



Total Solution Provider in Saw Device

SD806CP3

SAW DUPLEXER For 806.0MHz / 847.0MHz
Revision 0: July 2011



- 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	0	-	+50
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	P3			
Length x Width	mm ²	-	3.8 x 3.8	-
Height	mm	-	-	1.45

Electrical Specification

Rx_806.0MHz		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	801.0 ~ 811.0	dB	-	1.6	2.5
Amplitude Ripple	801.0 ~ 811.0	dB _{p-p}	-	0.6	1.0
Return Loss	801.0 ~ 811.0	dB	10	13	-
Attenuation	DC ~ 770.0	dB	35	40	-
	894.0 ~ 2000.0	dB	35	40	-
	2000.0 ~ 2500.0	dB	25	33	-
	2500.0 ~ 3000.0	dB	15	25	-
	842.0 ~ 852.0	dB	45	55	-
	731.0 ~ 741.0	dB	35	43	-
	661.0 ~ 671.0	dB	35	40	-
	869.0 ~ 894.0	dB	40	45	-

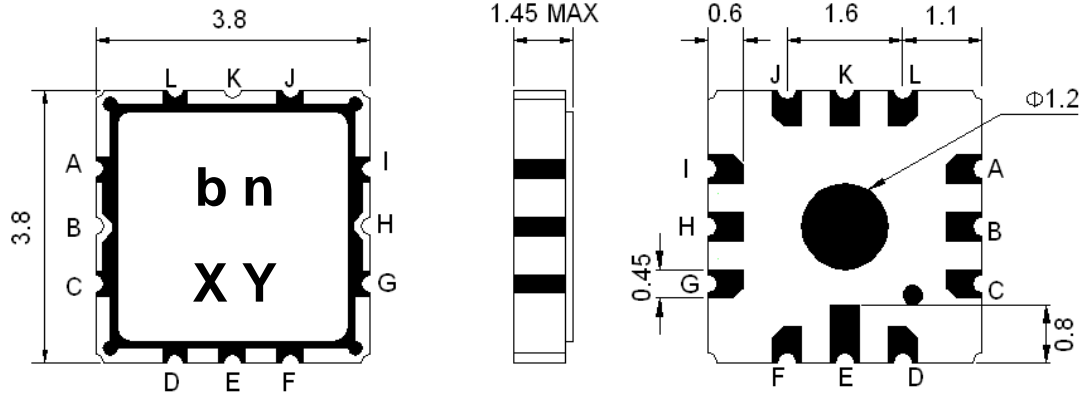


Tx_847.0MHz		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	842.0 ~ 852.0	dB	-	1.6	2.5
Amplitude Ripple	842.0 ~ 852.0	dB _{p-p}	-	0.5	1.0
Return Loss	842.0 ~ 852.0	dB	10	13	-
Attenuation	801.0 ~ 811.0	dB	40	46	-
	1010.5 ~ 1020.5	dB	40	50	-
	1179.0 ~ 1189.0	dB	45	55	-
	1684.0 ~ 1704.0	dB	35	45	-
	2526.0 ~ 2556.0	dB	30	40	-

Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	DC ~ 746.0	dB	50	55	-
	842.0 ~ 852.0	dB	45	55	-
	801.0 ~ 811.0	dB	40	47	-
	920.0 ~ 3000.0	dB	25	30	-

Notes : (1) No Matching Network .

