

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

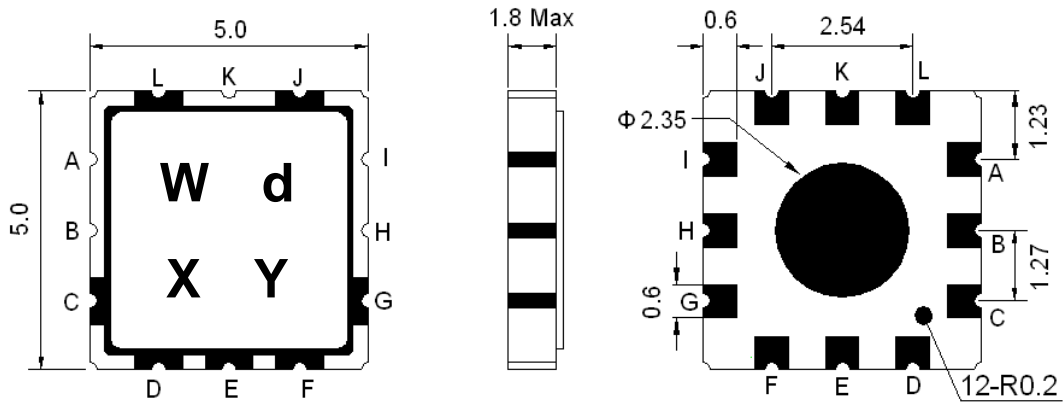
Electrical Characteristics

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) ⁽¹⁾	Ω	-	100	-
Package type & size	K4			
Length x Width	mm ²	-	5.0 x 5.0	-
Height	mm	-	1.8	-

ELECTRICAL SPECIFICATION					
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Tx → Ant		Specifications			
Insertion Loss	410.0 ~ 415.0	dB	-	3.0	3.8
VSWR	410.0 ~ 415.0	-	-	2.4	2.8
Absolute Attenuation	0.3 ~ 400.0	dB	25	32	-
	420.0 ~ 425.0	dB	40	55	-
	425.0 ~ 1700.0	dB	20	25	-
	1700.0 ~ 2000.0	dB	10	17	-
Ant → Rx		Specifications			
Insertion Loss	420.0 ~ 425.0	dB	-	3.2	3.8
Amplitude Imbalance	420.0 ~ 425.0	dB	-1.0	-0.8/0.1	1.0
Phase Imbalance	420.0 ~ 425.0	deg	-10	4.3/5.8	10
VSWR	420.0 ~ 425.0	-	-	2.0	2.5
Absolute Attenuation	0.3 ~ 410.0	dB	45	50	-
	410.0 ~ 415.0	dB	45	50	-
	445.0 ~ 600.0	dB	40	50	-
	600.0 ~ 1200.0	dB	25	35	-
	1200.0 ~ 2000.0	dB	20	27	-
Tx → Rx		Specifications			
Isolation	410.0 ~ 415.0	dB	50	60	-
	420.0 ~ 425.0	dB	55	70	-

Notes : (1) With Matching Network .

