

- WCDMA SAW Duplexer
- Revision 0: August 2007

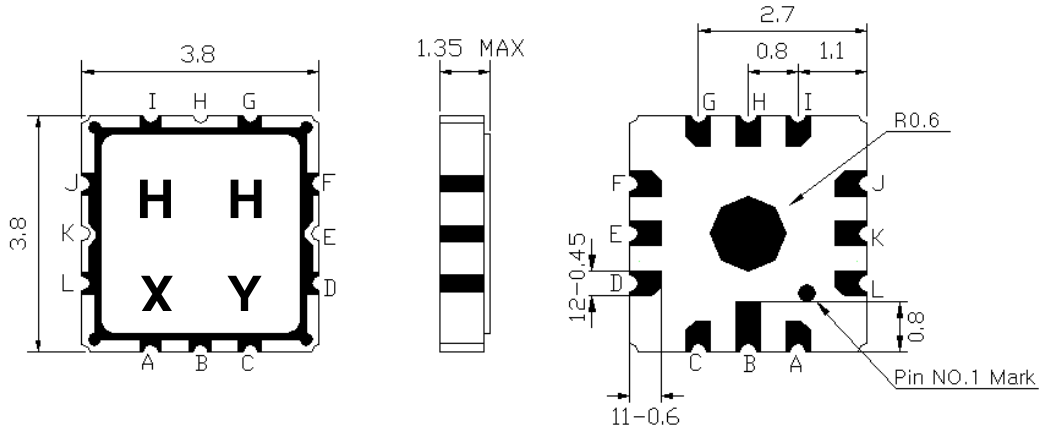
## Electrical Characteristics

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 <sup>2</sup>	-	3.8 x 3.8	-
Height	mm	-	1.35	-

ELECTRICAL SPECIFICATION					
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
<b>Rx_1970MHz</b>		<b>Specifications</b>			
Insertion Loss	1960 ~ 1980	dB	-	2.3	3.0
Ripple	1960 ~ 1980	dBp-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	-
<b>Tx_2160MHz</b>		<b>Specifications</b>			
Insertion Loss	2150 ~ 2170	dB	-	2.7	3.2
Ripple	2150 ~ 2170	dBp-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	-
<b>Rx → Tx</b>		<b>Specifications</b>			
Isolation	1960 ~ 1980	dB	45	55	-
	2150 ~ 2170	dB	40	46	-

**Notes :** Including Test PCB Loss.

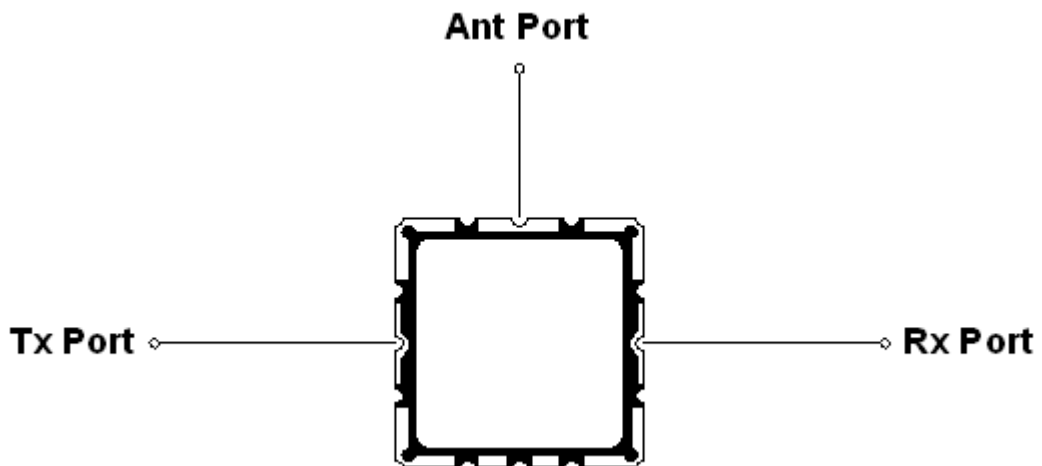
## Package Dimensions



Marking Descriptions	
H	Application(WCDMA)
H	Series(TD1921BP7)
X	Date Code (Year)
Y	Date Code (Month)

