

SD1921CP7

WCDMA SAW Duplexer
Revision 0: Oct, 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_1930MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	1920 ~ 1940	dB	-	2.2	2.8
Ripple	1920 ~ 1940	dB _{p-p}	-	0.4	1.0
Return Loss	1920 ~ 1940	dB	10	15	-
Absolute Attenuation	D.C ~ 900	dB	50	60	-
	1570 ~ 1580	dB	35	46	-
	2050	dB	45	55	-
	2110 ~ 2130	dB	45	53	-
	2300 ~ 2500	dB	20	28	-
Tx_2120MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	2110 ~ 2130	dB	-	2.6	3.2
Ripple	2110 ~ 2130	dB _{p-p}	-	0.6	1.2
Return Loss	2110 ~ 2130	dB	10	15	-
Absolute Attenuation	D.C ~ 900	dB	50	60	-
	1570 ~ 1580	dB	35	44	-
	1920 ~ 1940	dB	43	49	-
	2050	dB	15	25	-
	2300 ~ 2500	dB	35	45	-



SD1921CP7

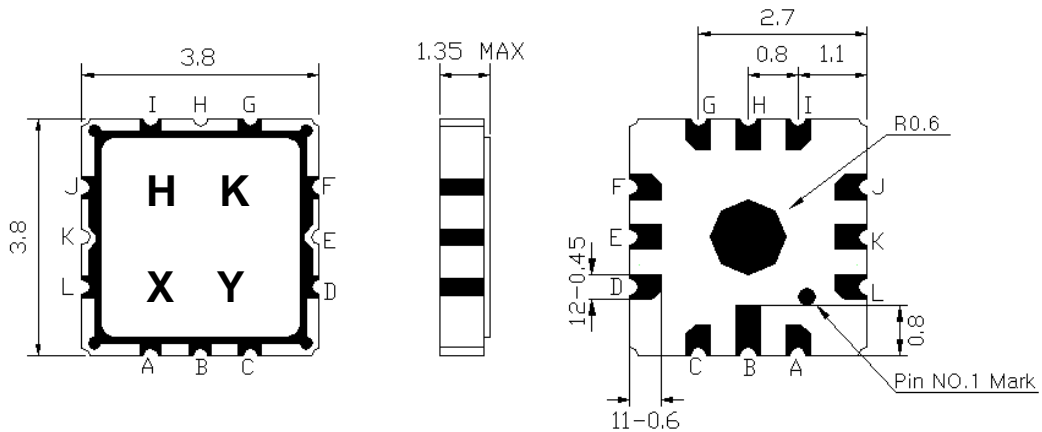
SAW Duplexer for WCDMA

Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	1920 ~ 1940	dB	50	55	-
	2110 ~ 2130	dB	41	46	-

Notes : Excluding Losses due to PCB.

□ Package Dimensions

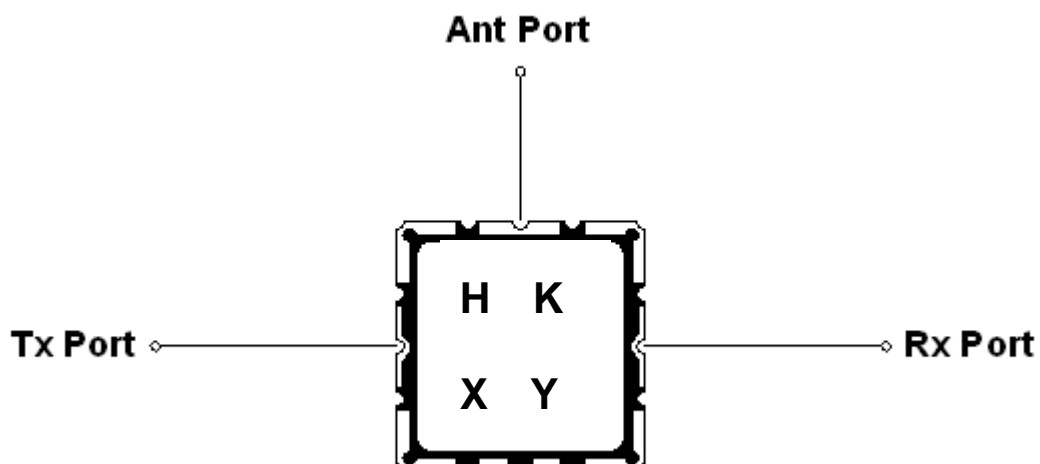
Unit: mm



Marking Descriptions	
H	Application(WCDMA)
K	Series(SD1921CP7)
X	Date Code(Year)
Y	Date Code(Month)

