



Total Solution Provider in Saw Device

SD1775EPB

SAW DUPLEXER For 1775.0MHz / 1867.5MHz
Revision 0: May ,2011



- 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	-	+80
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Maximum Input Power	dBm	28dBm > 50,000 Hours, CW tone(Ta= +50°C)		
Input Impedance	Ω	50		
Output Impedance	Ω	50		
Package type & size		PB		
Length x Width	mm ²	-	3.8 x 3.8	-
Height	mm	-	-	1.45

Electrical Specification

Tx → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	1770.0 ~ 1780.0	dB	-	2.1	3.2
Amplitude Ripple	1770.0 ~ 1780.0	dB _{p-p}	-	0.3	1.0
VSWR	1770.0 ~ 1780.0	-	-	1.3	2.0
Absolute Attenuation	1860.0 ~ 1875.0	dB	45	51	-

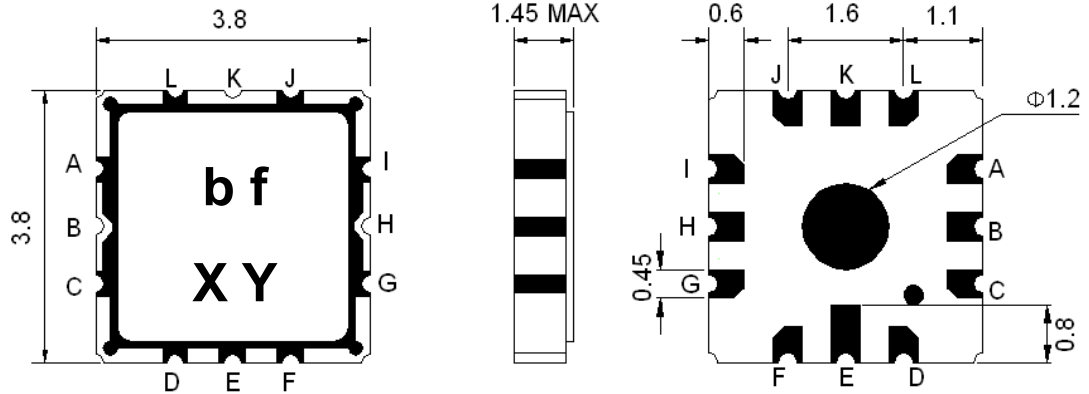
Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	1860.0 ~ 1875.0	dB	-	2.5	3.5
Amplitude Ripple	1860.0 ~ 1875.0	dB _{p-p}	-	0.3	1.0
VSWR	1860.0 ~ 1875.0	-	-	1.5	2.0
Absolute Attenuation	1770.0 ~ 1780.0	dB	40	46	-



Rx → Tx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	1770.0 ~ 1780.0	dB	40	51	-
	1860.0 ~ 1875.0	dB	45	54	-

Notes : (1) With Matching Network .

