



Total Solution Provider in Saw Device

SD707CPB

SAW DUPLEXER For 707.0MHz / 781.5MHz
Revision 0: August 2012



- 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	30dBm > 50,000 Hours, CW tone(Ta= +50°C)		
Input Impedance	Ω	50		
Output TX Impedance	Ω	50		
Output RX Impedance	Ω	50		
Package type & size	PB			
Length x Width	mm ²	-	3.8 x 3.8	-
Height	mm	-	-	1.45

Electrical Specification

Tx(707.0MHz) → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	698.0 ~ 716.0	dB	-	1.4	3.0
Amplitude Ripple	698.0 ~ 716.0	dB _{p-p}	-	0.5	1.5
VSWR	698.0 ~ 716.0	-	-	1.5	2.2
Absolute Attenuation	722.0 ~ 729.0	dB	2	6	-
	729.0 ~ 790.0	dB	30	36	-

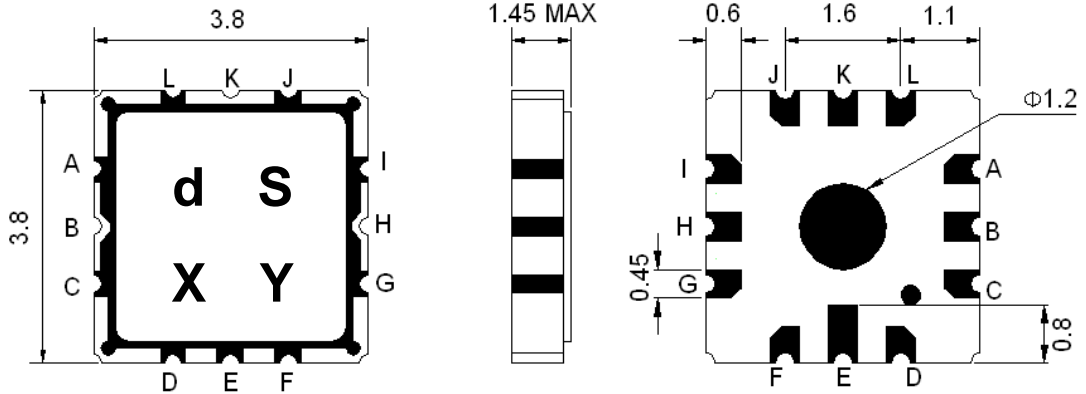


Ant → Rx(781.5MHz)		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	776.0 ~ 787.0	dB	-	1.6	3.0
Amplitude Ripple	776.0 ~ 787.0	dB _{p-p}	-	0.6	1.5
VSWR	776.0 ~ 787.0	-	-	1.5	2.2
Absolute Attenuation	695.0 ~ 755.0	dB	30	36	-
	755.0 ~ 766.0	dB	2	28	-

Rx → Tx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	695.0 ~ 716.0	dB	30	40	-
	776.0 ~ 790.0	dB	30	37	-

Notes : (1) With Matching Network .