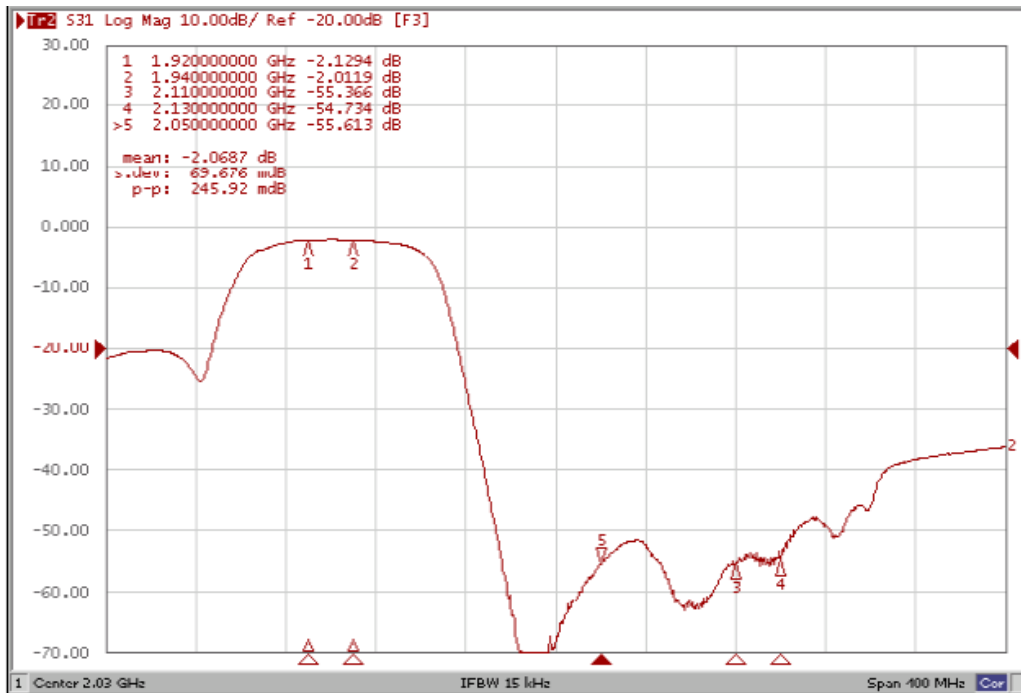
Pin Description	
A, B, C, D, F, G, I, J, L	GND
E	Rx Port(1930MHz)
H	Ant Port
K	TxPort(2120MHz)

