

- CDMA450 Rx Balanced SAW Duplexer For 412.5 MHz / 422.5 MHz
- Revision 0: July 2011

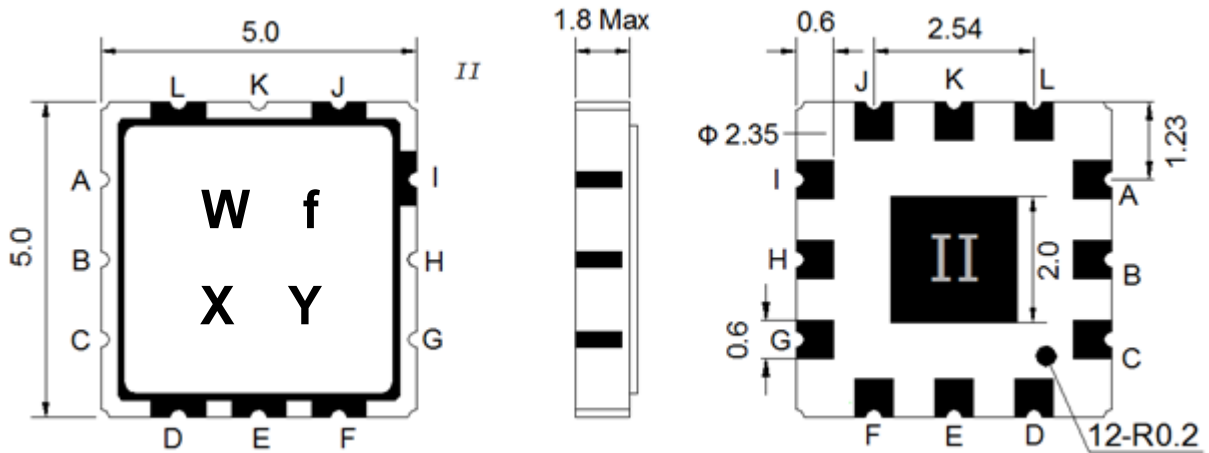
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-30	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	0	-
Input Power Level	dBm	29dBm> 50000 Hours, CW tone(Ta= +55°C)		
Antenna & Tx Impedance (single ended)	Ω	-	50	-
Rx Impedance (balanced) <sup>(1)</sup>	Ω	-	100	-
Package type & size	K6			
Length x Width	mm <sup>2</sup>	-	5.0 x 5.0	-
Height	mm	-	1.8	-

ELECTRICAL SPECIFICATION					
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
<b>Tx → Ant</b>		<b>Specifications</b>			
<b>Insertion Loss</b>	410.0 ~ 415.0	dB	-	2.6	3.3
<b>VSWR</b>	410.0 ~ 415.0	-	-	1.7	2.2
<b>Absolute Attenuation</b>	0.3 ~ 400.0	dB	25	32	-
	420.0 ~ 425.0	dB	40	45	-
	425.0 ~ 1700.0	dB	15	18	-
	1700.0 ~ 2000.0	dB	10	17	-
<b>Ant → Rx</b>		<b>Specifications</b>			
<b>Insertion Loss</b>	420.0 ~ 425.0	dB	-	3.2	3.8
<b>Amplitude Imbalance</b>	420.0 ~ 425.0	dB	-1.0	-0.6/0.4	1.0
<b>Phase Imbalance</b>	420.0 ~ 425.0	deg	-10	6.0/7.5	10
<b>VSWR</b>	420.0 ~ 425.0	-	-	2.0	2.5
<b>Absolute Attenuation</b>	0.3 ~ 410.0	dB	45	53	-
	410.0 ~ 415.0	dB	45	53	-
	445.0 ~ 600.0	dB	40	50	-
	600.0 ~ 1200.0	dB	30	40	-
	1200.0 ~ 2000.0	dB	25	32	-
<b>Tx → Rx</b>		<b>Specifications</b>			
<b>Isolation</b>	410.0 ~ 415.0	dB	52	60	-
	420.0 ~ 425.0	dB	52	70	-

