

SD1921BP7

WCDMA SAW Duplexer
Revision 0: AUG, 2007



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

□ Electrical Characteristics

Maximum Ratings

ITEM	UNIT	MIN.	TYP.	MAX.
Operation Temperature Range	°C	-20	-	+75
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Input Power	dBm	28dBm>50000 Hours, CW tone(Ta= +50°C)		
Input Power Max – Other than LowFreq. band	dBm	10		
Ant. LowFreq ,HighFreq. Terminating Impedance	Ω	50 Ohm		
Package type	P7			
Length x Width	mm ²	3.8 x 3.8		
Height	mm	1.35		

Electrical Specification

Rx_1970MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	1960 ~ 1980	dB	-	2.3	3.0
Ripple	1960 ~ 1980	dB _{p-p}	-	0.4	1.0
Return Loss	1960 ~ 1980	dB	10	14	-
Absolute Attenuation	D.C ~ 900	dB	50	60	-
	1570 ~ 1580	dB	35	50	-
	2090	dB	45	53	-
	2150 ~ 2170	dB	45	49	-
	2300 ~ 2500	dB	20	28	-
Tx_2160MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	2150 ~ 2170	dB	-	2.7	3.2
Ripple	2150 ~ 2170	dB _{p-p}	-	0.5	1.0
Return Loss	2150 ~ 2170	dB	10	12	-
Absolute Attenuation	D.C ~ 900	dB	55	67	-
	1570 ~ 1580	dB	35	45	-
	1960 ~ 1980	dB	45	49	-
	2090	dB	20	30	-
	2300 ~ 2500	dB	35	45	-



SD1921BP7

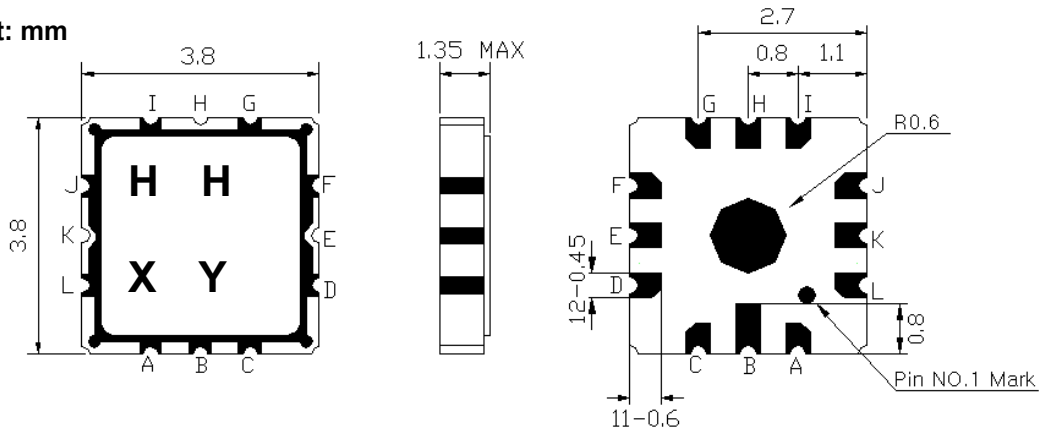
SAW Duplexer for WCDMA

Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	1960 ~ 1980	dB	45	55	-
	2150 ~ 2170	dB	40	46	-

