



Total Solution Provider in Saw Device

SD-2132T2-C45

Band 4, SAW Duplexer
Revision 2: 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	-20	-	+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//3.3nH		
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	1710.0 ~ 1755.0	dB	-	1.5	2.0
Ripple Over any 5.0MHz in-band	1710.0 ~ 1755.0	dB _{p-p}	-	0.4	0.7
VSWR of Ant Port	1710.0 ~ 1755.0	-	-	1.5	2.0
VSWR of Tx Port	1710.0 ~ 1755.0	-	-	1.6	2.0
Attenuation	1559.0 ~ 1563.0	dB	42	46	-
	1565.42 ~ 1573.374	dB	43	47	-
	1573.374 ~ 1577.466	dB	43	48	-
	1577.466 ~ 1585.42	dB	43	47	-
	1597.5515 ~ 1605.886	dB	40	44	-
	2110.0 ~ 2155.0	dB	45	49	-
	2400.0 ~ 2500.0	dB	35	40	-
	3410.0 ~ 3520.0	dB	25	29	-
5130.0 ~ 5265.0	dB	15	19	-	

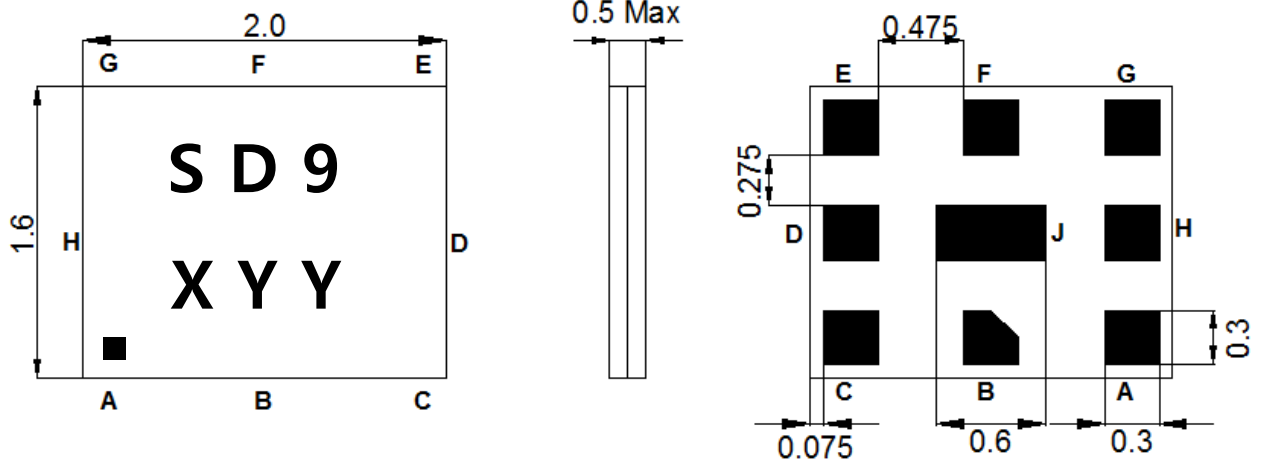


Ant to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	2110.0 ~ 2155.0	dB	-	1.8	2.5
Ripple Over any 5.0MHz in-band	2110.0 ~ 2155.0	dB _{p-p}	-	0.4	0.7
VSWR of Ant Port	2110.0 ~ 2155.0	-	-	1.8	2.2
VSWR of Rx Port	2110.0 ~ 2155.0	-	-	1.5	2.1
Attenuation	1.0 ~ 1710.0	dB	40	50	-
	1710.0 ~ 1755.0	dB	45	50	-
	2400.0 ~ 2500.0	dB	40	42	-
	4220.0 ~ 4310.0	dB	37	44	-
	6330.0 ~ 6465.0	dB	33	38	-

Tx to Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	1710.0 ~ 1755.0	dB	54	58	-
	1775.0 ~ 2110.0	dB	50	54	-
	2110.0 ~ 2155.0	dB	48	51	-

Notes : (1) With Matching Network .

