



Total Solution Provider in Saw Device

SD412AK2

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



- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
-

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Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	+80
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	K2			
Length x Width	mm ²	-	5.0 x 5.0	-
Height	mm	-	-	1.8

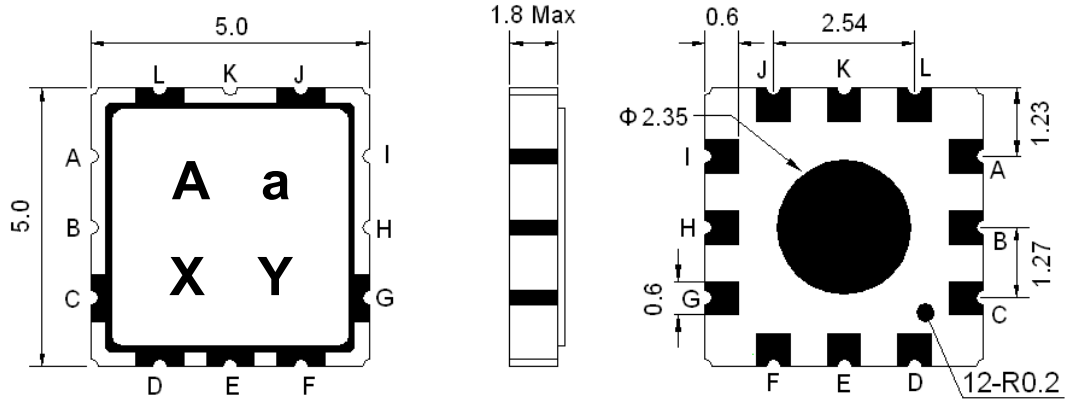
Electrical Specification

Tx → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	410.0 ~ 414.5	dB	-	2.5	2.8
VSWR	410.0 ~ 414.5	-	-	1.6	2.1
Absolute Attenuation	0.3 ~ 400.0	dB	23	26	-
	420.0 ~ 424.5	dB	30	50	-
	424.5 ~ 1700.0	dB	18	23	-
	1700.0 ~ 2000.0	dB	10	17	-

Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	420.0 ~ 424.5	dB	-	2.8	4.3
VSWR	420.0 ~ 424.5	-	-	1.6	2.2
Absolute Attenuation	0.3 ~ 410.0	dB	20	24	-
	410.0 ~ 414.5	dB	33	51	-
	445.0 ~ 600.0	dB	20	27	-
	600.0 ~ 1200.0	dB	20	30	-
	1200.0 ~ 2000.0	dB	25	46	-

Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	410.0 ~ 414.5	dB	32	50	-
	420.0 ~ 424.5	dB	35	57	-