Notes : Including Test PCB Loss

□ Package Dimensions

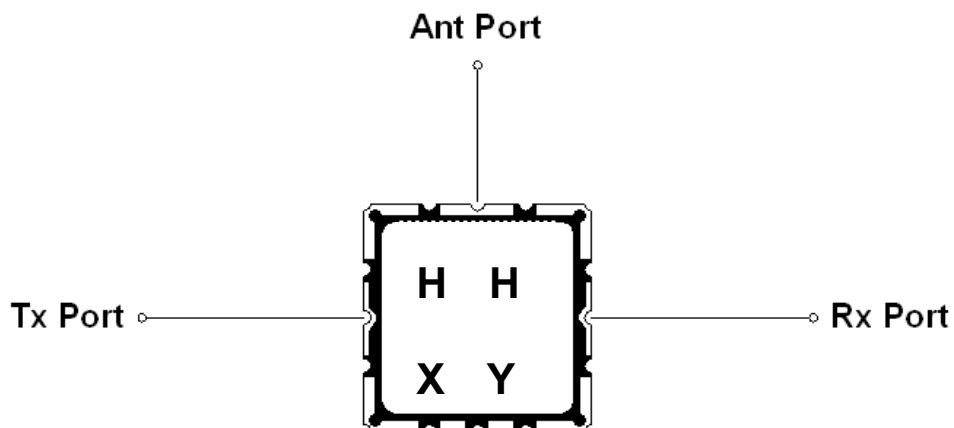
Unit: mm



Marking Descriptions	
H	Application(WCDMA)
H	Series(SD1921BP7)
X	Date Code(Year)
Y	Date Code(Month)

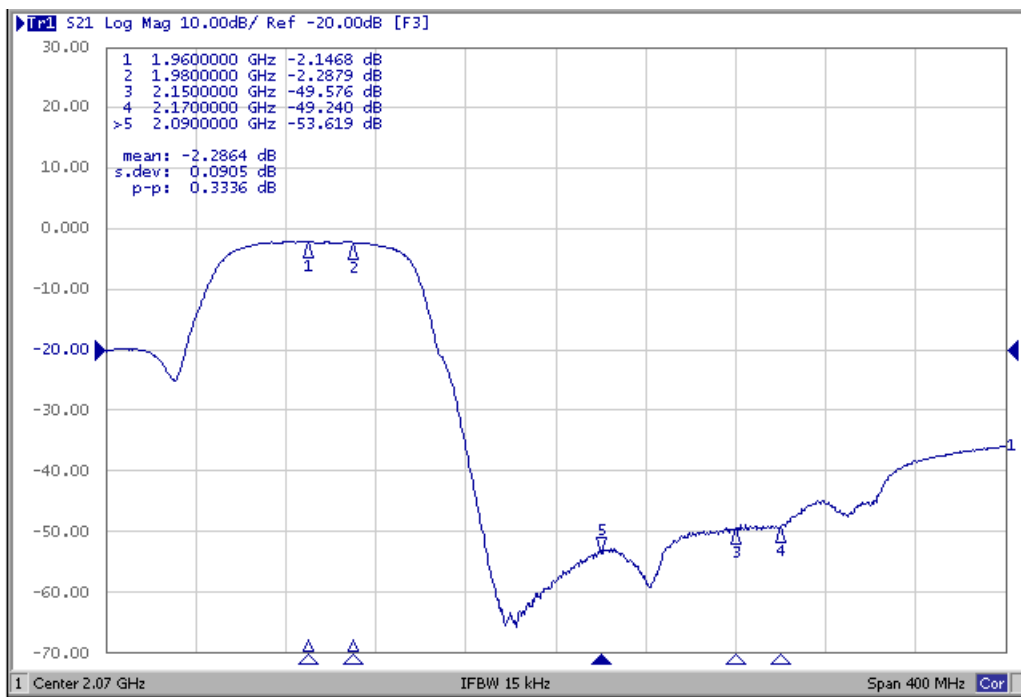
Pin Description	
A, C, D, F, G, I, J, L	GND
K	Tx Port(2160MHz)
H	Ant Port
E	Rx Port(1970MHz)