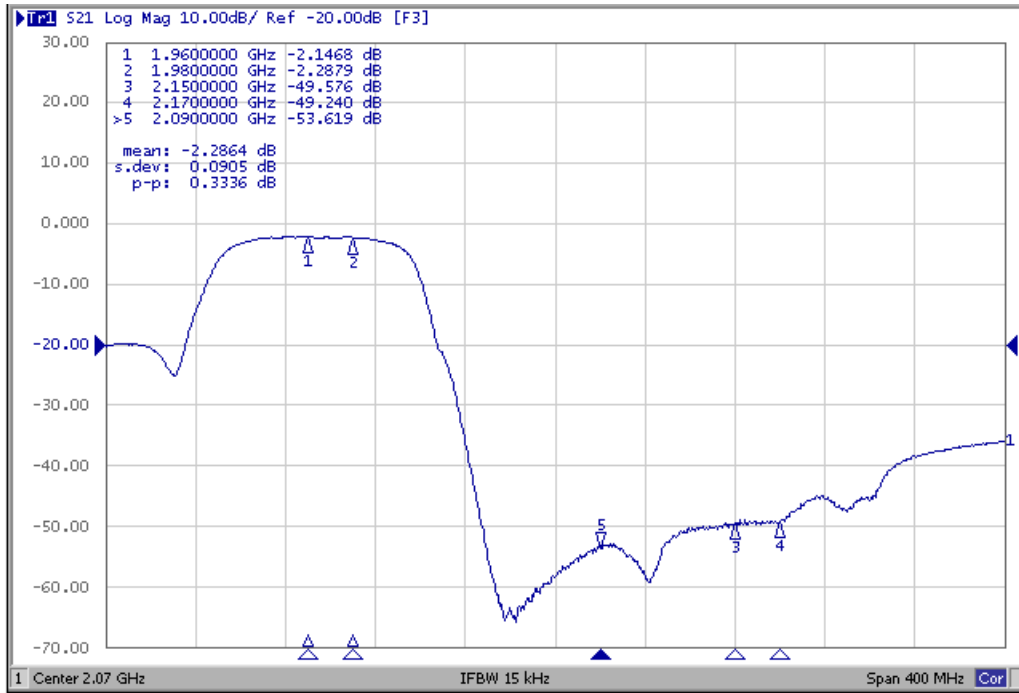
Pin Description	
A, C, D, F, G, I, J, L	GND
B	Tx Port(2160MHz)
K	Ant Port
H	Rx Port(1970MHz)