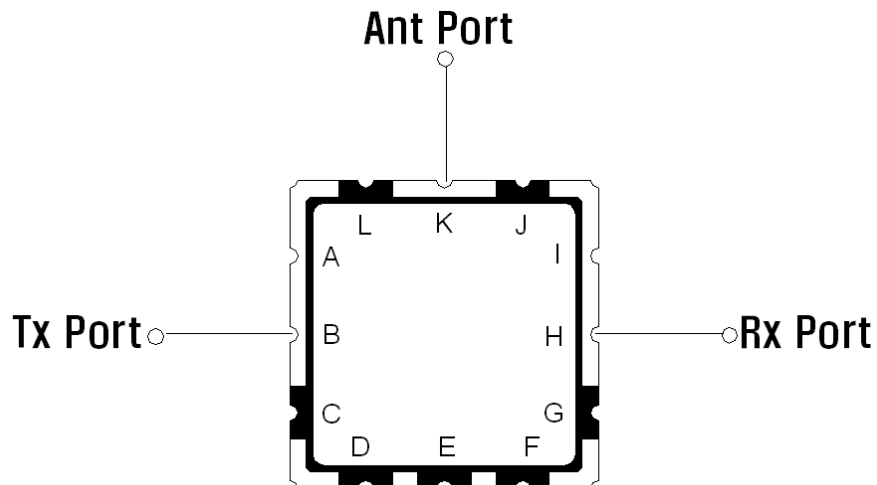
Package Dimensions



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

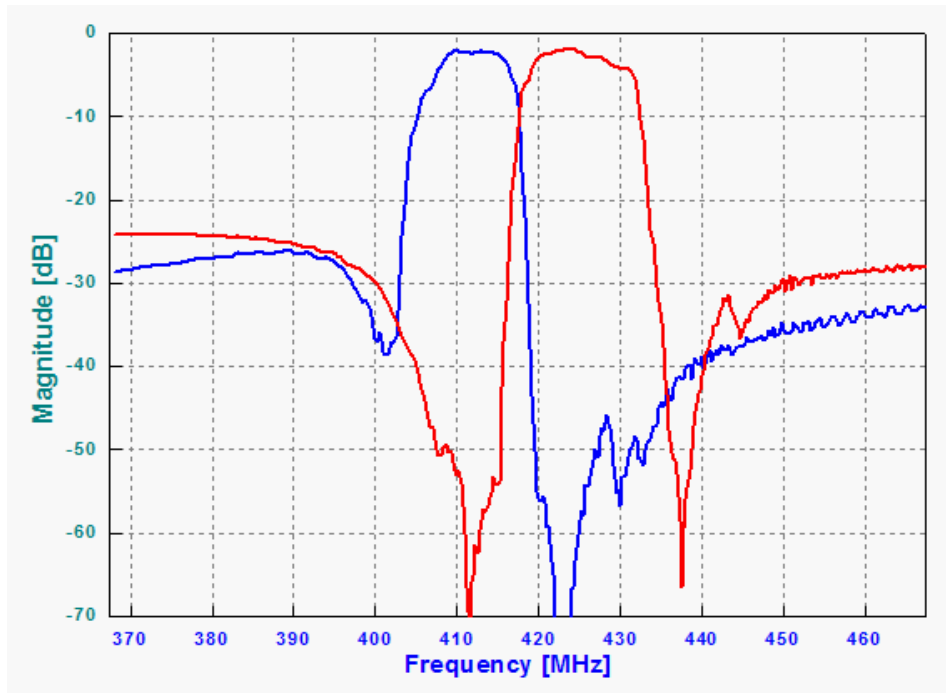
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Receiver
K	Antenna
B	Transmitter

