

- WCDMA SAW Duplexer
- Revision 0: MAY 2007

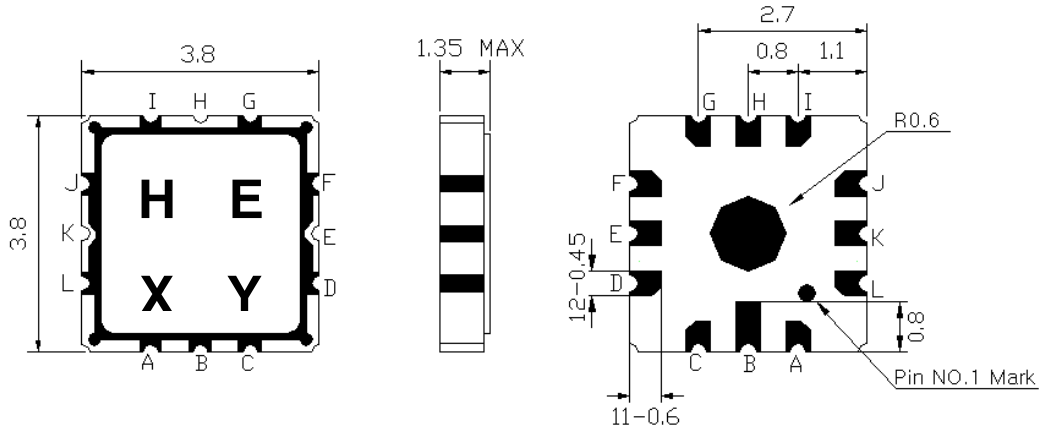
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating 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= +55°C)		
Input Power Max – Other than LowFreq. band	dBm	-	10	-
Ant. LowFreq, HighFreq. Terminating Impedance	Ω	-	50	-
Package type & size	P7			
Length x Width	mm ²	-	3.8 x 3.8	-
Height	mm	-	1.35	-

ELECTRICAL SPECIFICATION					
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Rx_1950MHz		Specifications			
Insertion Loss	1940 ~ 1960	dB	-	1.9	-
Ripple	1940 ~ 1960	dB _{p-p}	-	0.4	-
Return Loss	1940 ~ 1960	dB	10	14	10
Absolute Attenuation	D.C ~ 900	dB	50	58	50
	1570 ~ 1580	dB	35	46	35
	2070	dB	45	53	45
	2130 ~ 2150	dB	45	50	45
	2300 ~ 2500	dB	20	29	20
Tx_2140MHz		Specifications			
Insertion Loss	2130 ~ 2150	dB	-	2.2	3.0
Ripple	2130 ~ 2150	dB _{p-p}	-	0.6	1.0
Return Loss	2130 ~ 2150	dB	10	14	-
Absolute Attenuation	D.C ~ 900	dB	50	58	-
	1570 ~ 1580	dB	35	46	-
	1940 ~ 1960	dB	45	49	-
	2070	dB	20	27	-
	2300 ~ 2500	dB	35	45	-
Rx → Tx		Specifications			
Isolation	1940 ~ 1960	dB	47	54	-
	2130 ~ 2150	dB	43	46	-

Notes : Excluding Losses due to PCB.