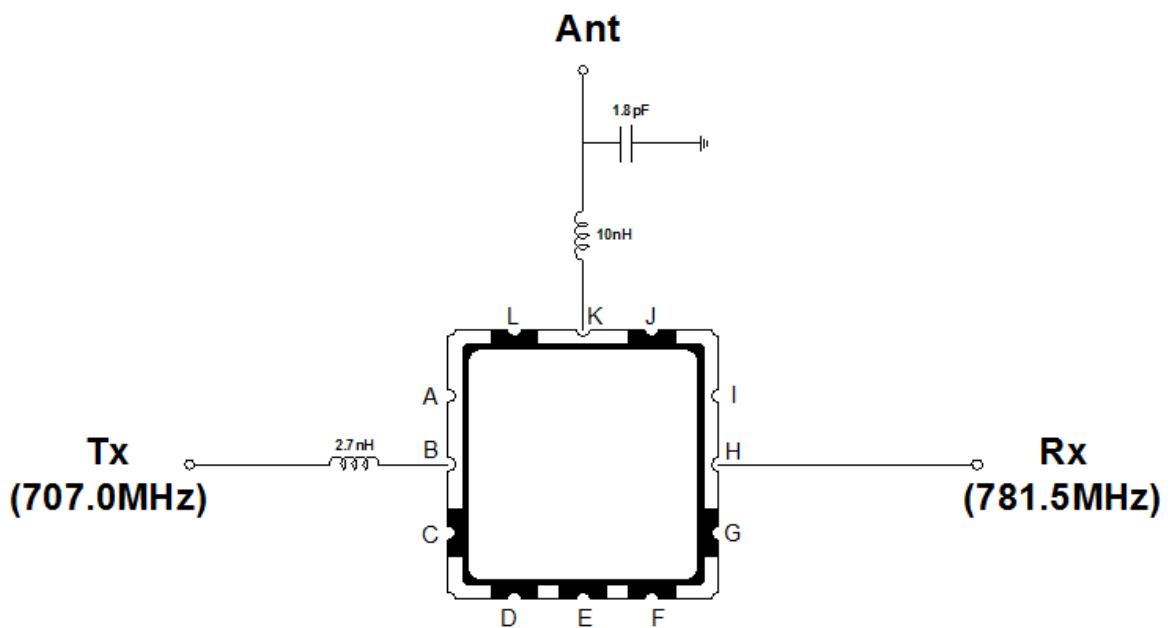
Package Dimensions



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

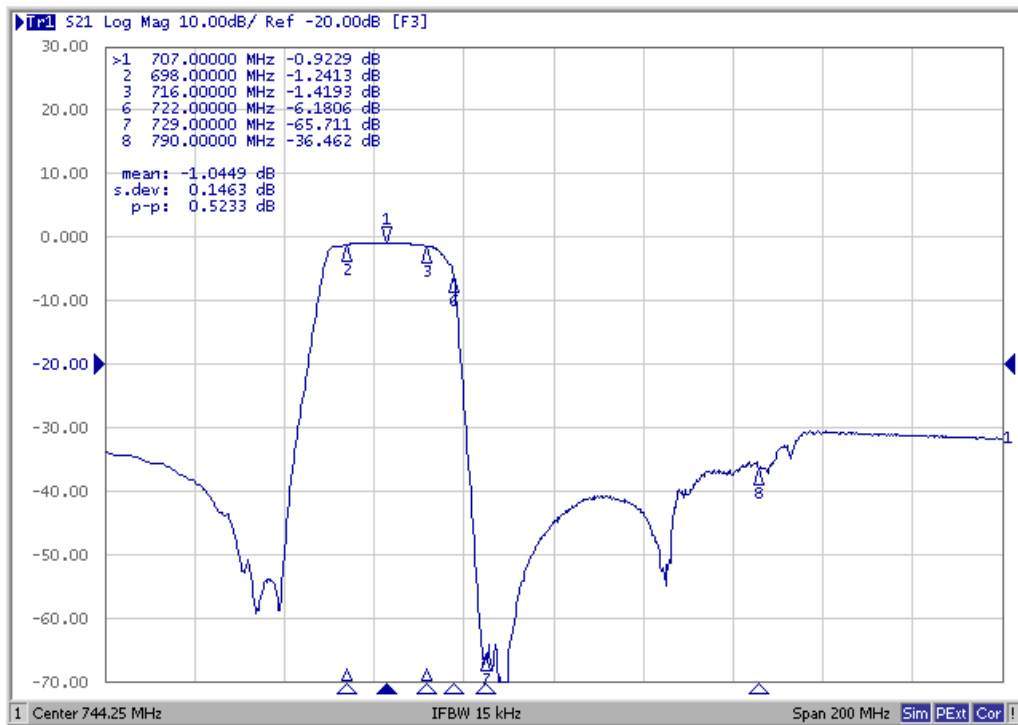
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Tx (707.0MHz)
H	Rx (781.5MHz)