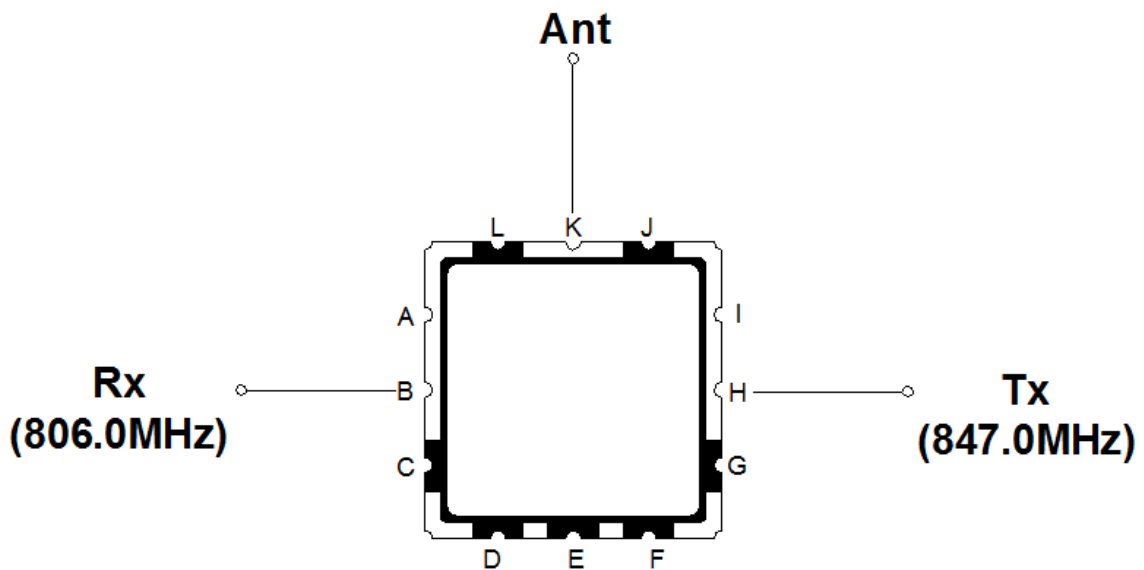
Package Dimensions



Marking Descriptions	
b	Wireless Application
n	Series Number
X	Date Code(Year)
Y	Date Code(Month)

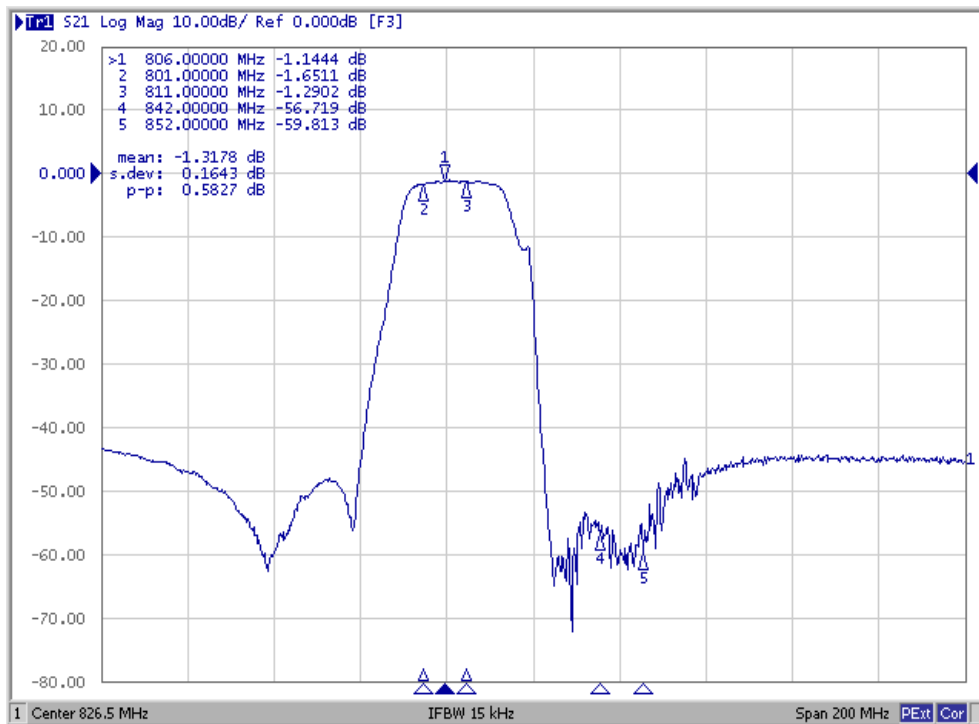
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Rx (806.0 MHz)
H	Tx (847.0MHz)