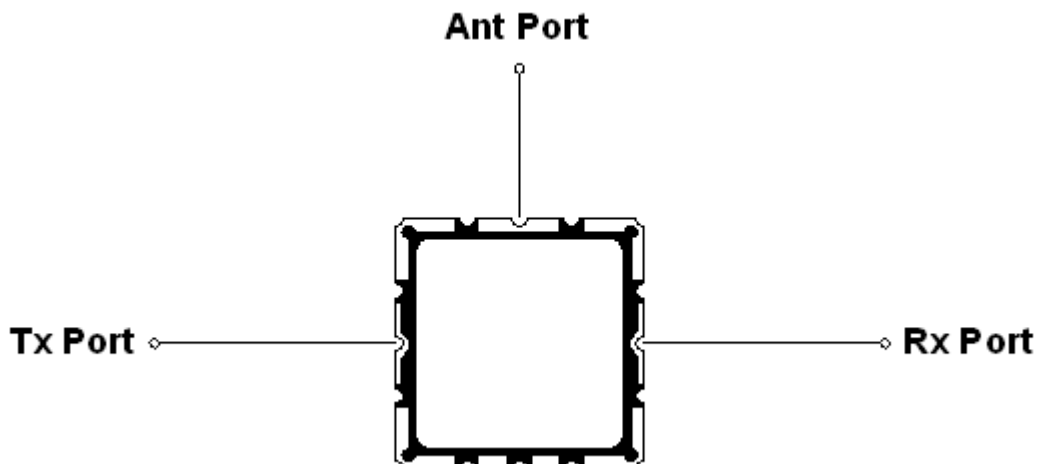
Package Dimensions



Marking Descriptions	
H	Application (WCDMA)
E	Series (TD1921AP7)
X	Date Code (Year)
Y	Date Code (Month)

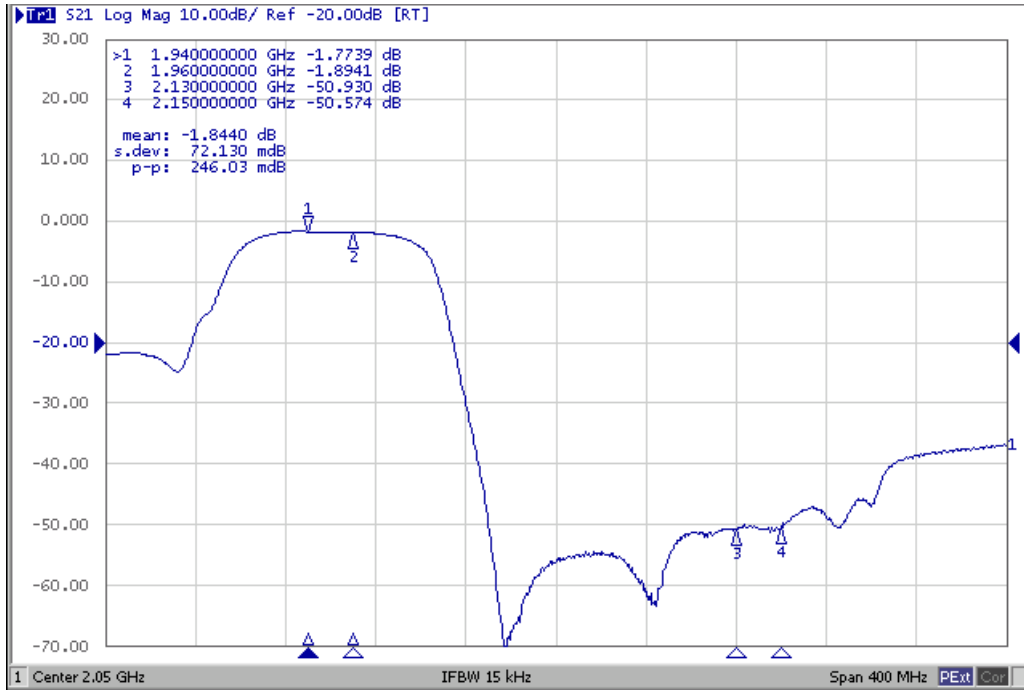
Pin Description	
A, B, C, D, F, G, I, J, L	GND
E	Rx Port(1950MHz)
H	Ant Port
K	TxPort(2140MHz)

