



*Total Solution Provider in Saw Device*

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# SD417BK2

CDMA450 E-Band, SAW DUPLEXER  
Revision 0: DECEMBER 2008



- 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	°C	-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

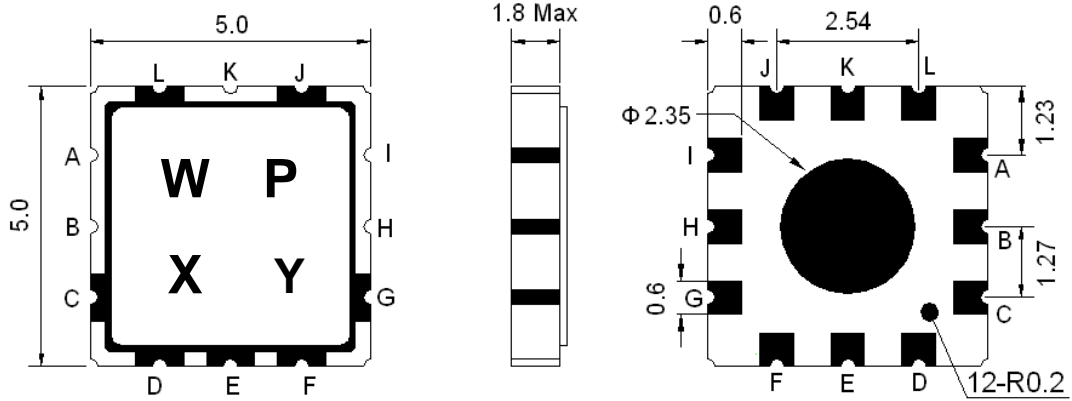
### Electrical Specification

Tx → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	415.5 ~ 420.0	dB	-	1.9	2.8
VSWR	415.5 ~ 420.0	-	-	1.6	2.1
Absolute Attenuation	0.3 ~ 400.0	dB	23	26	-
	425.5 ~ 430.0	dB	30	53	-
	430.0 ~ 1700.0	dB	15	21	-
	1700.0 ~ 2000.0	dB	10	18	-

Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	425.5 ~ 430.0	dB	-	2.7	4.8
VSWR	425.5 ~ 430.0	-	-	1.6	2.2
Absolute Attenuation	0.3 ~ 415.5	dB	20	24	-
	415.5 ~ 420.0	dB	33	53	-
	460.0 ~ 600.0	dB	20	27	-
	600.0 ~ 1200.0	dB	20	30	-
	1200.0 ~ 2000.0	dB	30	47	-

Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	415.5 ~ 420.0	dB	32	52	-
	425.5 ~ 430.0	dB	35	54	-