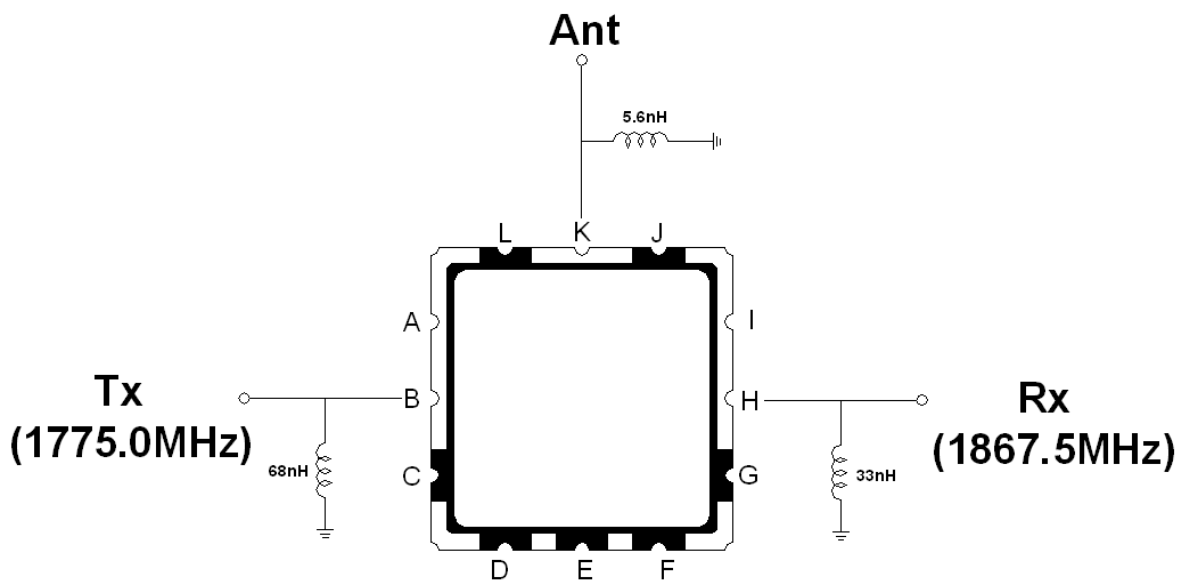
Package Dimensions



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

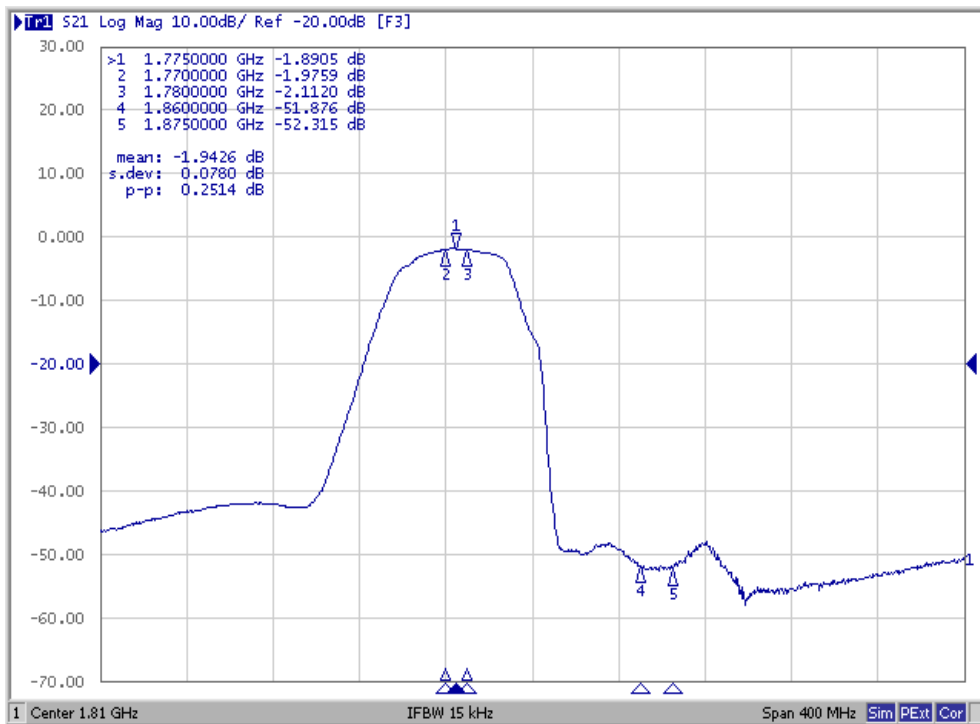
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Tx (1775.0 MHz)
H	Rx (1867.5MHz)