Testing Environment

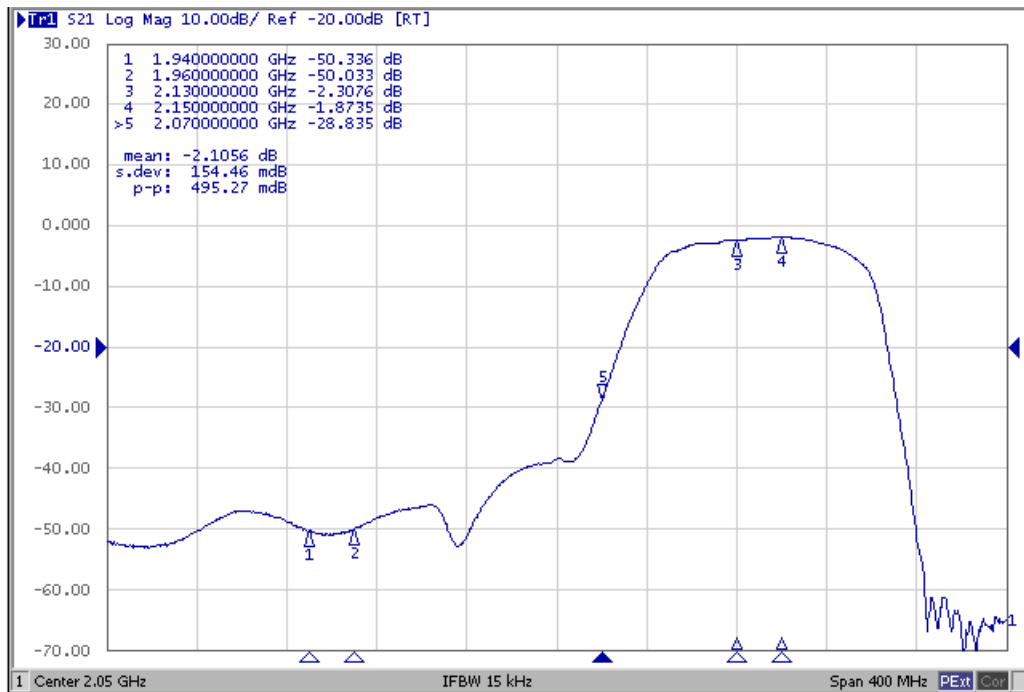


Frequency Characteristics

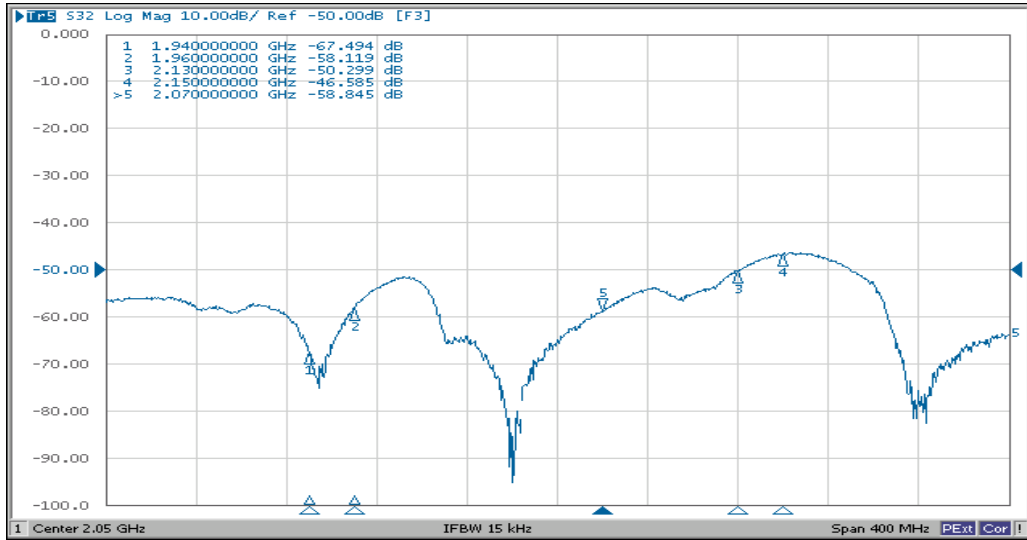
Rx Characteristic



Tx Characteristic