Testing Environment

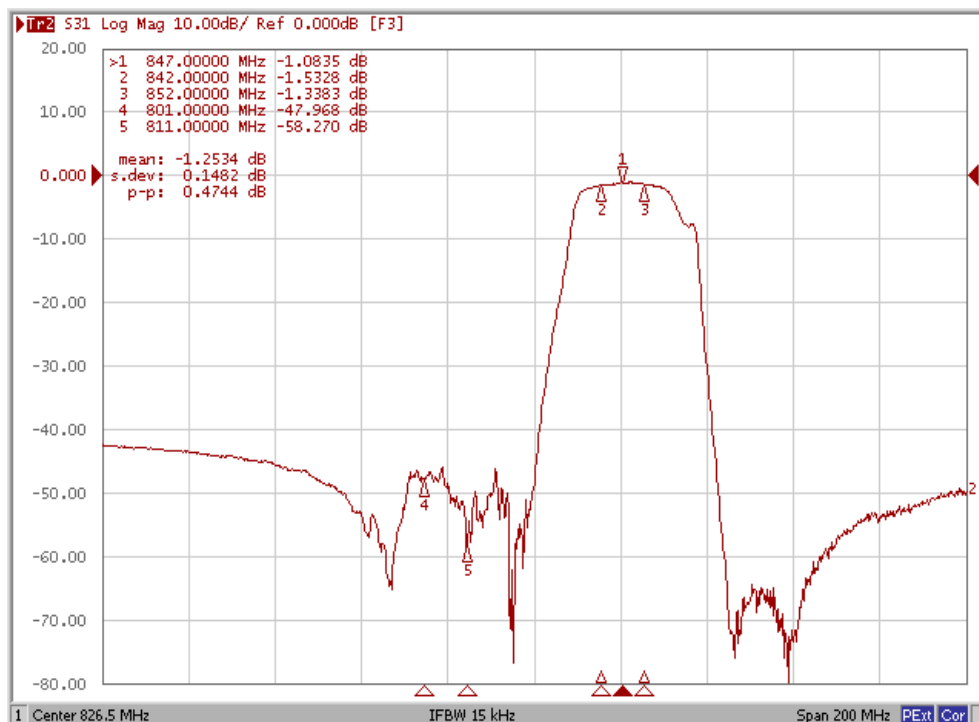


□ Frequency Characteristics

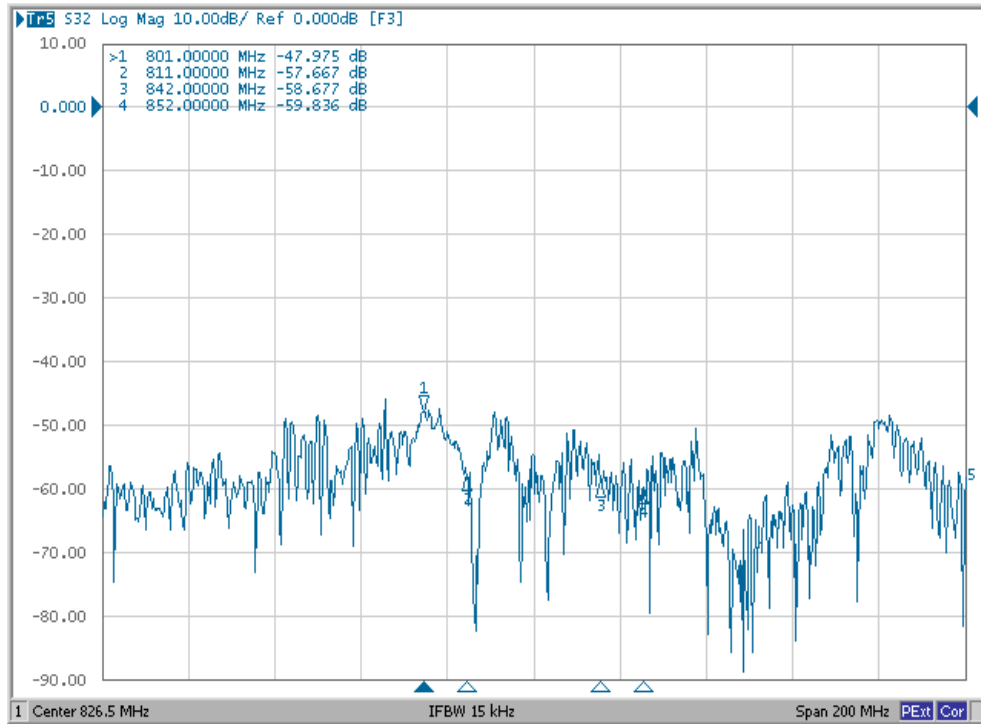
Ant to Rx



Tx to Ant

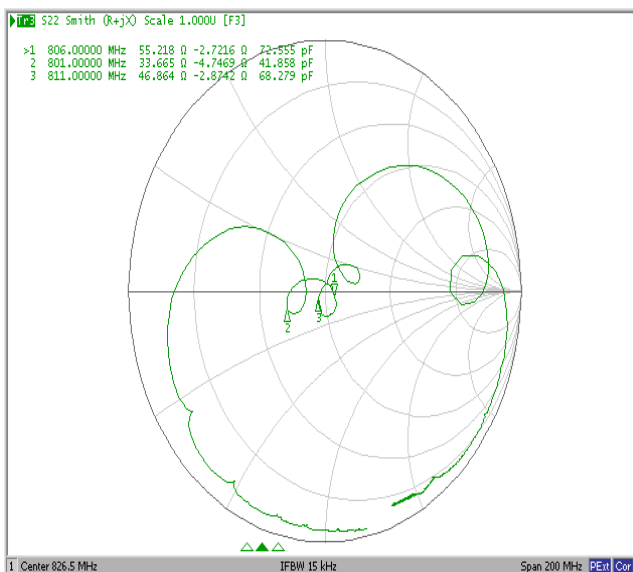