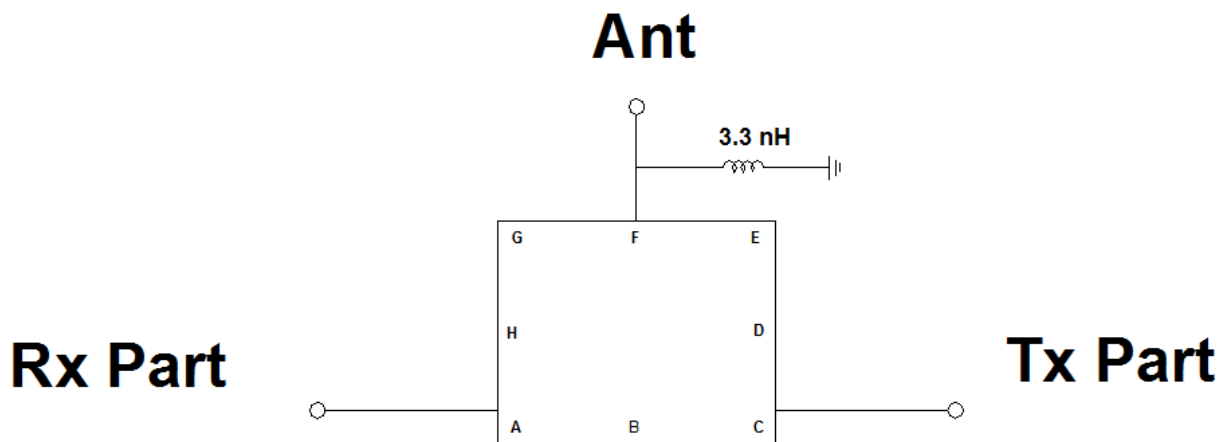
□ Package Dimensions



Marking Descriptions	
S	SAWNICS
D9	Series Number
X	Date Code(Year+Month)
YY	Lot No

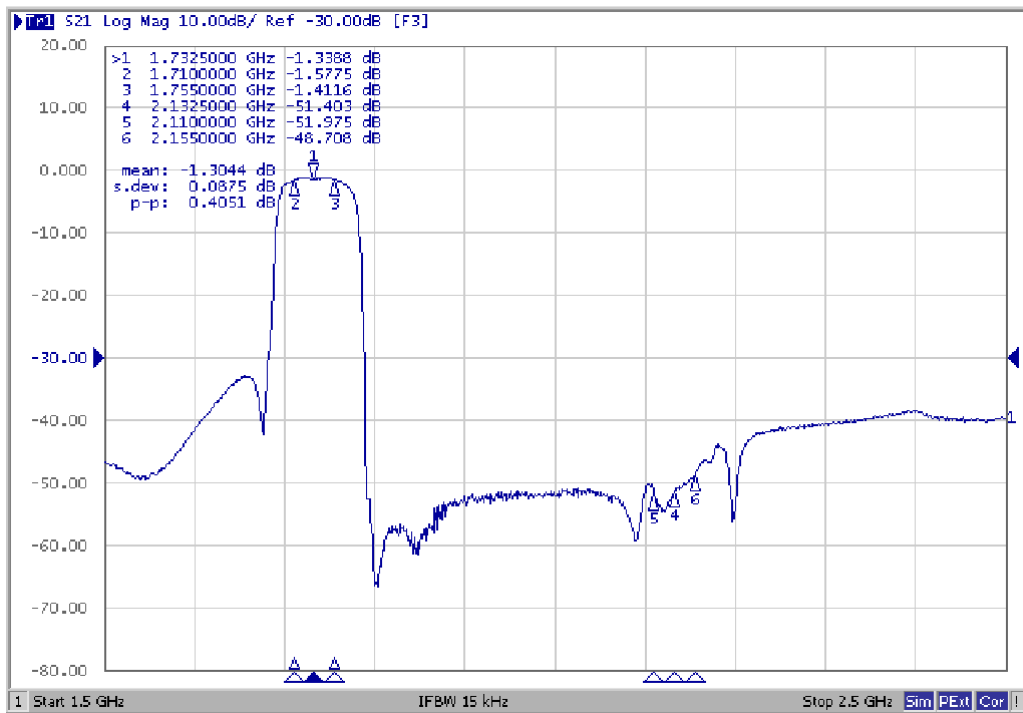
Pin Description	
B,D,E,G,H,J	Ground
F	Ant
C	Tx (1732.5MHz)
A	Rx (2132.5MHz)