Testing Environment



□ Frequency Characteristics

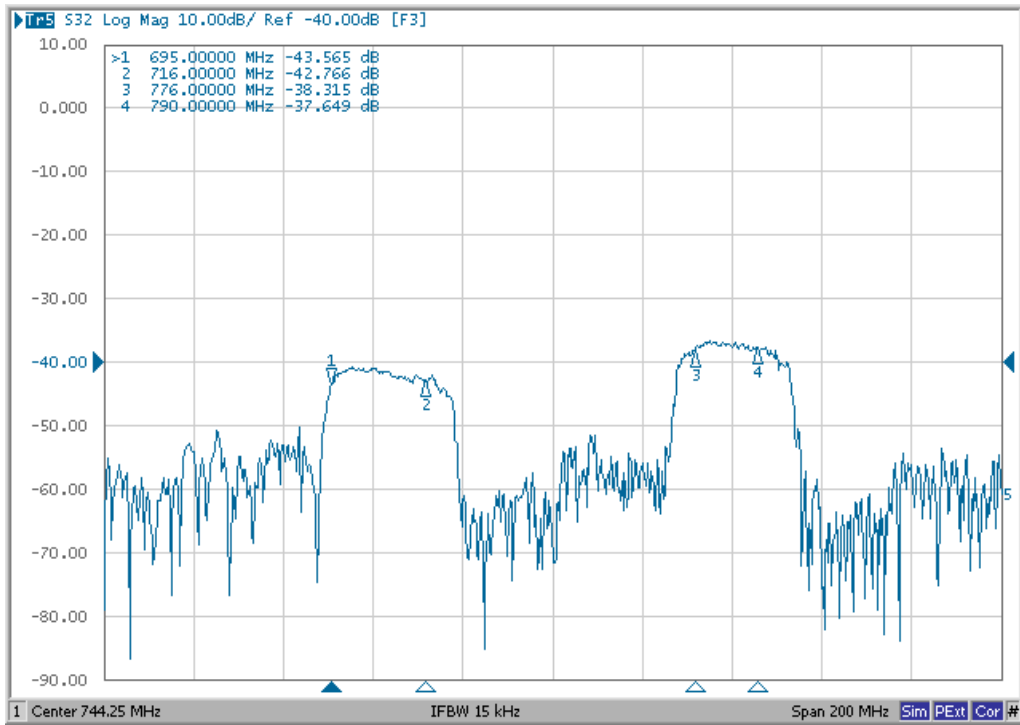
Tx to Ant



Ant to Rx

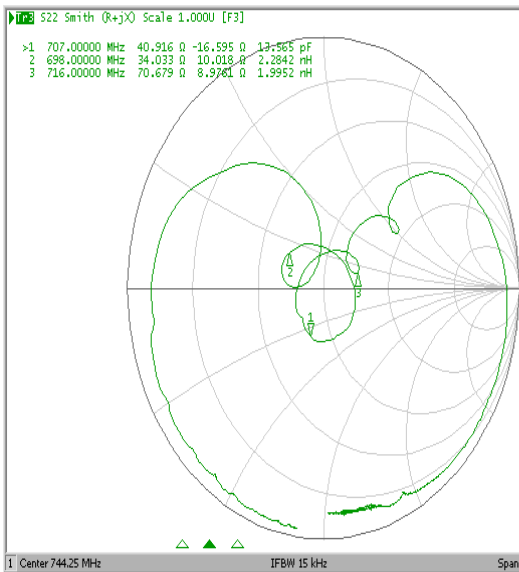


Isolation

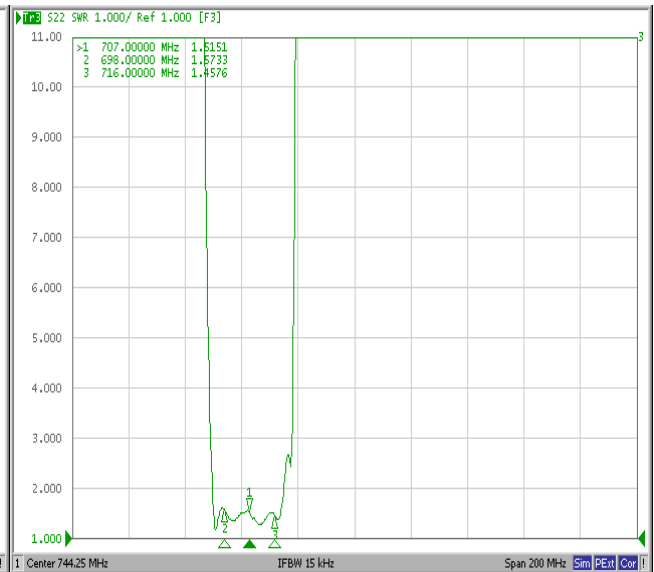


Tx Part

Smith Chart



VSWR

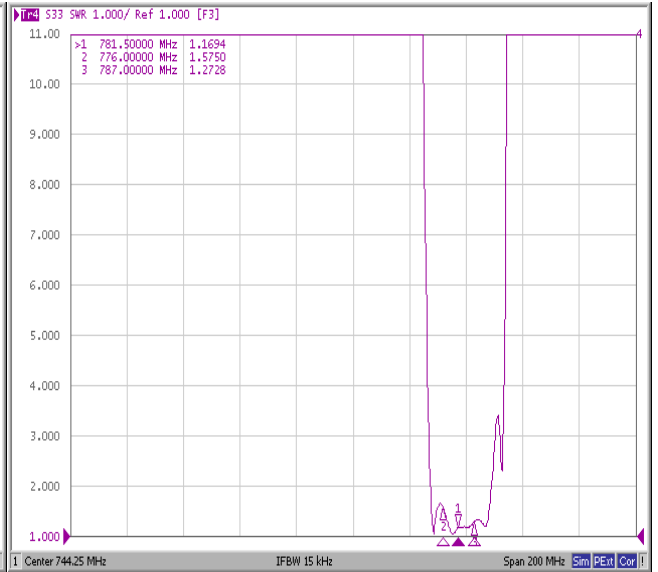
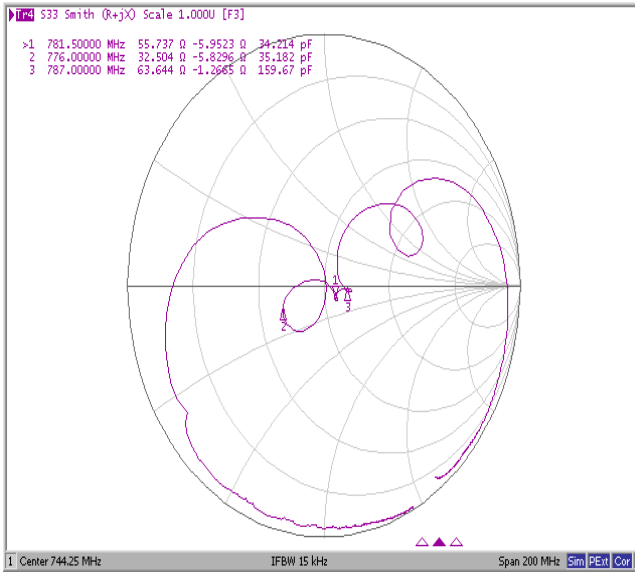




Rx Part

Smith Chart

VSWR



Antenna

Smith Chart

VSWR