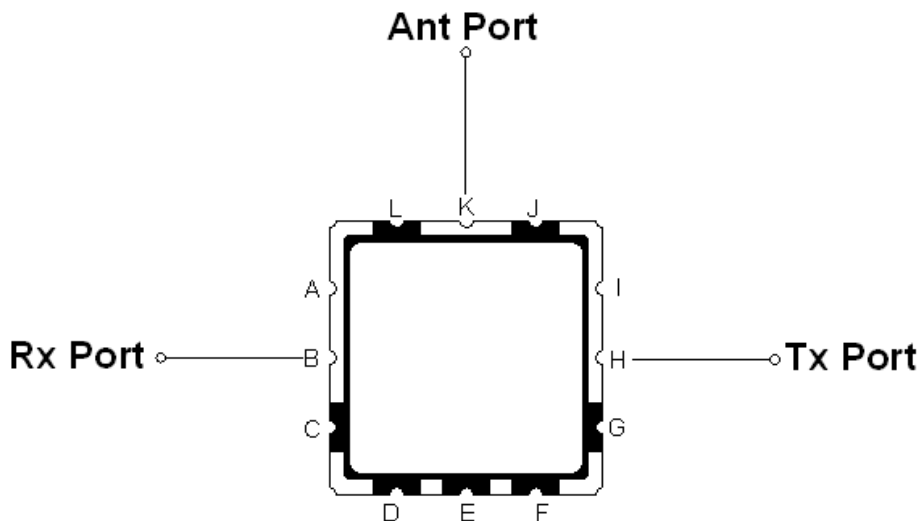
**□ Package Dimensions**



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

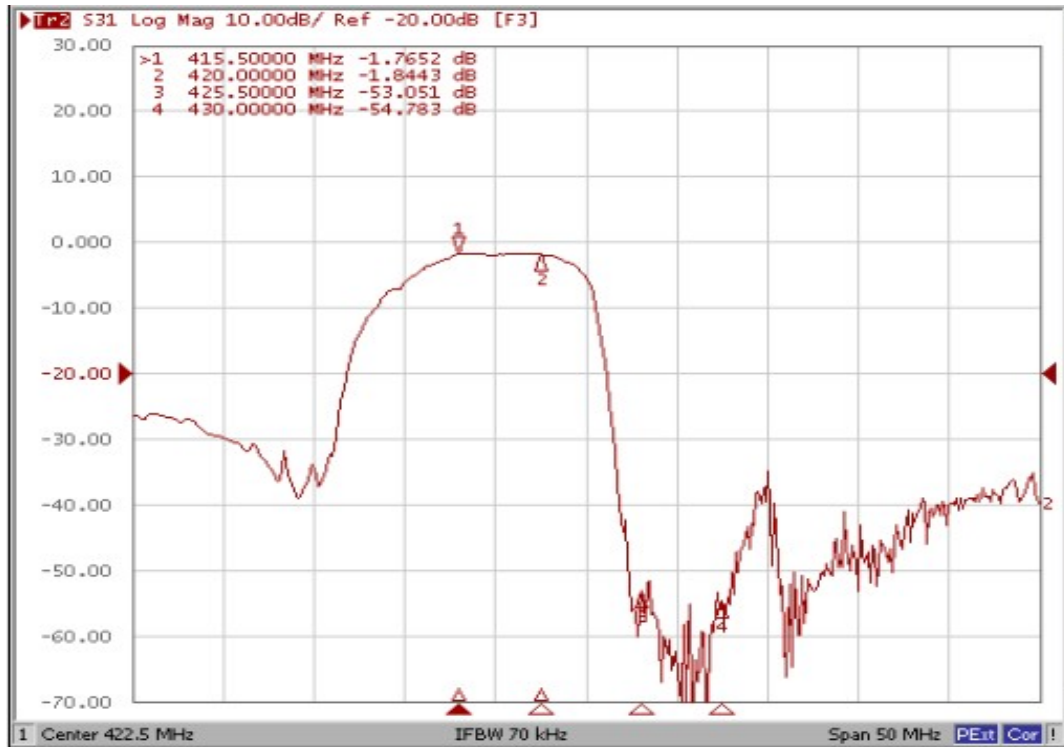
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
B	Receiver
K	Antenna
H	Transmitter