□ Testing Environment

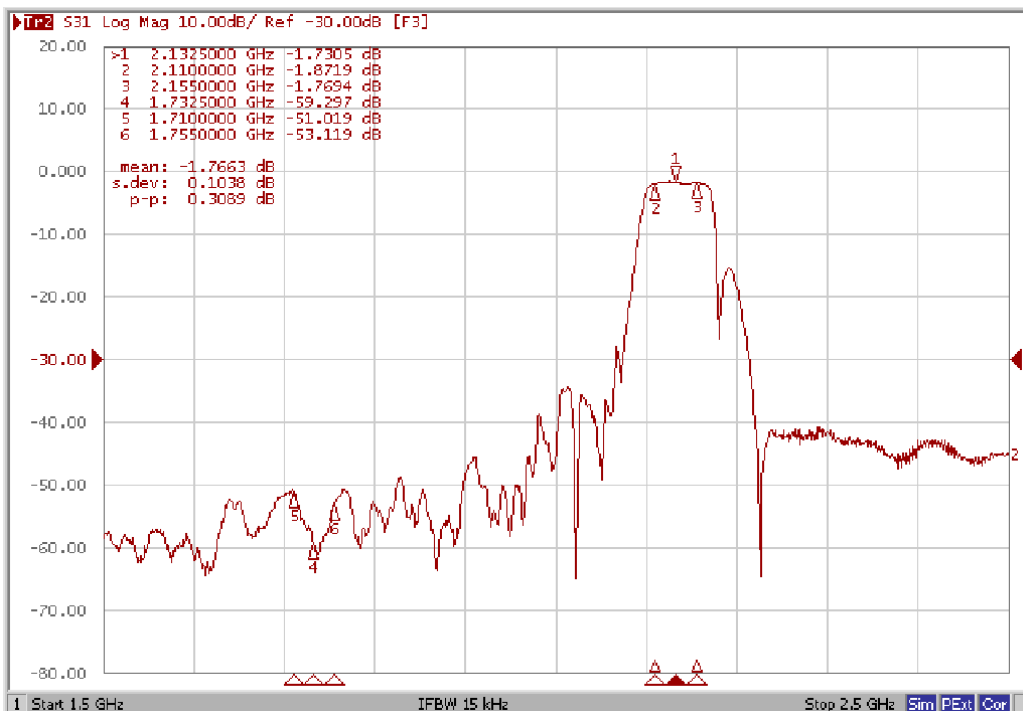


□ Frequency Characteristics