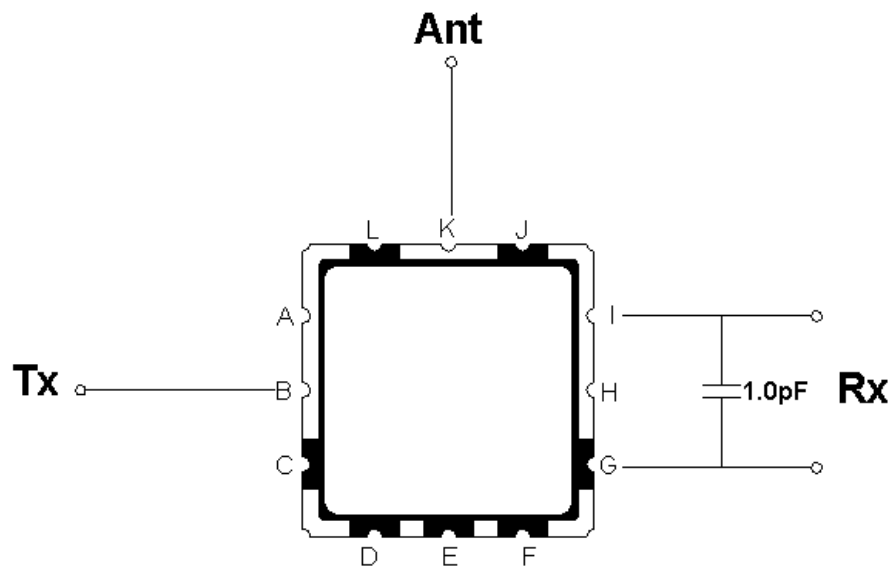
Package Dimensions



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

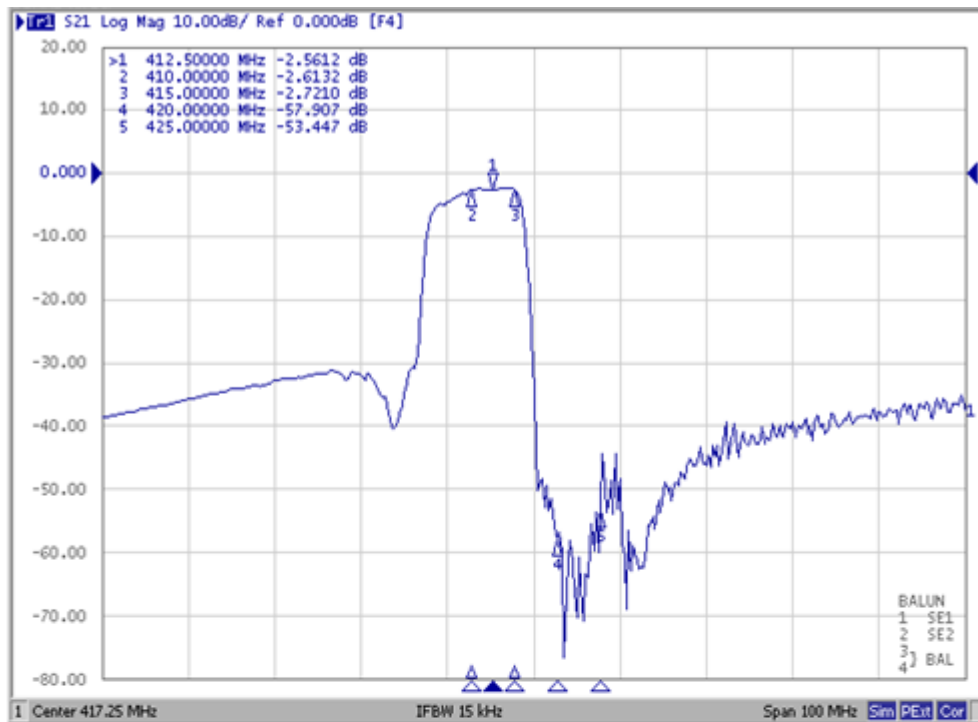
Pin Description	
A, C, D, E, F, H, J, L	Ground
K	Antenna
B	Tx
G, I	Rx Balanced

