



Total Solution Provider in Saw Device

SD452AK2

CDMA450 C-Band, SAW Duplexer
Revision 1: April 2005



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

SAWNICS Inc.

460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / www.sawnics.com

**□ Electrical Characteristics****Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	+80
Storage Temperature Range		-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

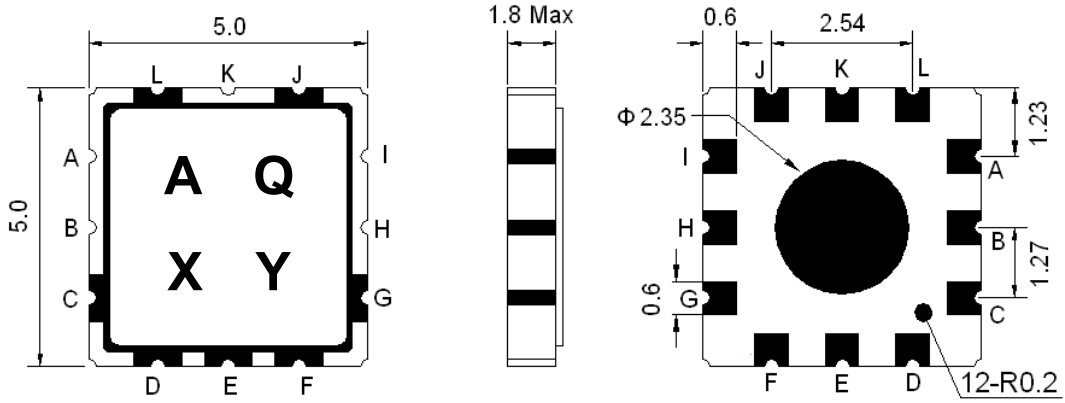
Tx → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	450.0 ~ 454.8	dB	-	2.2	2.8
VSWR	450.0 ~ 454.8	-	-	1.3	2.1
Absolute Attenuation	0.3 ~ 440.0	dB	25	27	-
	460.0 ~ 464.8	dB	30	50	-
	464.8 ~ 1700.0	dB	23	27	-
	1700.0 ~ 2000.0	dB	10	17	-

Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	460.0 ~ 464.8	dB	-	2.7	4.3
VSWR	460.0 ~ 464.8	-	-	1.4	2.2
Absolute Attenuation	0.3 ~ 450.0	dB	20	25	-
	450.0 ~ 454.8	dB	33	50	-
	484.8 ~ 505.0	dB	25	31	-
	505.0 ~ 1200.0	dB	20	32	-
	1200.0 ~ 2000.0	dB	25	47	-

Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	450.0 ~ 454.8	dB	35	53	-
	460.0 ~ 464.8	dB	32	50	-

Notes :

