



*Total Solution Provider in Saw Device*

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# SD1433BPB

SAW DUPLEXER For 1432.9MHz / 1480.9MHz  
Revision 0: July ,2011



- 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	-20	-	+70
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Maximum Input Power	dBm	28dBm > 50,000 Hours, CW tone(Ta= +50°C)		
Input Impedance (Antenna)	Ω	50		
Output Tx Impedance	Ω	50		
Output Rx Impedance	Ω	50		
Package type & size	PB			
Length x Width	mm <sup>2</sup>	-	3.8 x 3.8	-
Height	mm	-	-	1.45

#### Electrical Specification

Tx_1432.9MHz		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	1427.9 ~ 1437.9	dB	-	2.0	3.2
Amplitude Ripple	1427.9 ~ 1437.9	dB <sub>p-p</sub>	-	0.6	1.2
VSWR	1427.9 ~ 1437.9	-	-	1.8	2.1
Absolute Attenuation	1475.9 ~ 1485.9	dB	45	55	-

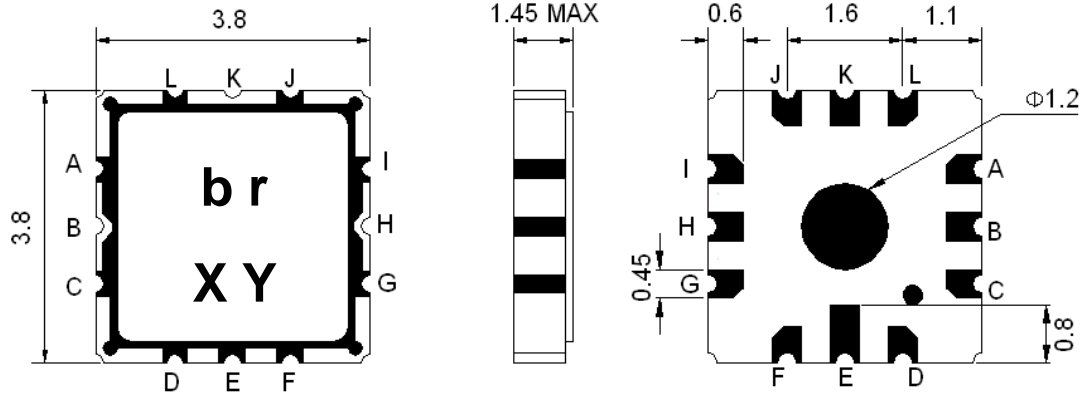


Rx_1480.9MHz		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	1475.9 ~ 1485.9	dB	-	2.0	3.2
Amplitude Ripple	1475.9 ~ 1485.9	dB <sub>p-p</sub>	-	0.4	1.2
VSWR	1475.9 ~ 1485.9	-	-	1.5	2.1
Absolute Attenuation	1427.9 ~ 1437.9	dB	40	46	-

Rx → Tx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	1427.9 ~ 1437.9	dB	40	48	-
	1475.9 ~ 1485.9	dB	45	56	-