**Notes :** (1) With Matching Network .

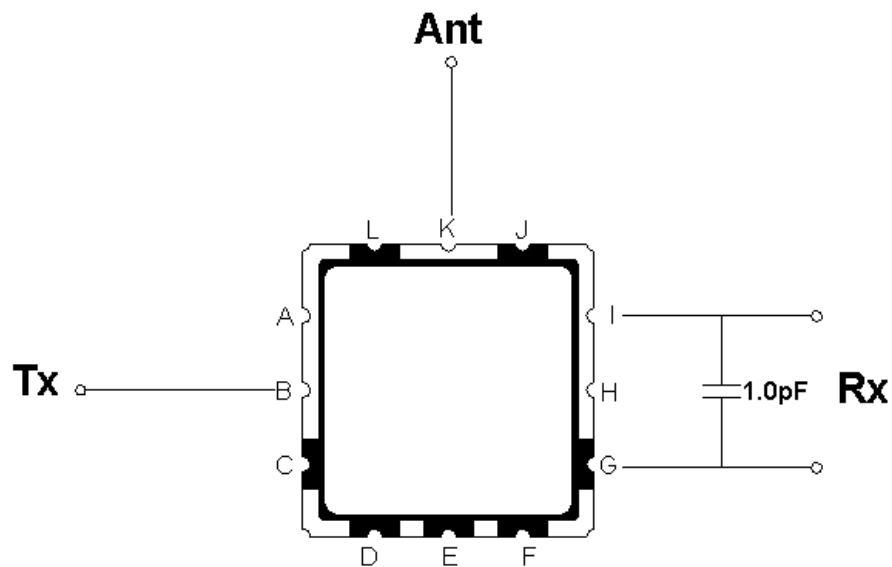
## Package Dimensions



Marking Descriptions	
W	CDMA450 Application
f	Series Number
X	Date Code (Year)
Y	Date Code (Month)

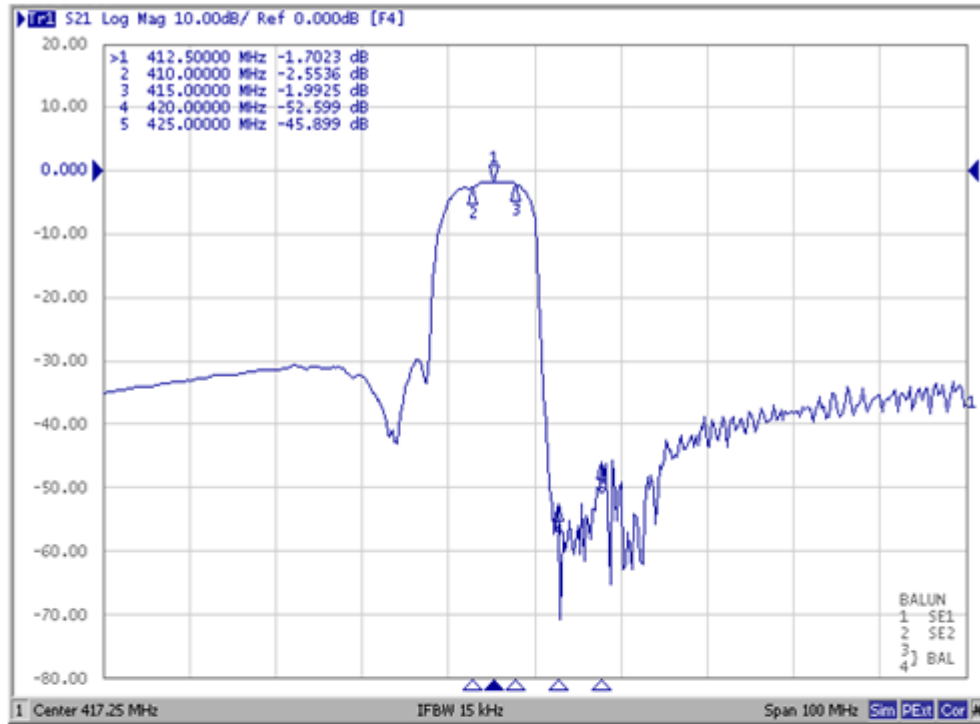
Pin Description	
A, C, D, E, F, I, J, L	Ground
K	Antenna
B	Tx
G, H	Rx Balanced

