



*Total Solution Provider in Saw Device*

---

# SD831JP3

SAW DUPLEXER For 831 MHz / 876 MHz  
Revision 0: July , 2011



- 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](http://www.sawnics.com)



**□ Electrical Characteristics**

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-5	-	+70
Storage Temperature Range		-40	-	+85
Maximum DC Voltage	V	0		
Maximum Input Power	W	1.2 W > 50000 Hours, CW tone(Ta= +50°C)		
Input Impedance	Ω	50		
Output Impedance	Ω	50		
Package type & size		P3		
Length x Width	mm <sup>2</sup>	-	3.8 x 3.8	-
Height	mm	-	-	1.45

**Electrical Specification**

Tx → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	824.0 ~ 839.0	dB	-	1.5	3.0
Ripple	824.0 ~ 839.0	dB	-	0.6	1.0
VSWR	824.0 ~ 839.0	-	-	1.5	2.0
Absolute Attenuation	854.0	dB	25	55	-
	869.0 ~ 884.0	dB	40	45	-

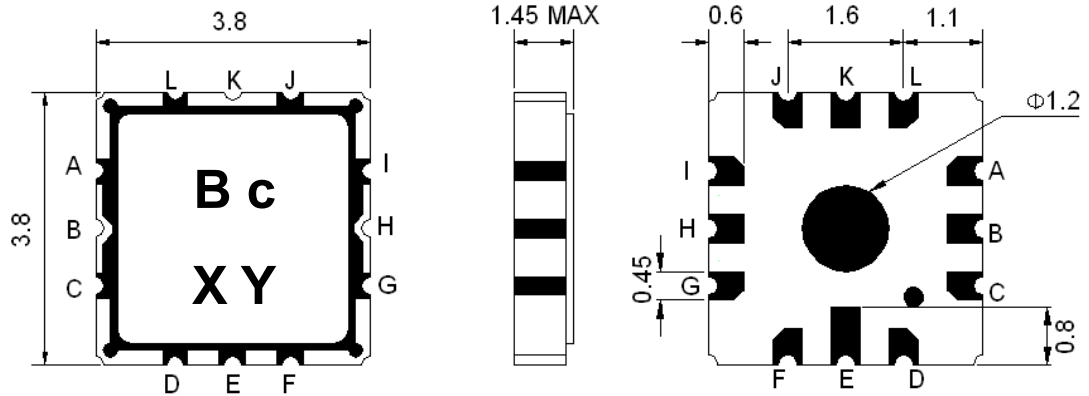
Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	869.0 ~ 884.0	dB	-	1.5	3.0
Ripple	869.0 ~ 884.0	dB	-	0.6	1.5
VSWR	869.0 ~ 884.0	-	-	1.5	2.0
Absolute Attenuation	824.0 ~ 839.0	dB	40	45	-
	854.0	dB	25	50	-
	905.0 ~ 915.0	dB	45	55	-



Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	824.0 ~ 839.0	dB	40	45	-
	869.0 ~ 884.0	dB	45	50	-