**Notes :** (1) With Matching Network .

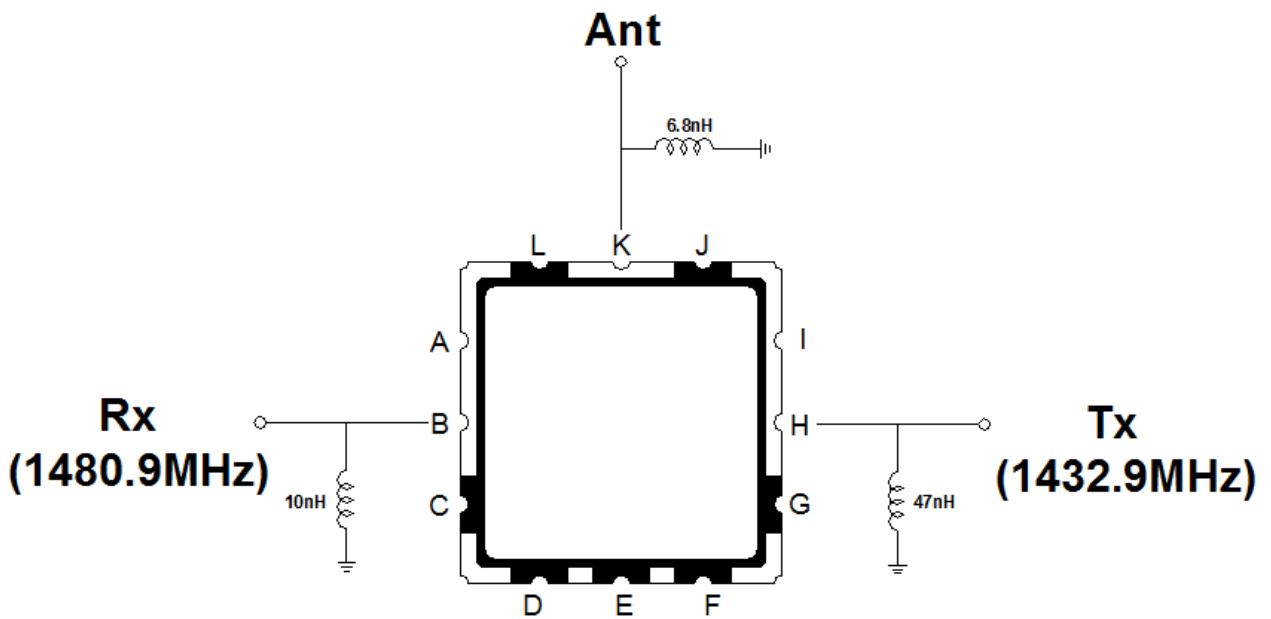
**Package Dimensions**



Marking Descriptions	
b	Wireless Application
r	Series Number
X	Date Code(Year)
Y	Date Code(Month)

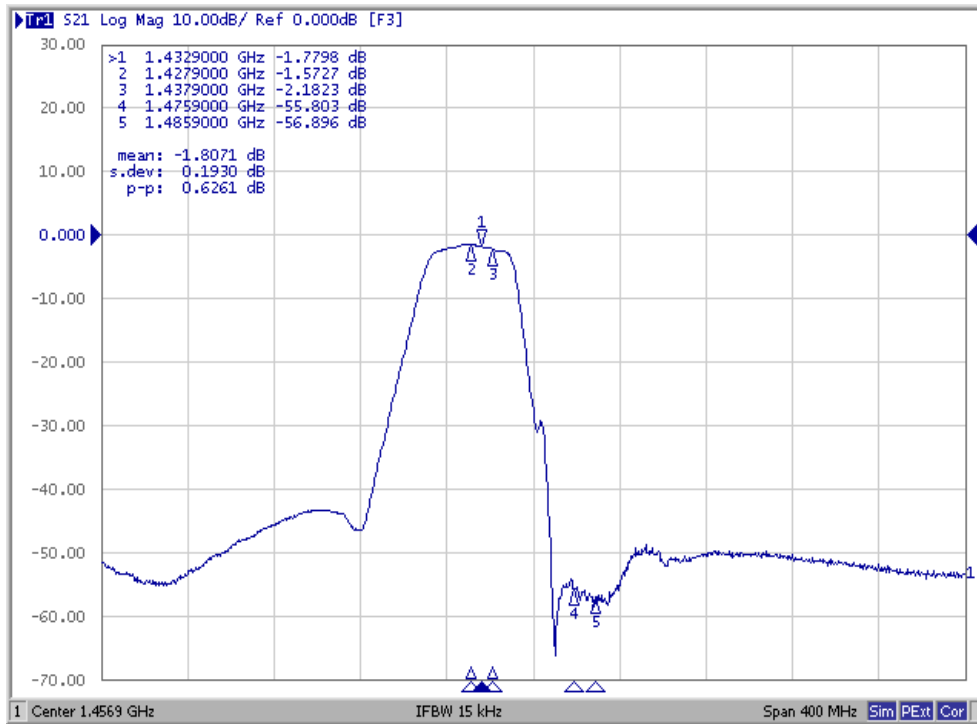
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Rx (1480.9 MHz)
H	Tx (1432.9MHz)