## Testing Environment

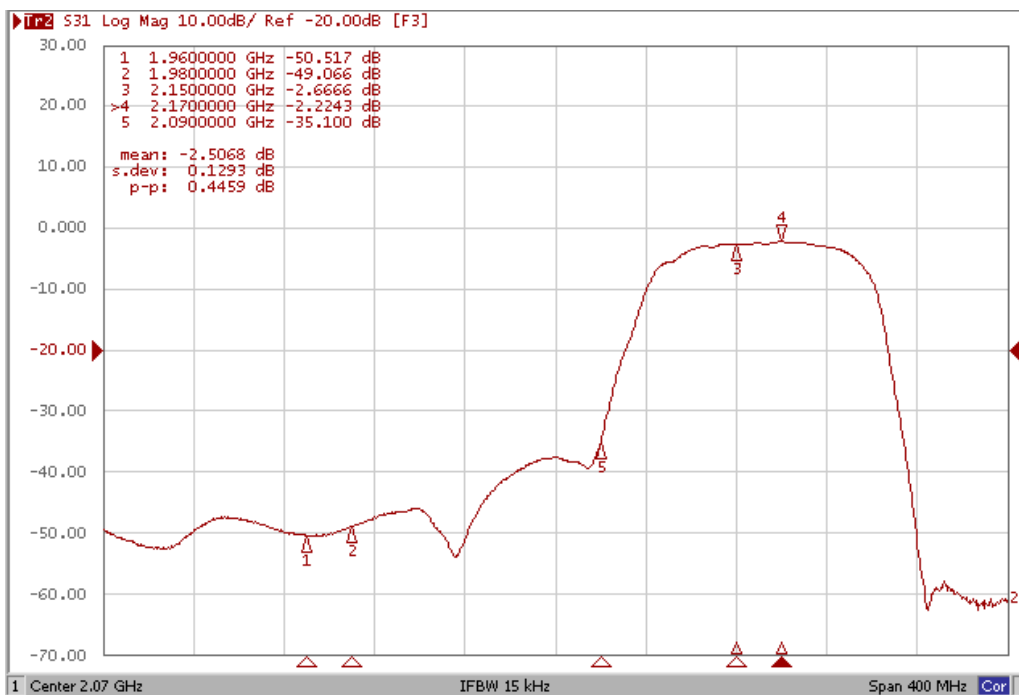


## Frequency Characteristics

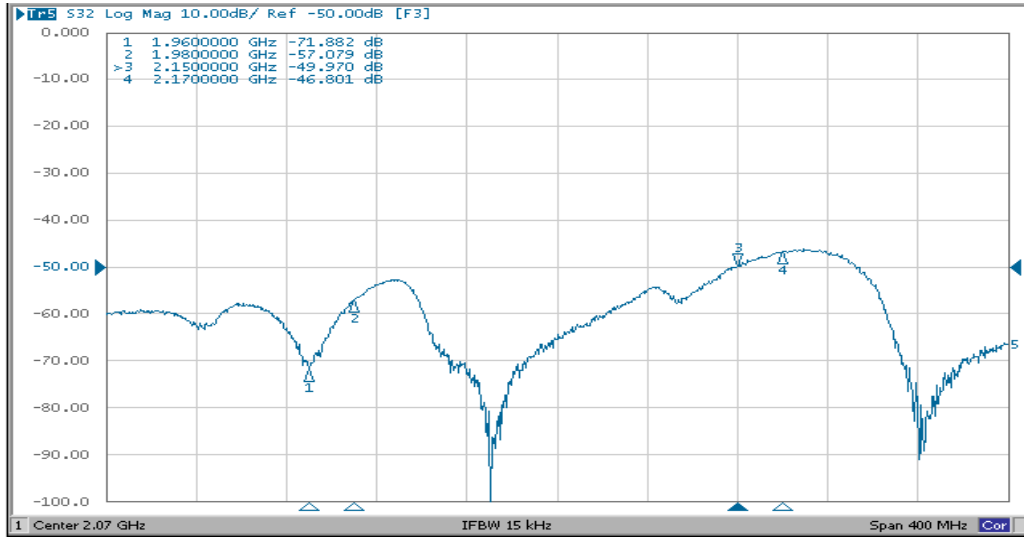
**Rx Characteristic**



**Tx Characteristic**

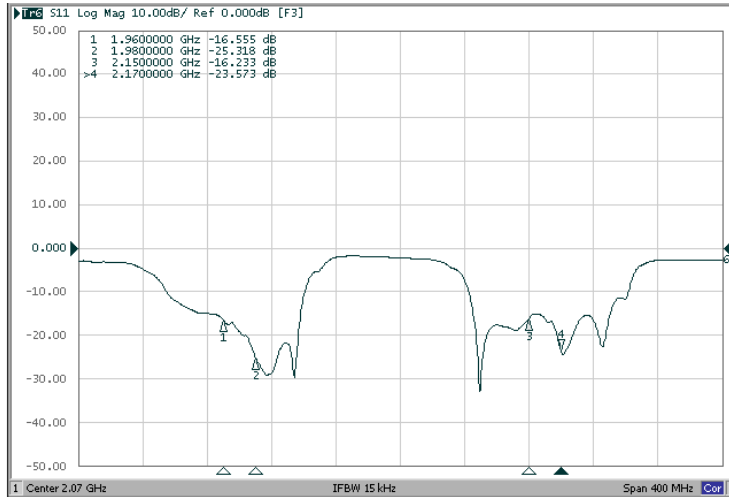


## Isolation Characteristic

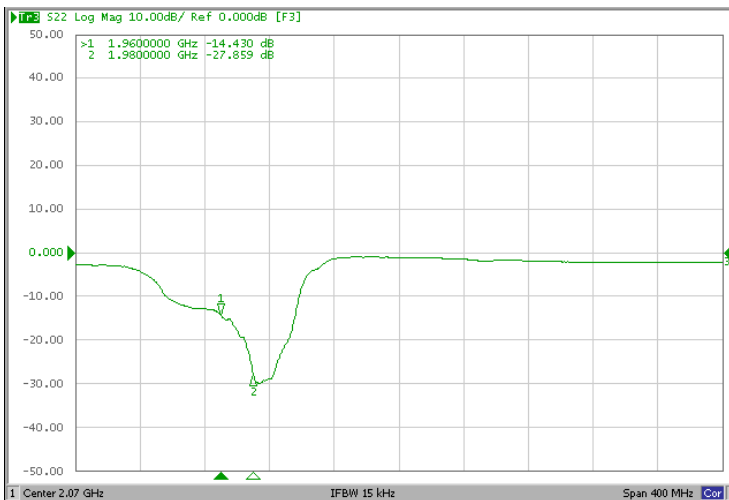