□ Testing Environment

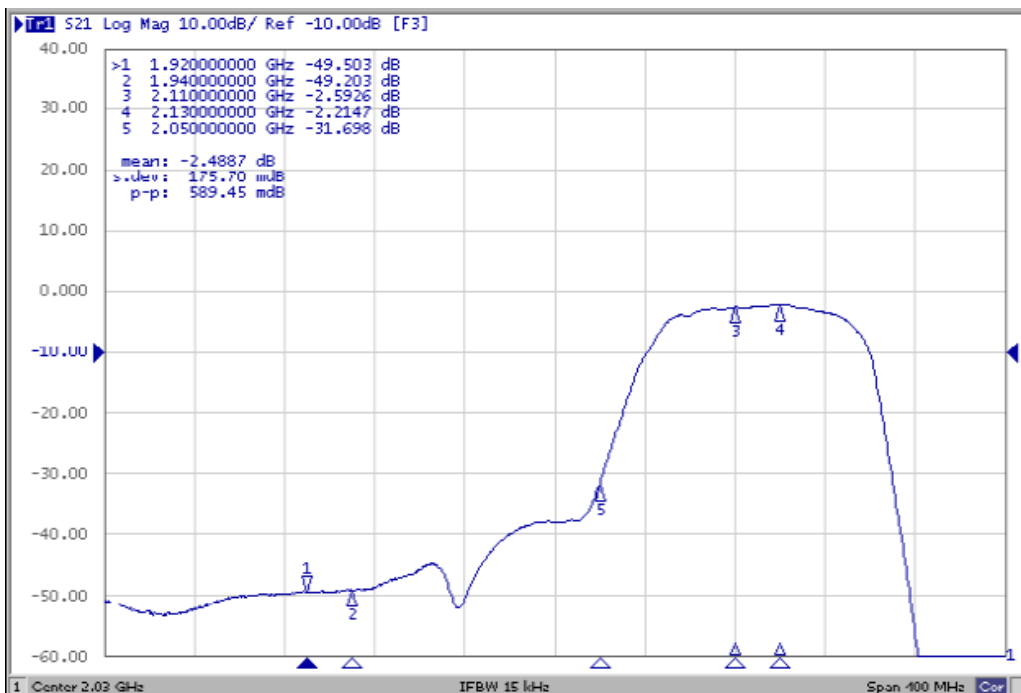


□ Frequency Characteristics

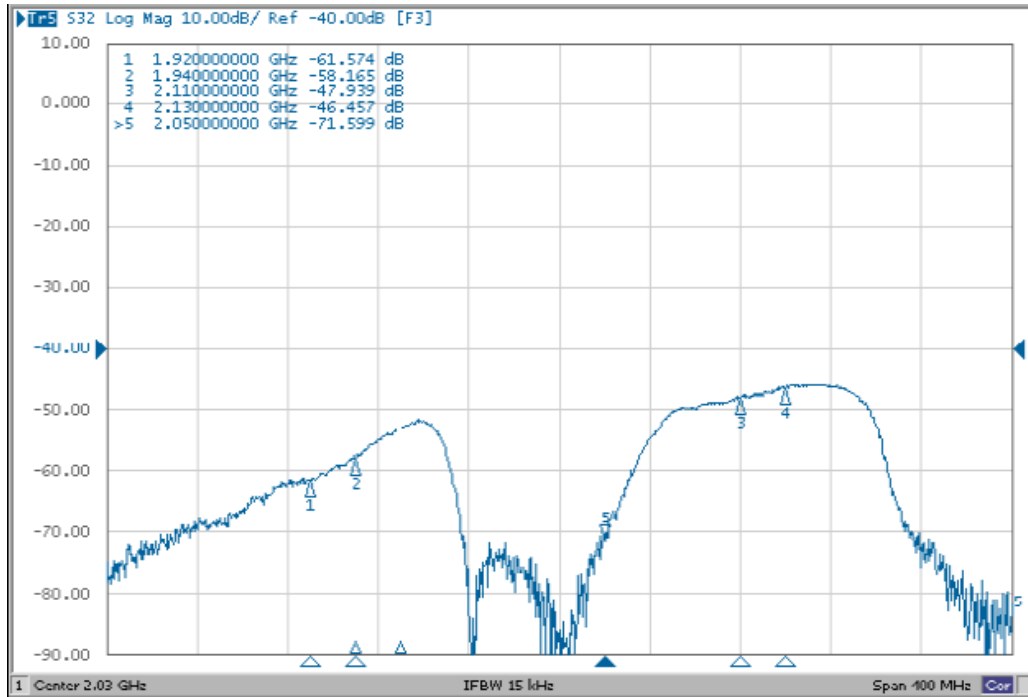
Rx Characteristic



Tx Characteristic

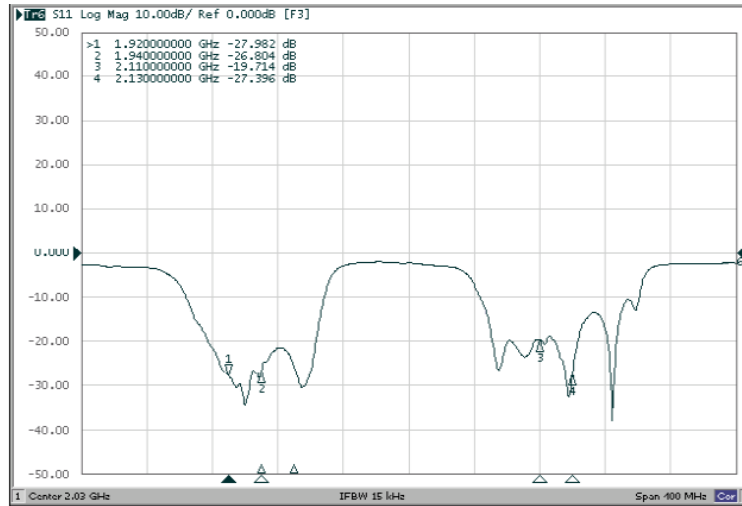


Isolation Characteristic

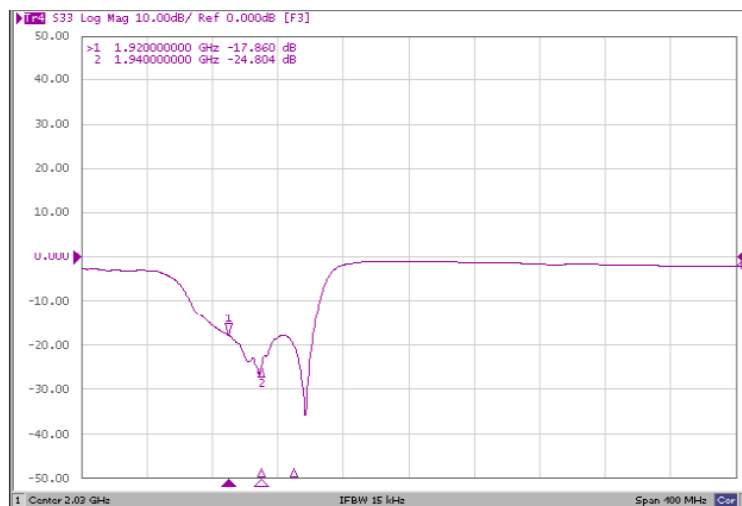


