



Total Solution Provider in Saw Device

SD-071002-C53

SAW DUPLEXER For 710.0MHz / 740.0MHz
Revision 0: May 2013



- 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		
Maximum Input Power	dBm	30dBm > 50,000 Hours, CW tone(Ta= +50°C)		
Input Impedance(Antenna)	Ω	50		
Output Tx Impedance	Ω	50		
Output Rx Balanced Impedance	Ω	100		
Package type & size	C53			
Length x Width	mm ²	-	2.5 x 2.0	-
Height	mm	-	-	0.7

Electrical Specification

Tx(710.0MHz) → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	704.0 ~ 716.0	dB	-	1.3	3.0
Amplitude Ripple	704.0 ~ 716.0	dB _{p-p}	-	0.5	1.5
VSWR	704.0 ~ 716.0	-	-	1.4	2.0
Absolute Attenuation	734.0 ~ 756.0	dB	40	47	-

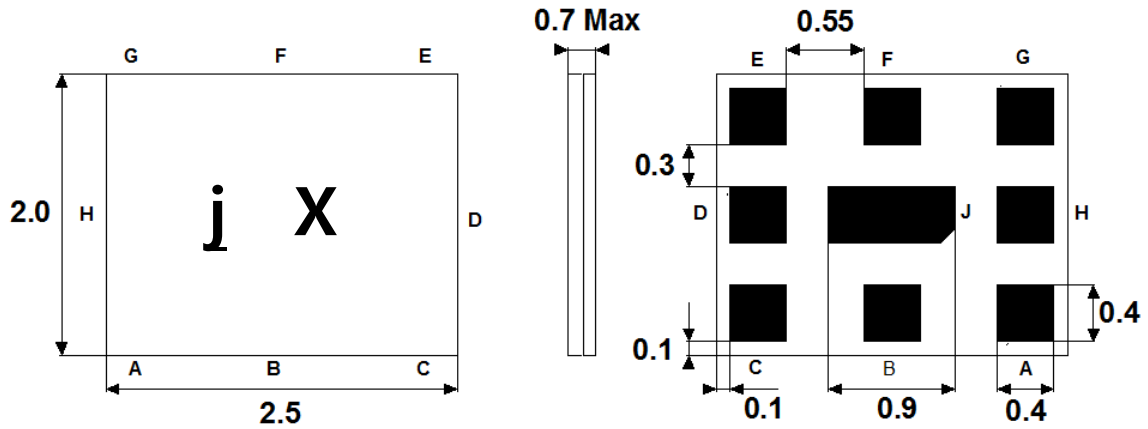


Ant → Rx(745.0MHz)		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	734.0 ~ 756.0	dB	-	2.0	3.5
Amplitude Ripple	734.0 ~ 756.0	dB _{p-p}	-	1.2	2.0
VSWR	734.0 ~ 756.0	-	-	1.6	2.2
Absolute Attenuation	704.0 ~ 716.0	dB	20	30	-

Rx → Tx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	704.0 ~ 716.0	dB	30	36	-
	734.0 ~ 756.0	dB	40	50	-

Notes : (1) With Matching Network .

