

- CDMA450 Rx Balanced SAW Duplexer For 453.55 MHz / 463.55 MHz
- Revision 0: August 2011

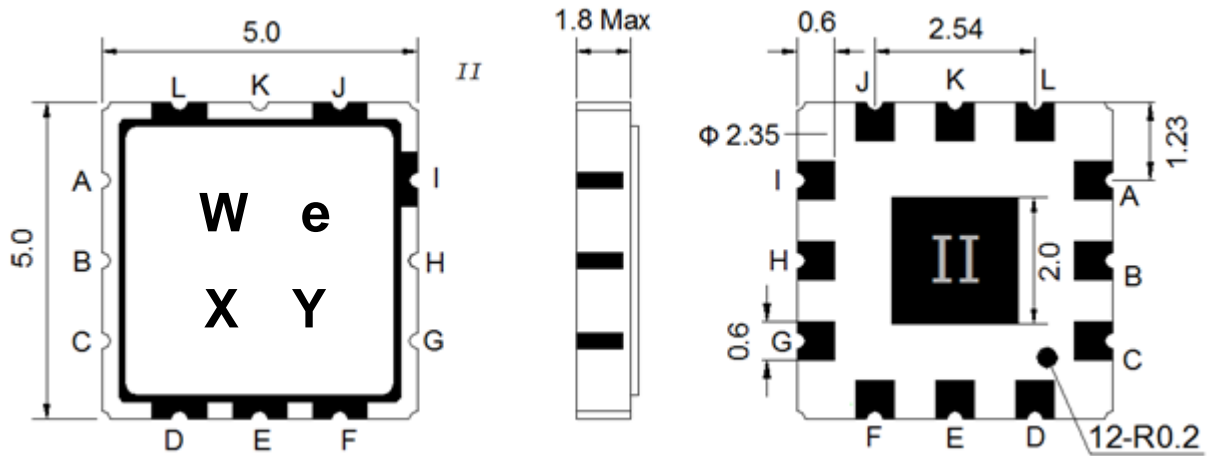
## Electrical Characteristics

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>			
Insertion Loss	451.3 ~ 455.8	dB	-	1.8	3.2
VSWR	451.3 ~ 455.8	-	-	1.7	2.2
Absolute Attenuation	D.C ~ 440.0	dB	25	29	-
	461.3 ~ 465.8	dB	40	55	-
	465.8 ~ 1700.0	dB	15	20	-
	1700.0 ~ 2000.0	dB	10	19	-
<b>Ant → Rx</b>		<b>Specifications</b>			
Insertion Loss	461.3 ~ 465.8	dB	-	2.7	3.8
Amplitude Imbalance	461.3 ~ 465.8	dB	-1.0	-0.5/0.3	1.0
Phase Imbalance	461.3 ~ 465.8	deg	-15	8.0/10.0	15
VSWR	461.3 ~ 465.8	-	-	1.8	2.2
Absolute Attenuation	D.C ~ 451.3	dB	40	50	-
	451.3 ~ 455.8	dB	45	52	-
	485.0 ~ 507.5	dB	45	54	-
	507.5 ~ 1200.0	dB	25	37	-
	1200.0 ~ 2000.0	dB	15	27	-
<b>Tx → Rx</b>		<b>Specifications</b>			
Isolation	451.3 ~ 455.8	dB	52	56	-
	461.3 ~ 465.8	dB	52	70	-