Return Loss Characteristic

Ant



Rx

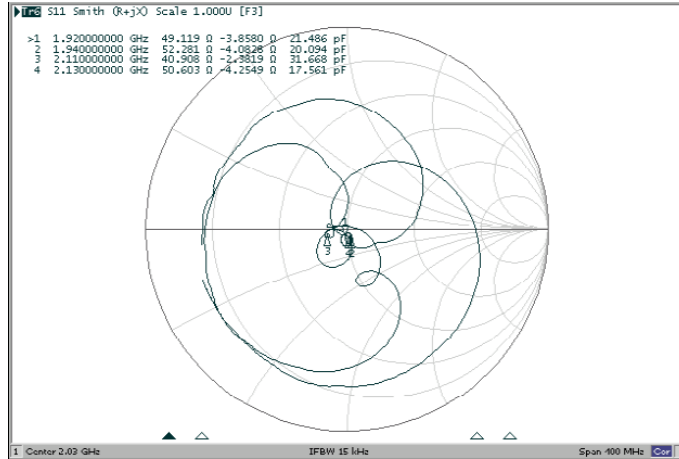


Tx

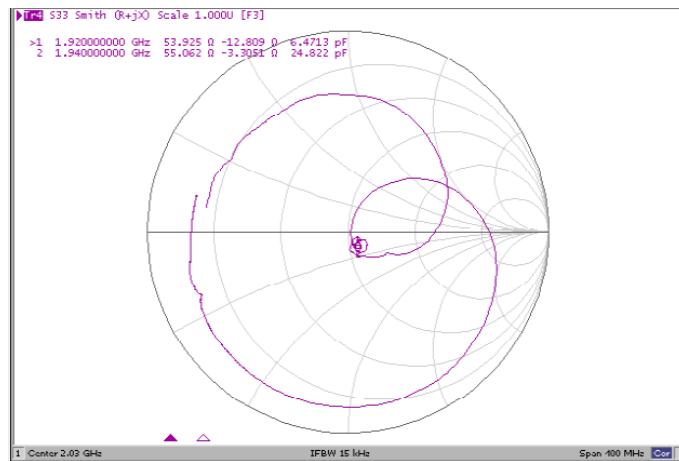


Smith Chart Characteristic

Ant

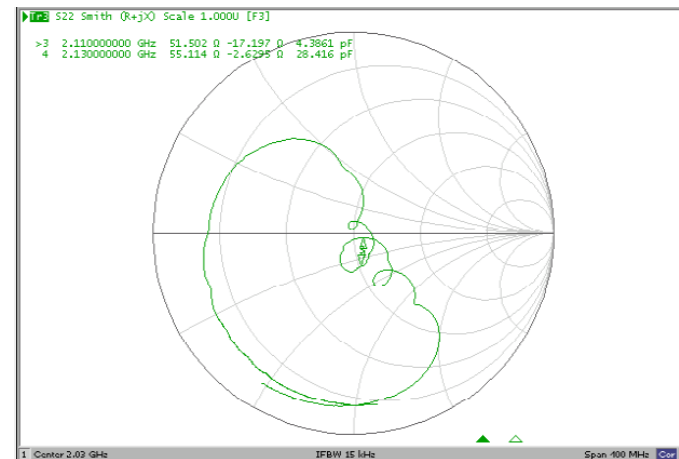


Rx



B

Tx





Wide Span. Characteristic

