



Total Solution Provider in Saw Device

SD-071001-S34

SAW DUPLEXER For 710.0MHz / 745.0MHz
Revision 0: November 2012



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

SAWNICS Inc.

460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / www.sawnics.com



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		
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 Impedance	Ω	50		
Package type & size	S34			
Length x Width	mm ²	-	3.8 x 3.8	-
Height	mm	-	-	1.45

Electrical Specification

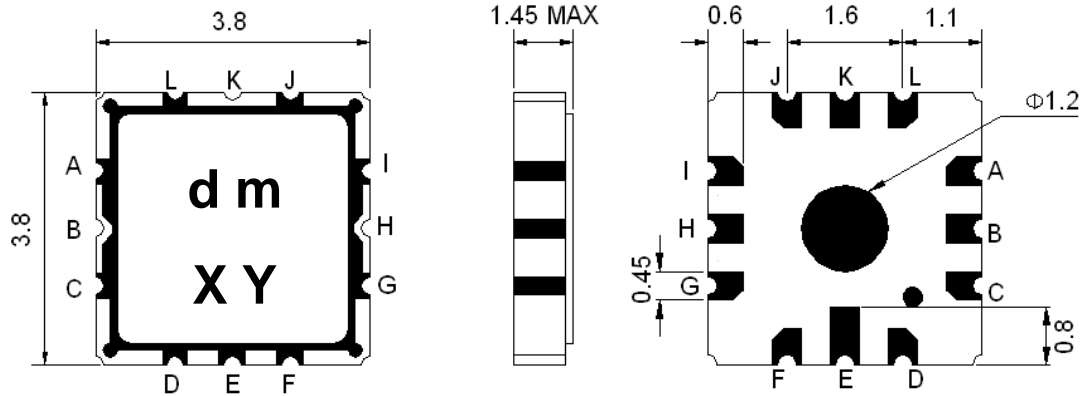
Tx(710.0MHz) → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	704.0 ~ 716.0	dB	-	1.3	3.0
Amplitude Ripple	704.0 ~ 716.0	dB _{p-p}	-	0.5	1.5
VSWR	704.0 ~ 716.0	-	-	1.4	2.0
Absolute Attenuation	0.0 ~ 500.0	dB	30	38	-
	725.0 ~ 734.0	dB	5	11	-
	734.0 ~ 756.0	dB	40	47	-
	776.0 ~ 787.0	dB	30	40	-
	817.0 ~ 894.0	dB	30	40	-
	1400.0 ~ 2155.0	dB	20	26	-

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	0.0 ~ 698.0	dB	20	30	-
	698.0 ~ 716.0	dB	30	37	-
	716.0 ~ 725.0	dB	20	33	-
	766.5 ~ 776.0	dB	15	45	-
	776.0 ~ 787.0	dB	35	47	-
	817.0 ~ 894.0	dB	25	33	-
	1400.0 ~ 2155.0	dB	30	40	-
	2184.0 ~ 2271.0	dB	20	30	-

Rx → Tx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	704.0 ~ 716.0	dB	30	36	-
	716.0 ~ 734.0	dB	25	34	-
	734.0 ~ 756.0	dB	40	50	-
	756.0 ~ 776.0	dB	40	49	-
	776.0 ~ 787.0	dB	40	55	-

Notes : (1) With Matching Network .