Isolation

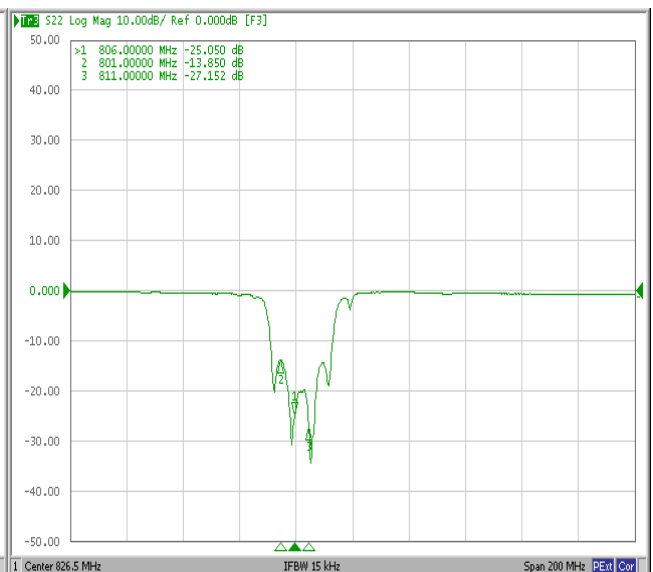


Rx Part

Smith Chart



Return Loss

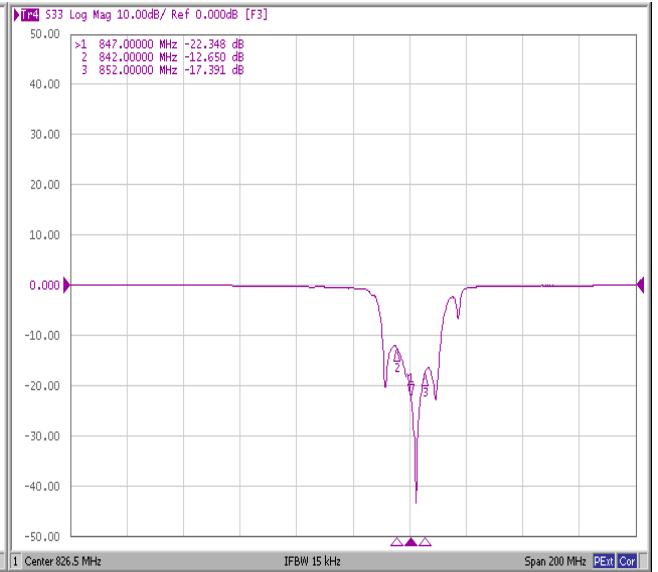
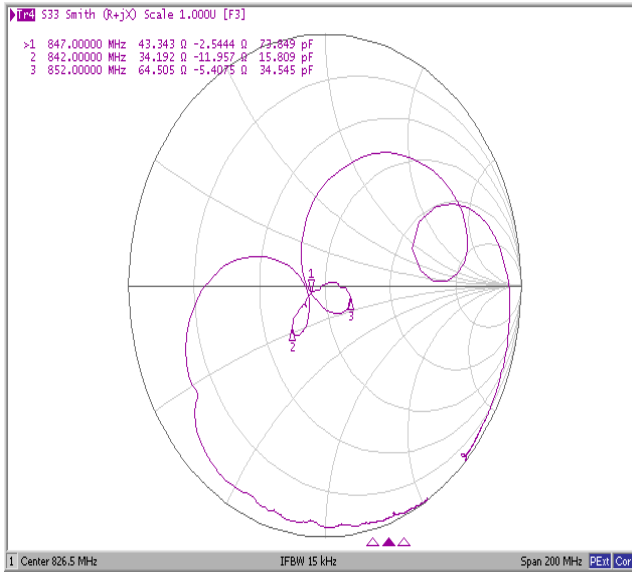