Testing Environment

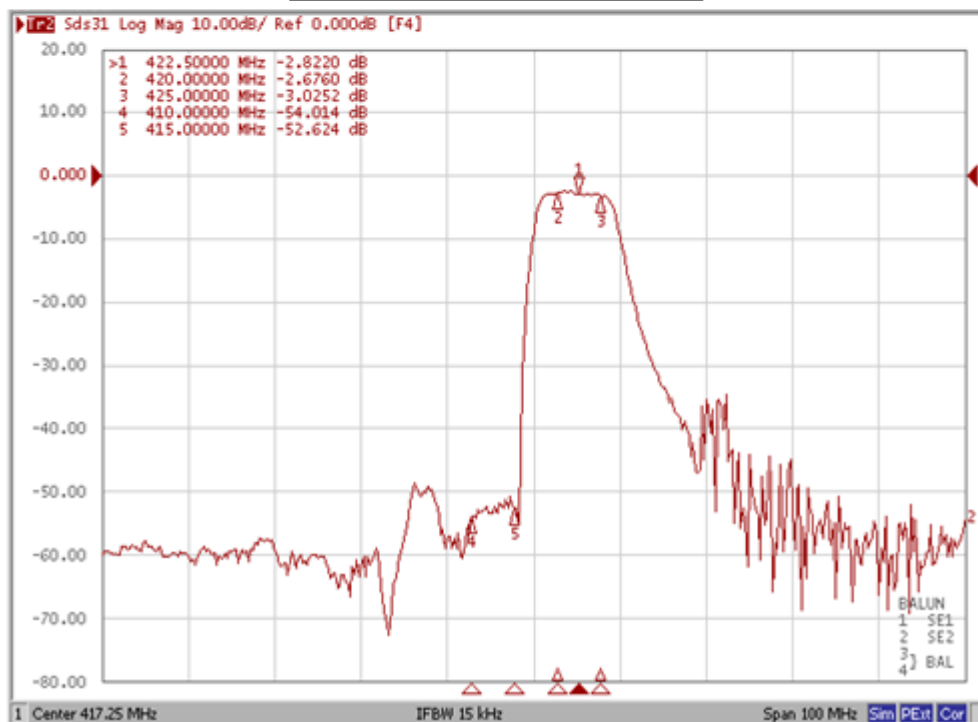


Frequency Characteristics

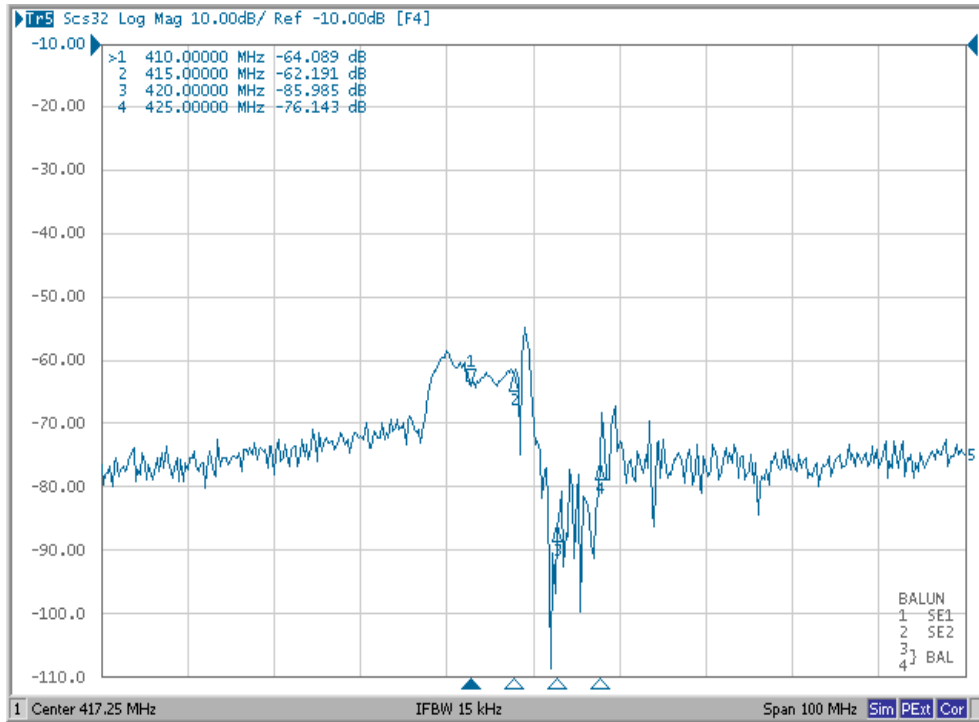
Tx to Ant



Ant to Rx

