

- CDMA450 A-Band, SAW Duplexer
- Revision 1: June 2007

Electrical Characteristics

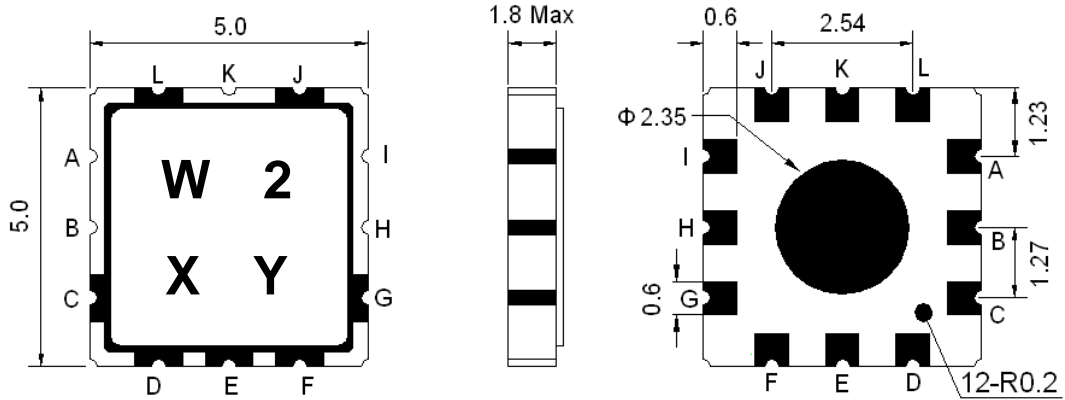
MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-10	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	0	-
Maximum Input Power	W	1.0 W > 50000 Hours, CW tone(Ta= +50°C)		
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	K3			
Length x Width	mm ²	-	5.0 x 5.0	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION					
Tx → Ant		Specifications			
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency	A Block	MHz	-	455.0	-
Insertion Loss	453.36 ~ 457.09	dB	-	2.6	3.2
	452.5 ~ 457.475	dB	-	2.6	3.8
Amplitude Ripple	453.36 ~ 457.09	dB	-	0.9	1.5
	452.5 ~ 457.475	dB	-	0.9	2.0
Return Loss Tx Input	453.36 ~ 457.09	dB	10.0	14.0	-
	452.5 ~ 457.475	dB	9.0	14.0	-
Return Loss Antenna Input	452.5 ~ 457.475	dB	8.0	10.0	-
Rx Band Rejection	462.5 ~ 463.36	dB	40.0	56.0	-
	463.36 ~ 467.09	dB	50.0	56.0	-
	467.09 ~ 467.475	dB	48.0	56.0	-
Absolute Attenuation	0.3 ~ 350.0	dB	40.0	50.0	-
	350.0 ~ 420.0	dB	30.0	37.0	-
	420.0 ~ 440.0	dB	30.0	36.0	-
	467.475 ~ 750.0	dB	30.0	38.0	-
	750.0 ~ 1100.0	dB	30.0	40.0	-
	1100.0 ~ 1400.0	dB	30.0	40.0	-
	1400.0 ~ 1600.0	dB	15.0	25.0	-
	1600.0 ~ 2000.0	dB	8.0	16.0	-
	1574.0 ~ 1577.0	dB	20.0	25.0	-

Ant → Rx		Specifications			
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency	A Block	MHz	-	465.0	-
Insertion Loss	463.36 ~ 467.09	dB	-	2.8	3.5
	462.5 ~ 467.475	dB	-	3.0	4.0
Amplitude Ripple	463.36 ~ 467.09	dB	-	0.8	1.5
	462.5 ~ 467.475	dB	-	1.0	2.0
Return Loss Antenna	462.5 ~ 467.475	dB	8.0	10.0	-
Return Loss Rx Output	462.5 ~ 467.475	dB	9.0	11.0	-
Tx Band Rejection	453.36 ~ 457.09	dB	50.0	54.0	-
	452.5 ~ 457.475	dB	47.0	54.0	-
Absolute Attenuation	0.3 ~ 452.5	dB	45.0	60.0	-
	477.0 ~ 481.0	dB	20.0	28.0	-
	481.0 ~ 750.0	dB	35.0	42.0	-
	750.0 ~ 1100.0	dB	40.0	45.0	-
	1100.0 ~ 1400.0	dB	40.0	45.0	-
	1400.0 ~ 2000.0	dB	20.0	25.0	-