**Return Loss Characteristic**

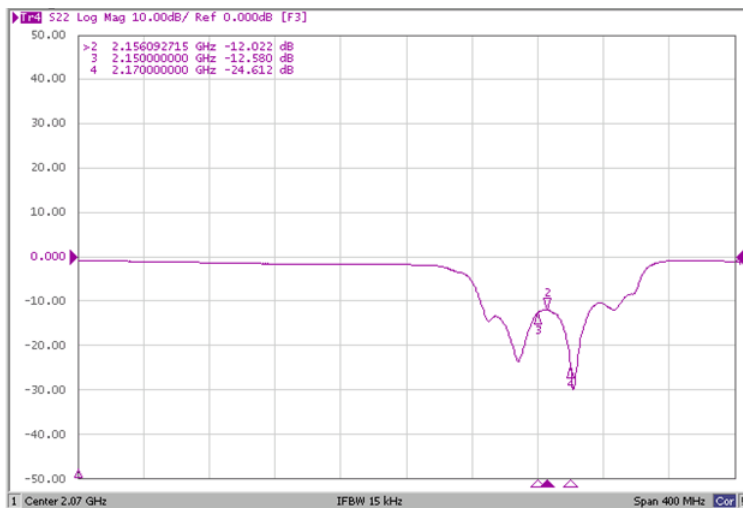
**Ant**



**Rx**

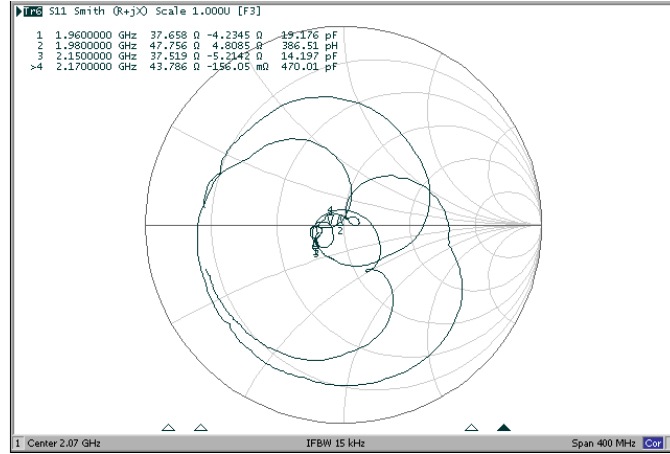


**Tx**

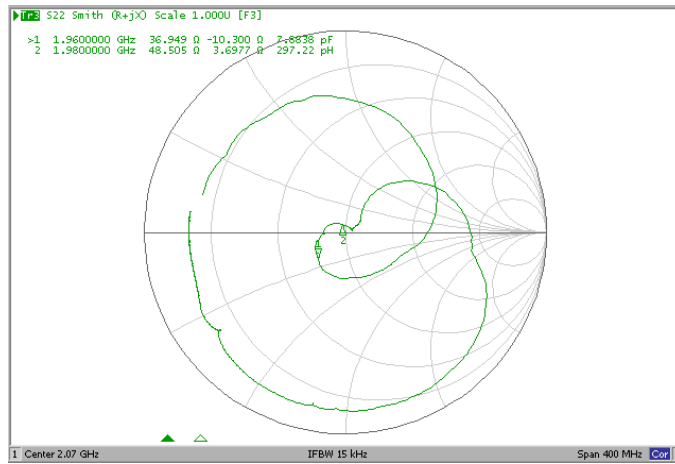


**Smith Chart Characteristic**

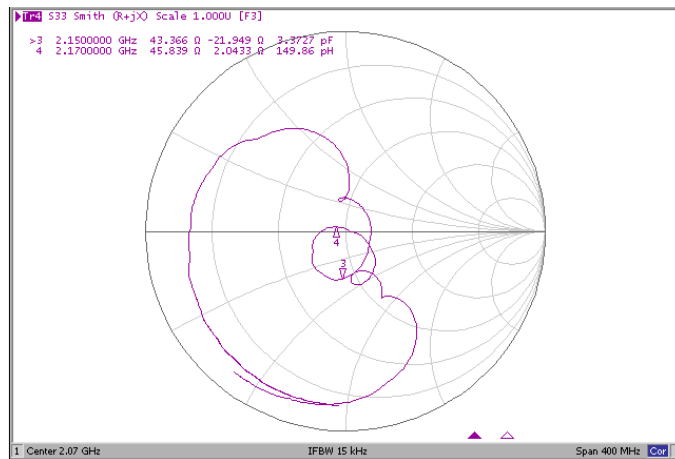