Testing Environment

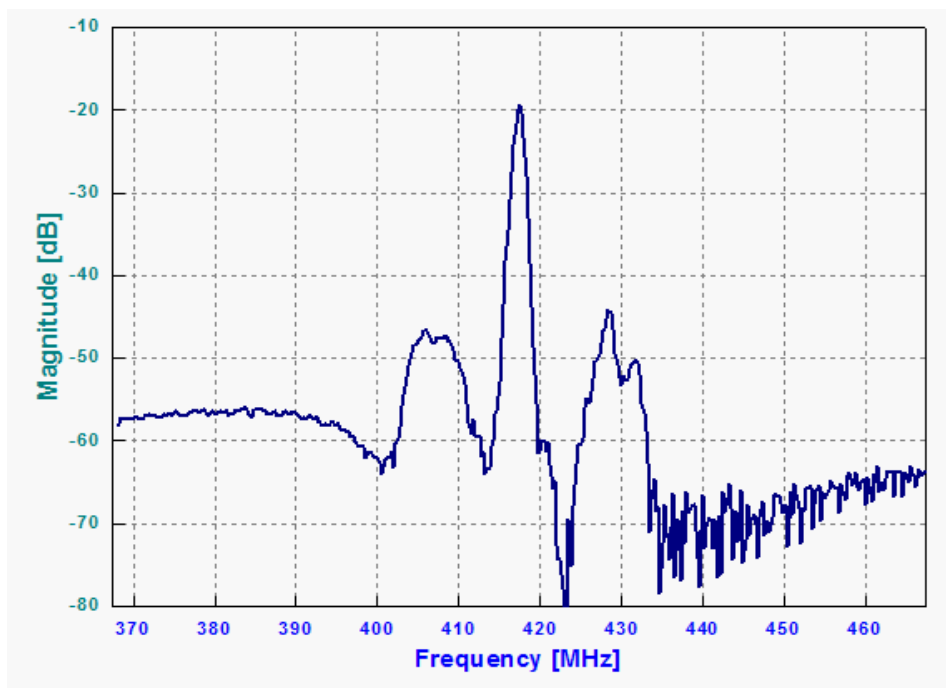


□ Frequency Characteristics

Tx to Ant, Ant to Rx



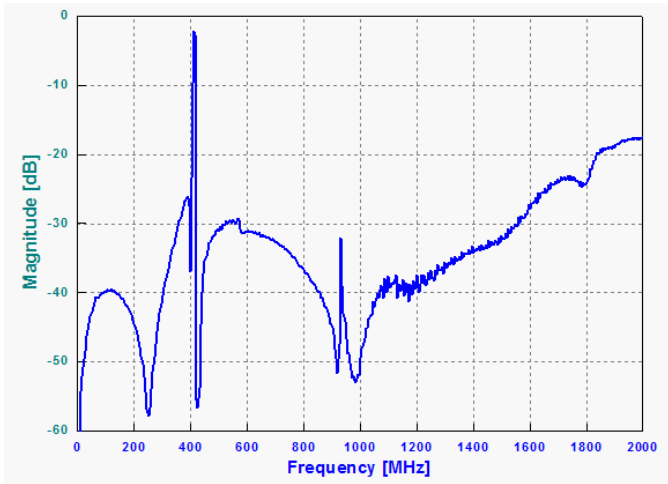
Tx to Rx Isolation



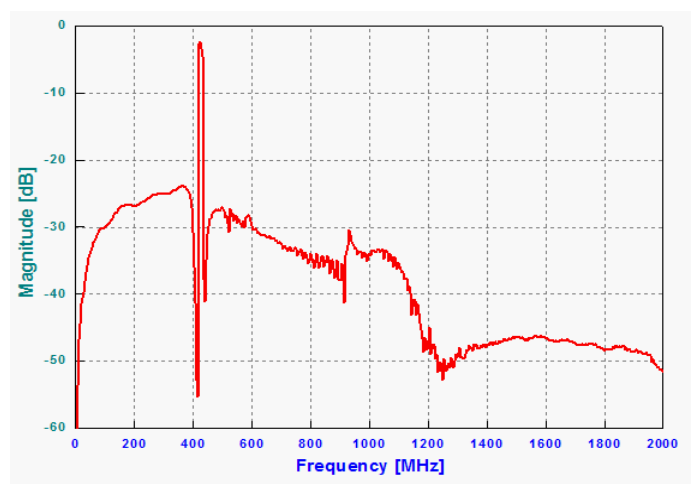
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Tx to Ant

