



*Total Solution Provider in Saw Device*

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# SD457AK2

CDMA450 G-Band, SAW DUPLEXER  
Revision 1: May 2006



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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**SAWNICS Inc.**

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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](http://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)		
Input Impedance	Ω	50		
Output Impedance	Ω	50		
Package type & size	K2			
Length x Width	mm <sup>2</sup>		5.0 x 5.0	-
Height	mm		-	1.8

### Electrical Specification

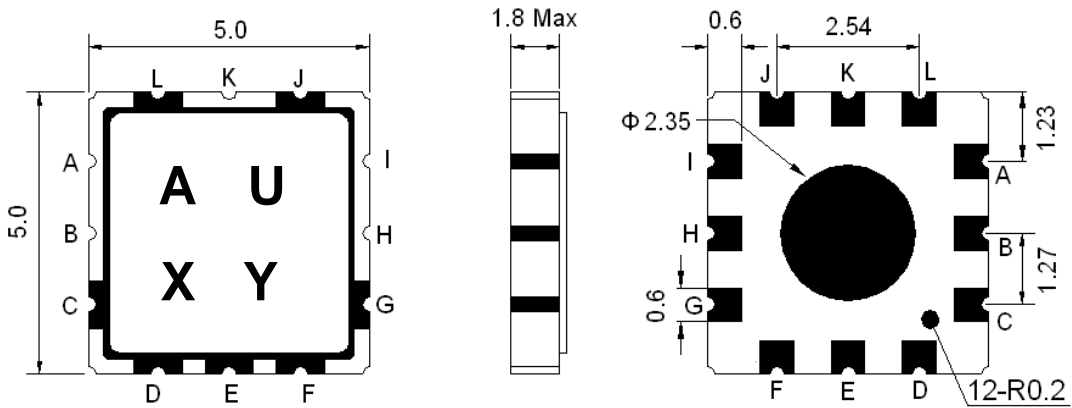
Tx → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	455.2 ~ 460.0	dB	-	2.0	2.8
VSWR	455.2 ~ 460.0	-	-	1.3	2.1
Absolute Attenuation	0.3 ~ 445.0	dB	25	27	-
	465.2 ~ 470.0	dB	30	50	-
	470.0 ~ 1700.0	dB	15	21	-
	1700.0 ~ 2000.0	dB	10	15	-

Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	465.2 ~ 470.0	dB	-	3.3	4.3
VSWR	465.2 ~ 470.0	-	-	1.6	2.2
Absolute Attenuation	0.3 ~ 455.2	dB	20	25	-
	455.2 ~ 460.0	dB	33	50	-
	490.0 ~ 700.0	dB	25	29	-
	700.0 ~ 1200.0	dB	20	33	-
	1200.0 ~ 2000.0	dB	25	47	-

Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	455.2 ~ 460.0	dB	35	51	-
	465.2 ~ 470.0	dB	32	53	-