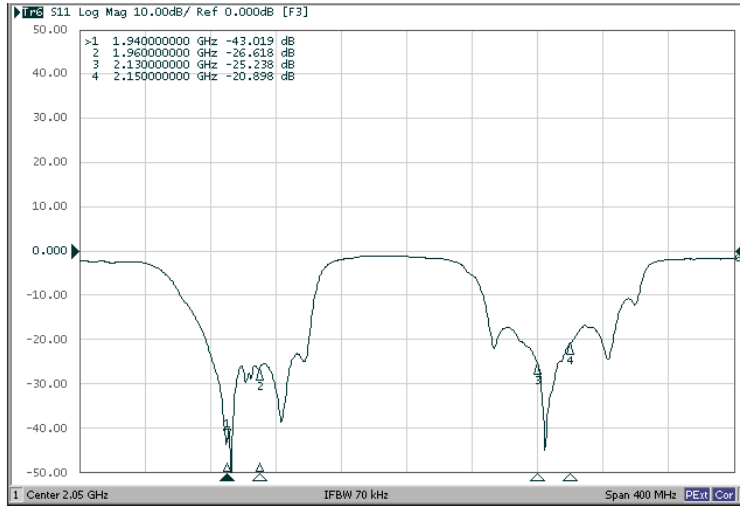


Isolation Characteristic

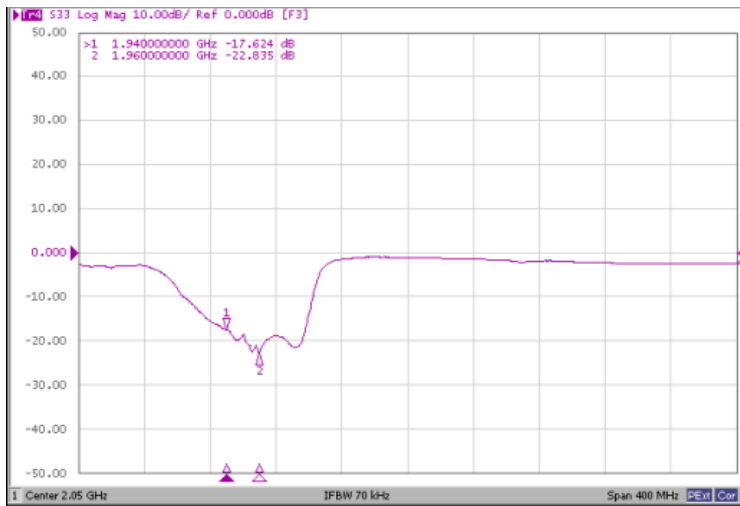


Return Loss Characteristic

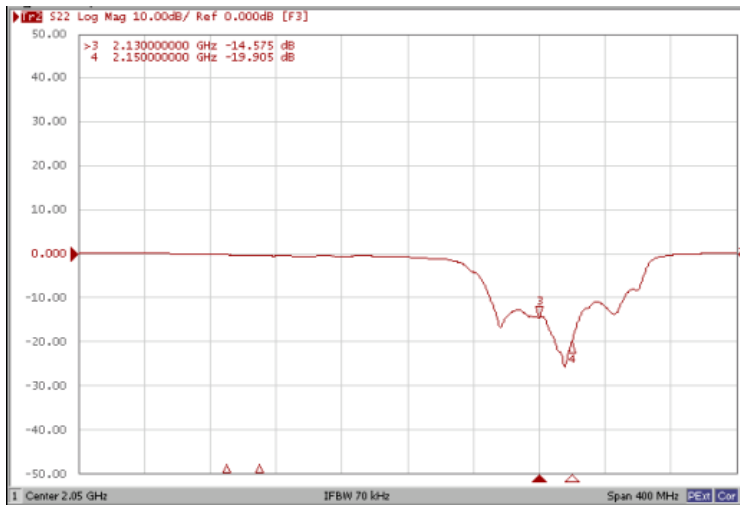
Ant