**Notes :** (1) No Matching Network .

## Package Dimensions



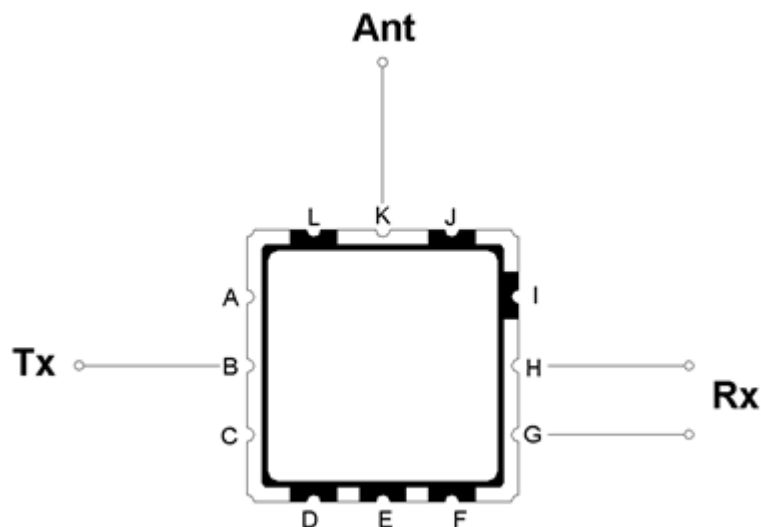
### Marking Descriptions

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

### Pin Description

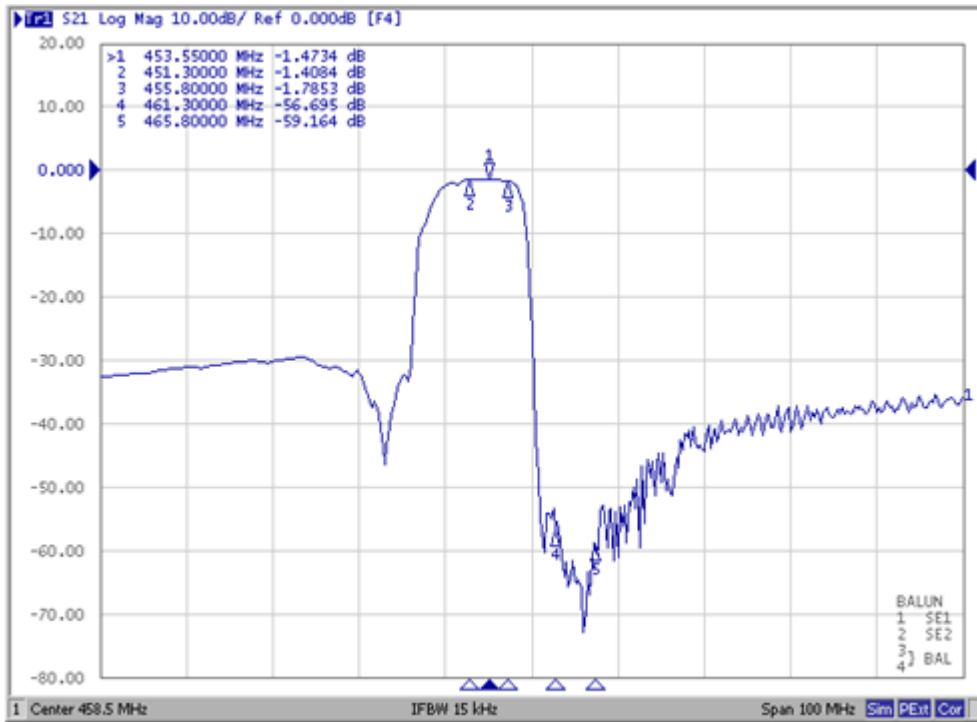
Pin Description	
A, C, D, E, F, I, J, L	Ground
K	Antenna
B	Tx
G, H	Rx Balanced

