

- CDMA450 H-Band, SAW Duplexer
- Revision 1: December 2005

Electrical Characteristics

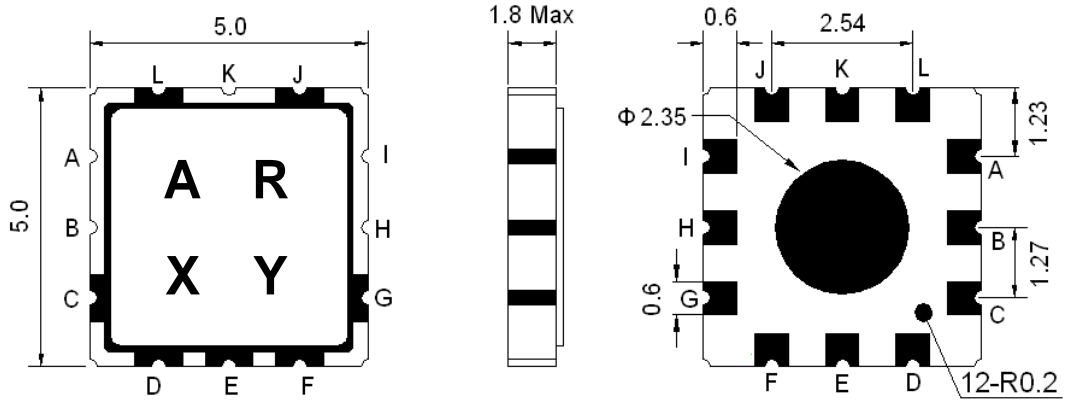
MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-10	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	0	-
Maximum Input Power	W	1.0 W > 50000 Hours, CW tone(Ta= +50°C)		
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (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	H Block	dB	-	453.52	-
Insertion Loss	451.69 ~ 455.41	dB	-	2.5	3.2
	451.31 ~ 455.73	dB	-	2.5	3.8
Amplitude Ripple	451.69 ~ 455.41	dB	-	0.9	1.5
	451.31 ~ 455.73	dB	-	0.9	2.0
Return Loss Tx Input	451.69 ~ 455.41	dB	10.0	14.0	-
	451.31 ~ 455.73	dB	9.0	13.0	-
Return Loss Antenna Input	451.31 ~ 455.73	dB	8.0	10.0	-
Rx Band Rejection	461.69 ~ 465.41	dB	50.0	54.0	-
	461.31 ~ 465.73	dB	40.0	50.0	-
Absolute Attenuation	0.3 ~ 350.0	dB	40.0	48.0	-
	350.0 ~ 440.0	dB	30.0	36.0	-
	465.73 ~ 750.0	dB	30.0	37.0	-
	750.0 ~ 1100.0	dB	30.0	40.0	-
	1100.0 ~ 1300.0	dB	25.0	39.0	-
	1300.0 ~ 1600.0	dB	20.0	25.0	-
	1600.0 ~ 2000.0	dB	8.0	15.0	-
	1574.0 ~ 1577.0	dB	20.0	25.0	-

Ant → Rx		Specifications			
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency	H Block	MHz	-	463.52	-
Insertion Loss	461.69 ~ 465.41	dB	-	2.8	3.5
	461.31 ~ 465.73	dB	-	3.0	4.0
Amplitude Ripple	461.69 ~ 465.41	dB	-	0.8	1.5
	461.31 ~ 465.73	dB	-	1.0	2.0
Return Loss Antenna	461.31 ~ 465.73	dB	9.0	11.0	-
Return Loss Rx Output	461.31 ~ 465.73	dB	10.0	13.0	-
Tx Band Rejection	451.69 ~ 455.41	dB	50.0	53.0	-
	451.31 ~ 455.73	dB	45.0	53.0	-
Absolute Attenuation	0.3 ~ 451.31	dB	45.0	60.0	-
	475.5 ~ 479.5	dB	20.0	27.0	-
	479.5 ~ 750.0	dB	35.0	40.0	-
	750.0 ~ 1100.0	dB	40.0	45.0	-
	1100.0 ~ 2000.0	dB	20.0	25.0	-