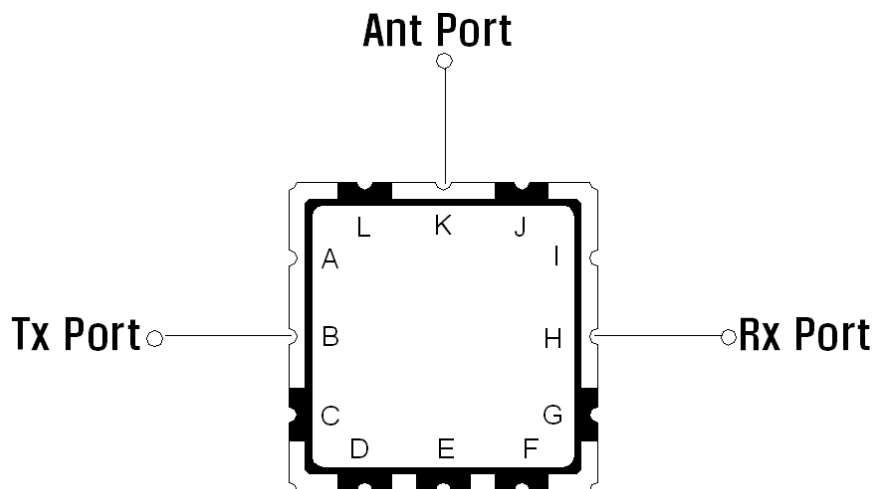
Package Dimensions



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

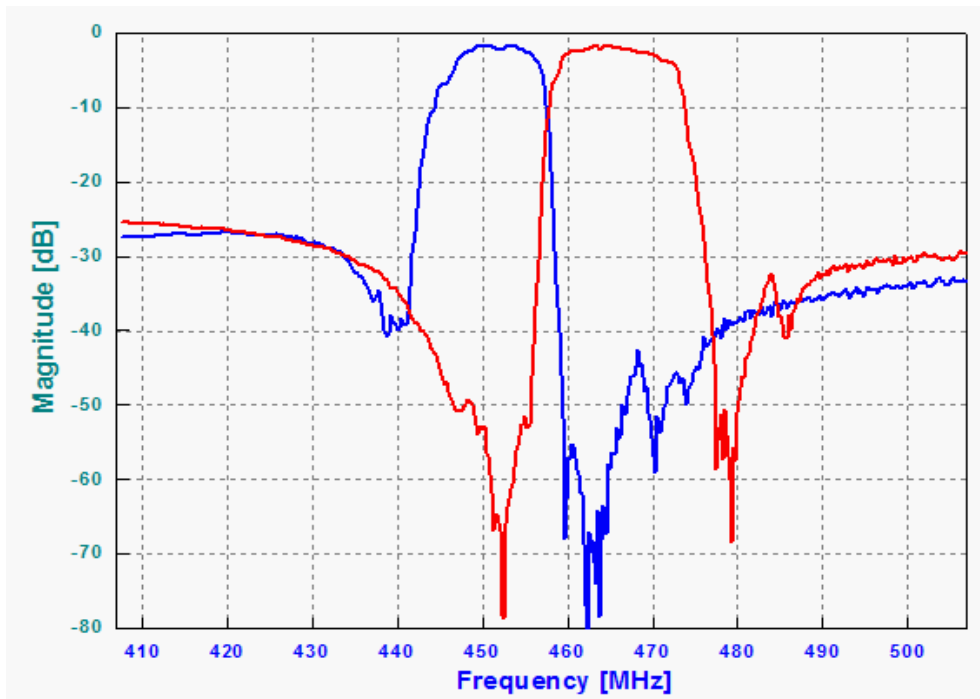
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Receiver
K	Antenna
B	Transmitter