Rx

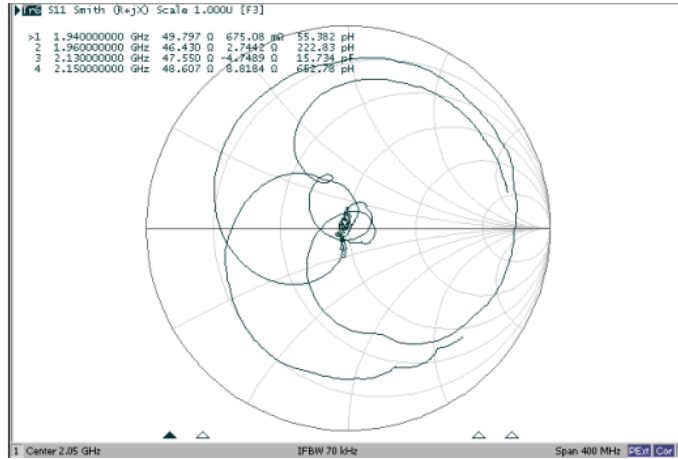


Tx

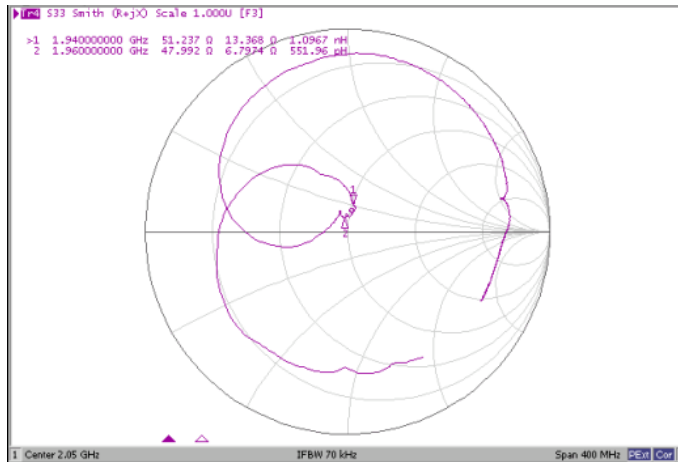


Smith Chart Characteristic

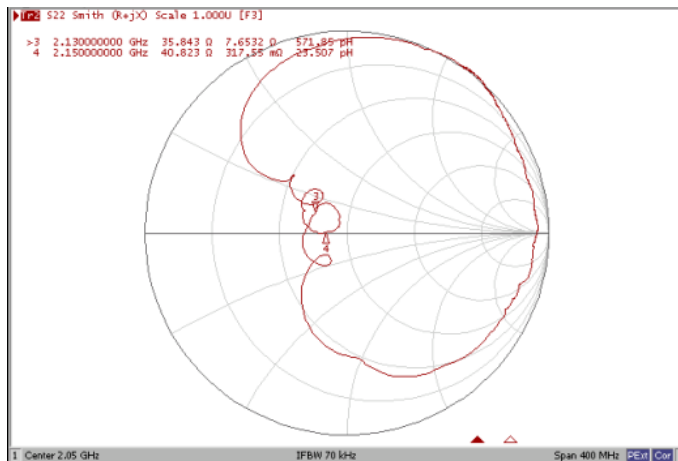
Ant