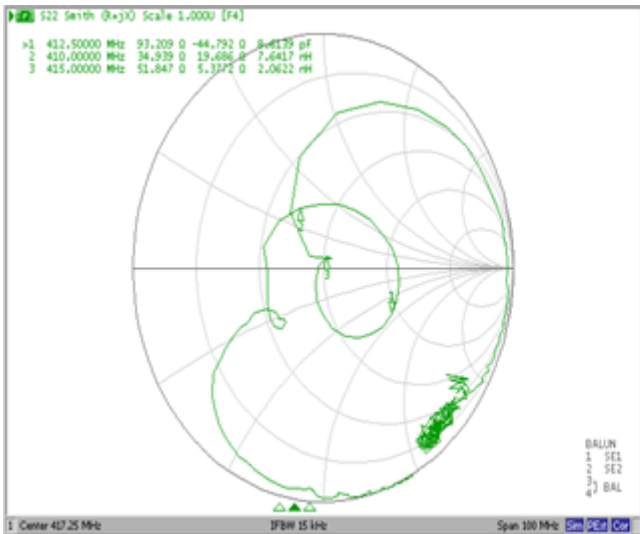


Isolation

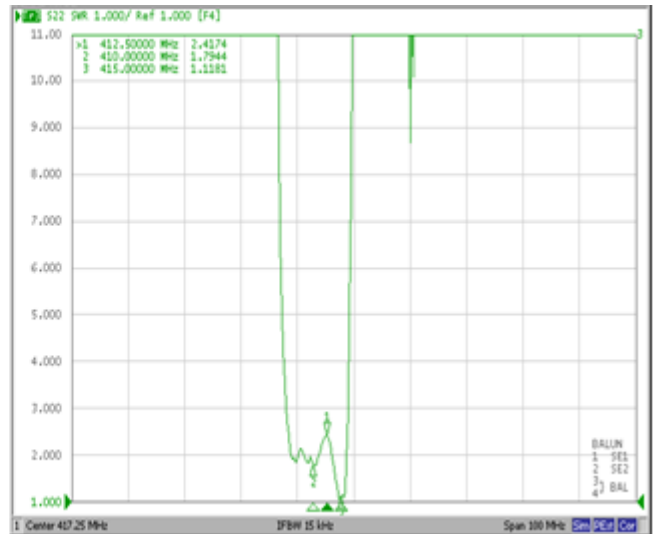


Tx Port

Smith Chart

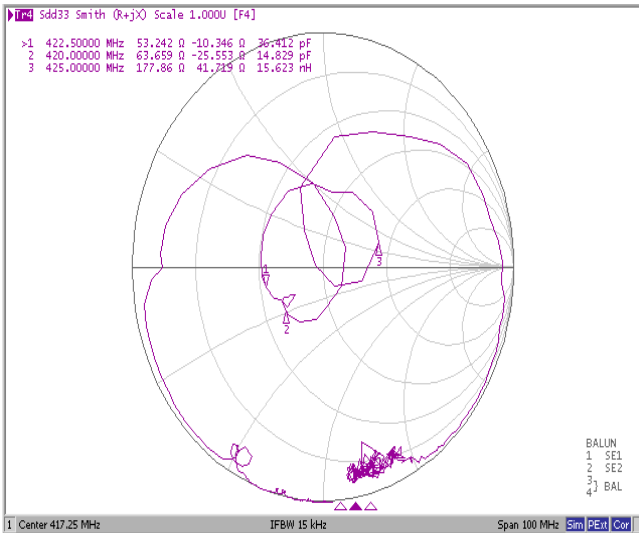


VSWR