Testing Environment

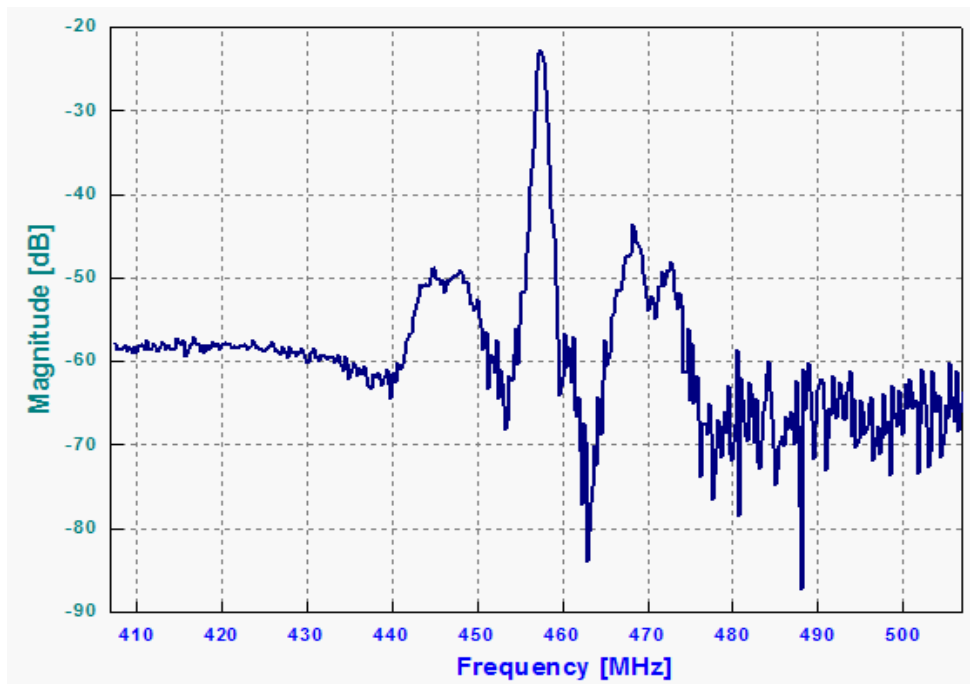


□ Frequency Characteristics

Tx to Ant, Ant to Rx



Tx to Rx Isolation



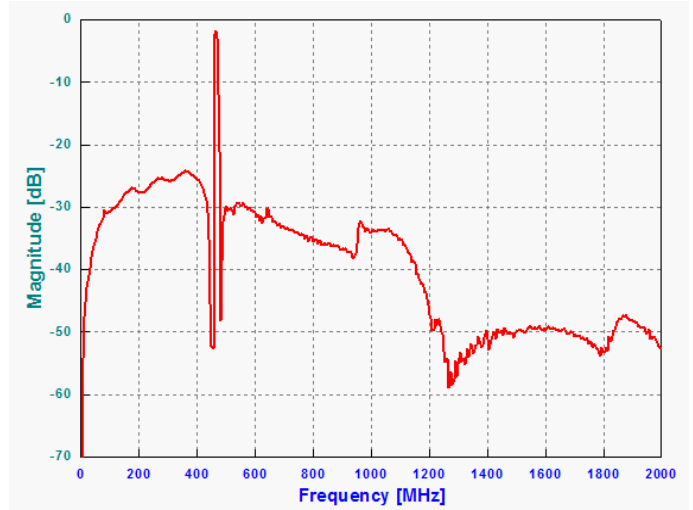
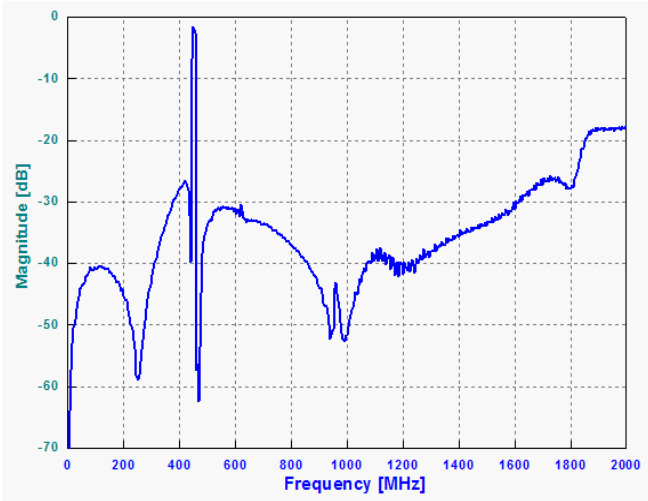


SD452AK2

CDMA450 C-Band, SAW DUPLEXER

Tx to Ant

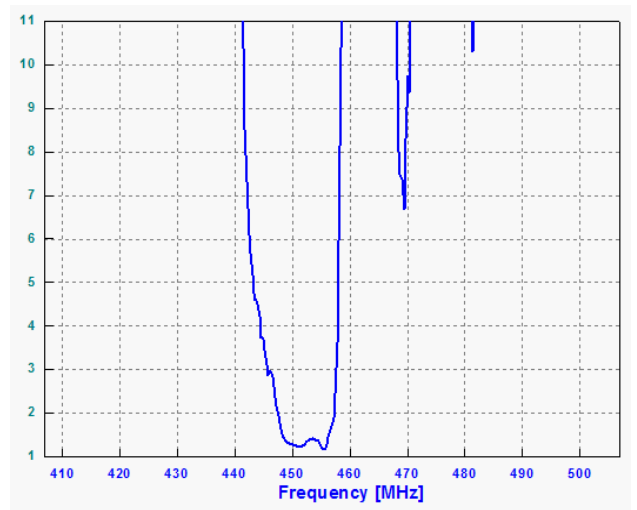
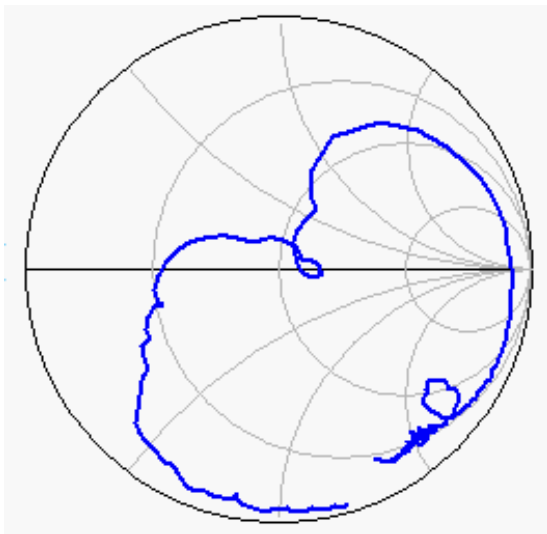
Ant to Rx