### Notes :

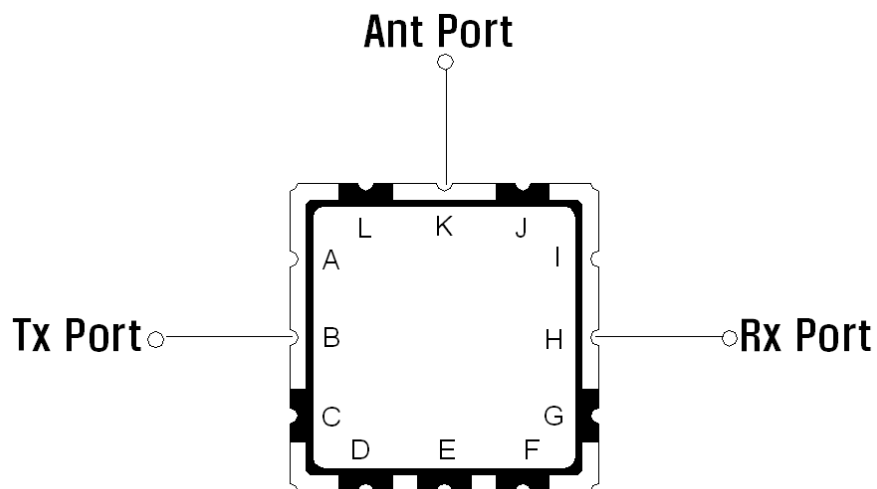
**Package Dimensions**



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

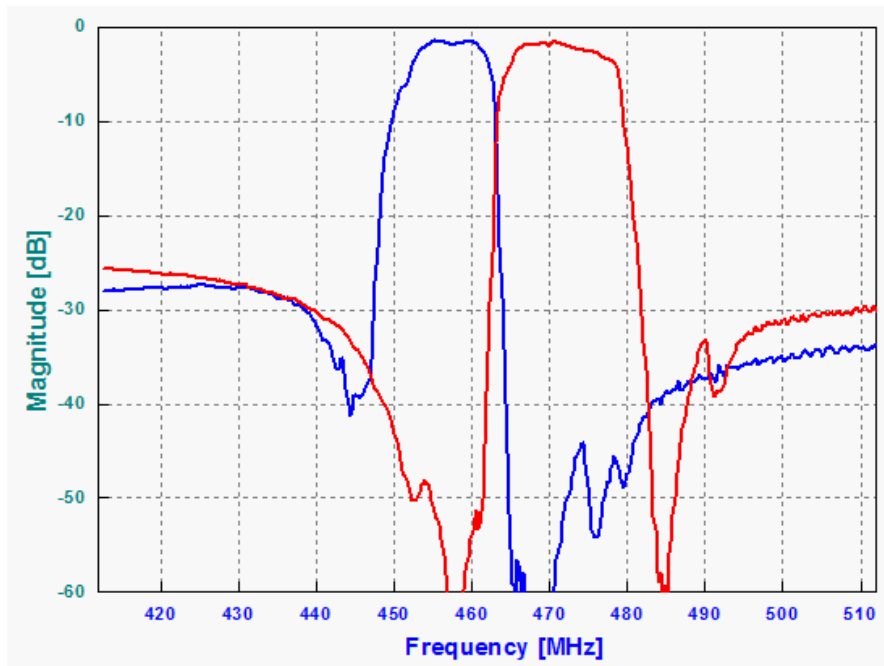
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Receiver
K	Antenna
B	Transmitter