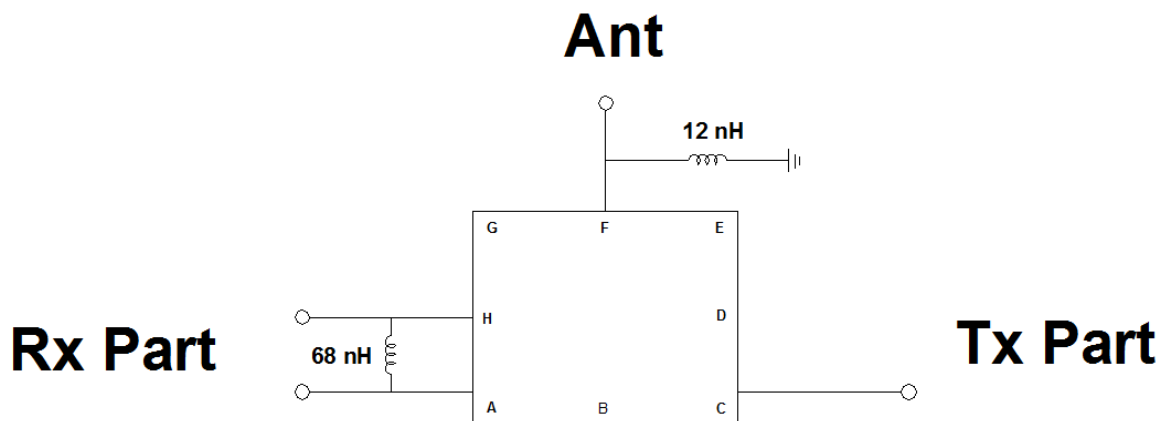
Package Dimensions



Marking Descriptions	
j	Series Number
X	Date Code(Year+Month)

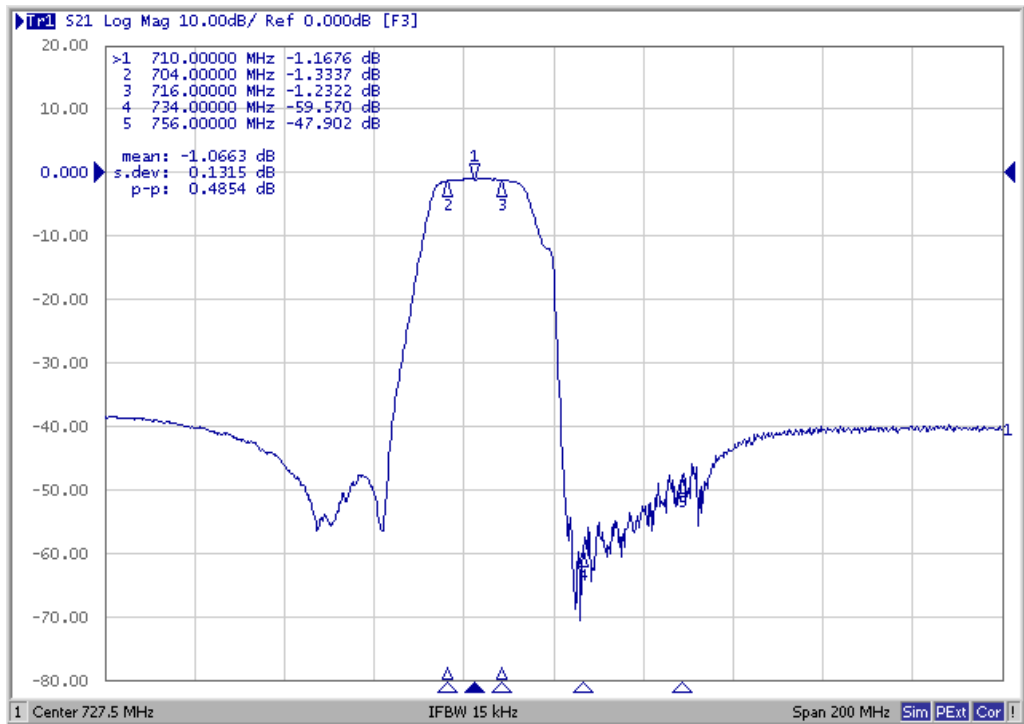
Pin Description	
B,D,E,G,	Ground
F	Ant
C	Tx (710.0MHz)
A,H	Rx (745.0MHz)