□ Testing Environment

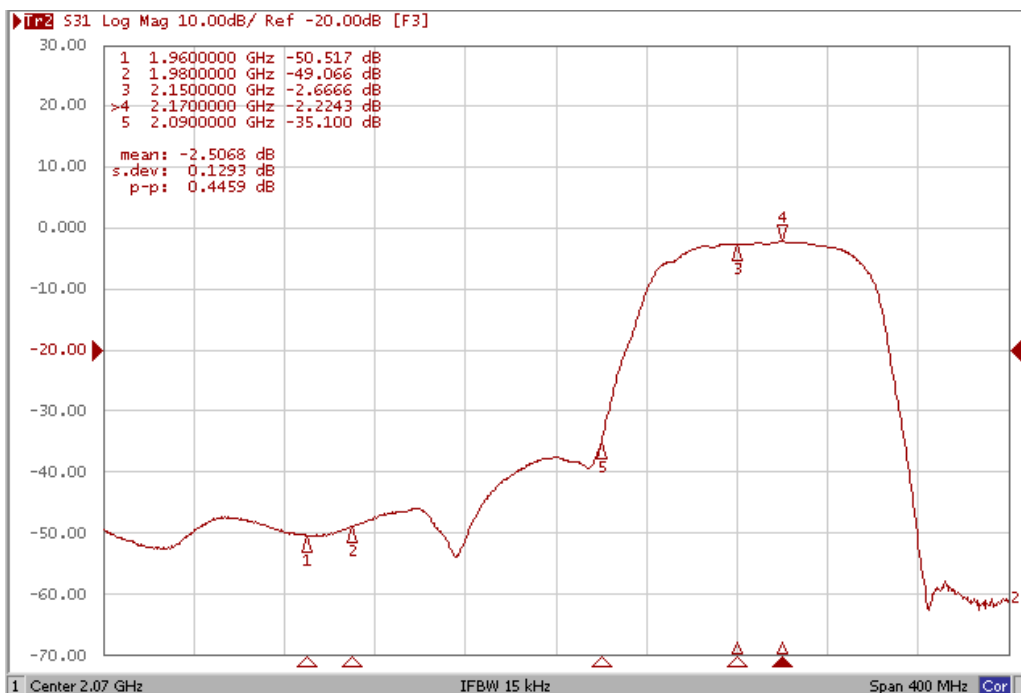


□ Frequency Characteristics

Rx Characteristic

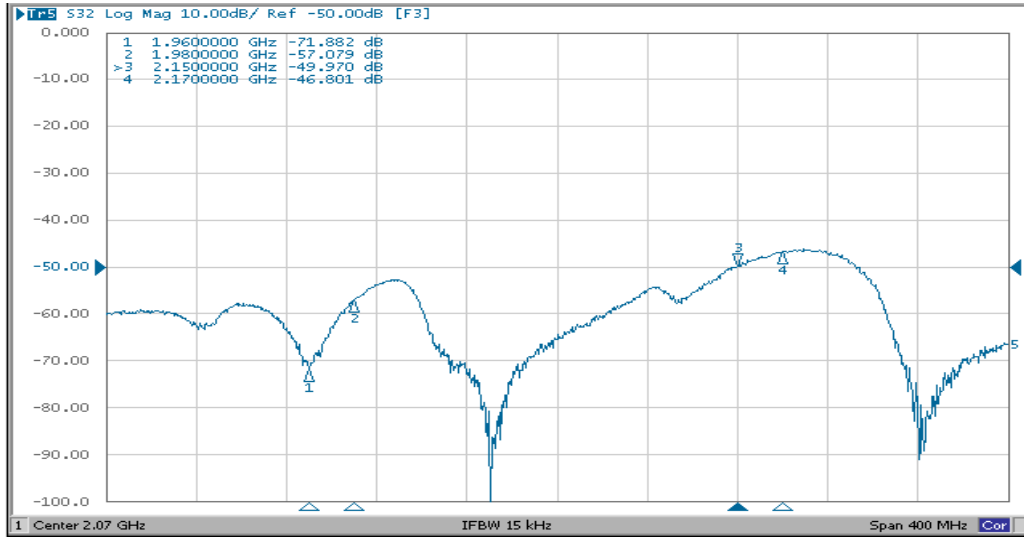


Tx Characteristic





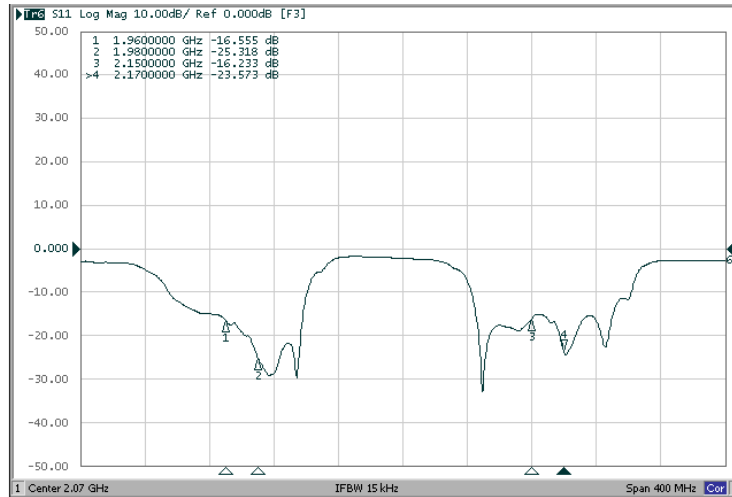