## Testing Environment

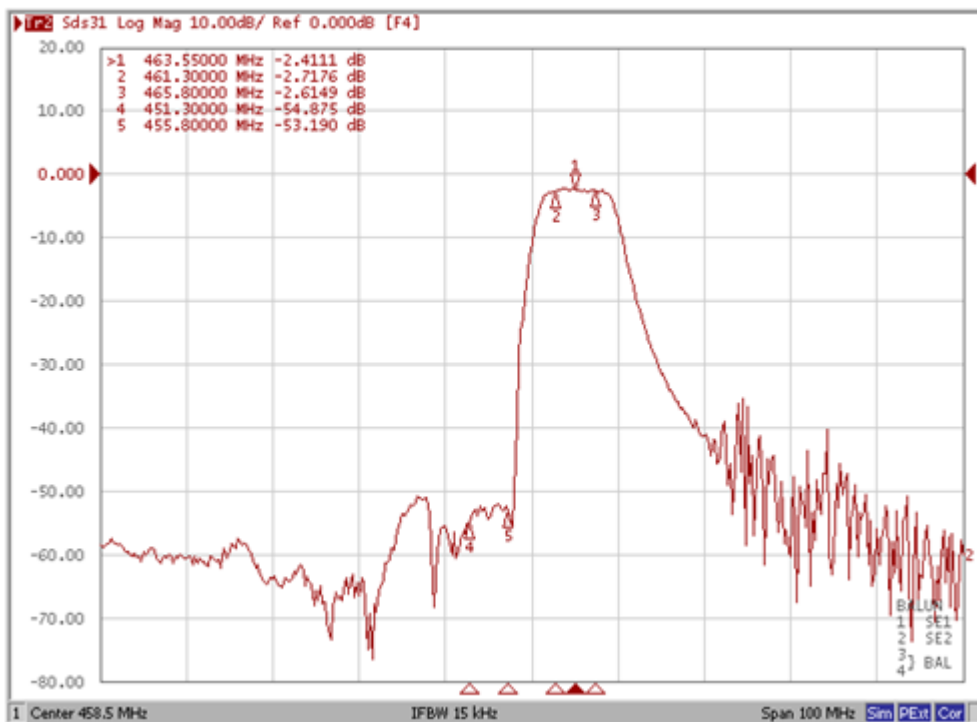


## Frequency Characteristics

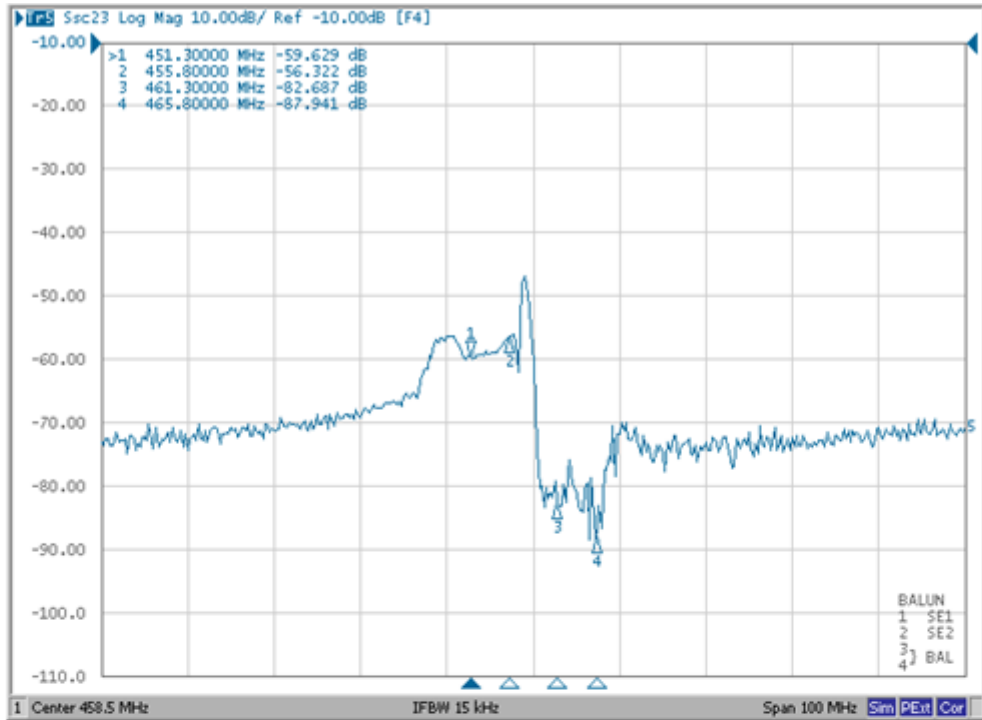
**Tx to Ant**



**Ant to Rx**