Tx → Rx		Specifications			
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Rx Band Rejection	462.5 ~ 463.36	dB	42.0	58.0	-
	463.36 ~ 467.09	dB	50.0	55.0	-
	467.09 ~ 467.475	dB	48.0	55.0	-
Tx Band Rejection	453.36 ~ 457.09	dB	51.0	55.0	-
	452.5 ~ 457.475	dB	50.0	55.0	-
Absolute Attenuation	0.3 ~ 350.0	dB	60.0	68.0	-
	350.0 ~ 452.5	dB	48.0	58.0	-
	467.475 ~ 481.0	dB	40.0	50.0	-
	481.0 ~ 750.0	dB	50.0	60.0	-
	750.0 ~ 1600.0	dB	35.0	40.0	-
	1600.0 ~ 2000.0	dB	25.0	35.0	-

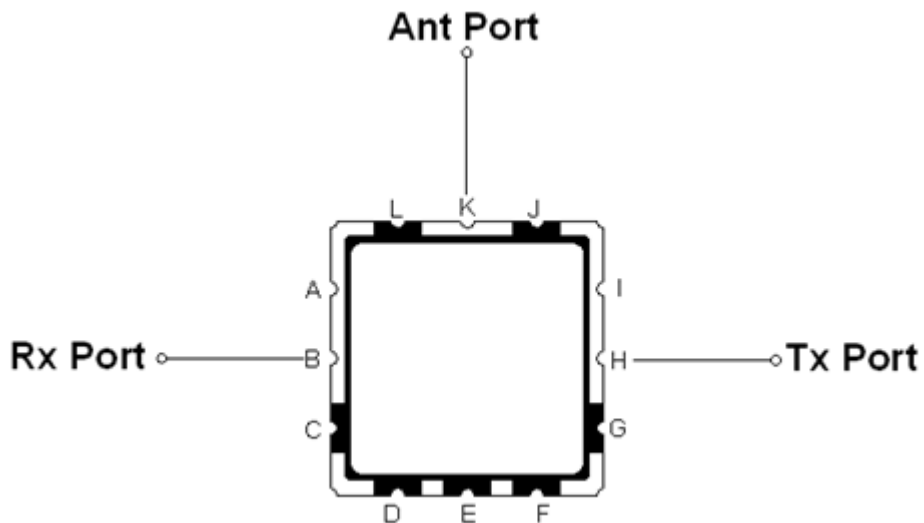
Package Dimensions



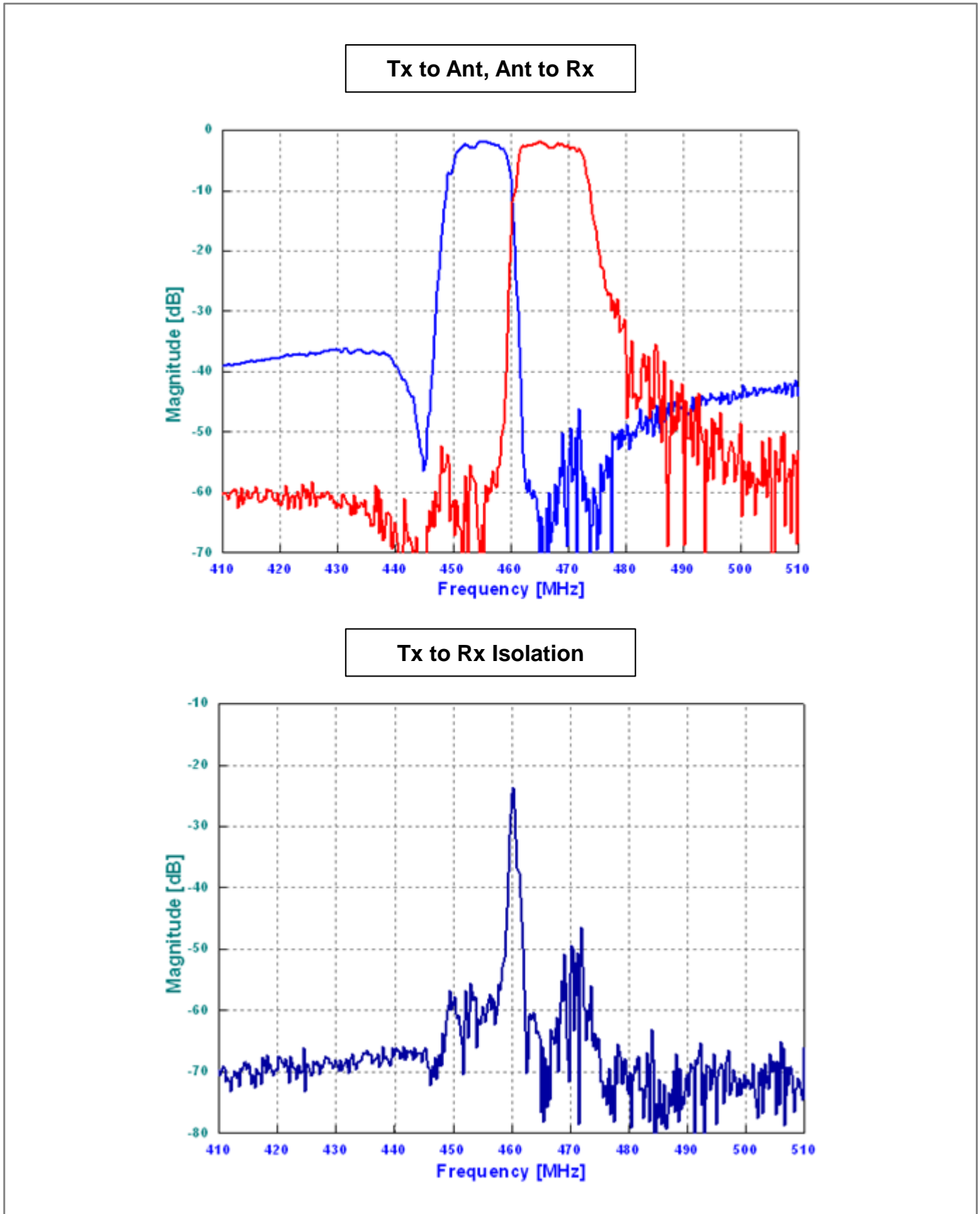
Marking Descriptions	
W	CDMA450 Application
2	Series Number
X	Date Code (Year)
Y	Date Code (Month)

Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Transmitter
K	Antenna
B	Receiver