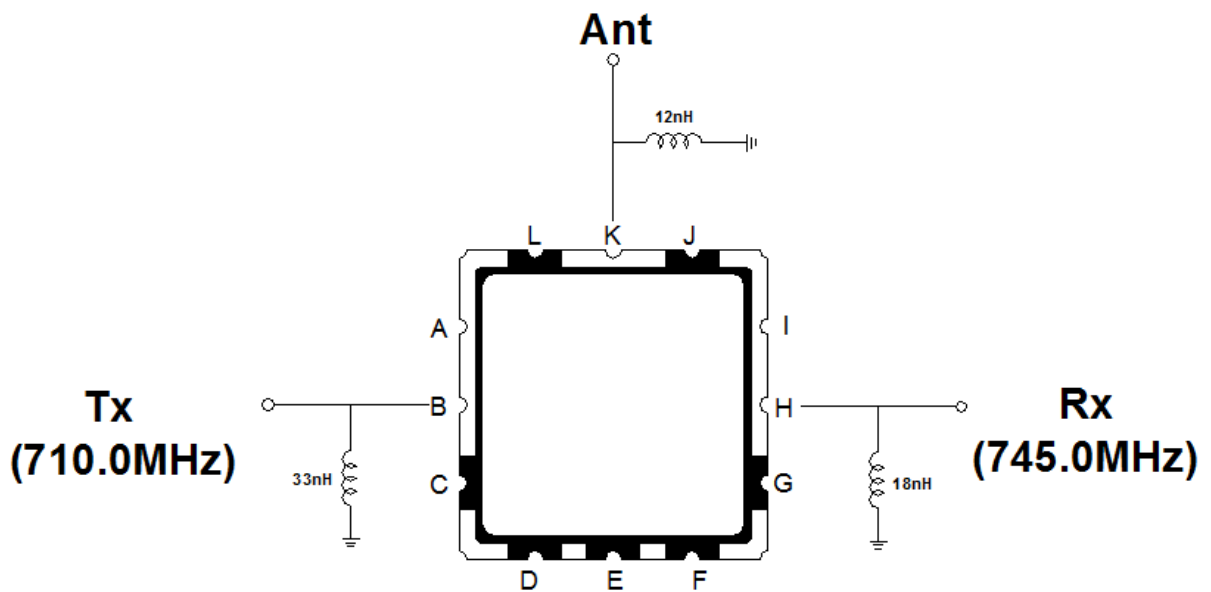
Package Dimensions



Marking Descriptions	
d	Wireless Application
m	Series Number
X	Date Code(Year)
Y	Date Code(Month)

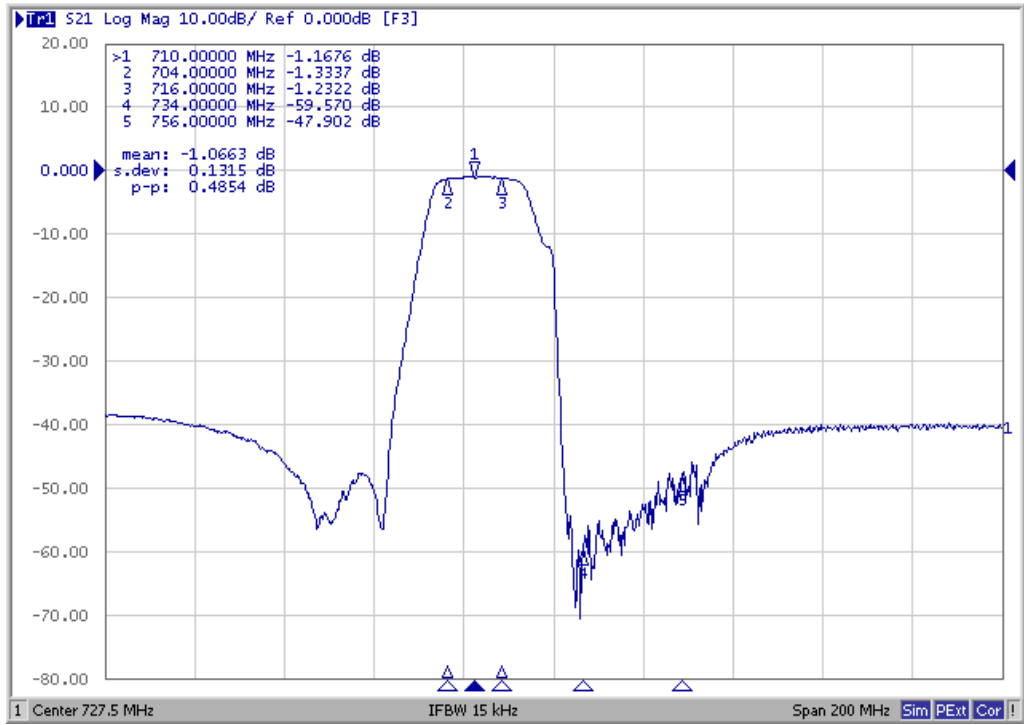
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Tx (710.0 MHz)
H	Rx (745.0MHz)