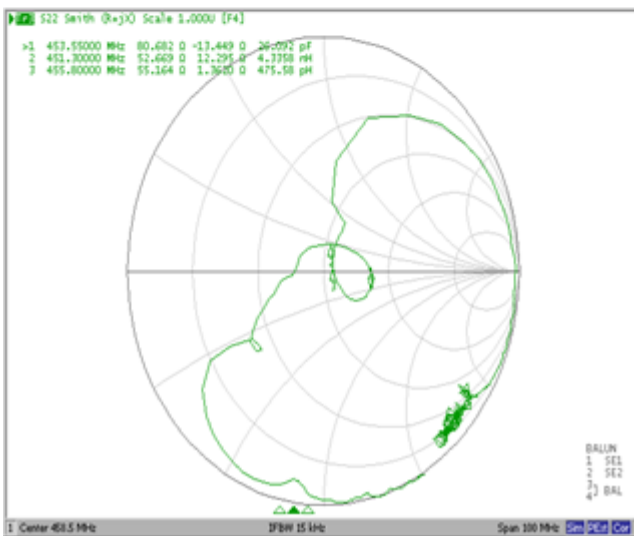


**Isolation**

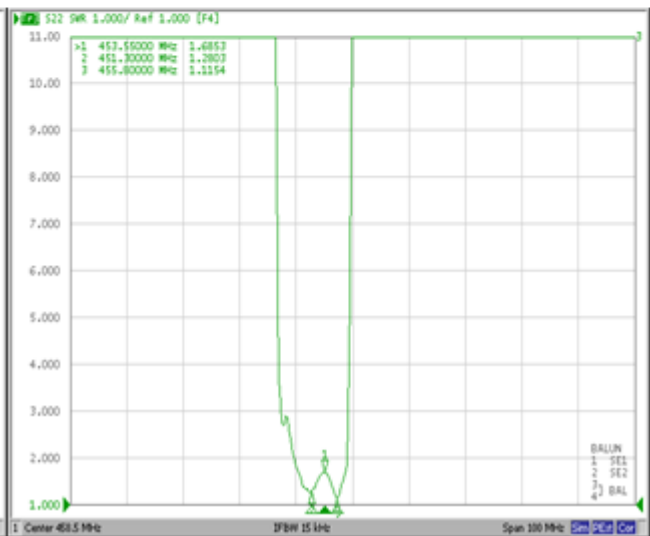


**Tx Port**

**Smith Chart**

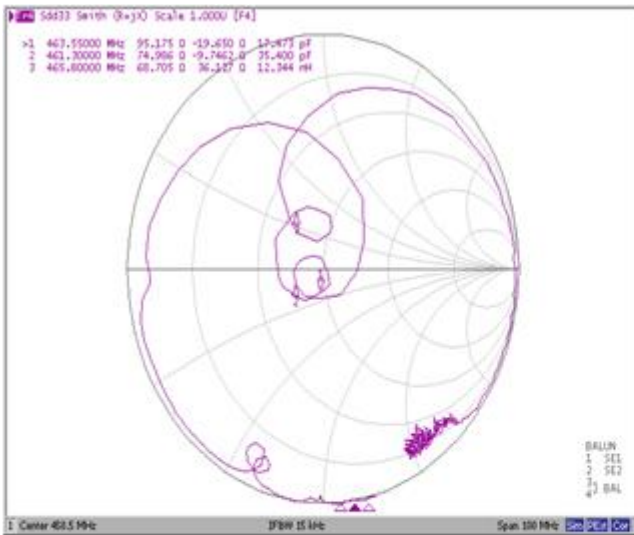