**Testing Environment**

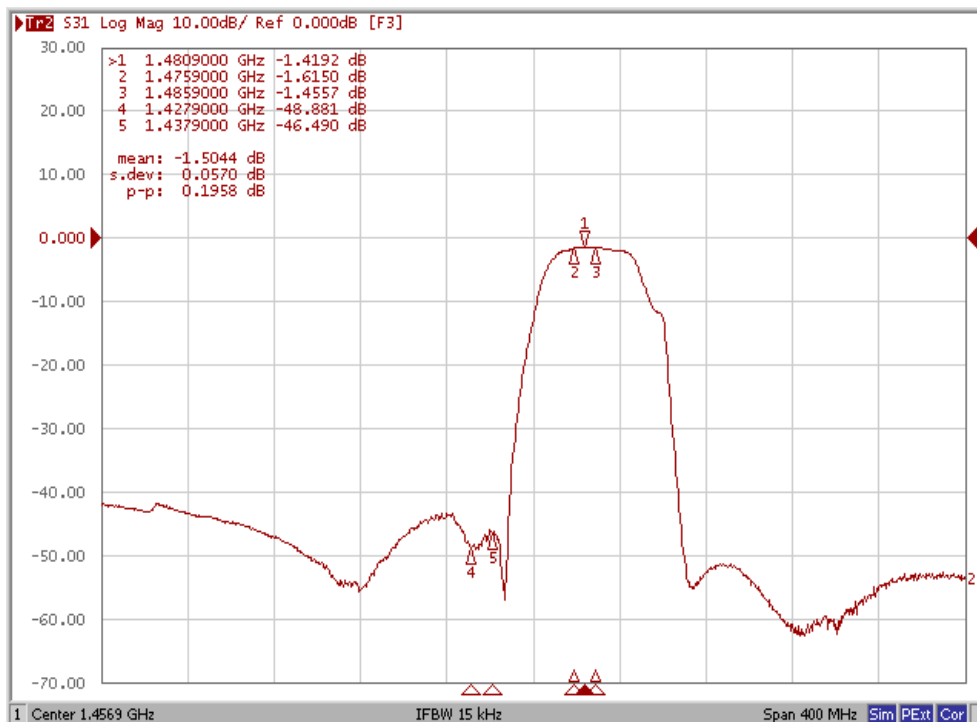


**□ Frequency Characteristics**

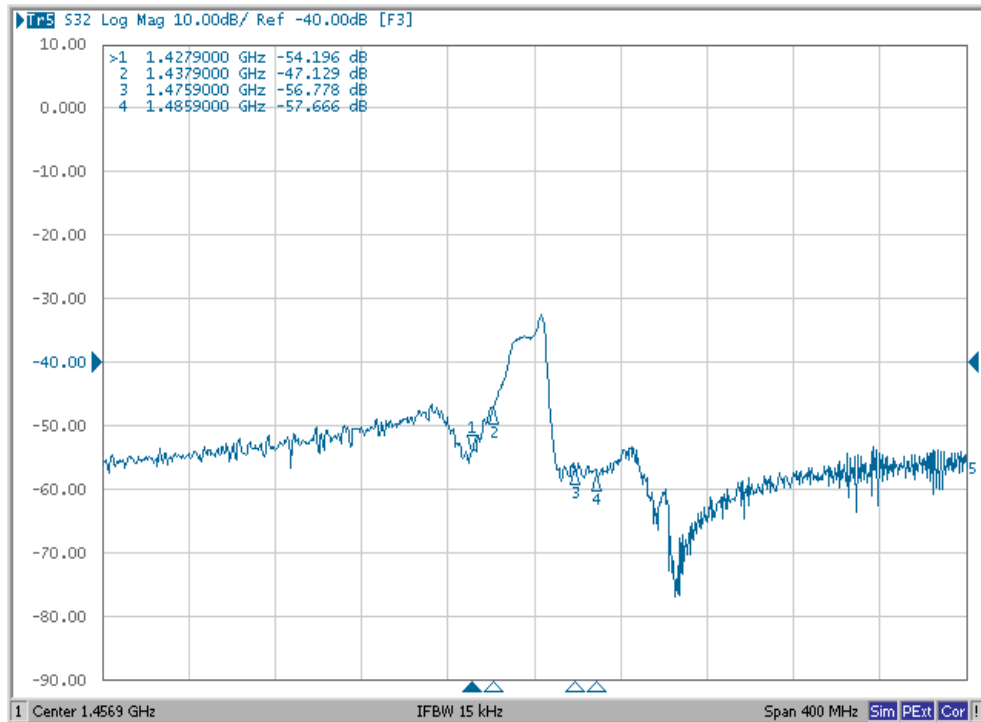
**Tx to Ant**



**Ant to Rx**

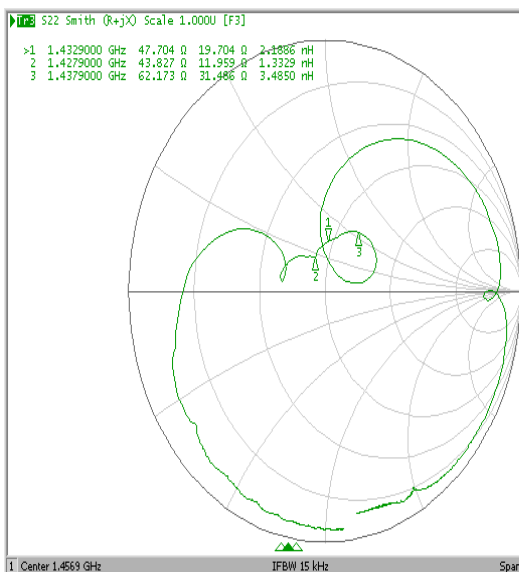