Tx → Rx		Specifications			
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Rx Band Rejection	461.69 ~ 465.41	dB	50.0	56.0	-
	461.31 ~ 465.73	dB	45.0	55.0	-
Tx Band Rejection	451.69 ~ 455.41	dB	50.0	53.0	-
	451.31 ~ 455.73	dB	48.0	53.0	-
Absolute Attenuation	0.3 ~ 350.0	dB	60.0	70.0	-
	350.0 ~ 451.31	dB	48.0	60.0	-
	465.73 ~ 479.5	dB	40.0	50.0	-
	479.5 ~ 750.0	dB	50.0	60.0	-
	750.0 ~ 1600.0	dB	35.0	40.0	-
	1600.0 ~ 2000.0	dB	25.0	33.0	-

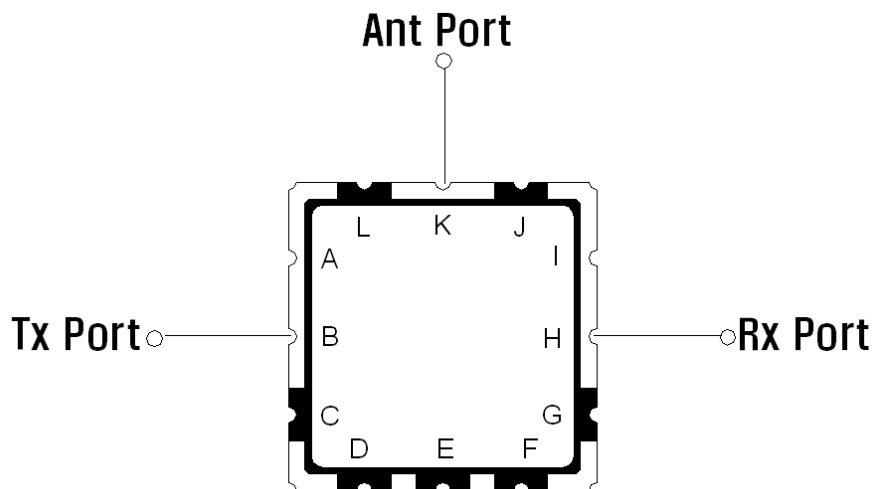
Package Dimensions



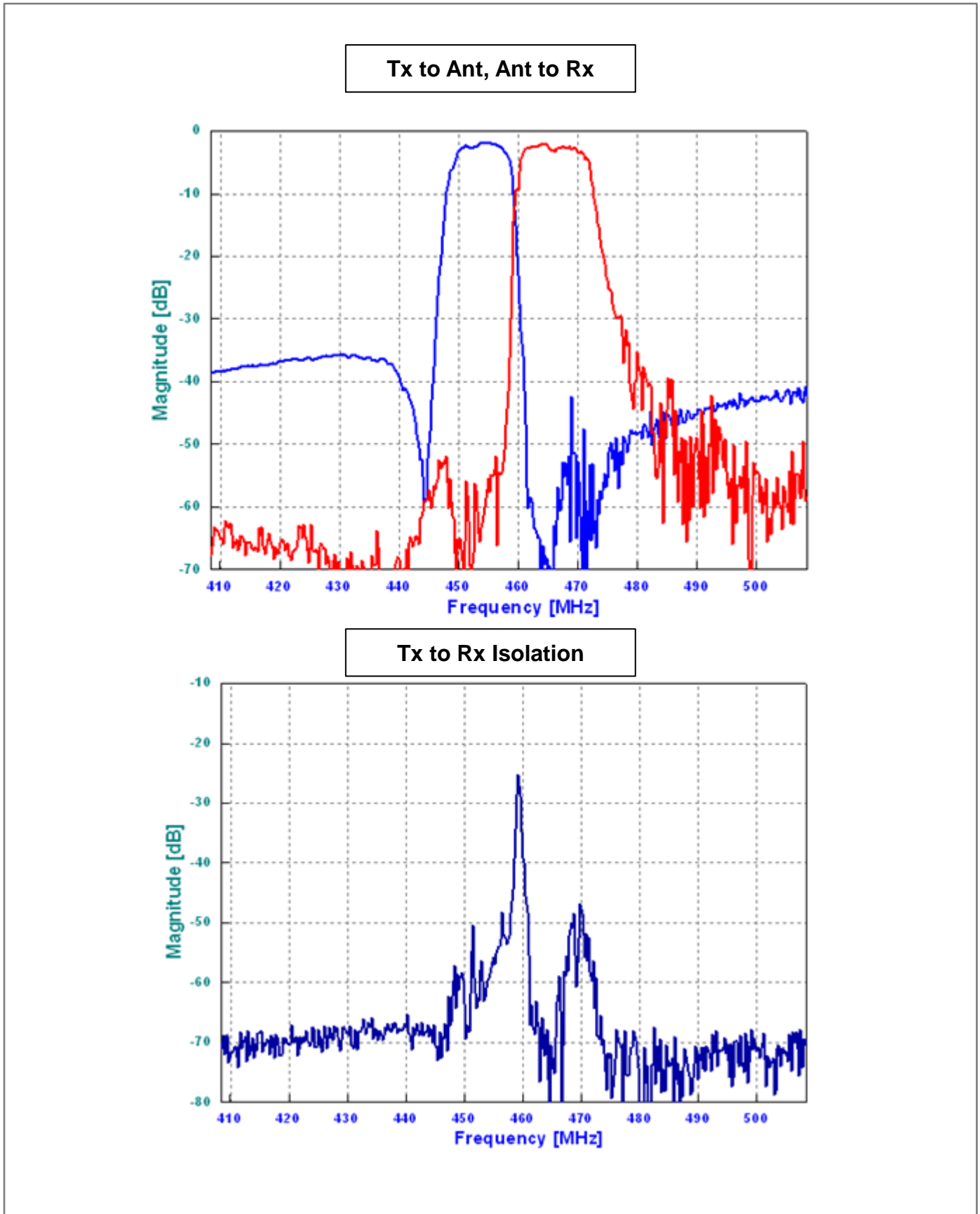
Marking Descriptions	
A	CDMA450 Application
R	Series Number
X	Date Code (Year)
Y	Date Code (Month)

