



*Total Solution Provider in Saw Device*

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# SD844AP2

SAW DUPLEXER For 844 MHz / 889 MHz  
Revision 0: December ,2010



- 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	-30	-	+80
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Maximum Input Power	W	1.0 W > 50,000 Hours, CW tone(Ta= +50°C)		
Input Impedance	Ω	50		
Output Impedance	Ω	50		
Package type & size		P2		
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	839.0 ~ 849.0	dB	-	1.2	2.5
Amplitude Ripple	839.0 ~ 849.0	dB <sub>p-p</sub>	-	0.2	1.0
VSWR	839.0 ~ 849.0	-	-	1.2	2.0
Absolute Attenuation	884.0 ~ 894.0	dB	40	50	-

Ant → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	884.0 ~ 894.0	dB	-	1.3	2.5
Amplitude Ripple	884.0 ~ 894.0	dB <sub>p-p</sub>	-	0.3	1.0
VSWR	884.0 ~ 894.0	-	-	1.2	2.0
Absolute Attenuation	839.0 ~ 849.0	dB	45	55	-



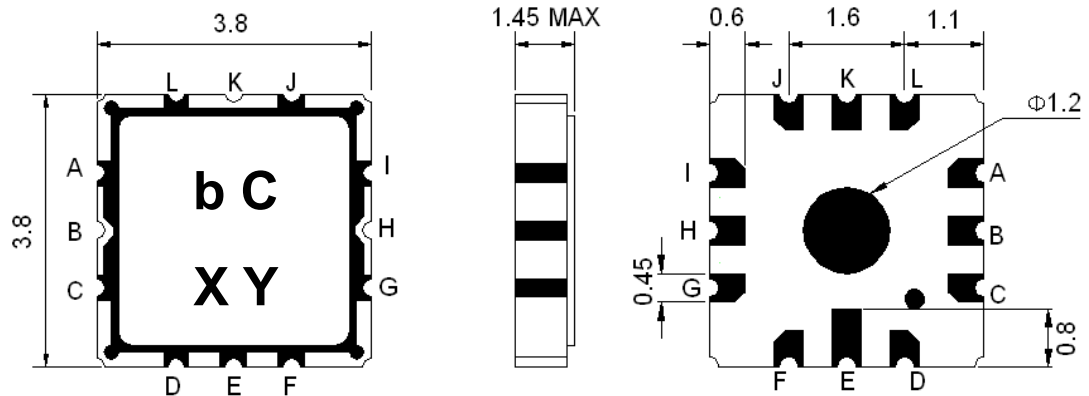
SD844AP2

SAW DUPLEXER FOR 844 MHz / 889MHz

Rx → Tx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	839.0 ~ 849.0	dB	50	58	-
	884.0 ~ 894.0	dB	45	55	-

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

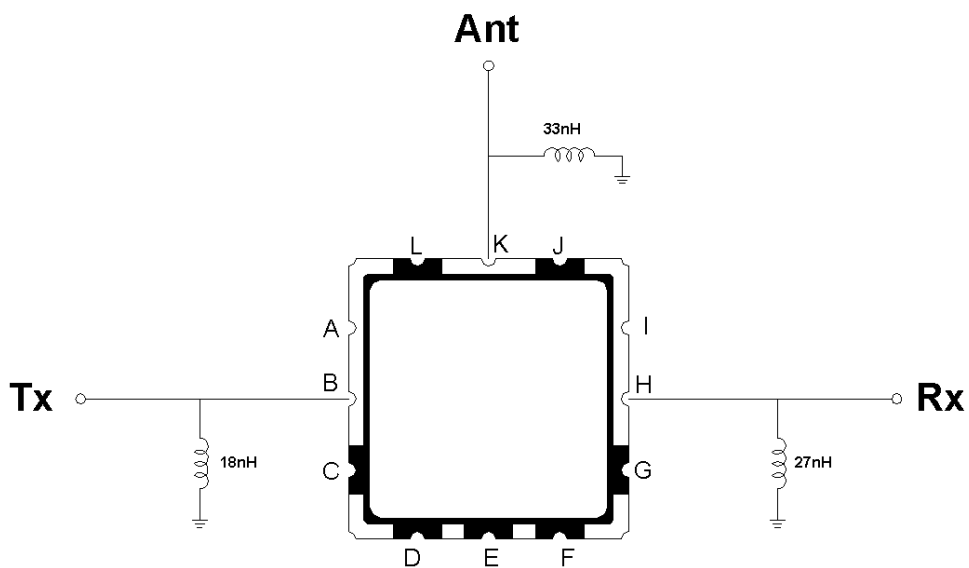
**Package Dimensions**



Marking Descriptions	
b	Wireless 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
B	Tx (844.0 MHz)
H	Rx (889.0MHz)