## Testing Environment

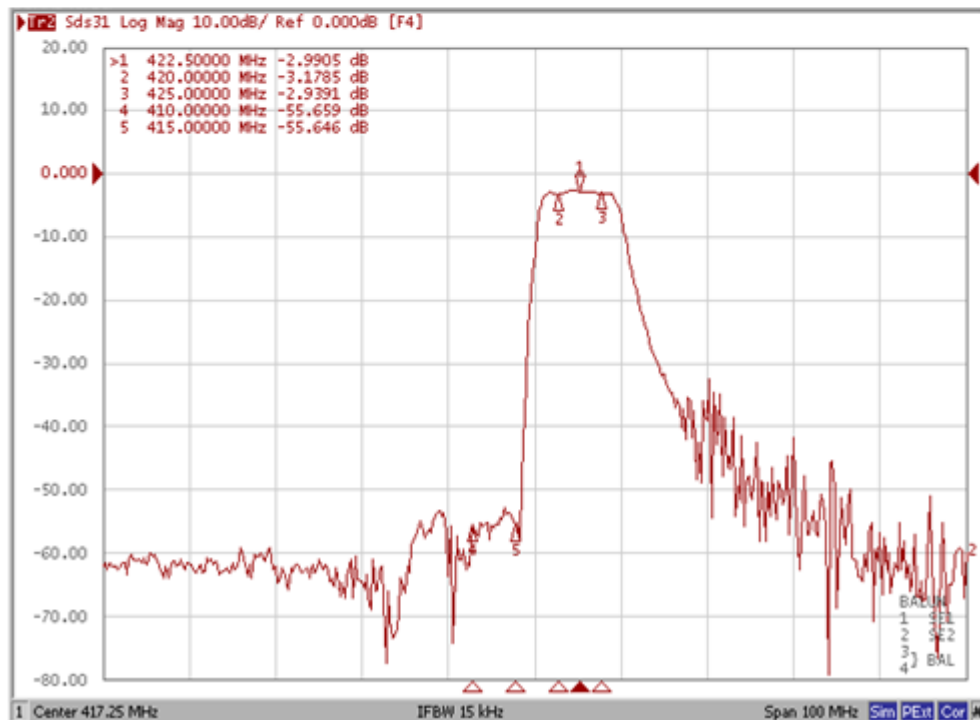


## Frequency Characteristics

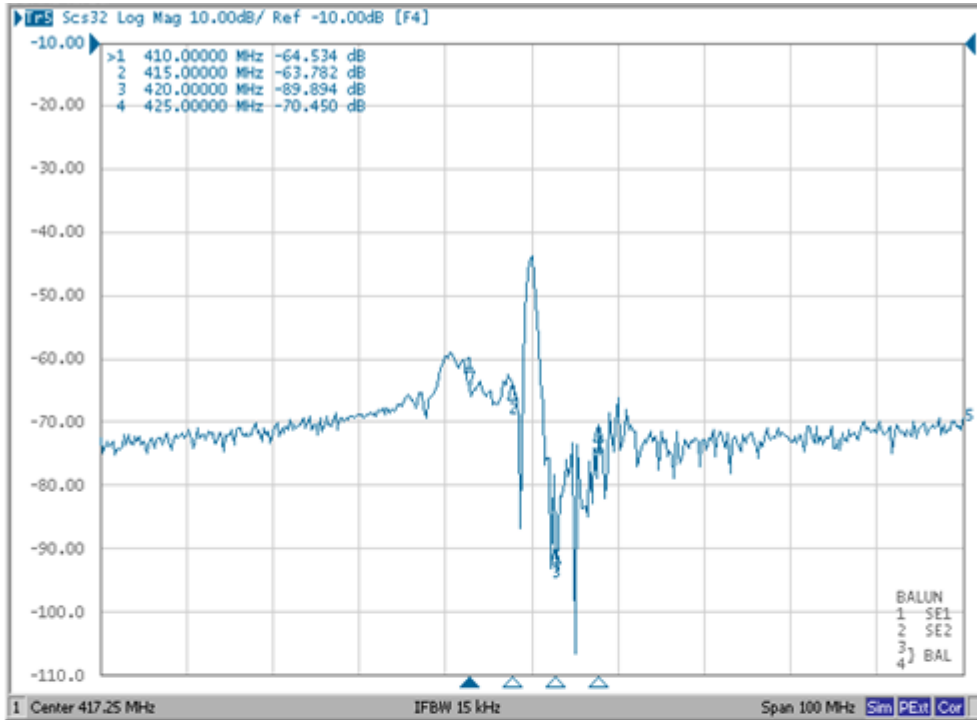