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

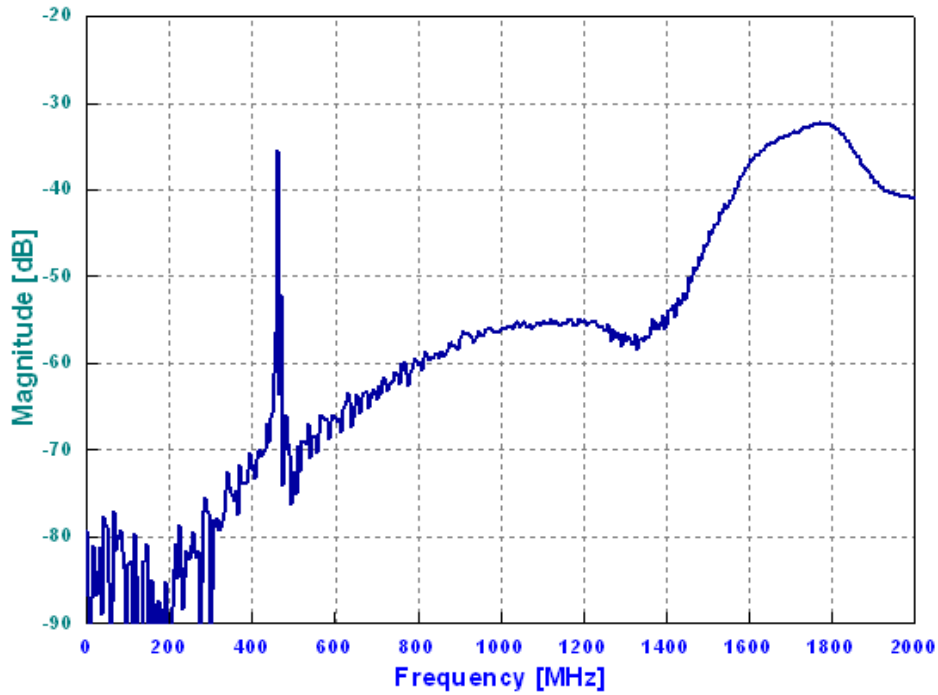
Testing Environment



Frequency Characteristics



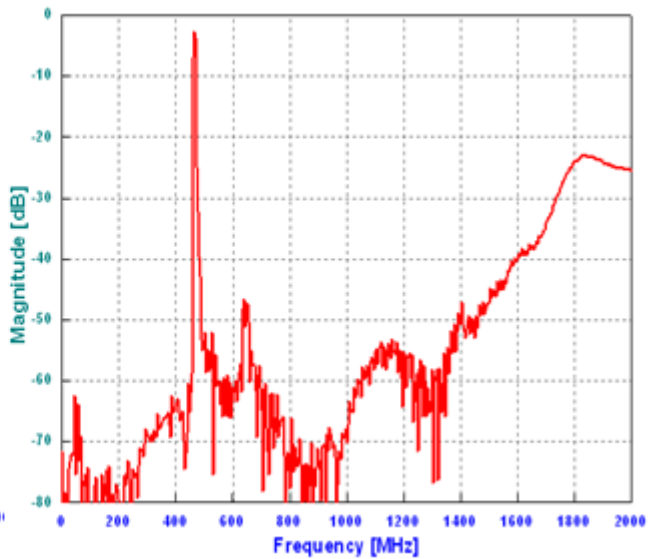
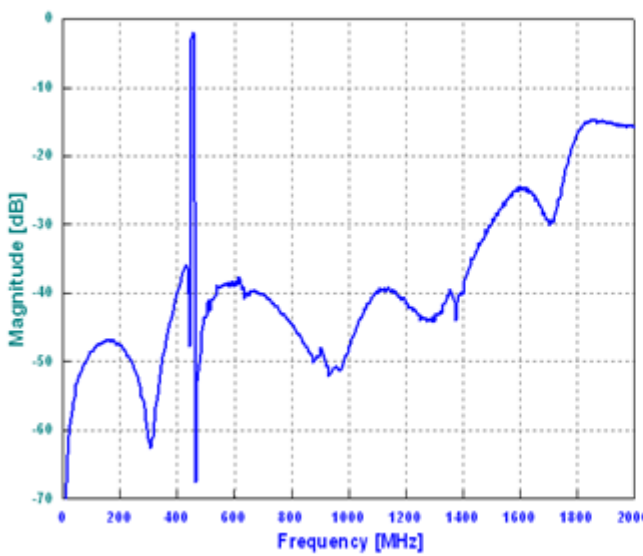
Tx to Rx Isolation Wide Band