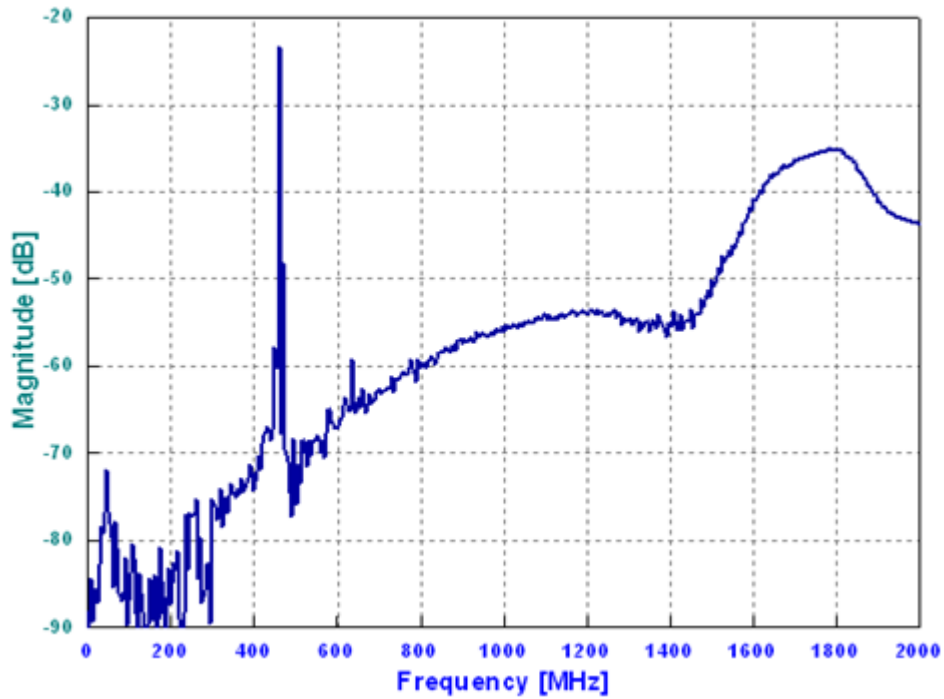
Testing Environment



Frequency Characteristics



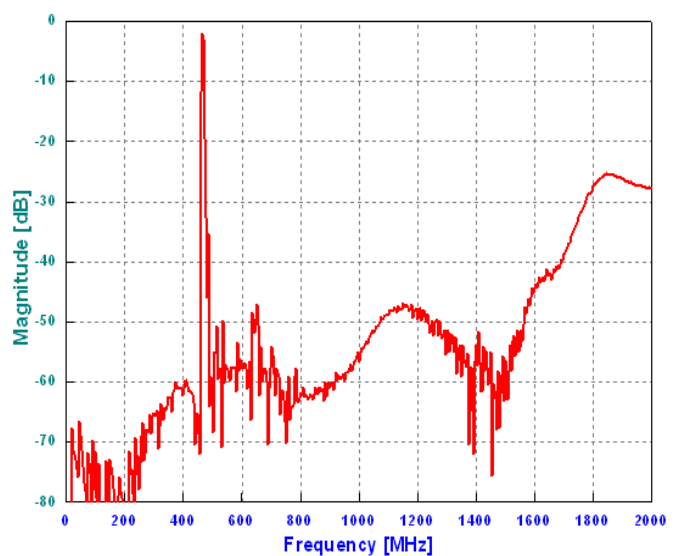
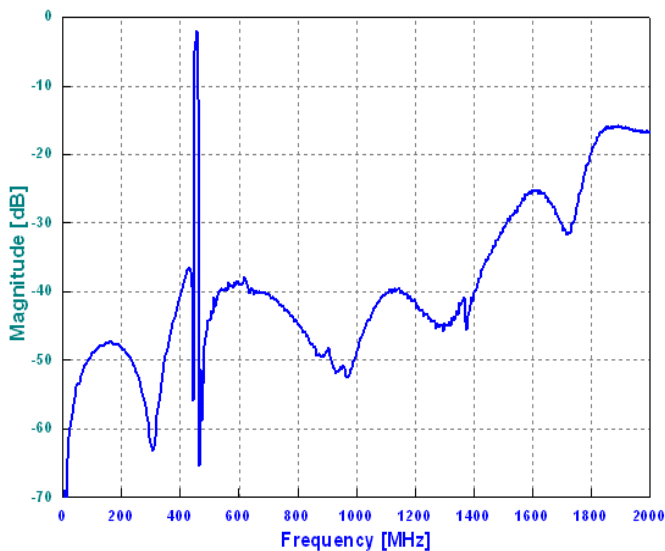
Tx to Rx Isolation Wide Band