**Notes :** (1) No Matching Network .

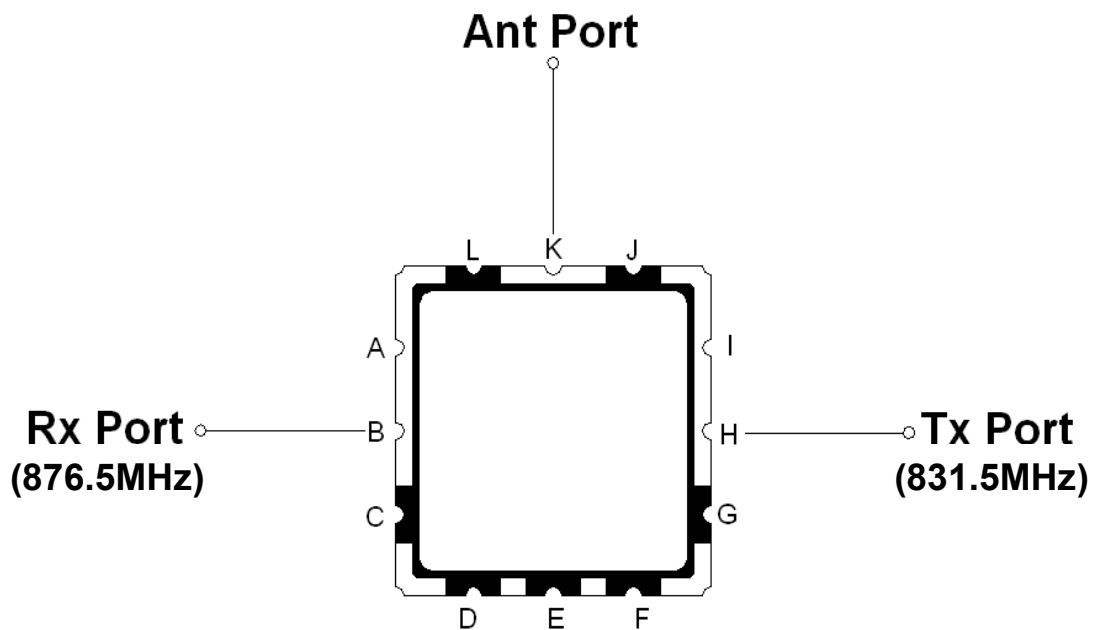
**Package Dimensions**



Marking Descriptions	
B	CDMA800 Application
c	Series Number
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant Port
B	Rx Port (876.5MHz)
H	Tx Port (831.5MHz)