**Tx to Ant**



**Ant to Rx**

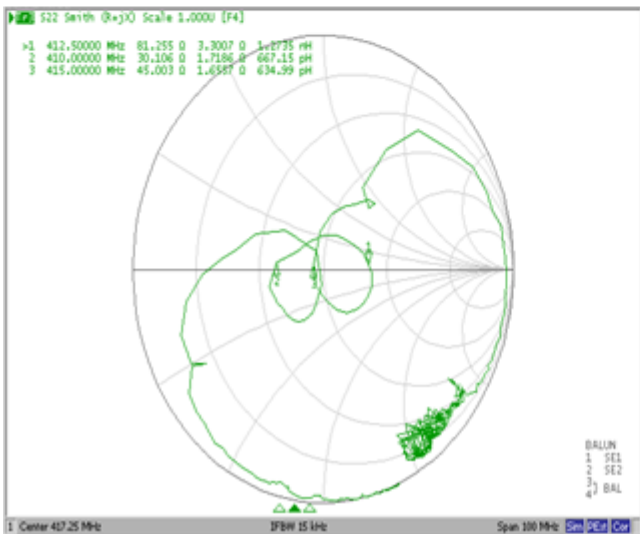


**Isolation**

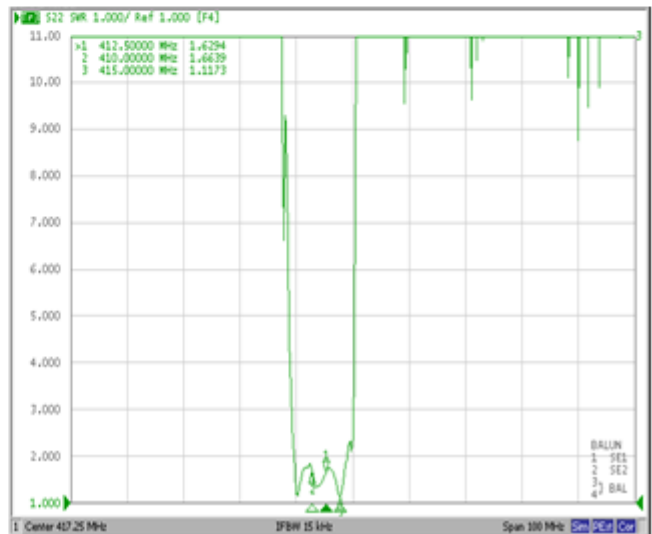


**Tx Port**

**Smith Chart**