Isolation Characteristic



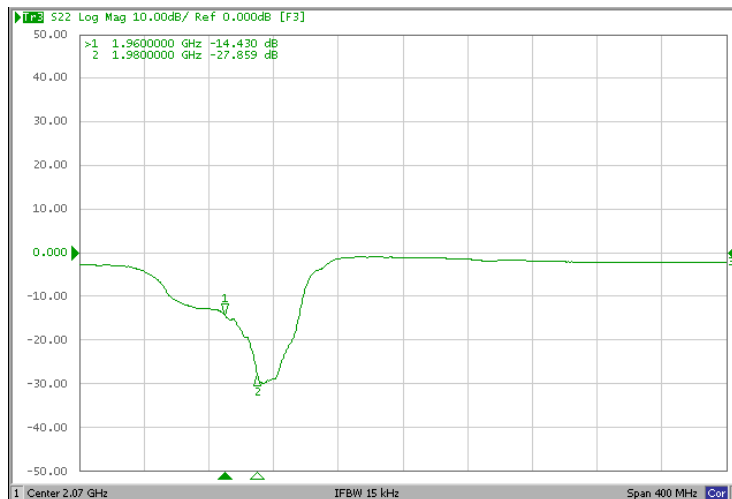


Return Loss Characteristic

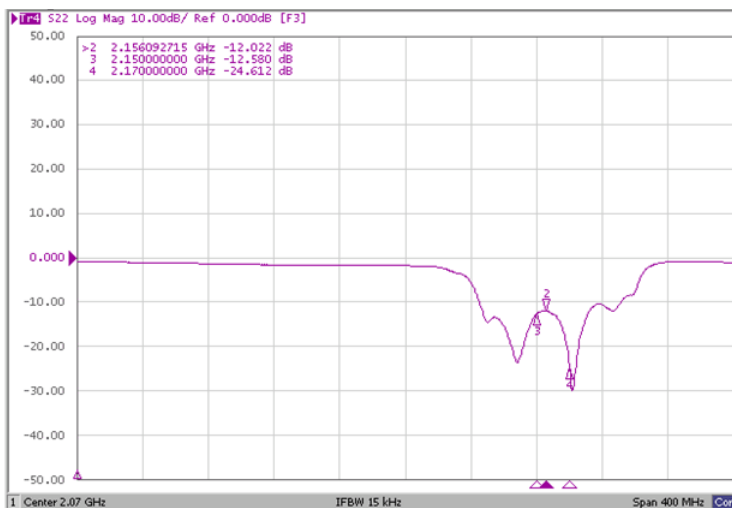
Ant



Rx

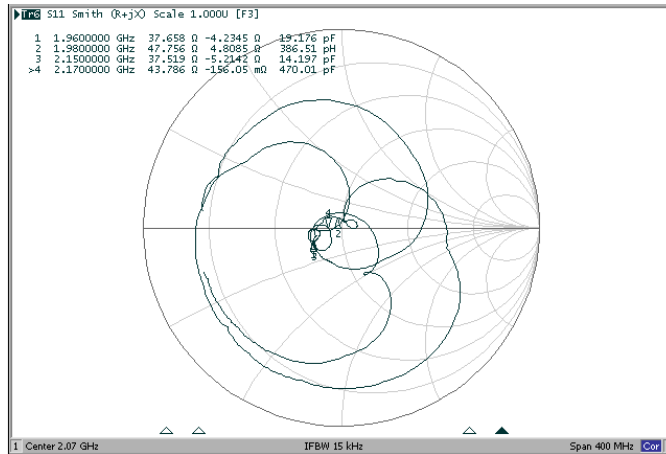


Tx