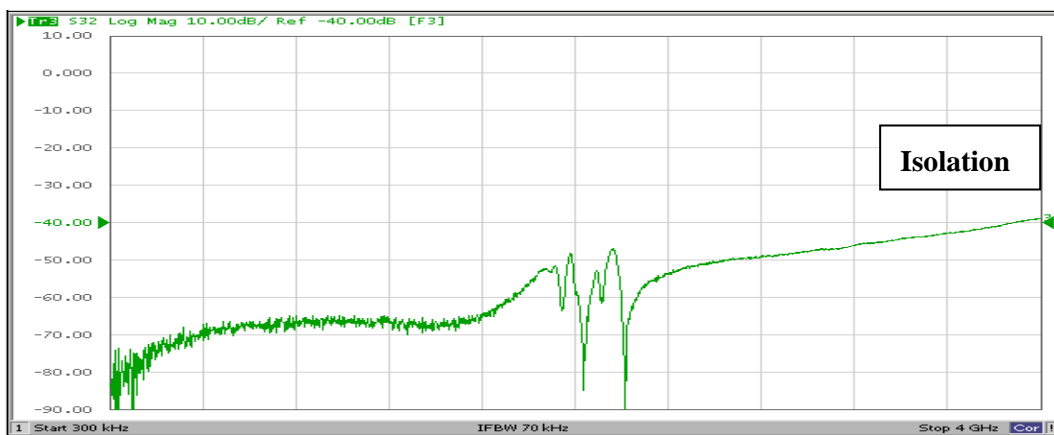
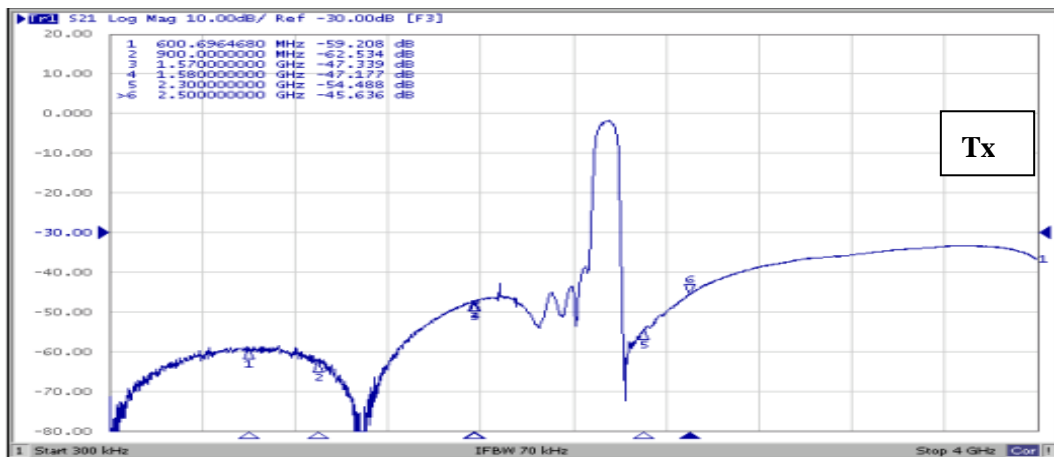
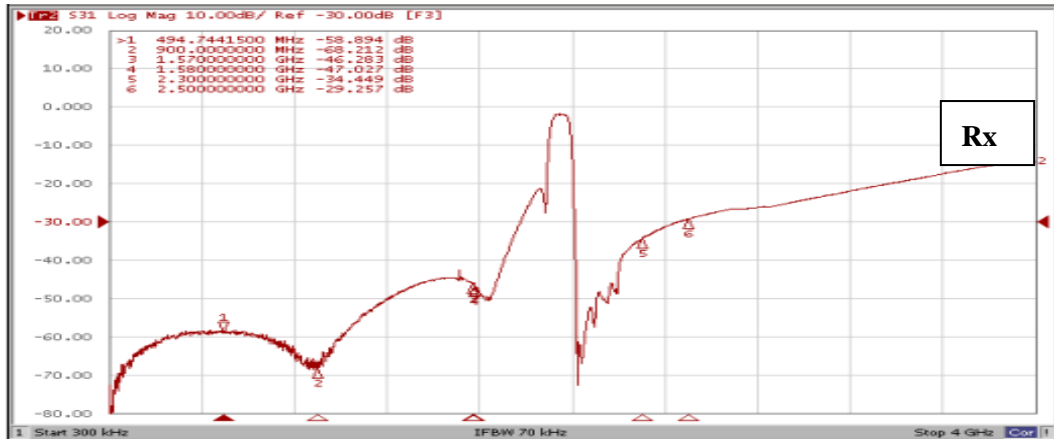
Rx



Tx



Wide Span Characteristic



Test PCB Loss at 3G Band