**□ Testing Environment**



### Frequency Characteristics

#### Tx Characteristic

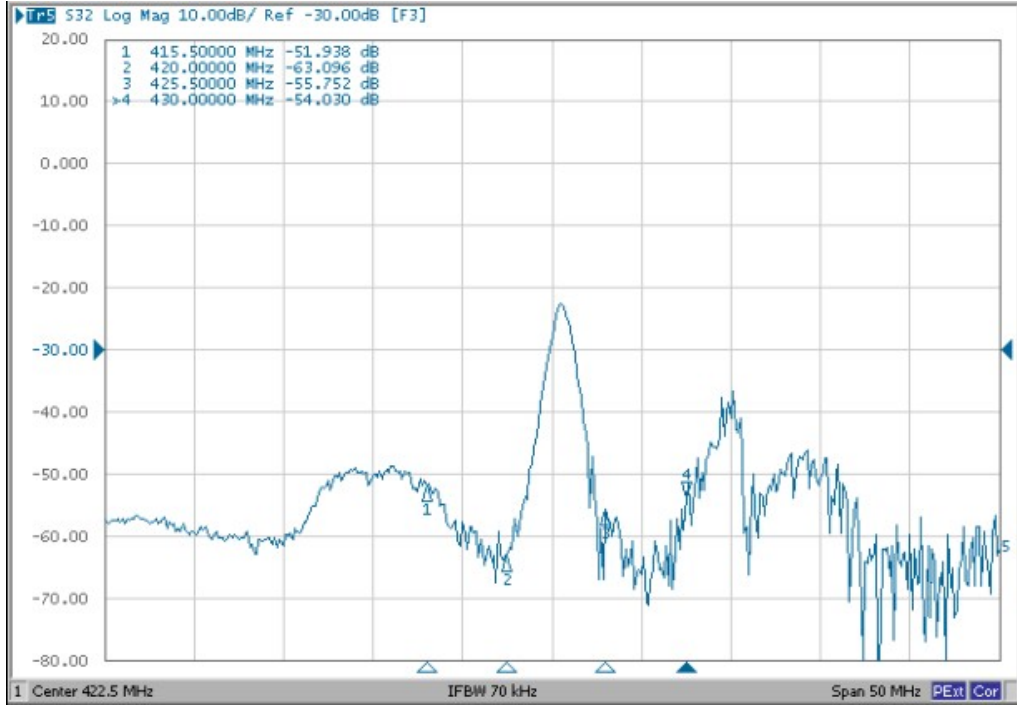


#### Rx Characteristic



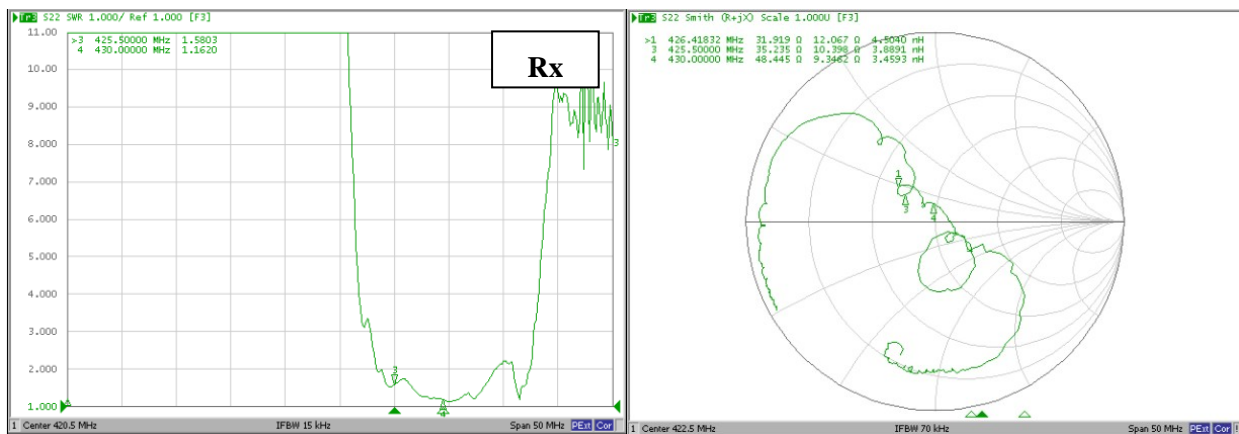
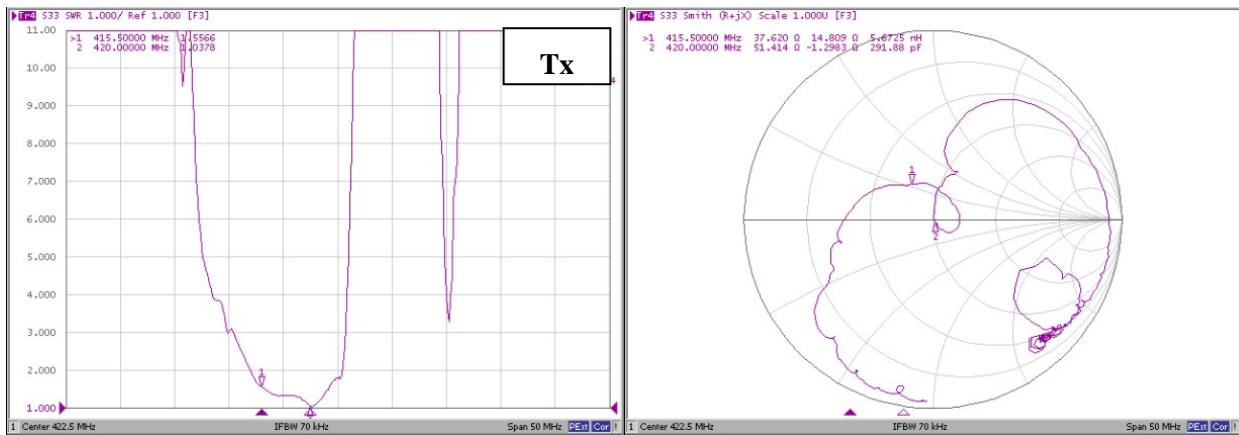
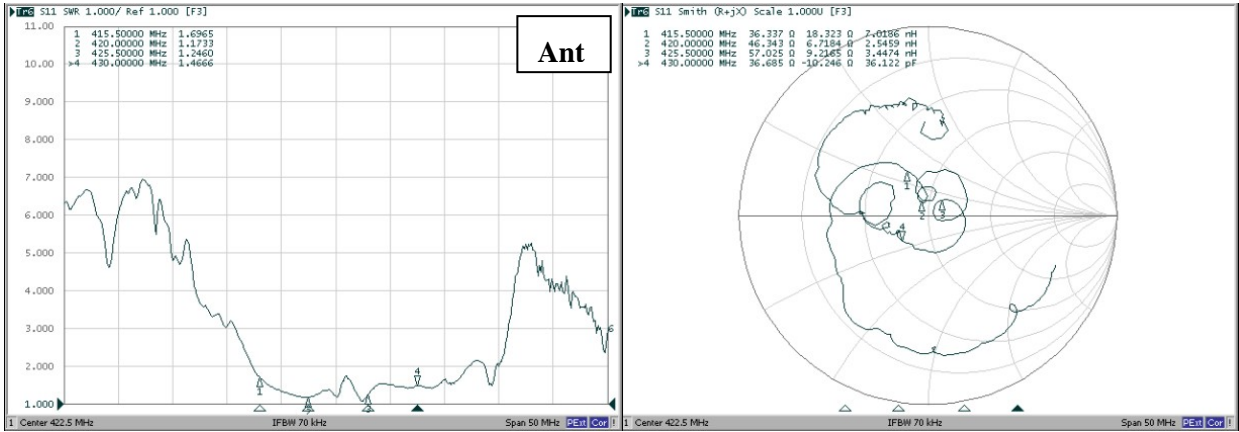


Isolation Characteristic





### Return Loss & Smith Chart





Wide Span