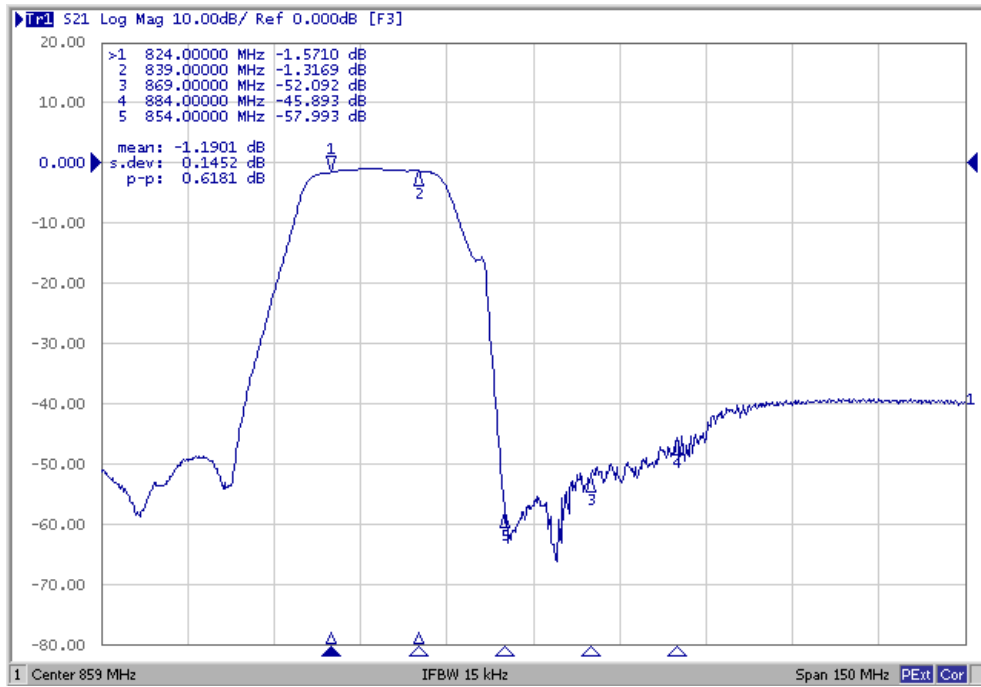
**Testing Environment**



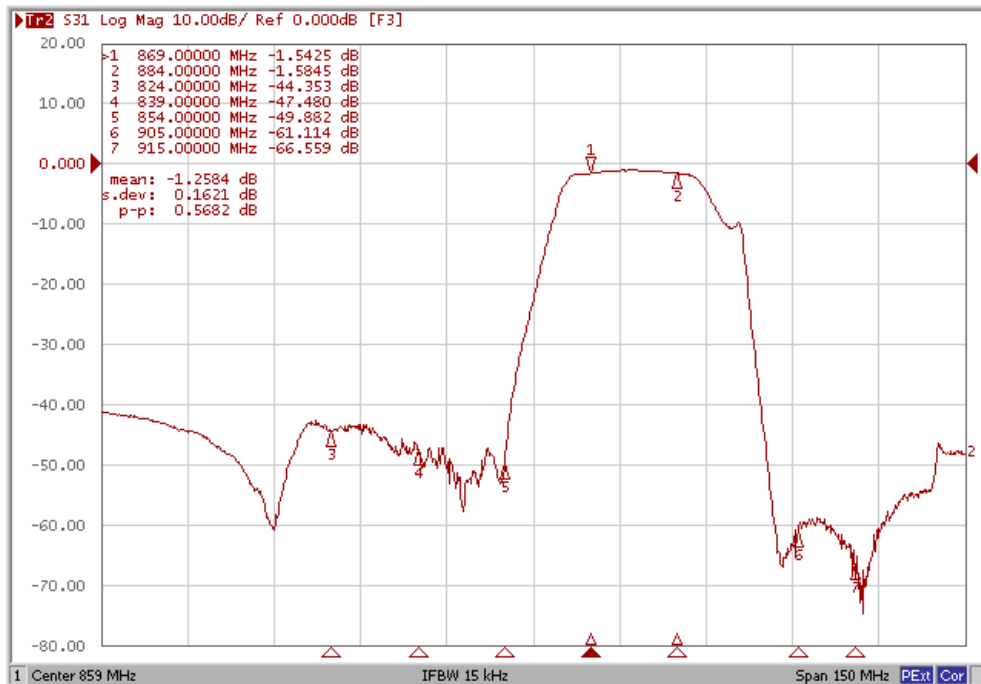


**Frequency Characteristics**

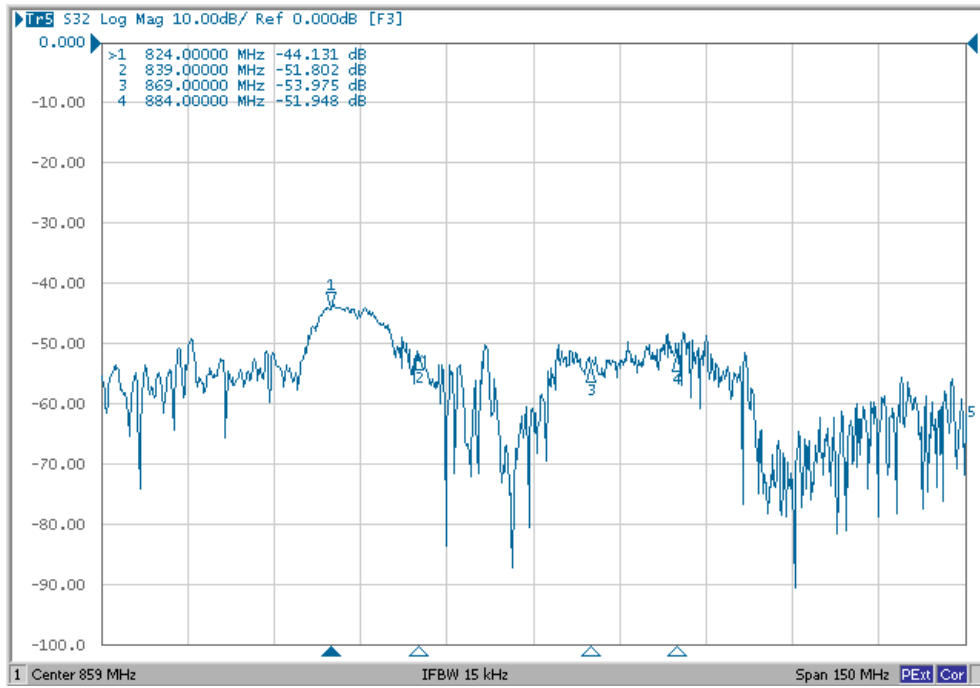
Tx to Ant



Ant to Rx

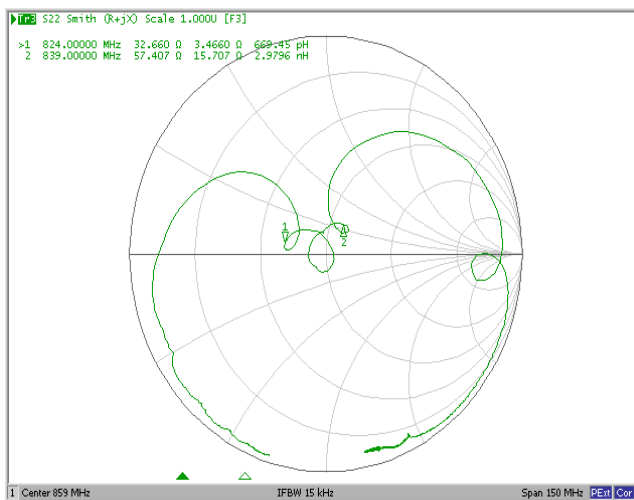