Tx Part

Smith Chart

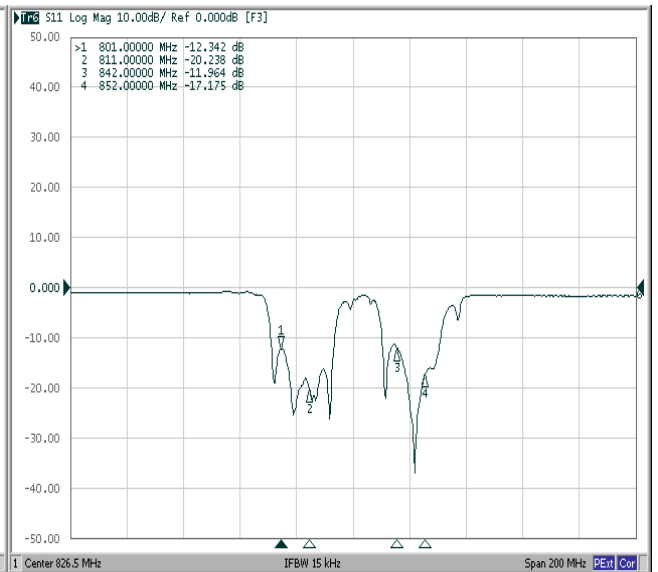
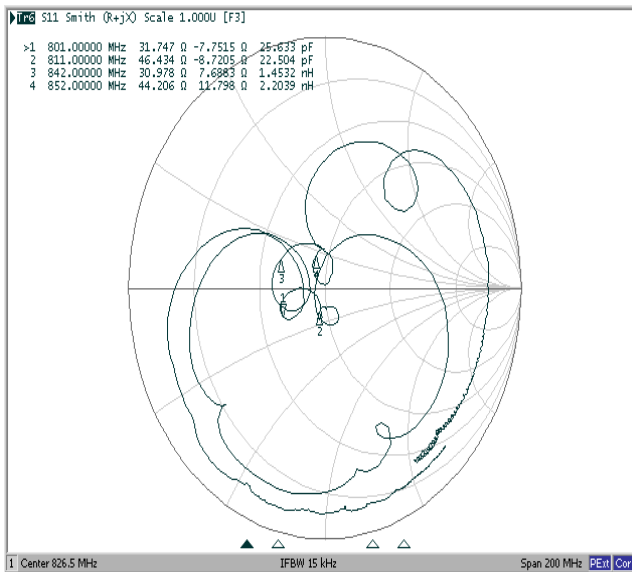
Return Loss



Antenna

Smith Chart

VSWR





Wide Span