### Isolation

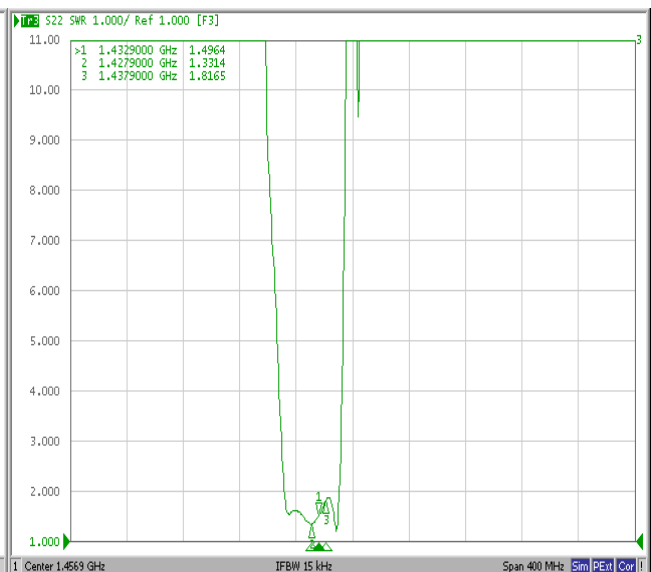


### Tx Part

#### Smith Chart



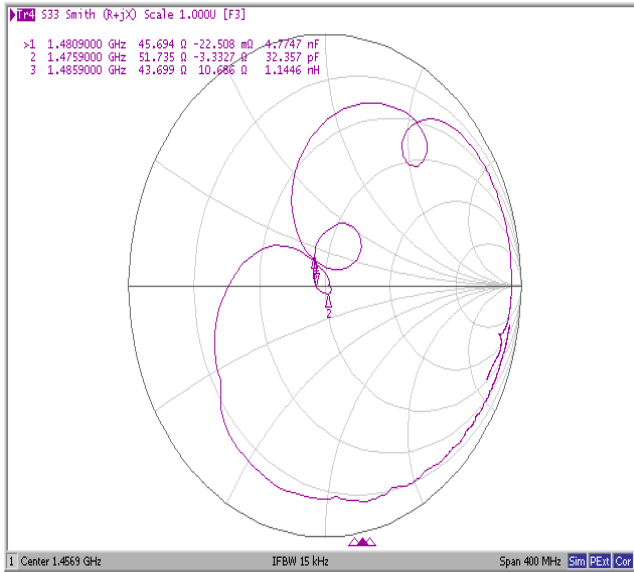
#### VSWR





Rx Part

Smith Chart

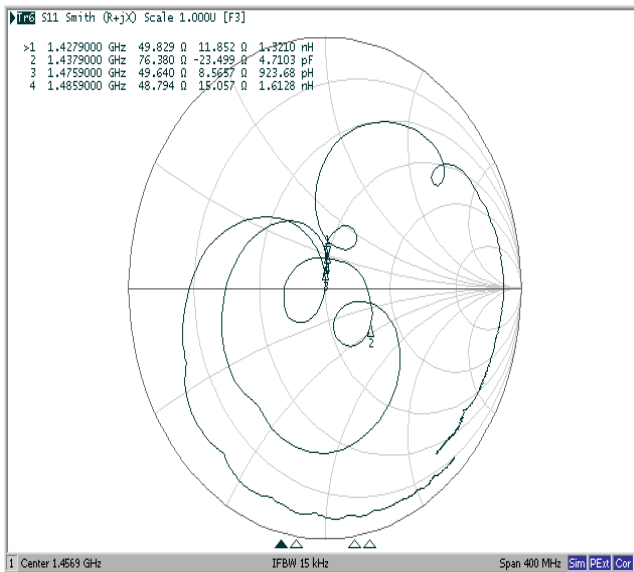


VSWR



Antenna

Smith Chart



VSWR