**VSWR**

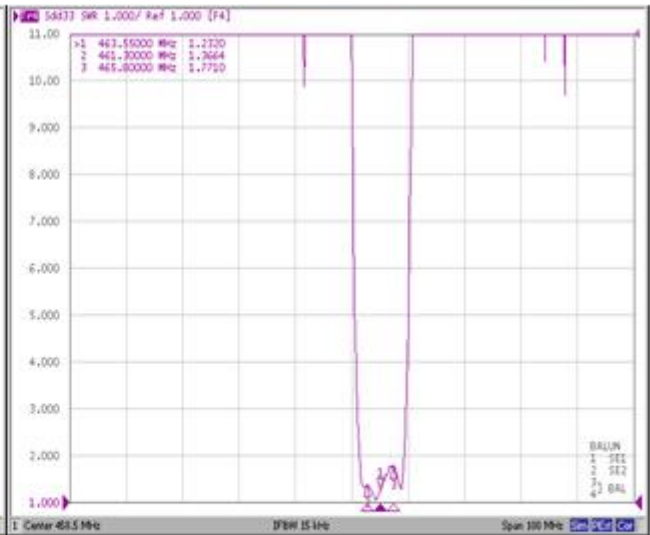


**Rx Port**

Smith Chart



VSWR

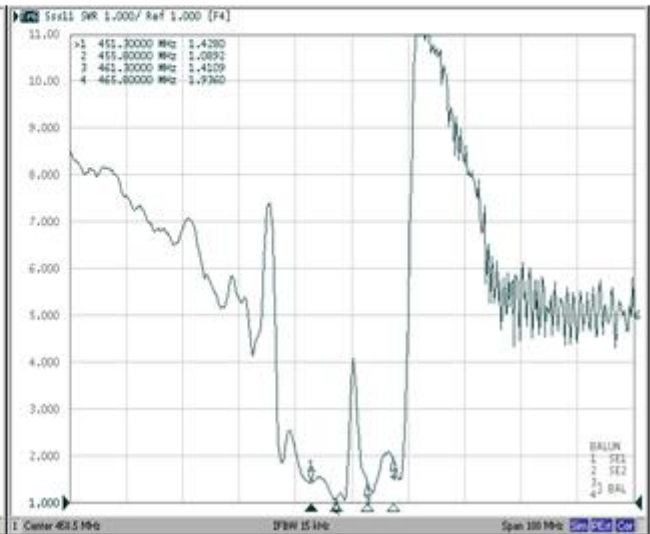


**Ant Port**

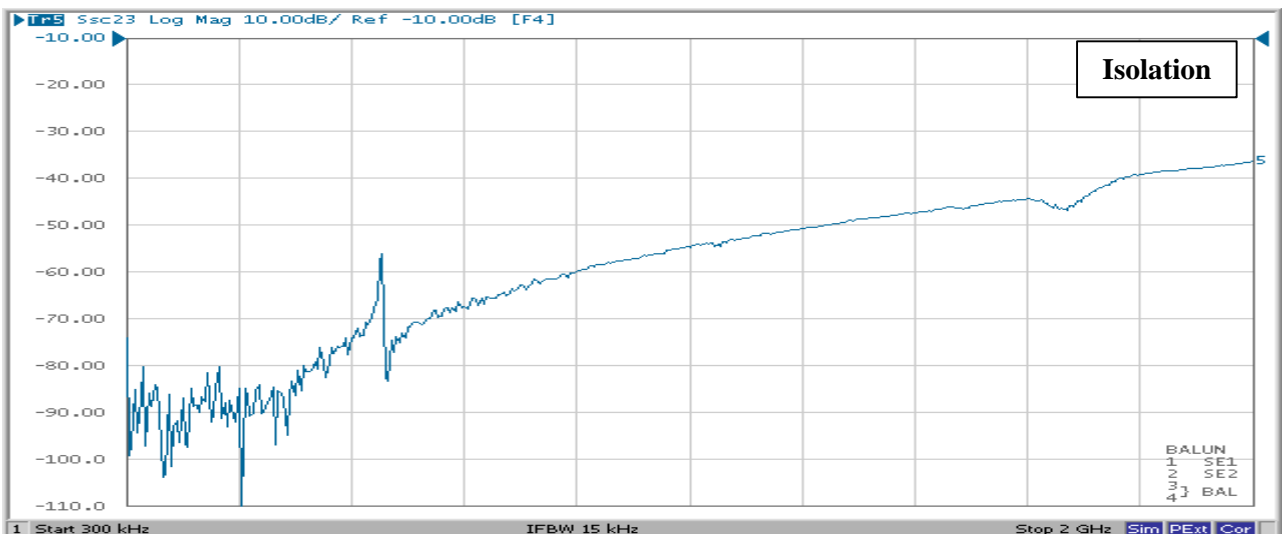
