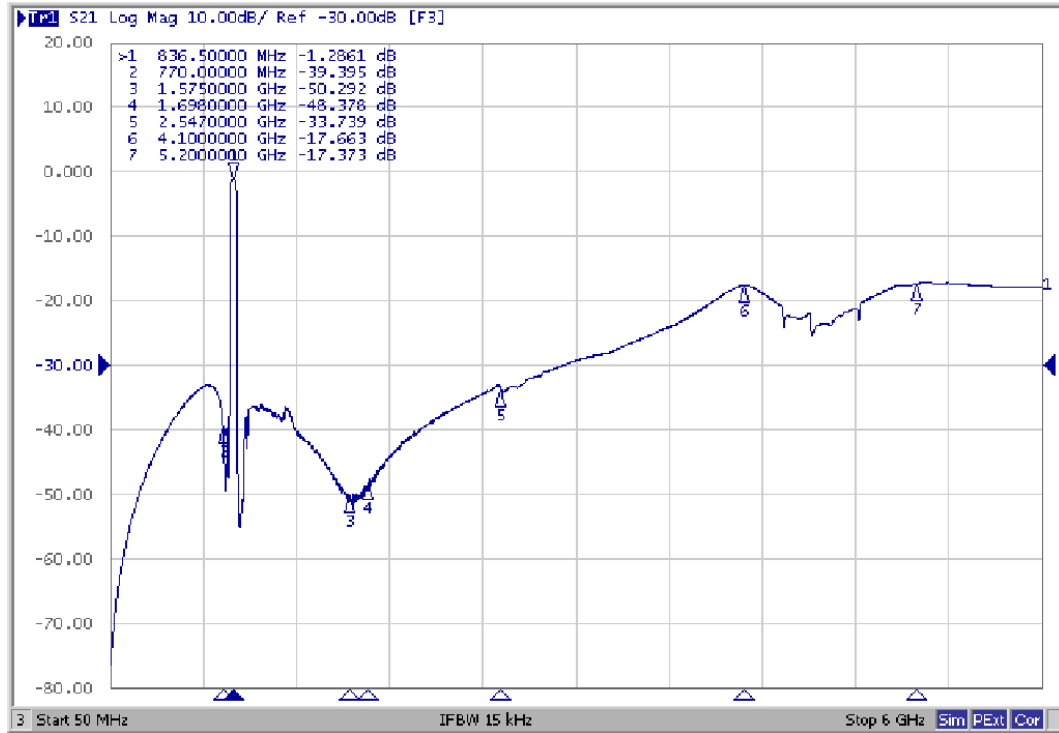
Smith Chart (ANT Port)





Wide Span

Tx



Rx