Testing Environment

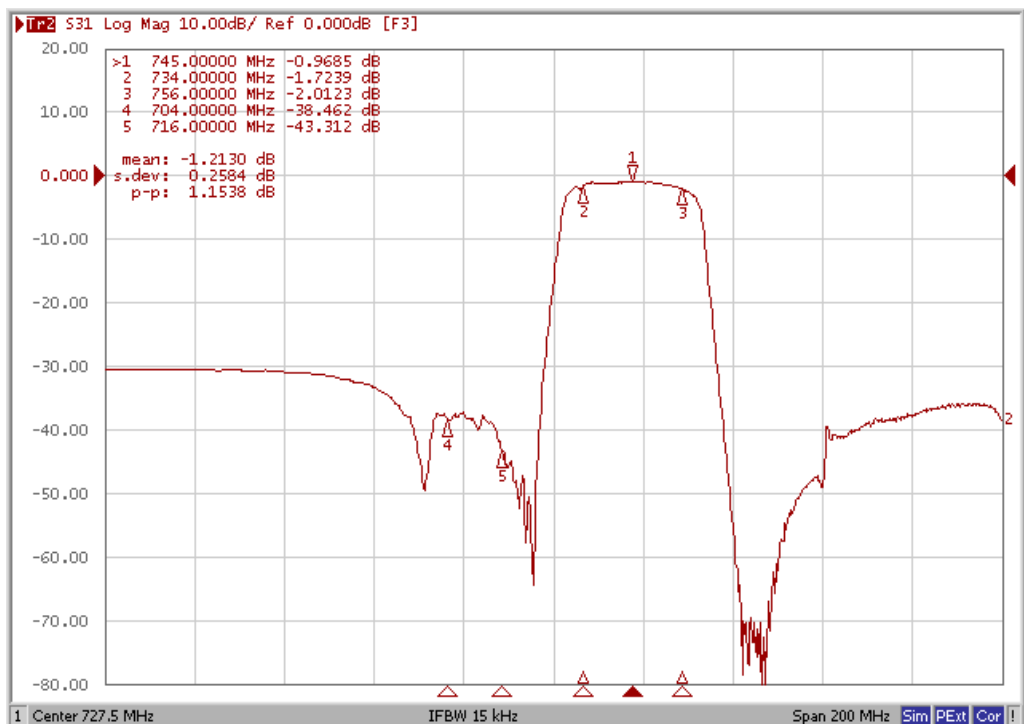


□ Frequency Characteristics

Tx to Ant

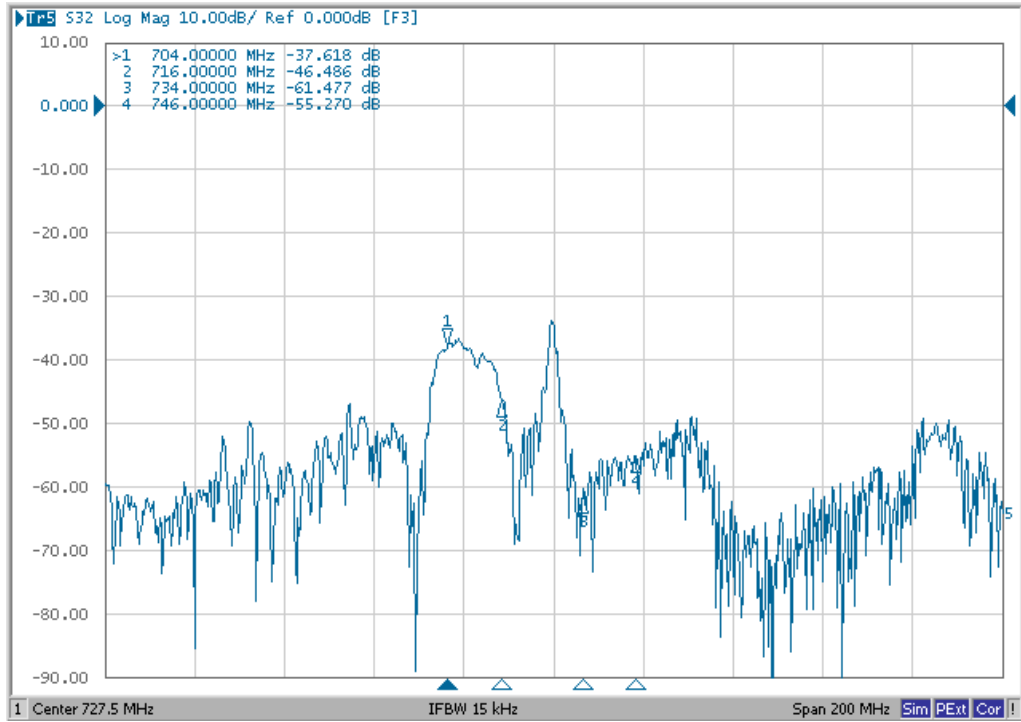


Ant to Rx