Wide Band

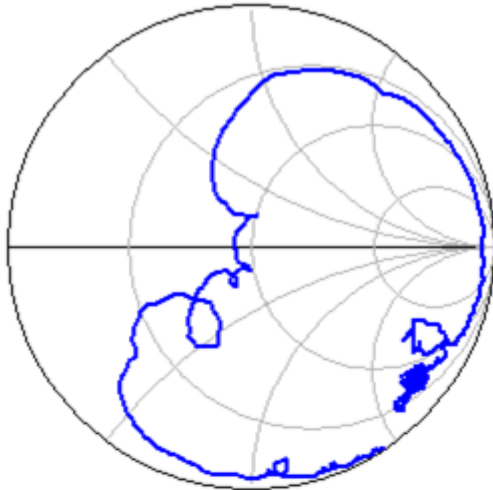
Tx

Rx

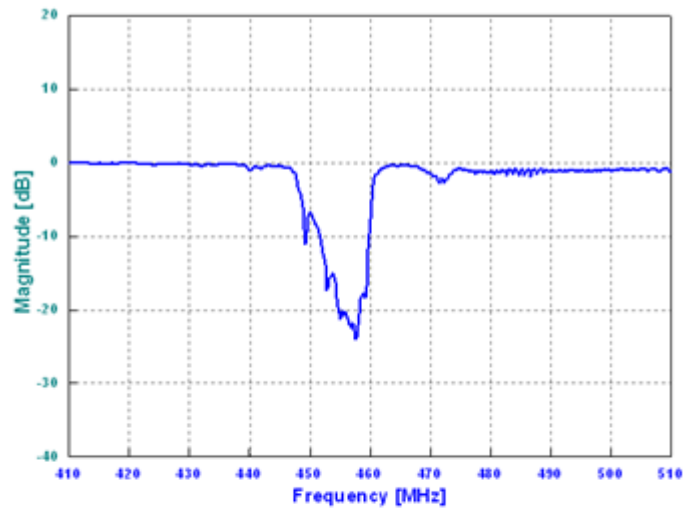


Tx Port

Smith Chart

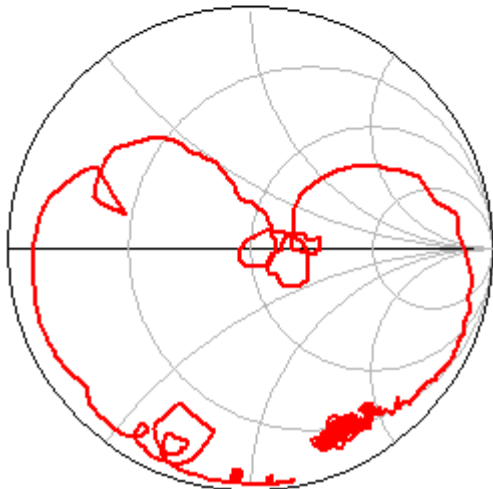


Return Loss

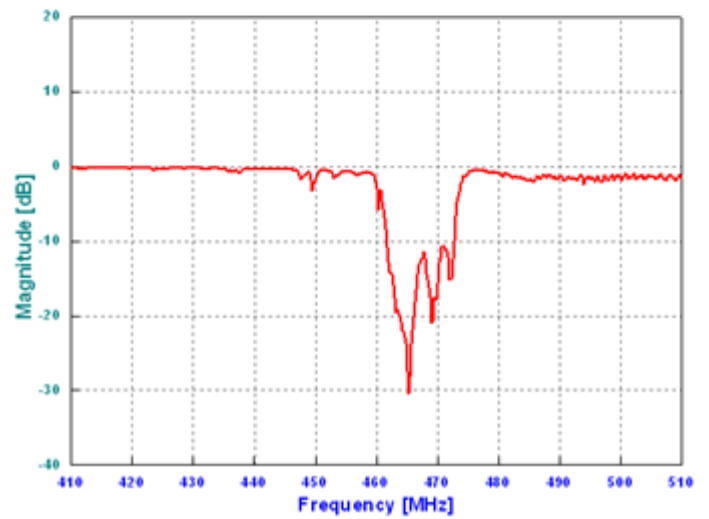


Rx Port

Smith Chart

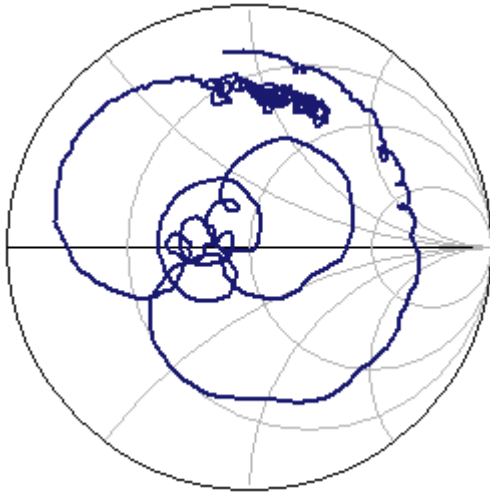


Return Loss



Ant Port

Smith Chart



Return Loss