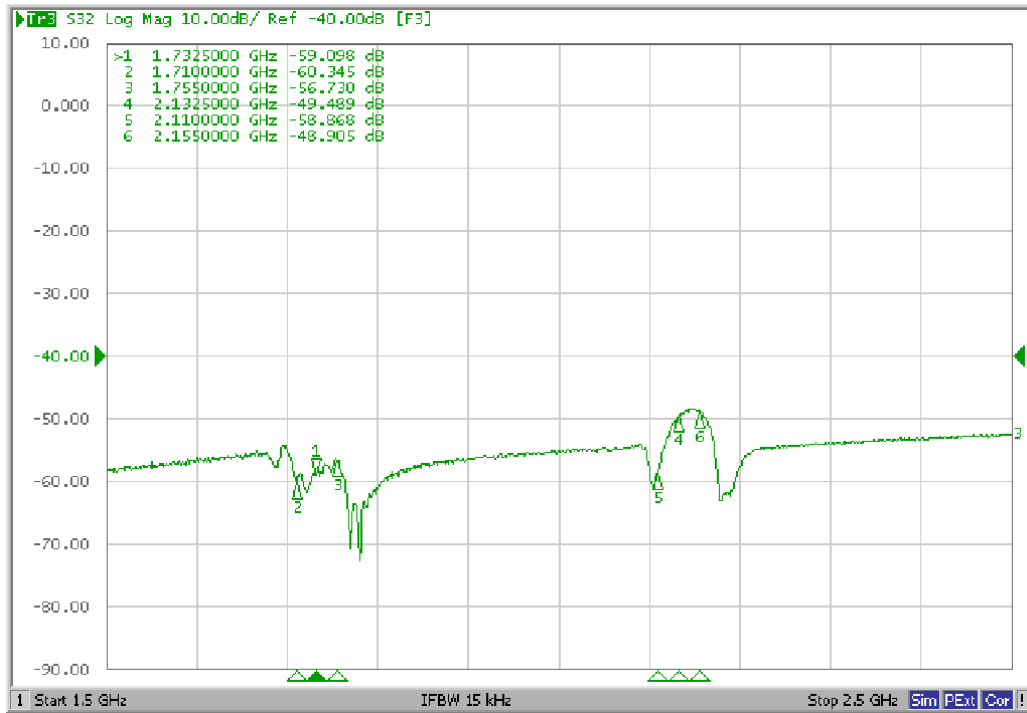
Tx to Ant



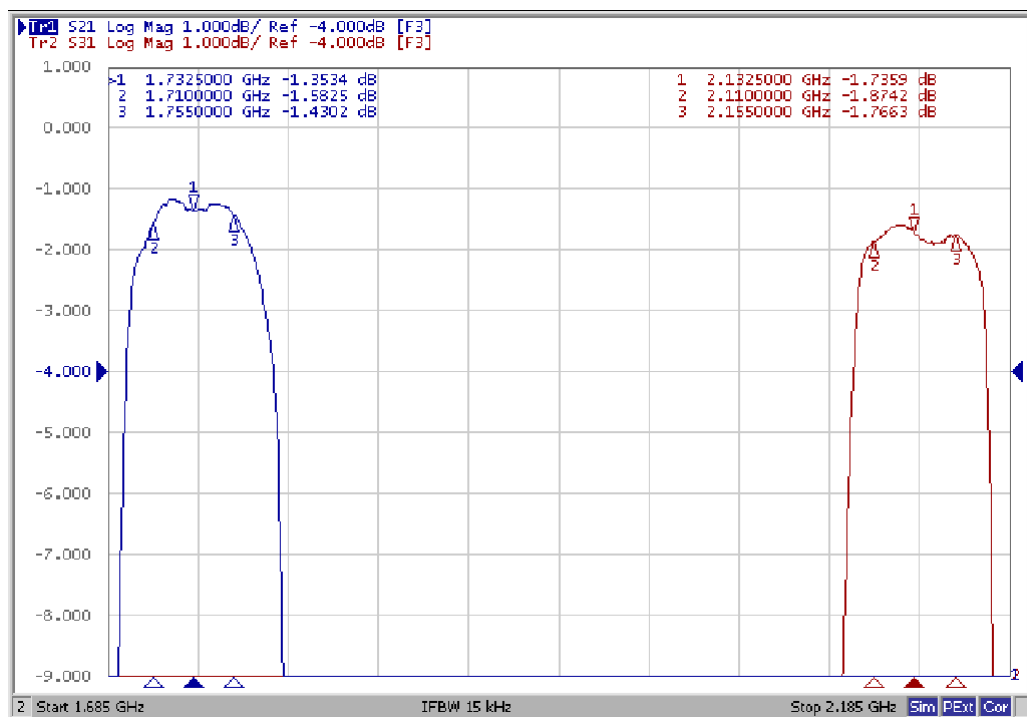
Ant to Rx



Isolation