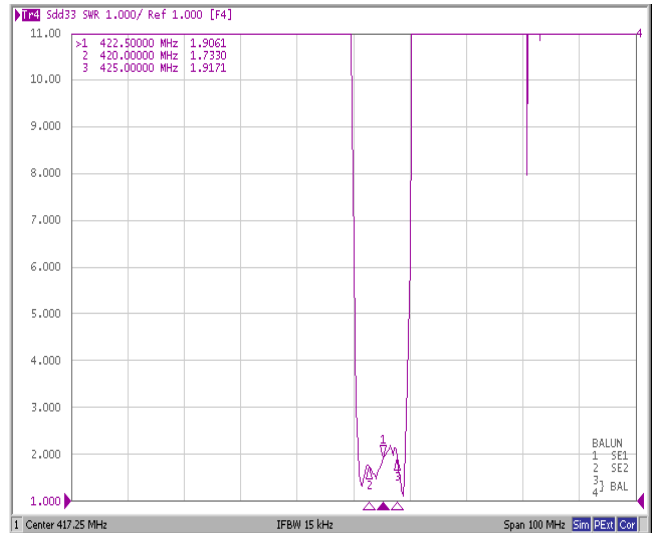


Rx Port

Smith Chart

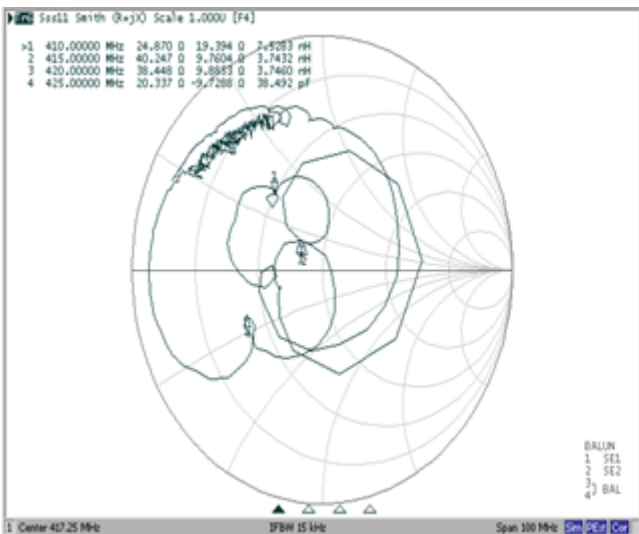


VSWR

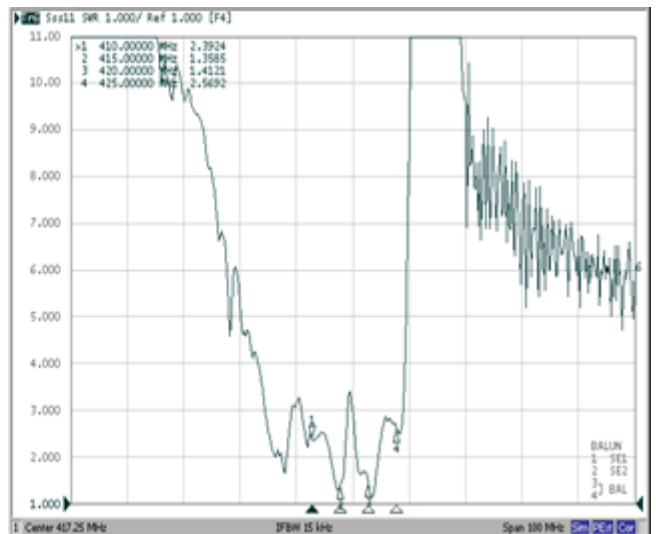


Ant Port