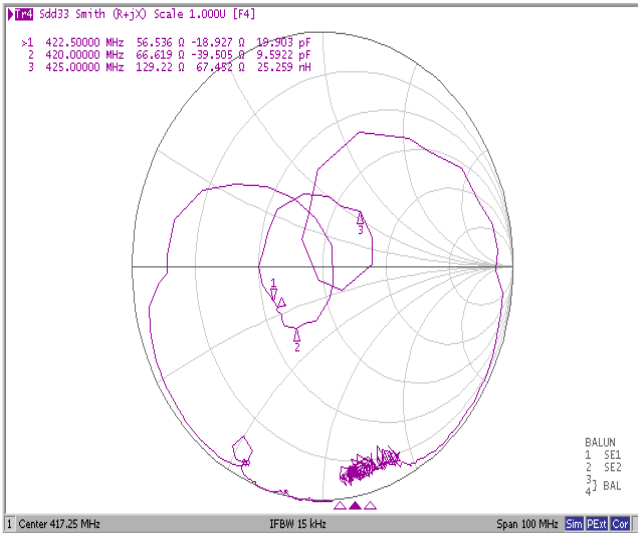


**VSWR**

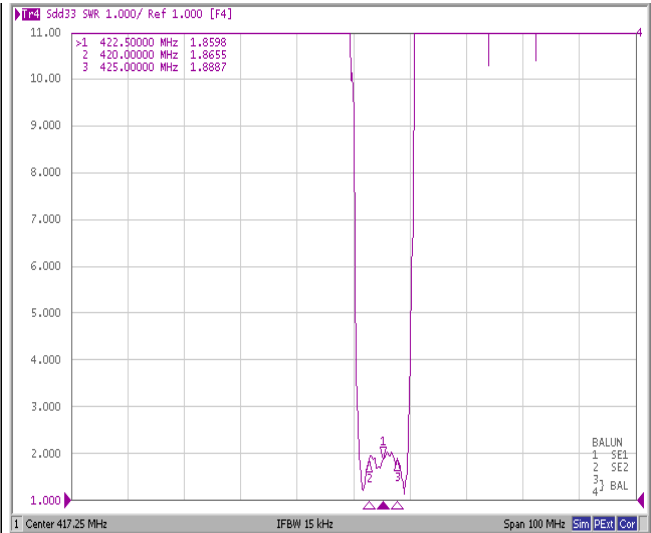


**Rx Port**

**Smith Chart**

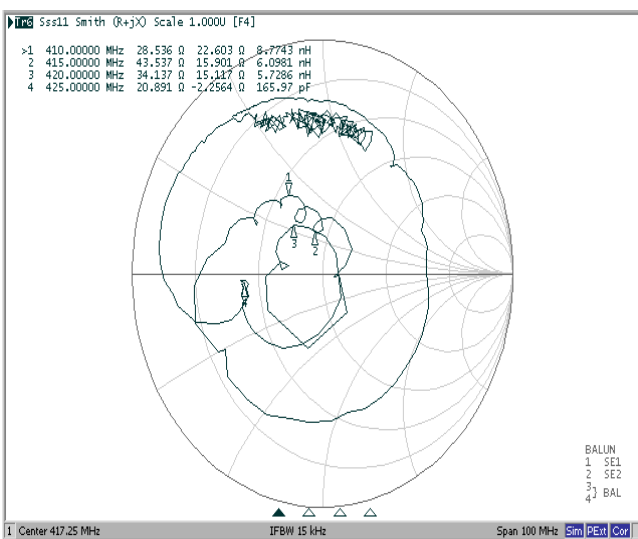