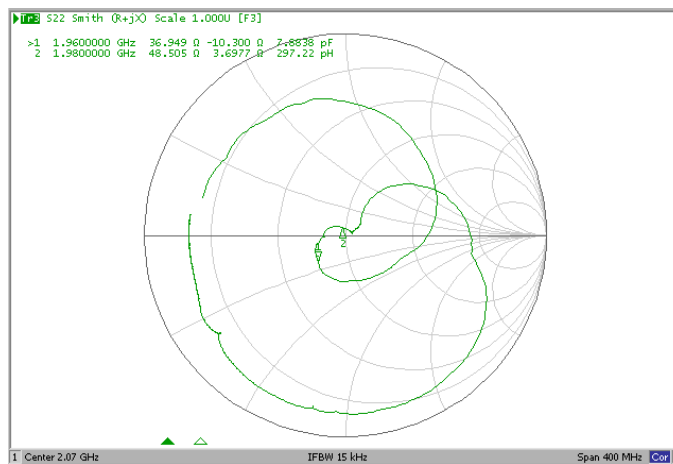


Smith Chart Characteristic

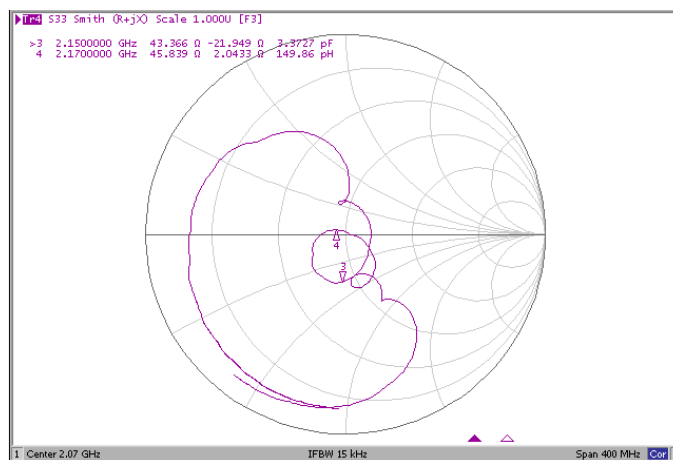
Ant



Rx

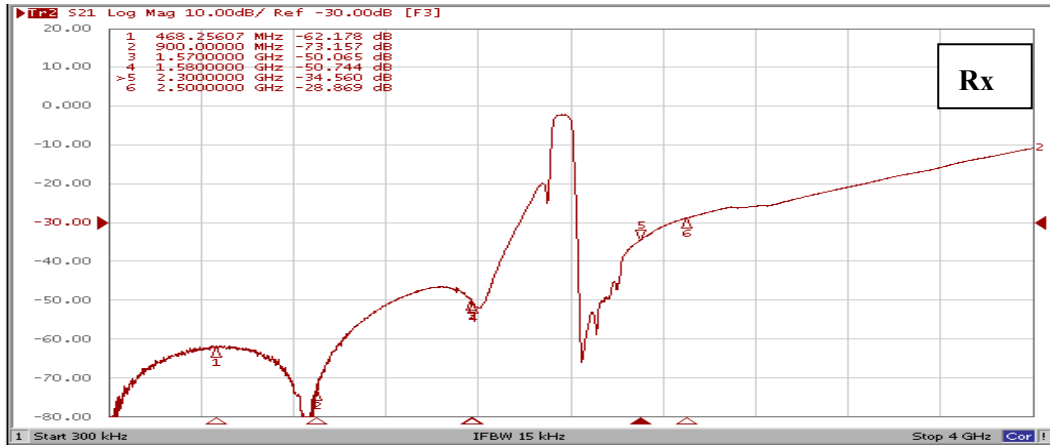


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