Testing Environment

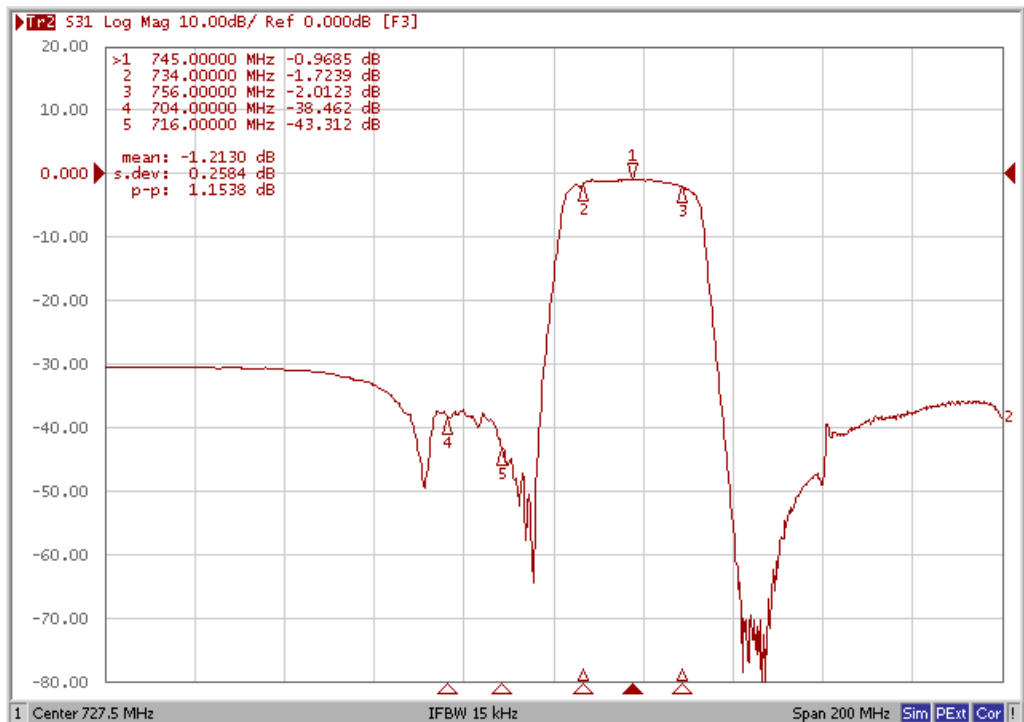


□ Frequency Characteristics

Tx to Ant

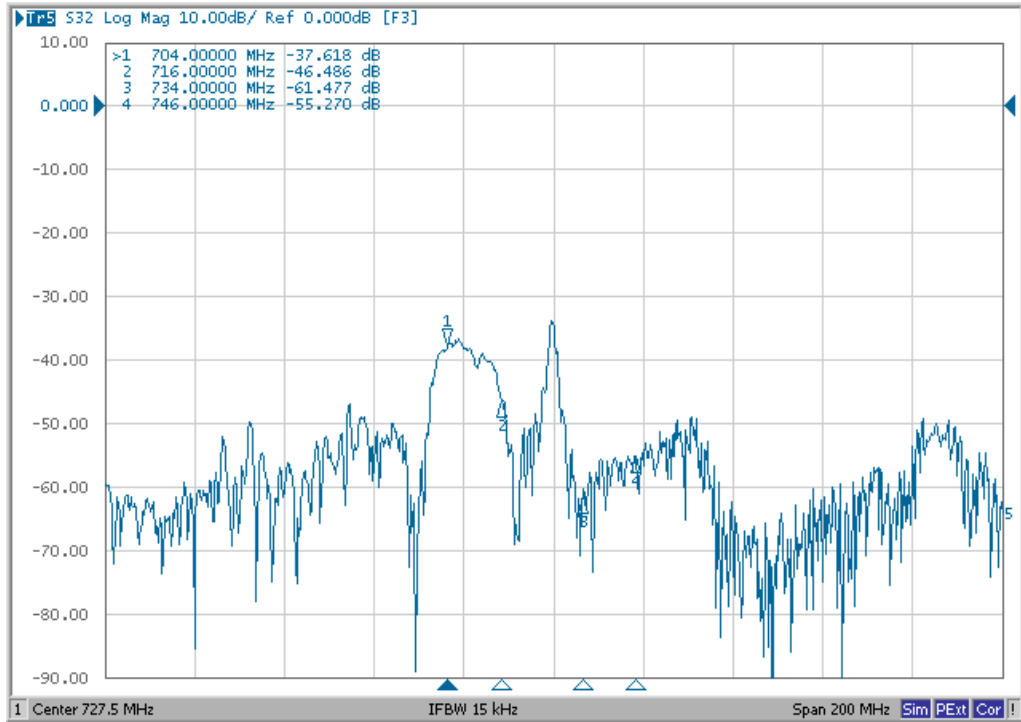


Ant to Rx