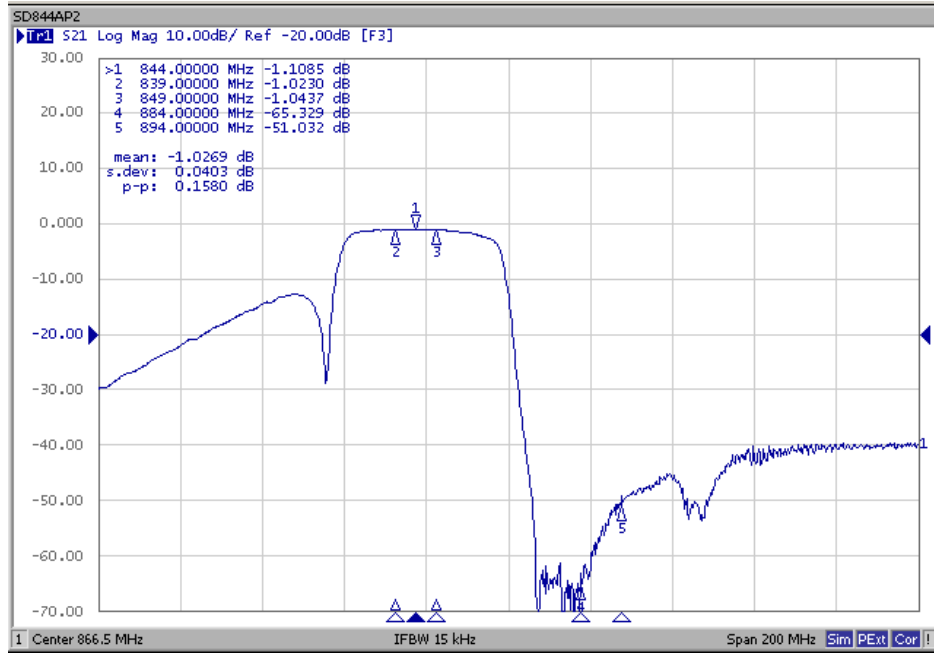
**Testing Environment**



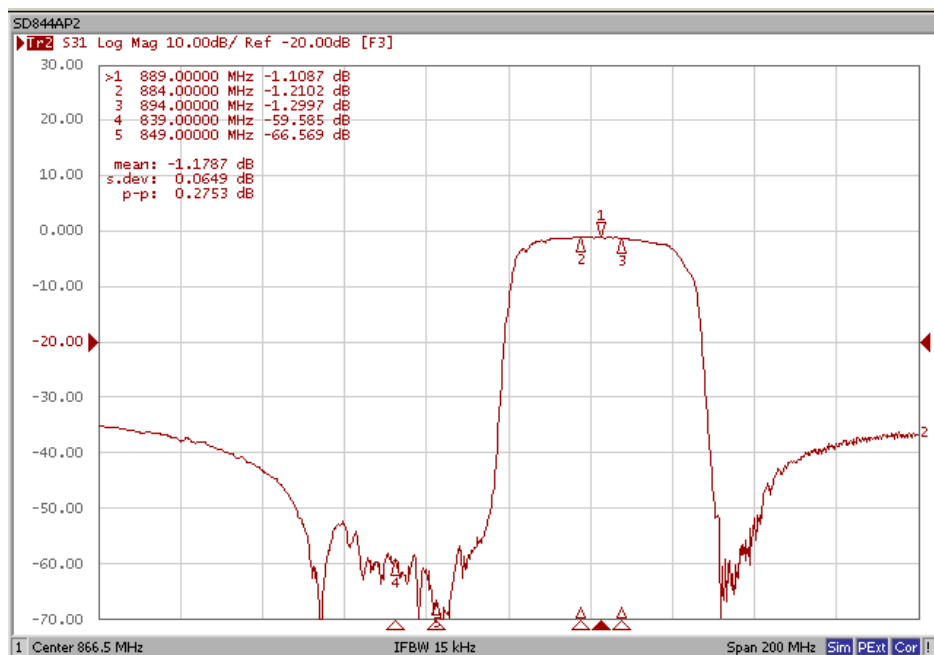


**□ Frequency Characteristics**

**Tx to Ant**