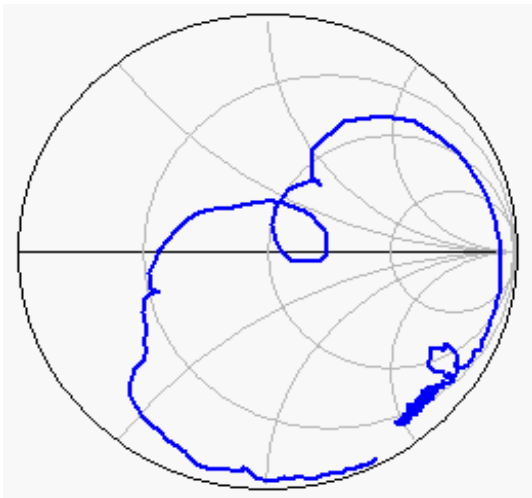


Ant to Rx

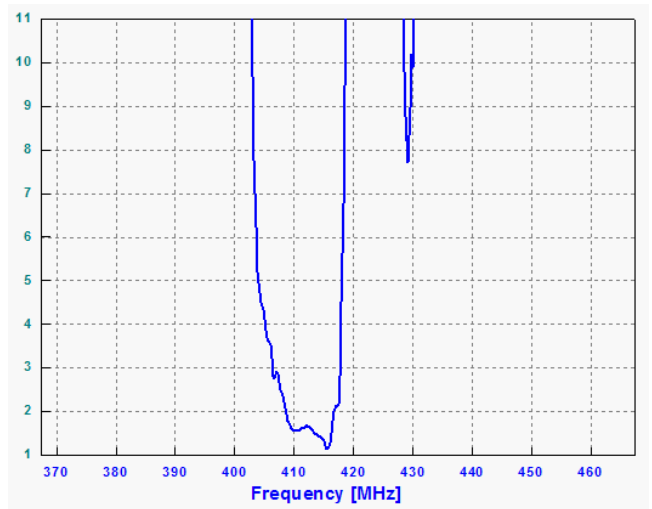


Tx Port

Smith Chart



VSWR

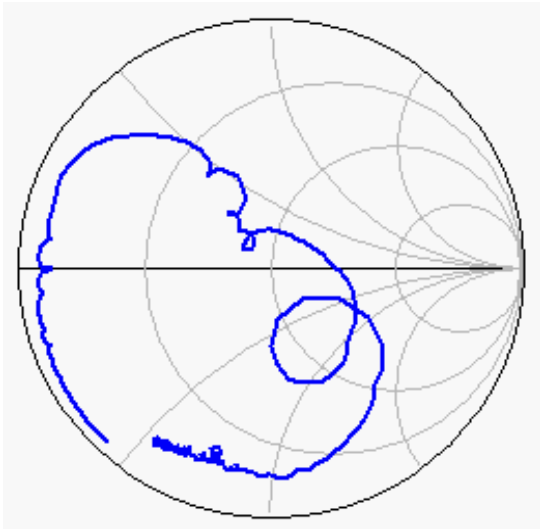


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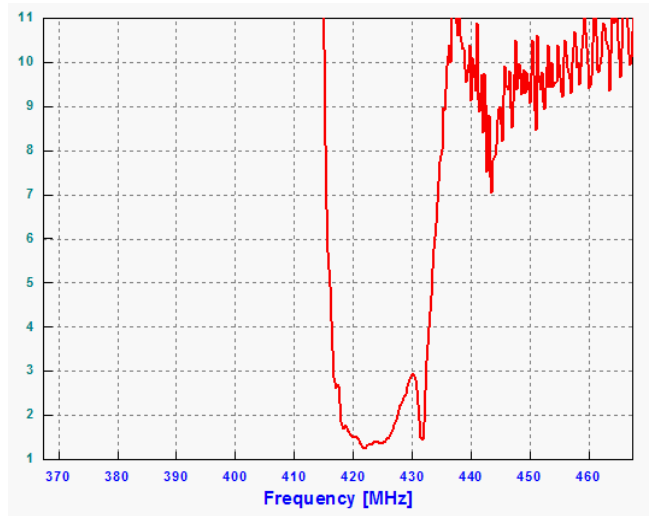
CDMA450 L-Band,SAW DUPLEXER

Rx Port

Smith Chart

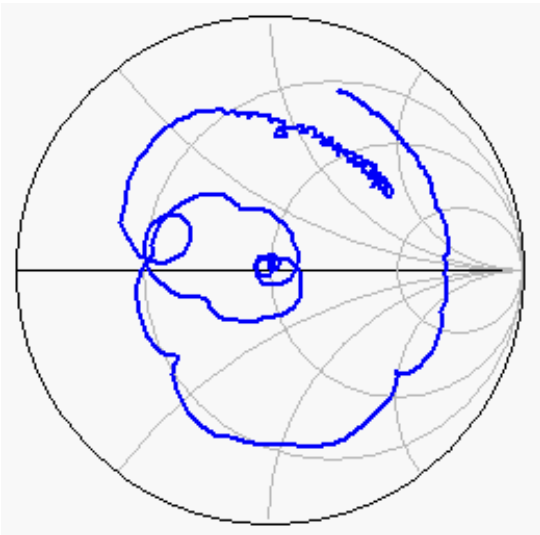


VSWR



Ant Port

Smith Chart



VSWR