Testing Environment

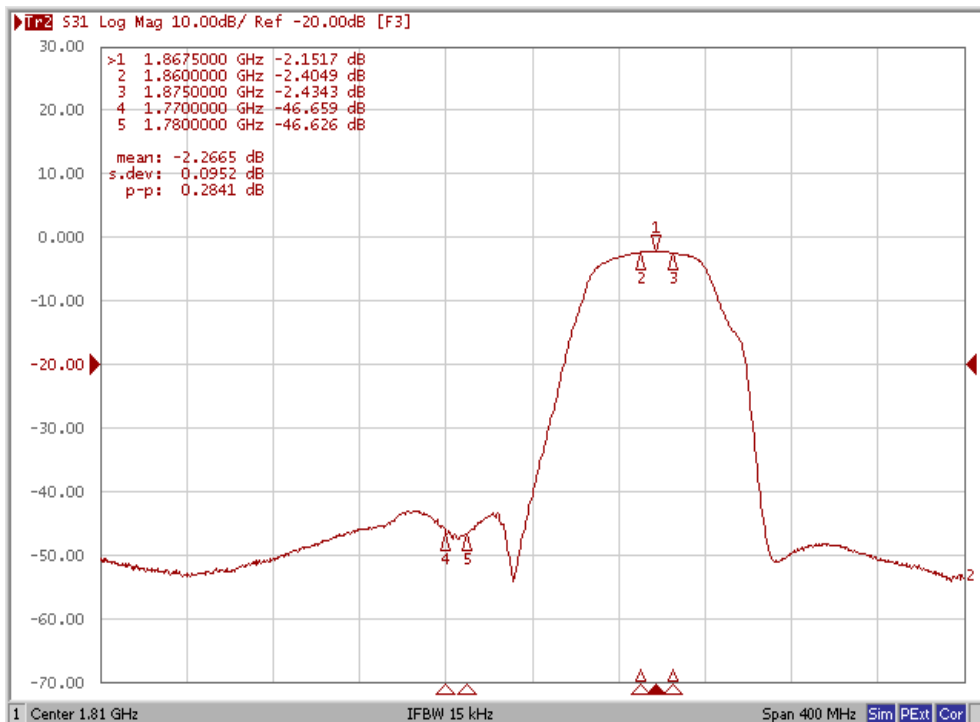


Frequency Characteristics

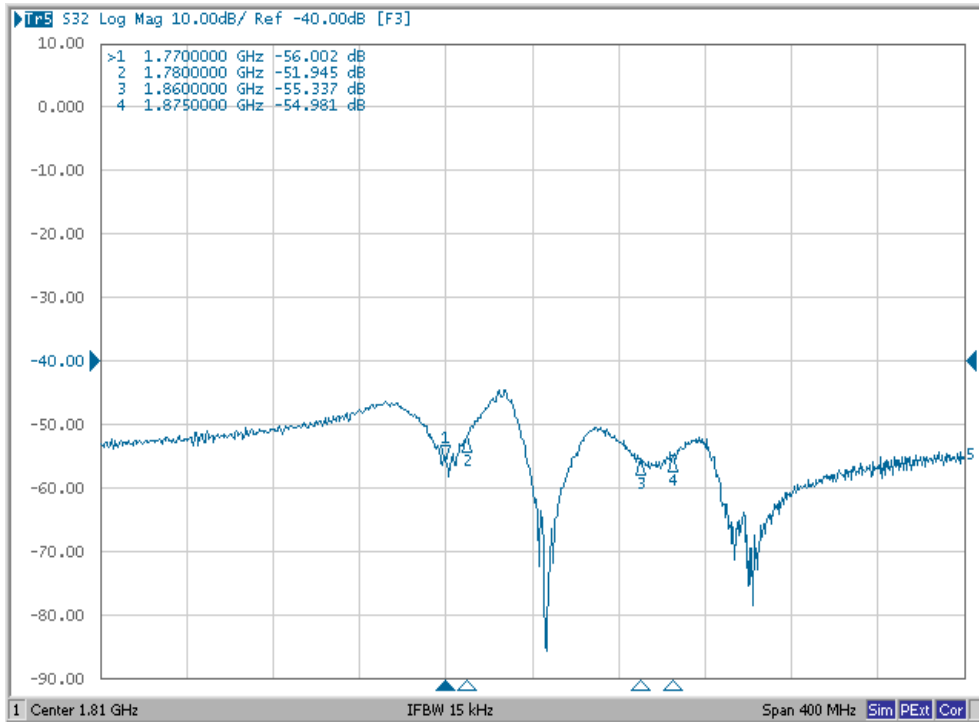
Tx to Ant



Ant to Rx

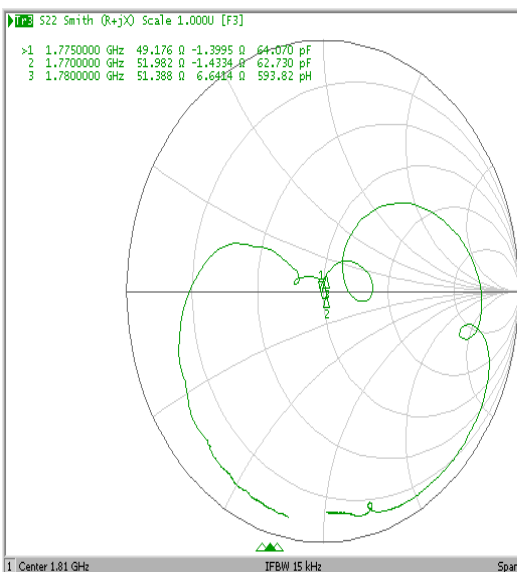


Isolation