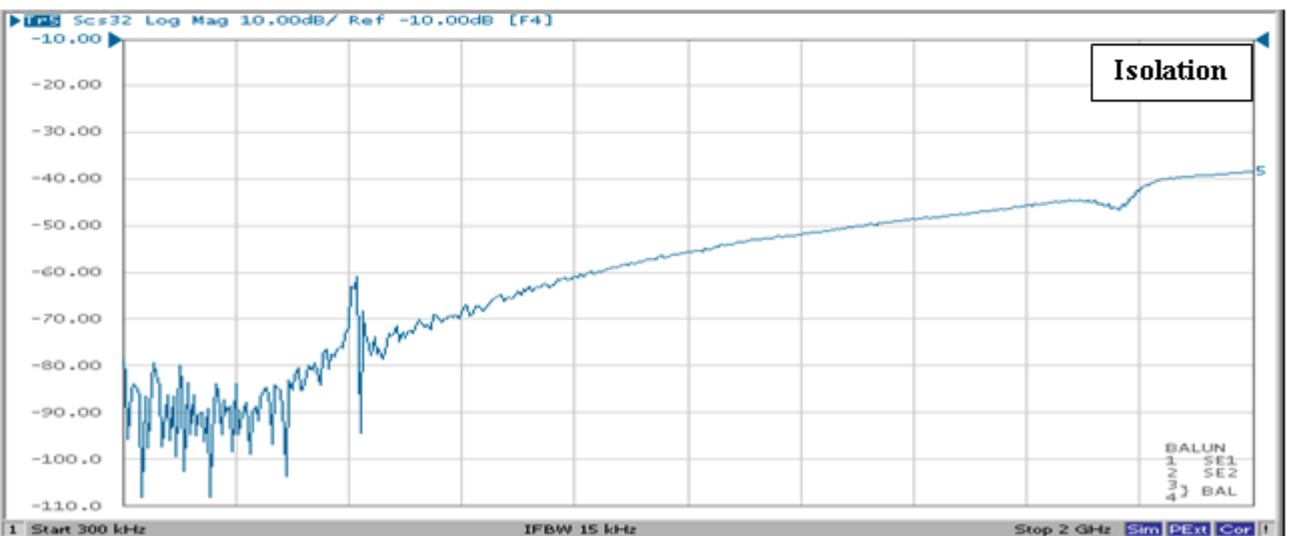
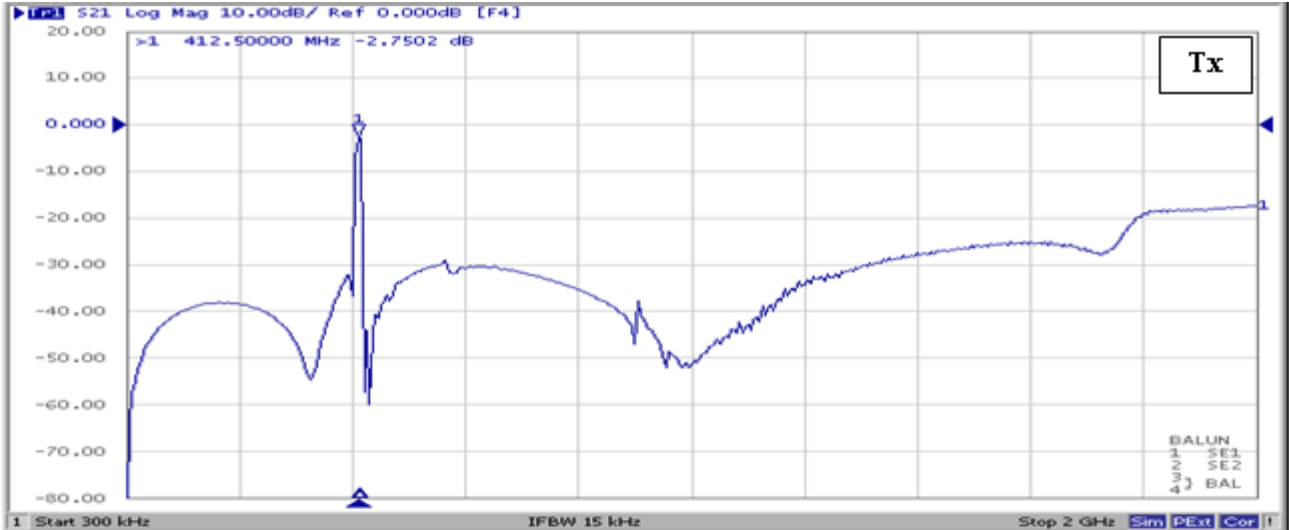
Smith Chart



VSWR



Wide Span



Amplitude Imbalance



Phase Imbalance