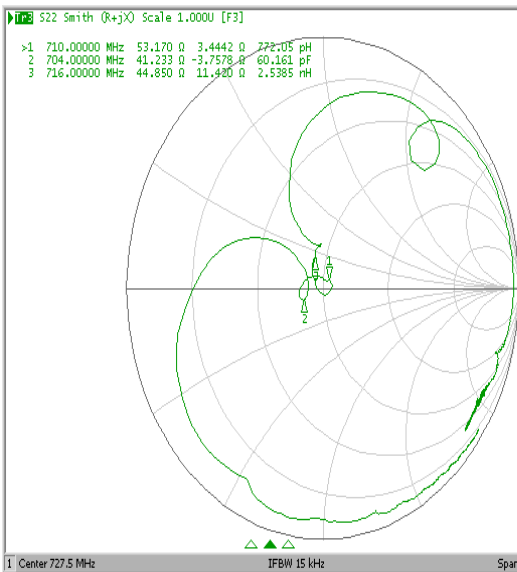


Isolation

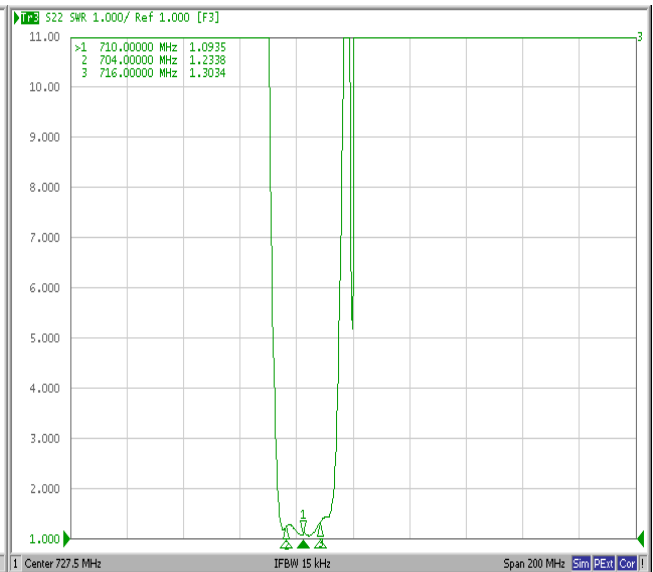


Tx Part

Smith Chart



VSWR

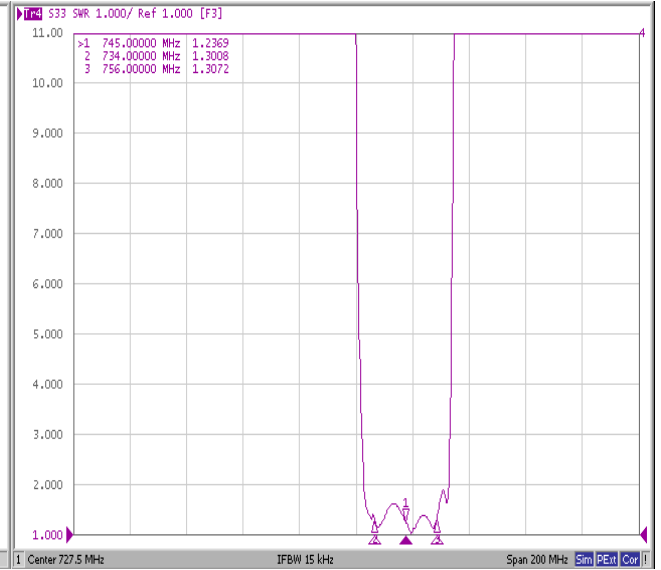
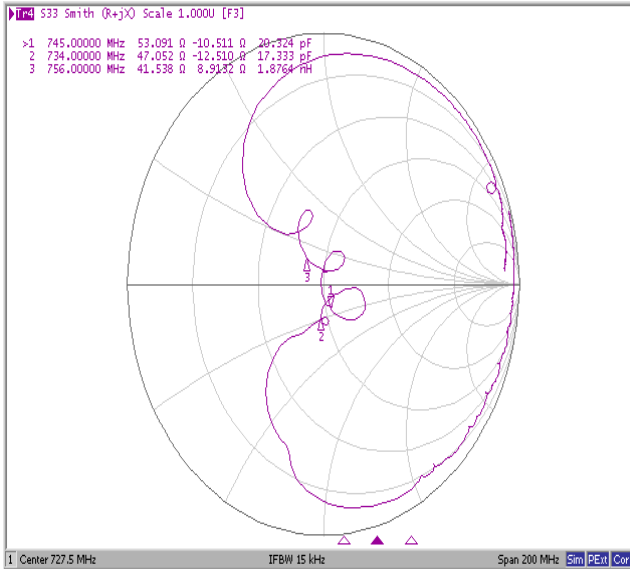