Tx Port

Smith Chart

VSWR

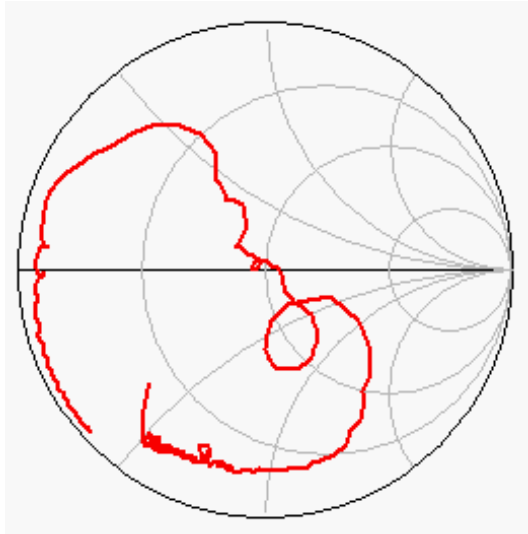


SD452AK2

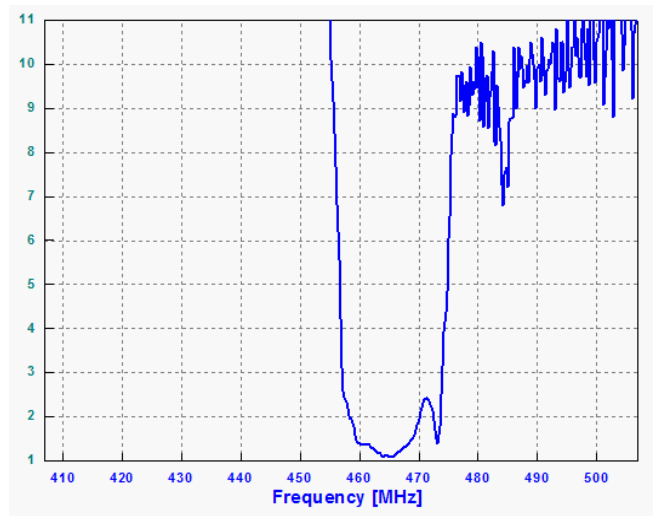
CDMA450 C-Band, SAW DUPLEXER

Rx Port

Smith Chart

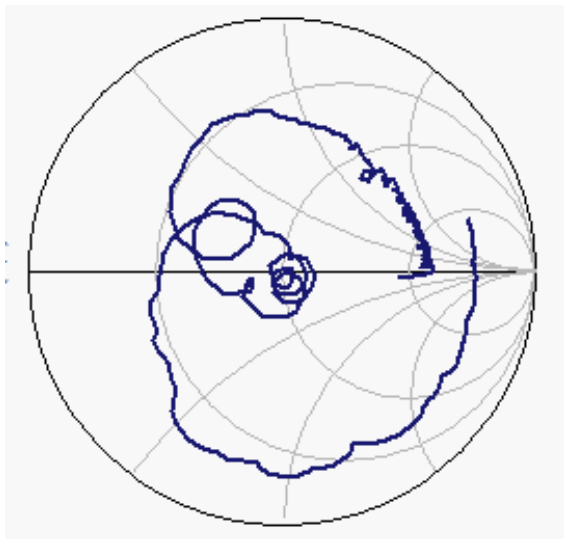


VSWR



Ant Port

Smith Chart



VSWR