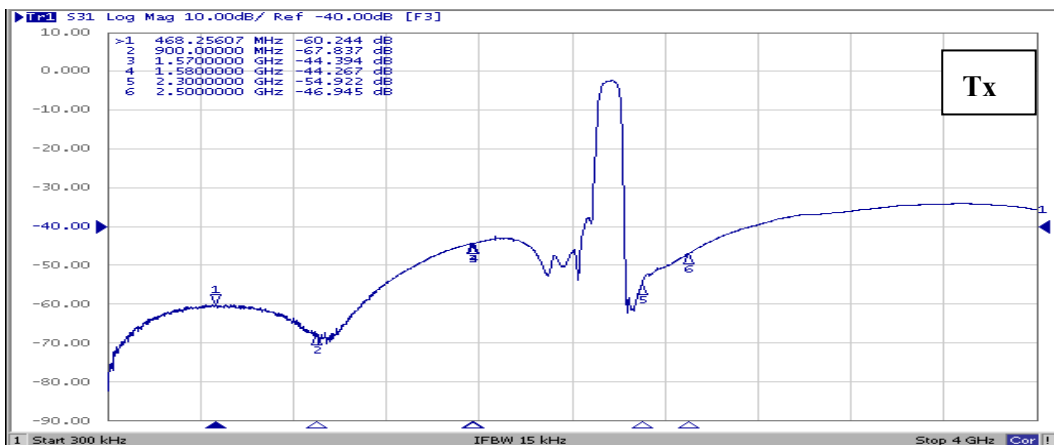




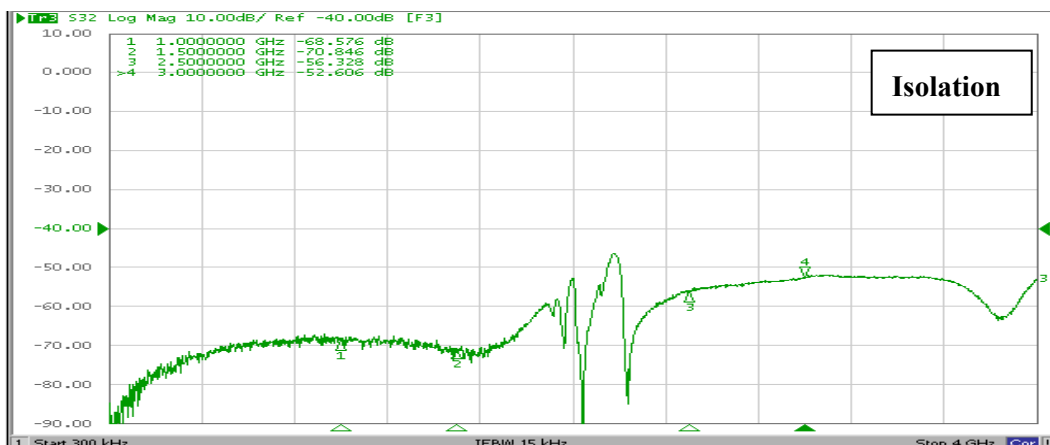
Wide Span. Characteristic



High Freq. Wide Characteristic



Isolation Wide Characteristic





Test PCB Loss