Rx Part

Smith Chart

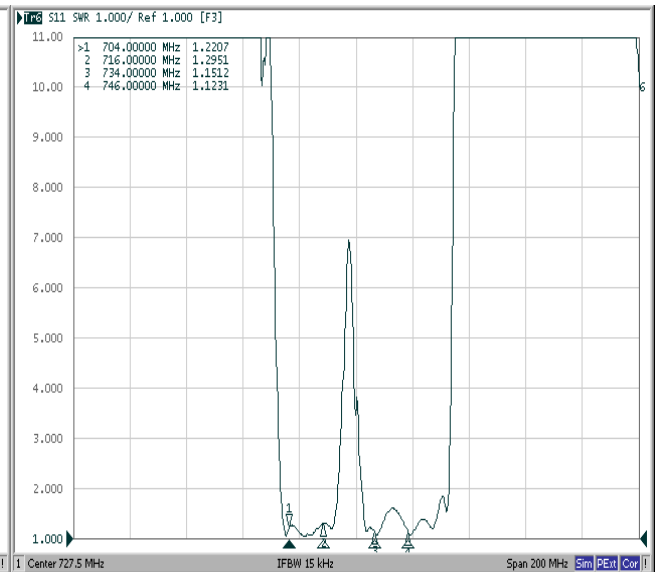
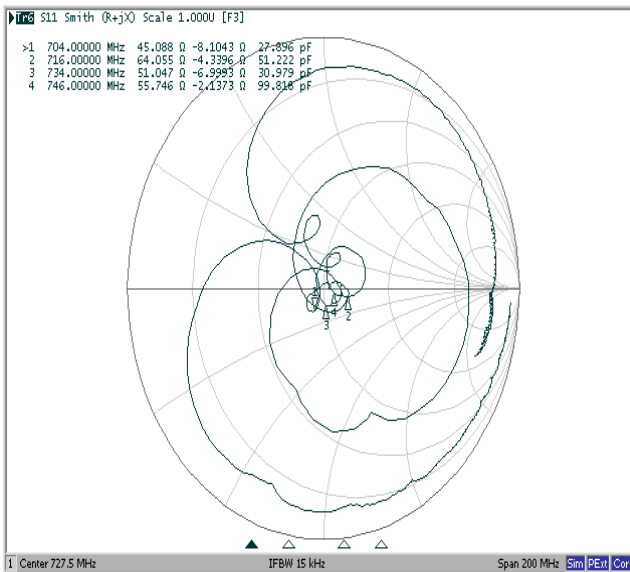
VSWR



Antenna

Smith Chart

VSWR





Wide Span