Wide Band

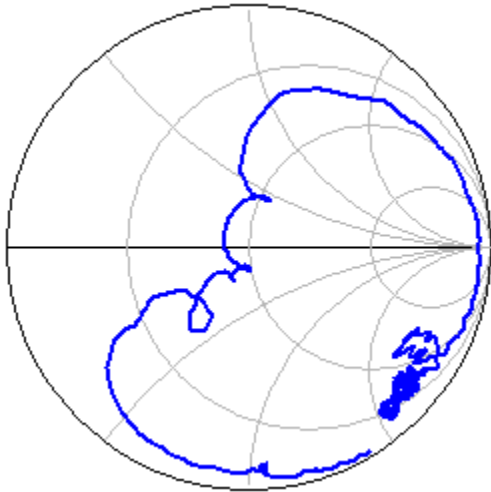
Tx

Rx

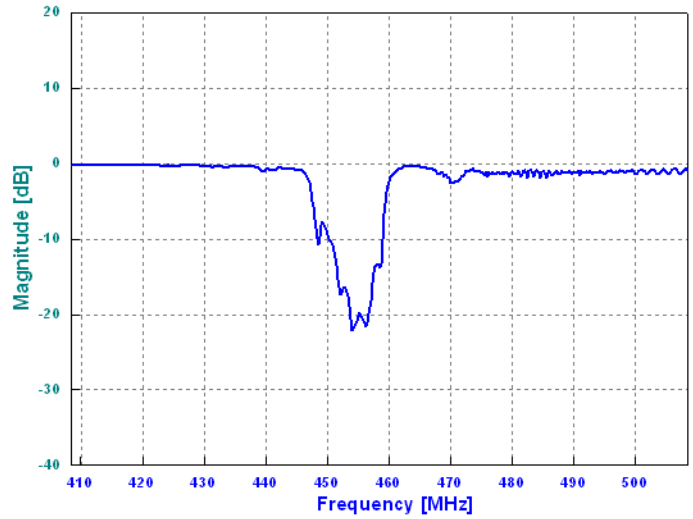


Tx Port

Smith Chart

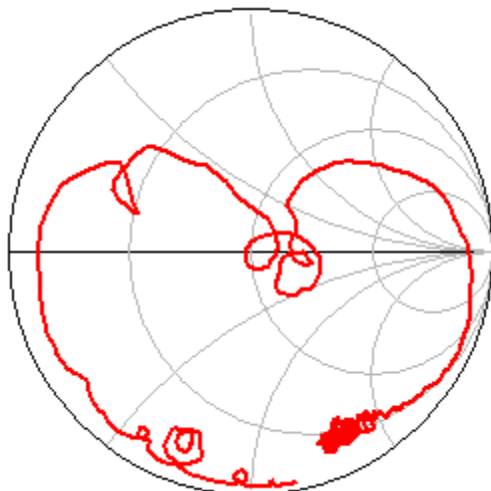


Return Loss

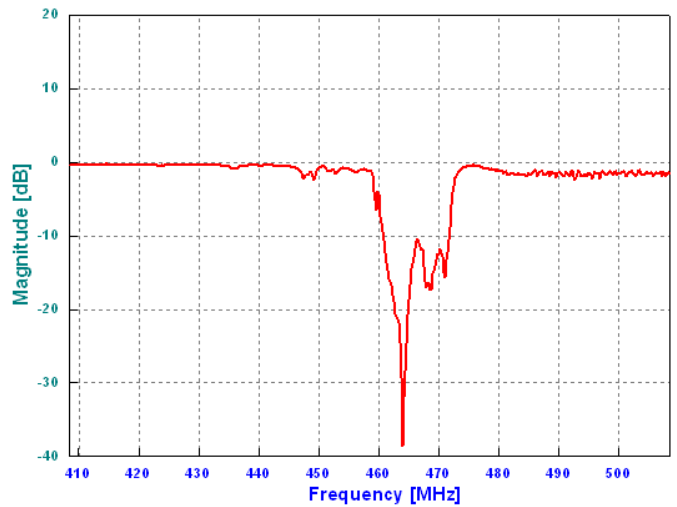


Rx Port

Smith Chart

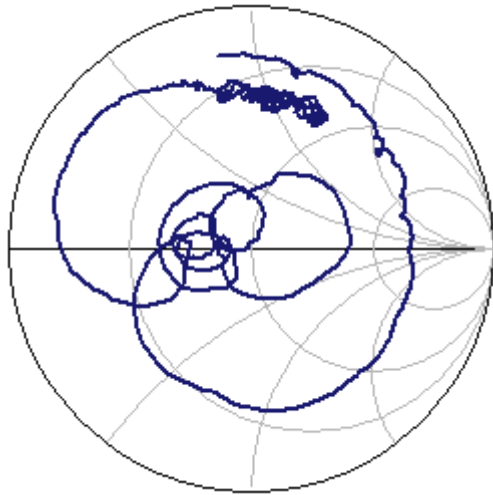


Return Loss



Ant Port

Smith Chart



Return Loss