### Isolation

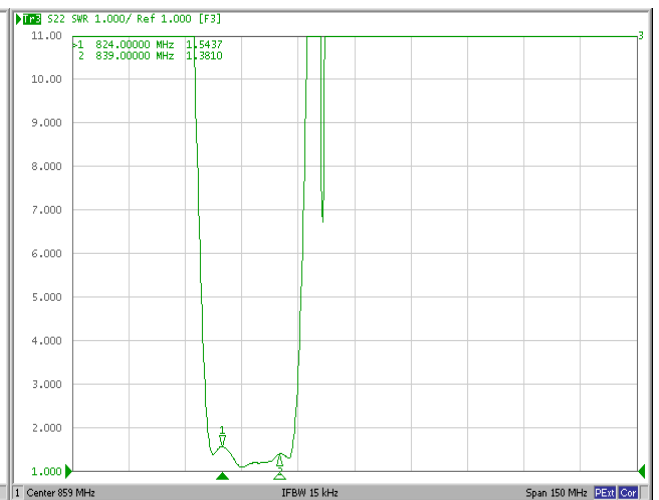


### Tx Port

#### Smith Chart



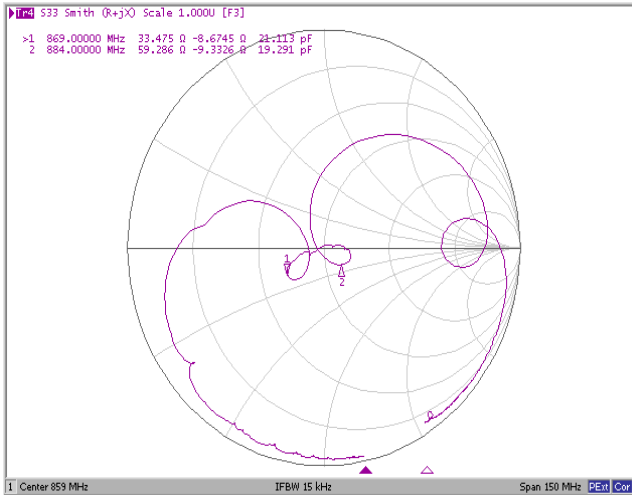
#### VSWR



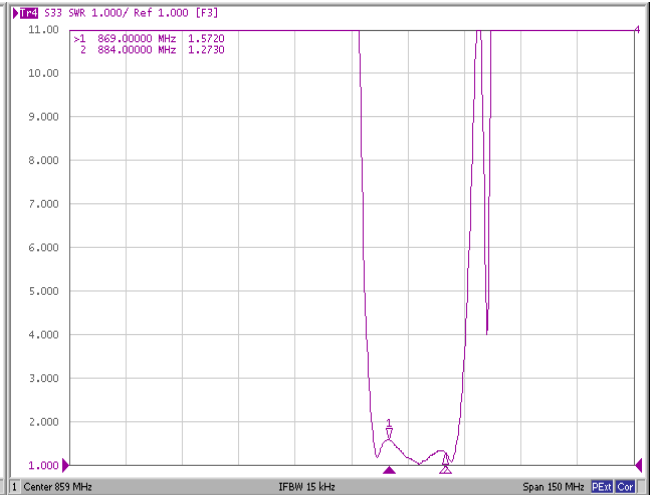


Rx Port

Smith Chart

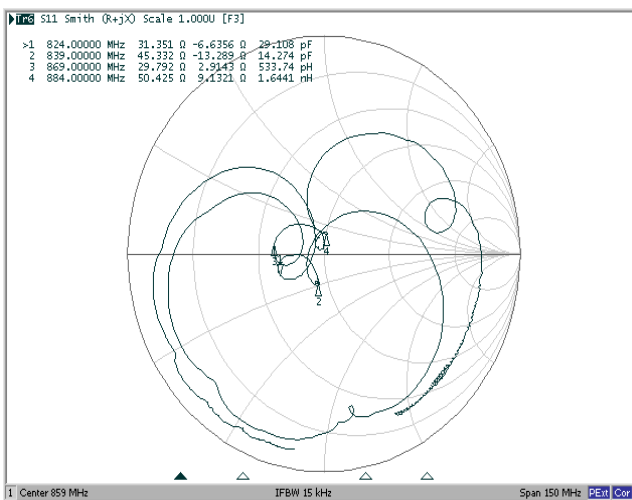


VSWR



Ant Port

Smith Chart



VSWR