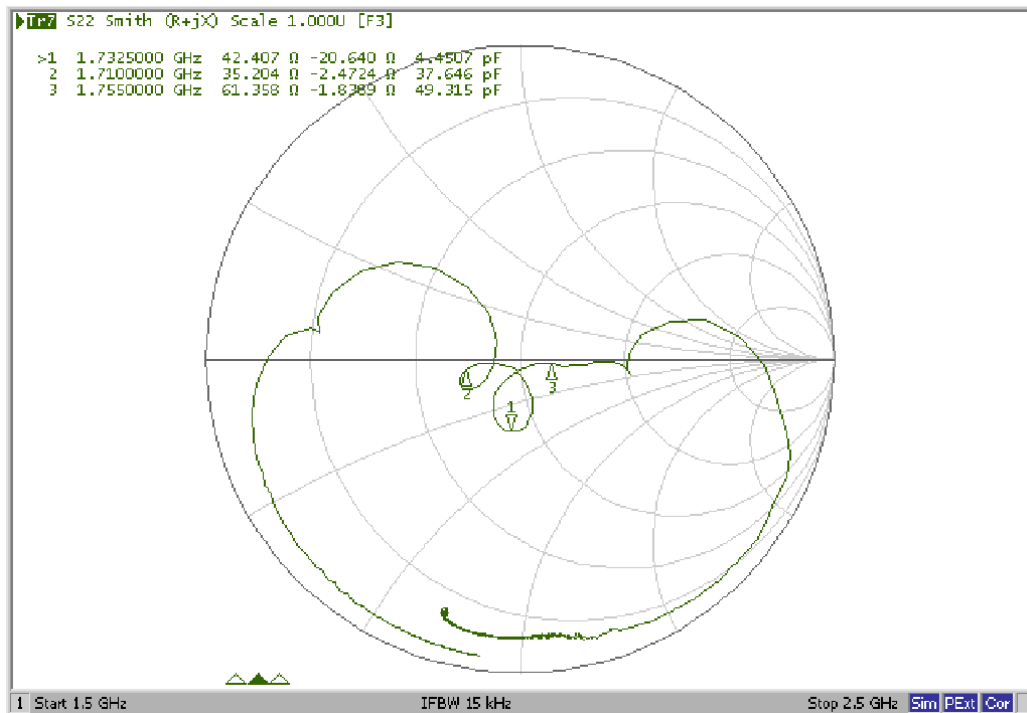
Ripple



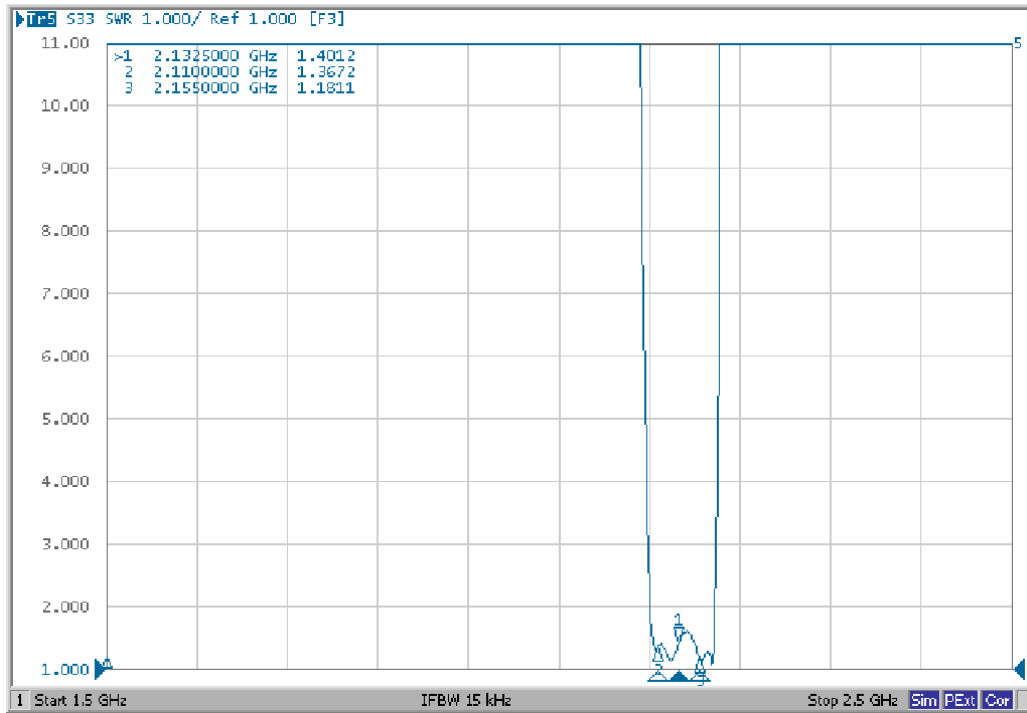
VSWR (Tx Port)