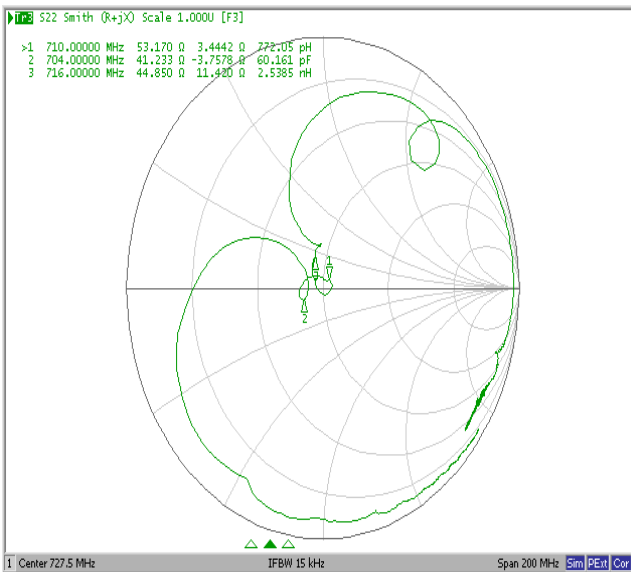


Isolation

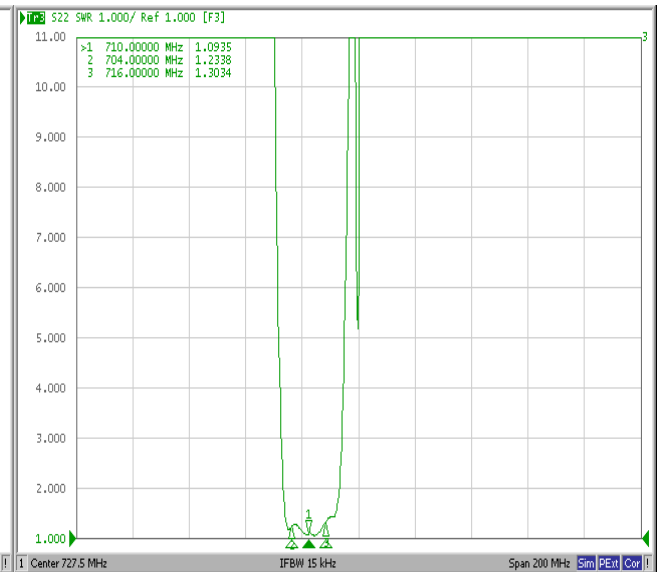


Tx Part

Smith Chart



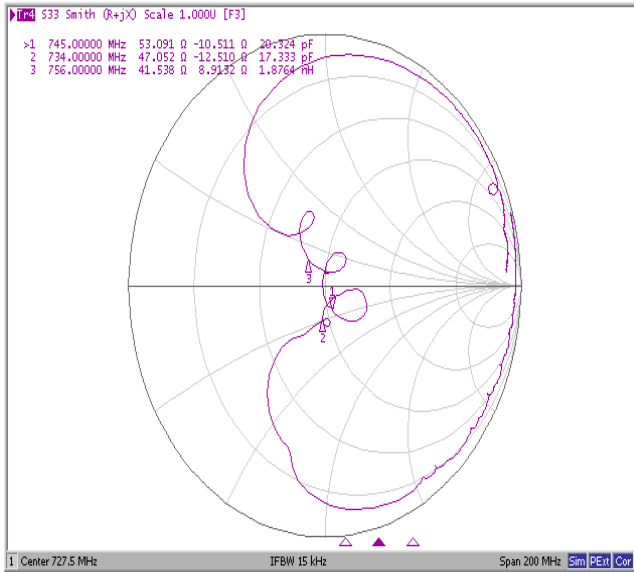
VSWR



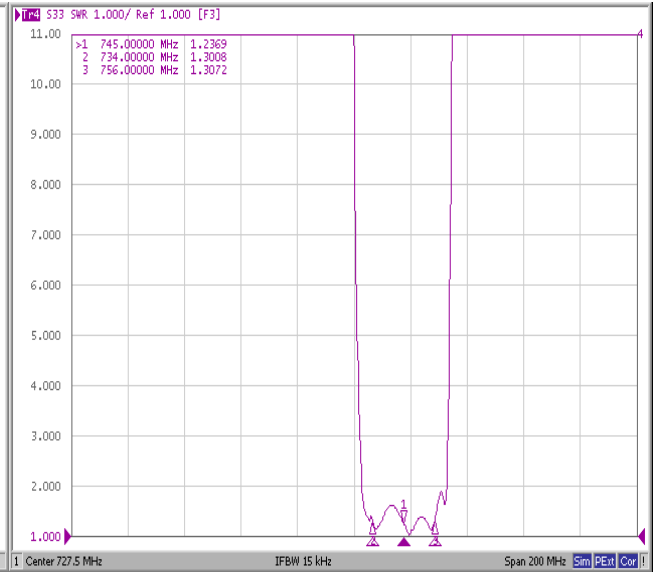