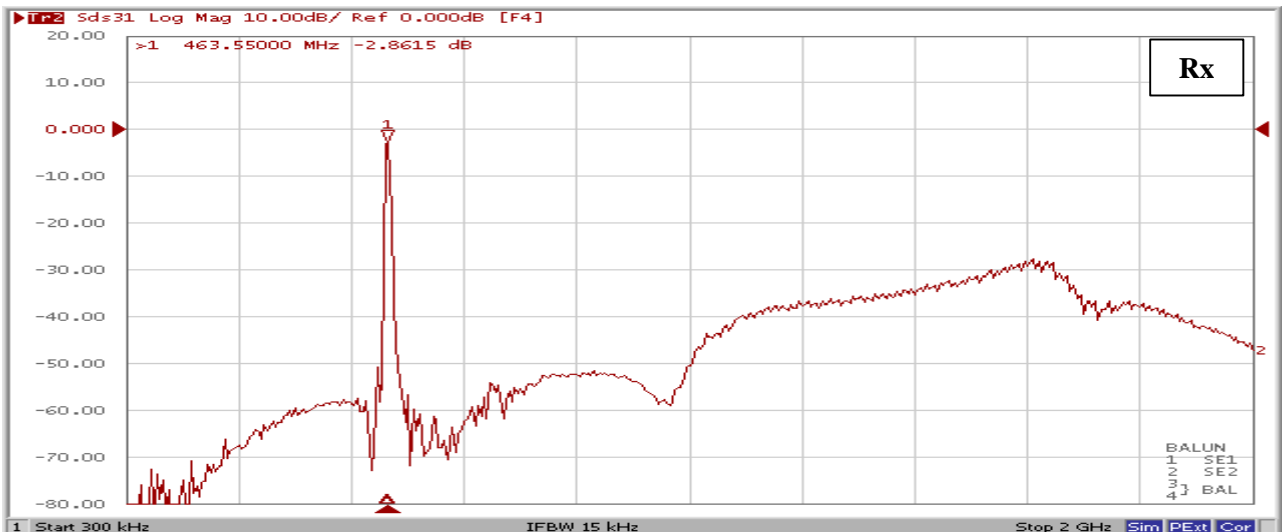
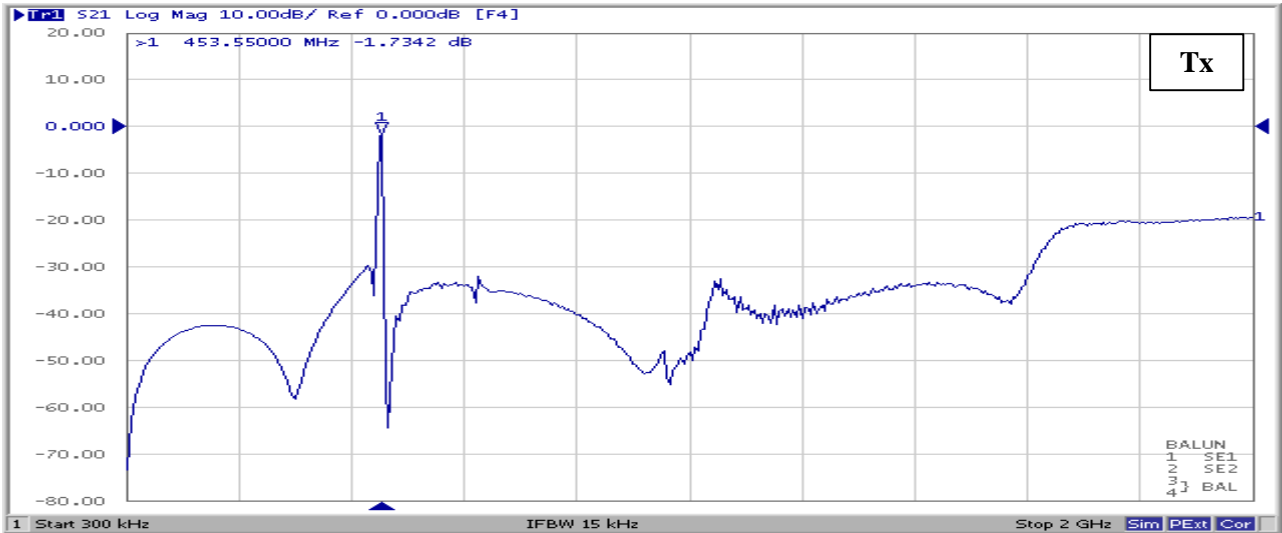
Smith Chart



VSWR



**Wide Span**



## Amplitude Imbalance



## Phase Imbalance