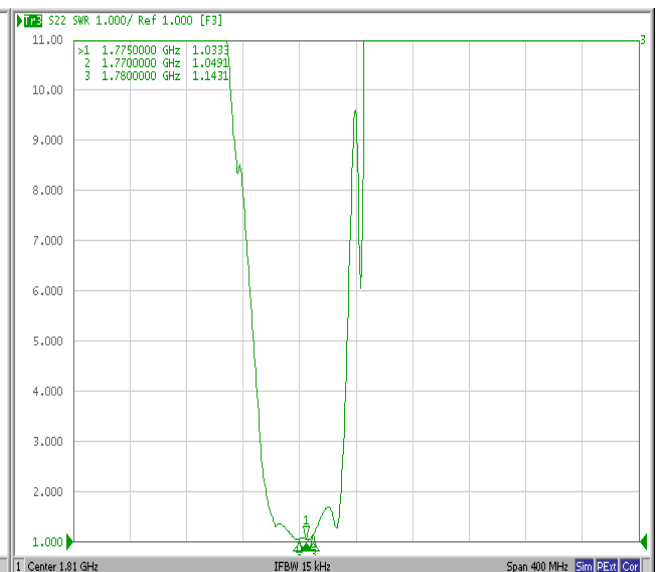


Tx Part

Smith Chart



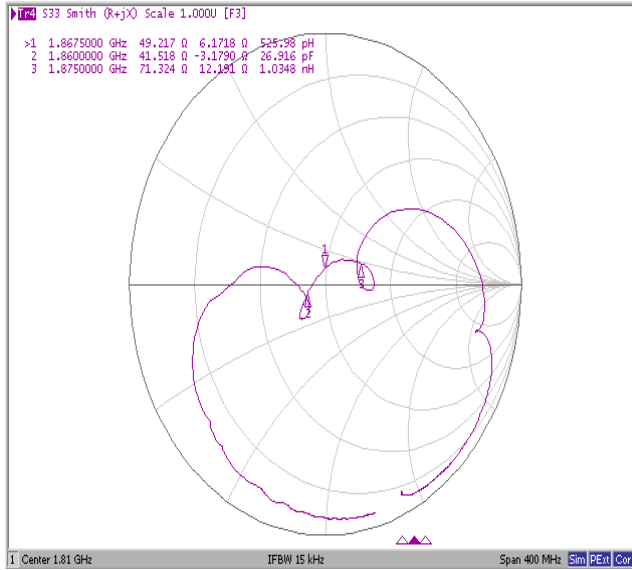
VSWR





Rx Part

Smith Chart

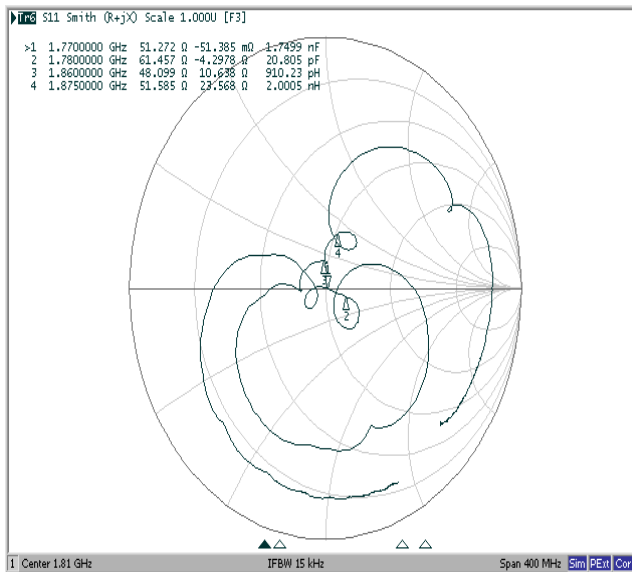


VSWR



Antenna

Smith Chart



VSWR