Rx Part

Smith Chart

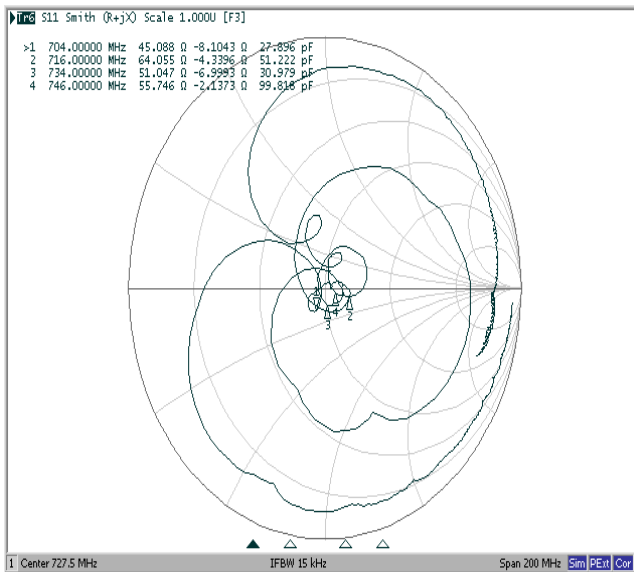


VSWR

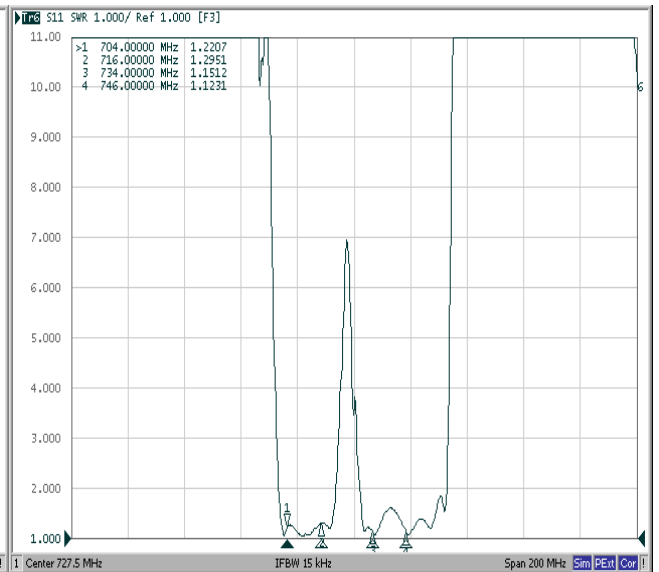


Antenna

Smith Chart



VSWR





Wide Span