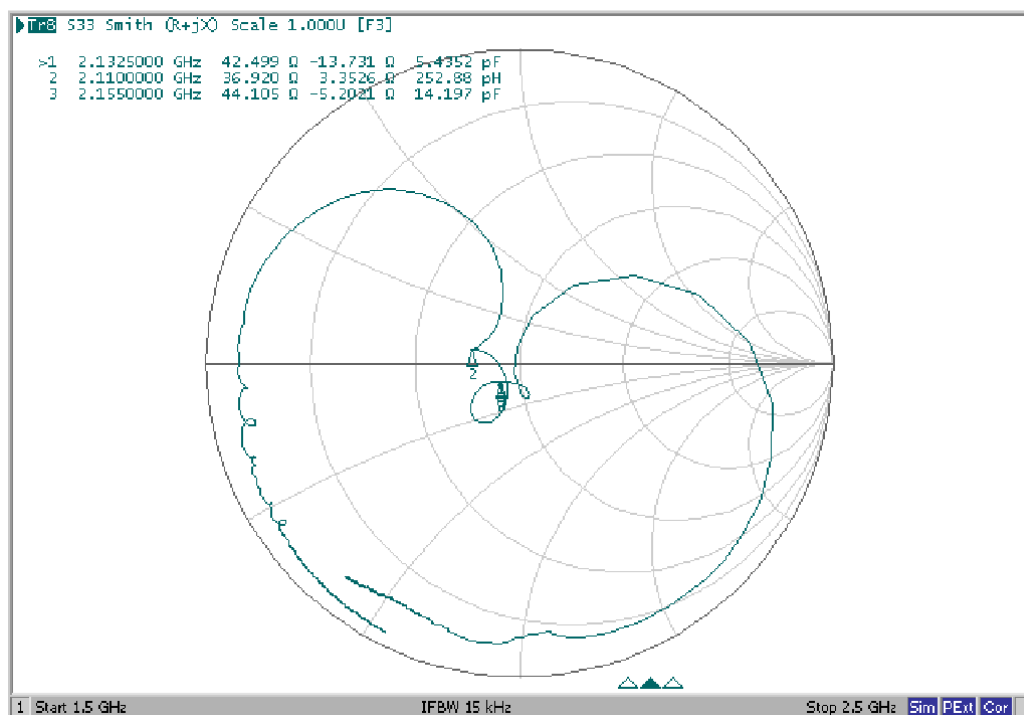
Smith Chart (Tx Port)



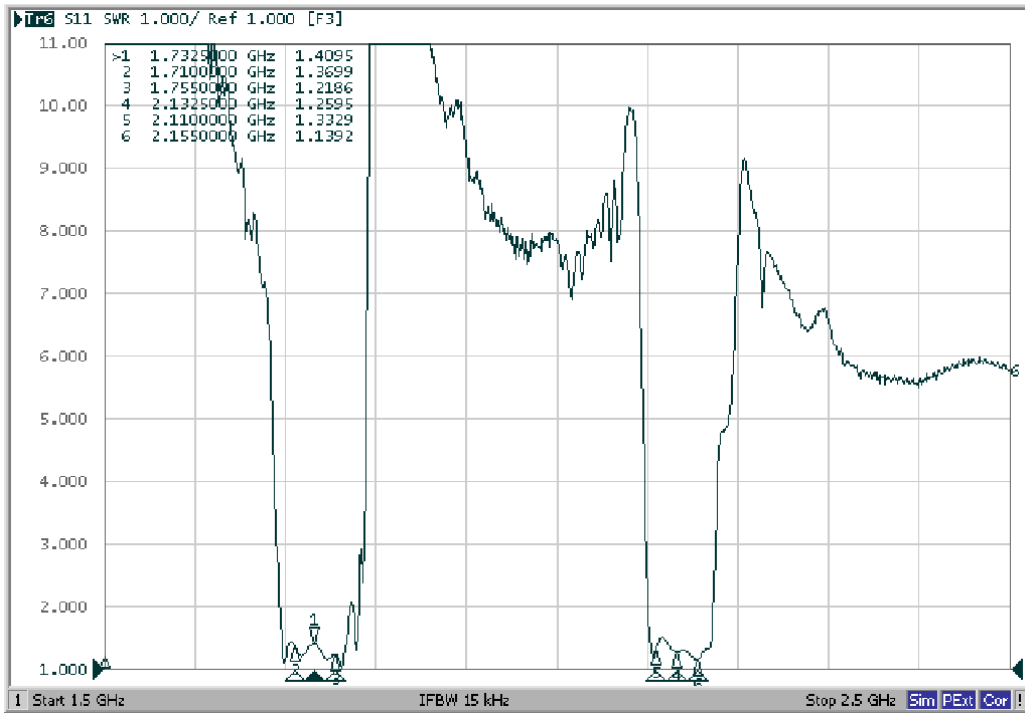
VSWR (Rx Port)