**VSWR**

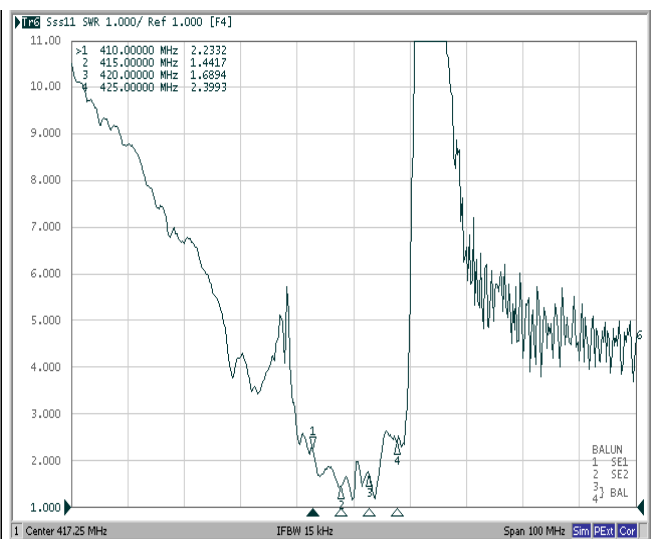


**Ant Port**

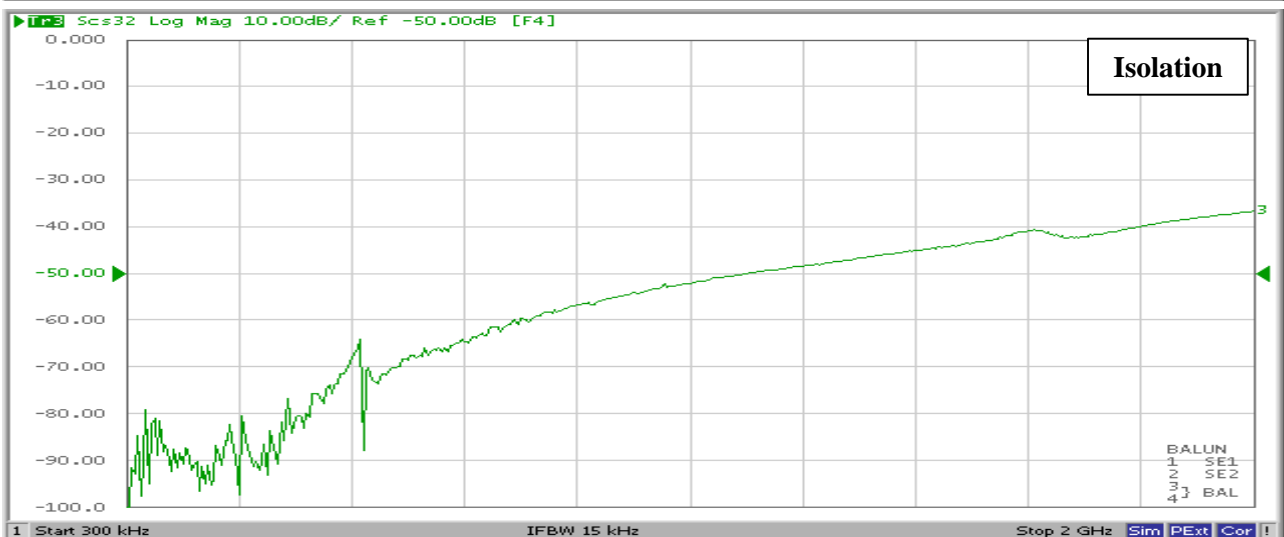
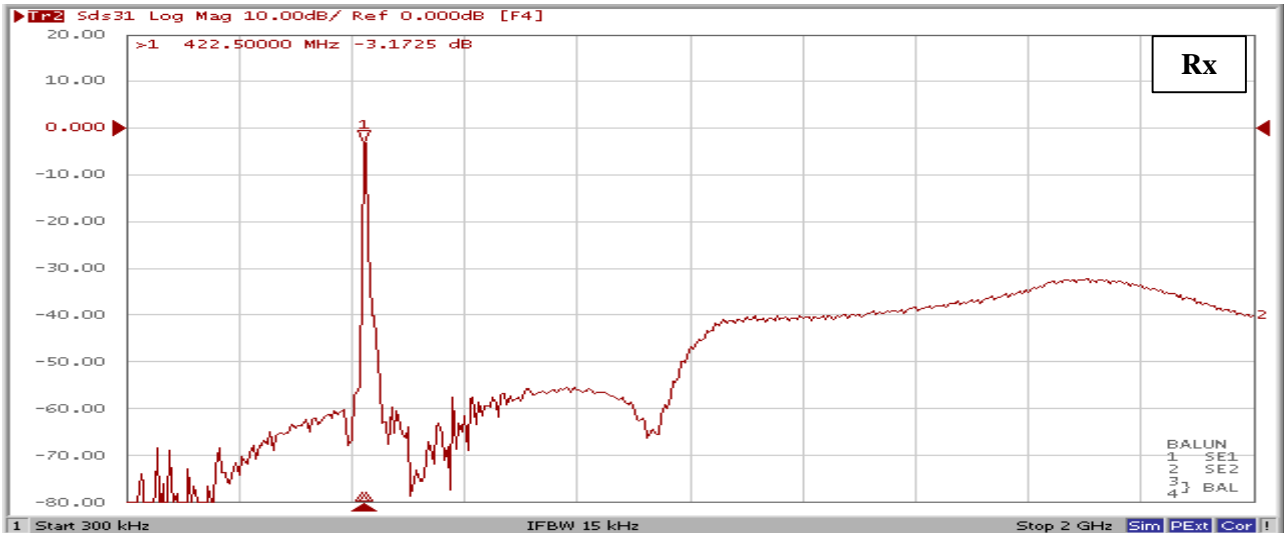