**Testing Environment**

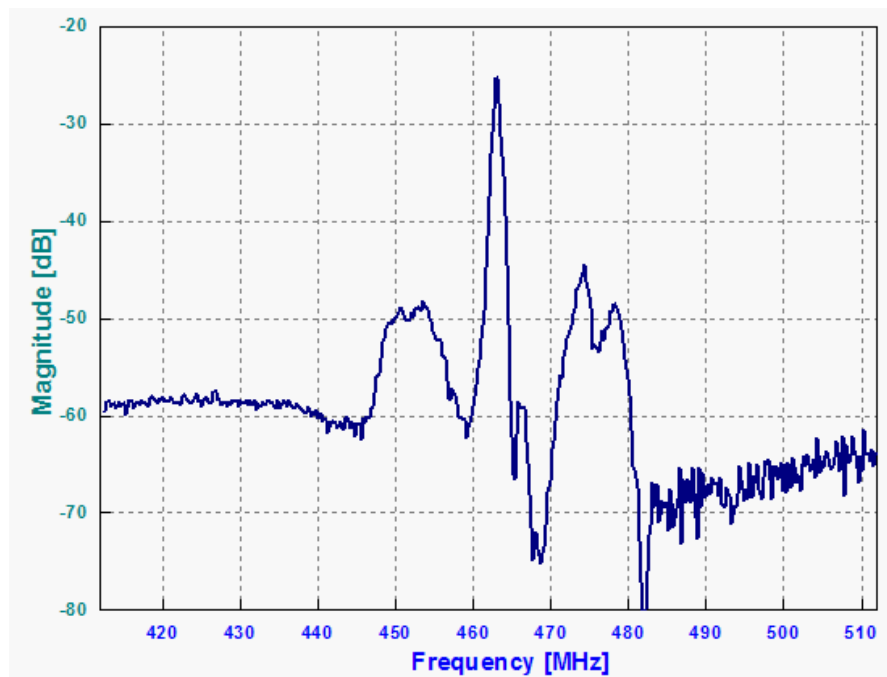


**□ Frequency Characteristics**

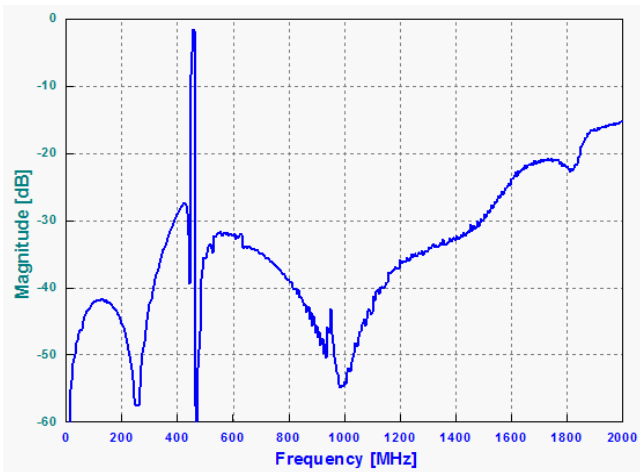
Tx to Ant, Ant to Rx



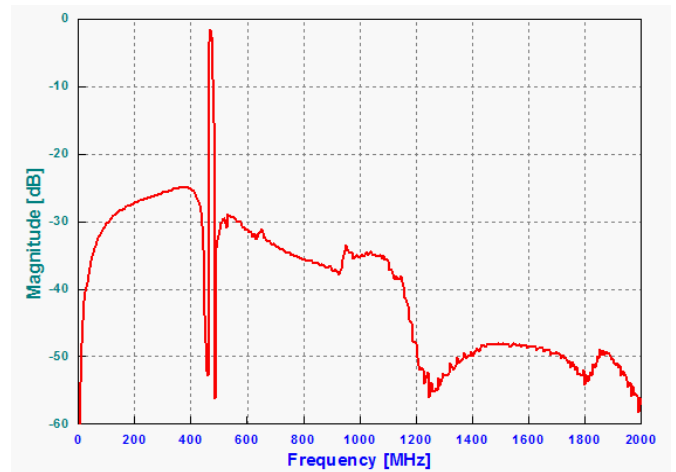
Tx to Rx Isolation



**Tx to Ant**

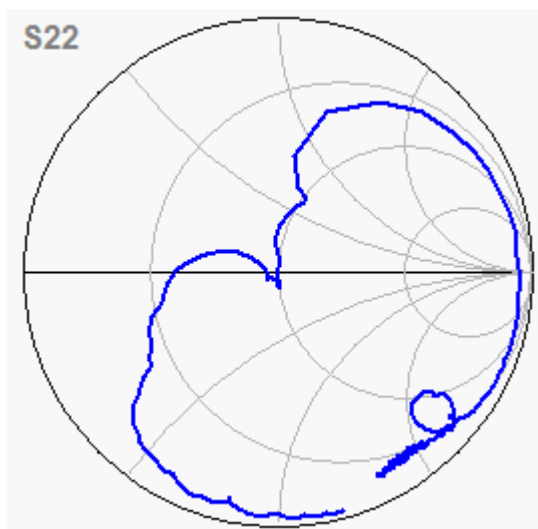