**Ant**



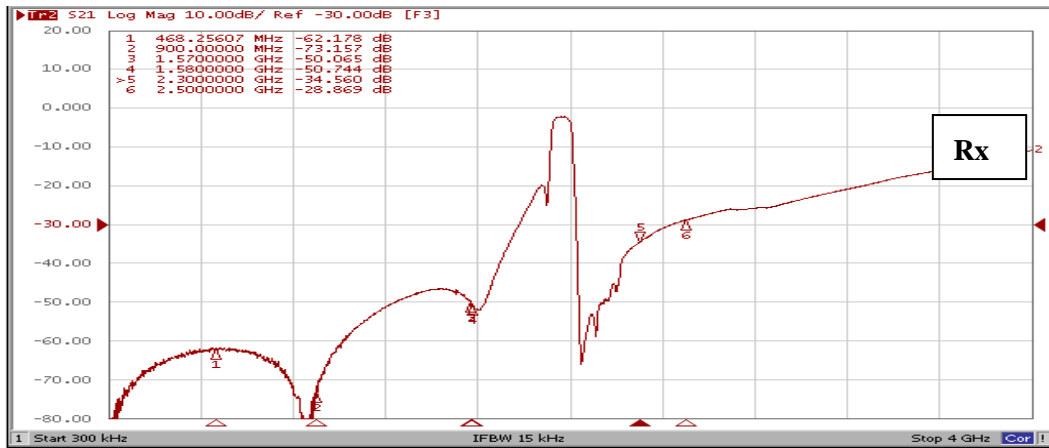
**Rx**



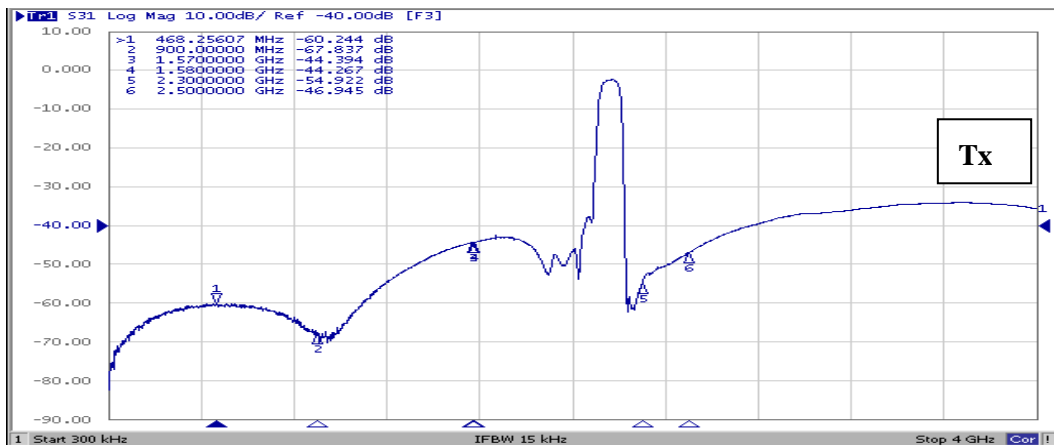
**Tx**



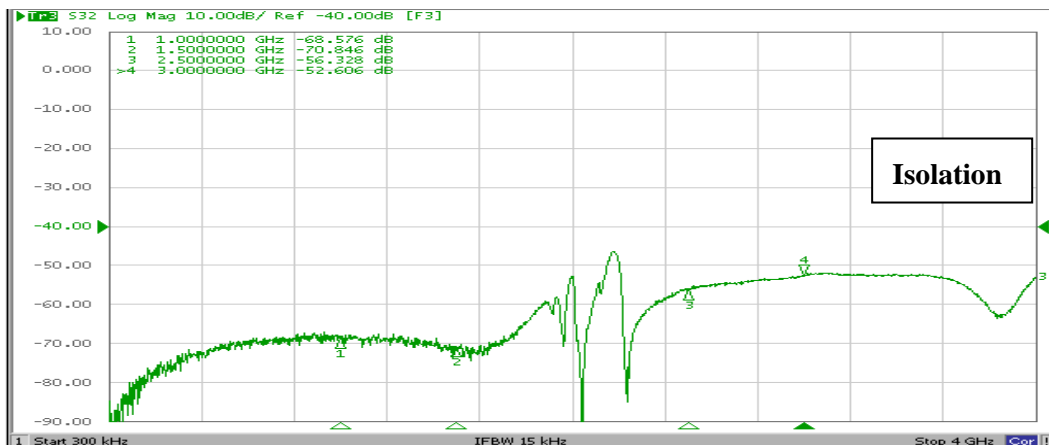
**Wide Span Characteristic**



**High Freq. Wide Characteristic**



**Isolation Wide Characteristic**



**Test PCB Loss**