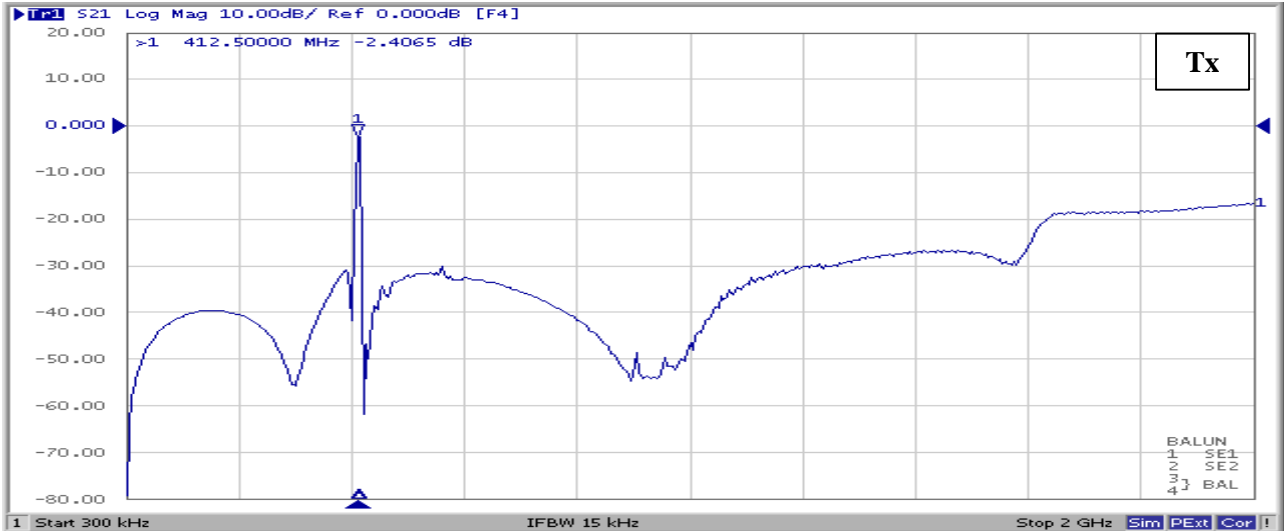
**Smith Chart**



**VSWR**



**Wide Span**



## Amplitude Imbalance



## Phase Imbalance