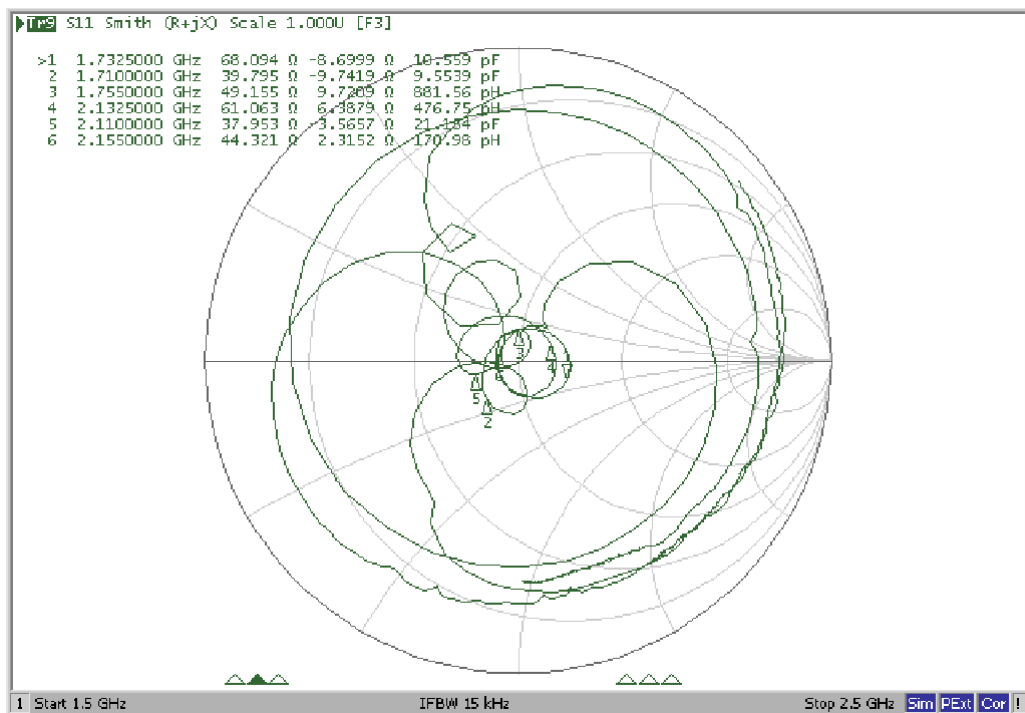
Smith Chart (Rx Port)



VSWR (ANT Port)



Smith Chart (ANT Port)



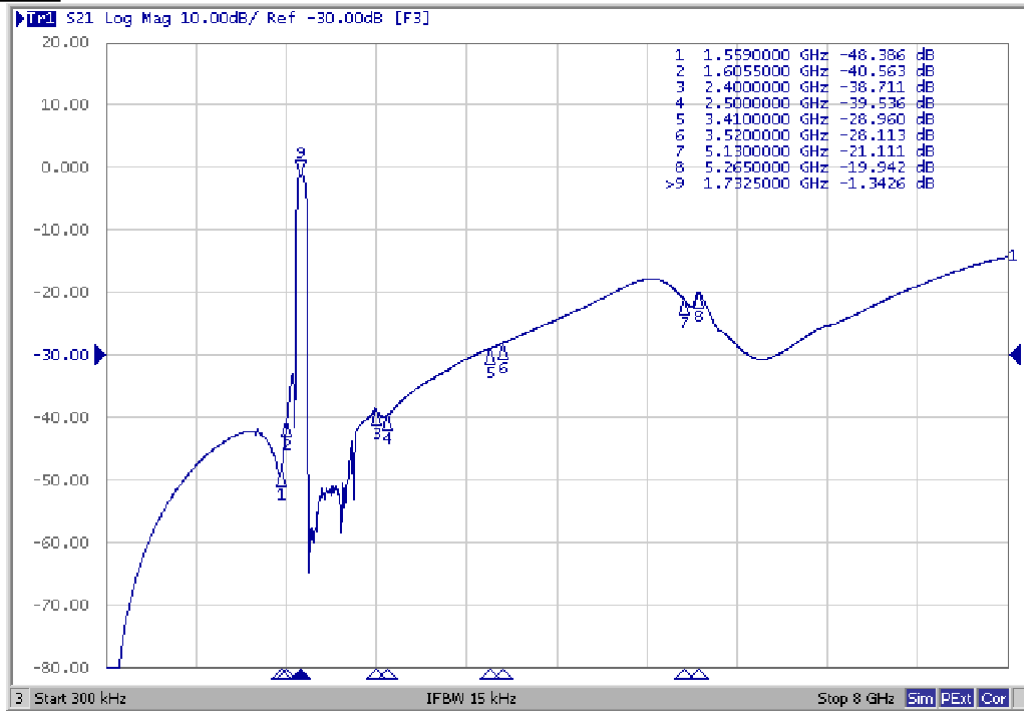


SD-2132T2-C45

Band 4, SAW Duplexer

Wide Span

Tx



Rx