**Ant to Rx**

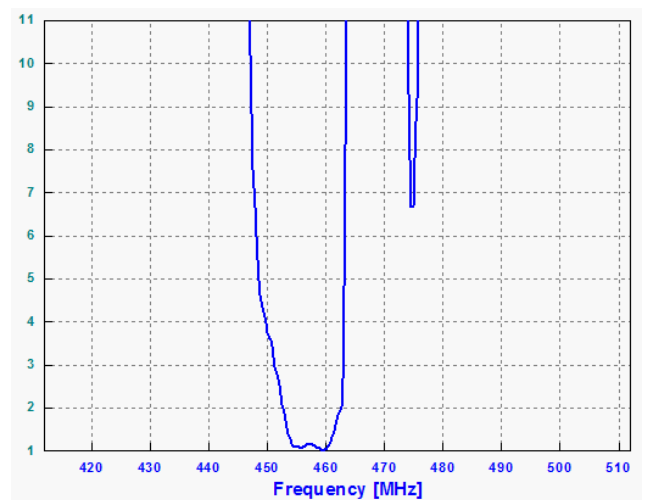


**Tx Port**

**Smith Chart**

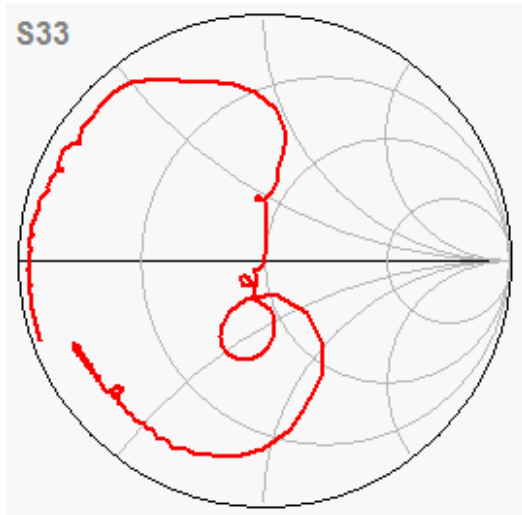


**VSWR**

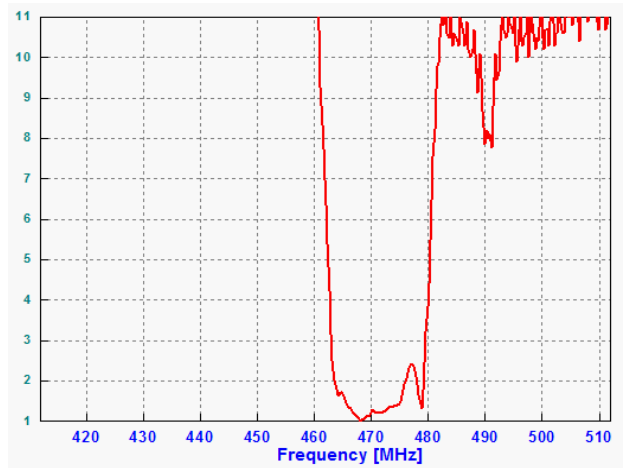


### Rx Port

Smith Chart

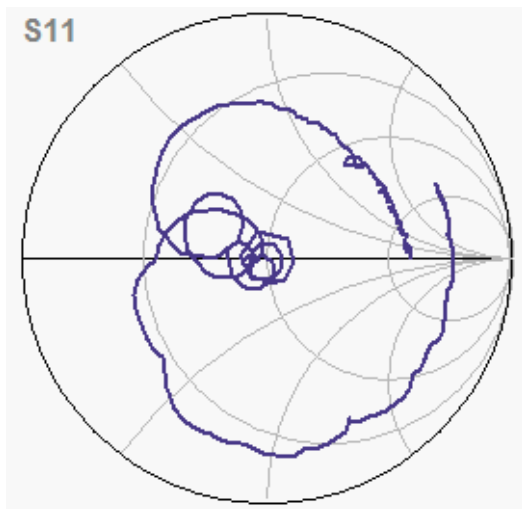


VSWR



### Ant Port

Smith Chart



VSWR