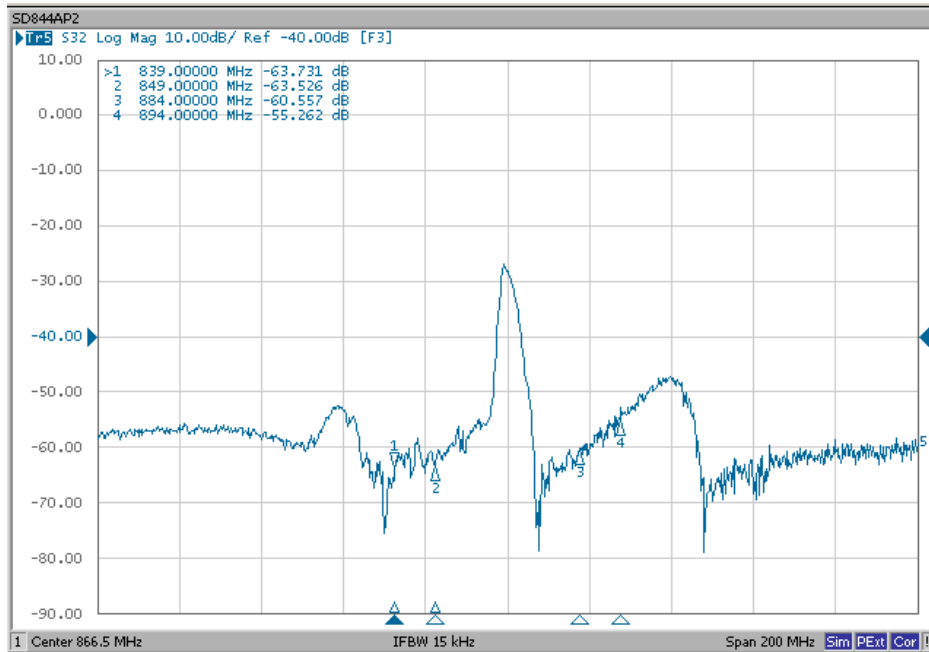


**Ant to Rx**





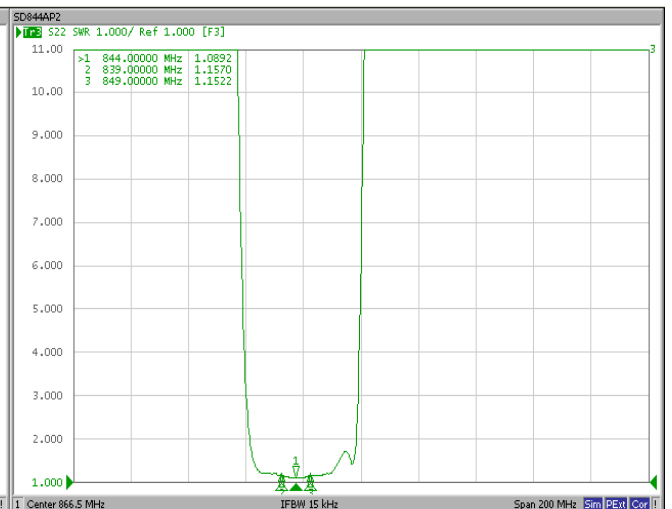
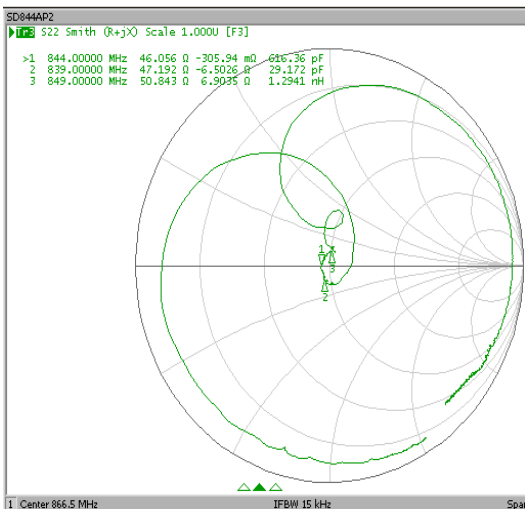
Isolation



Tx Part

Smith Chart

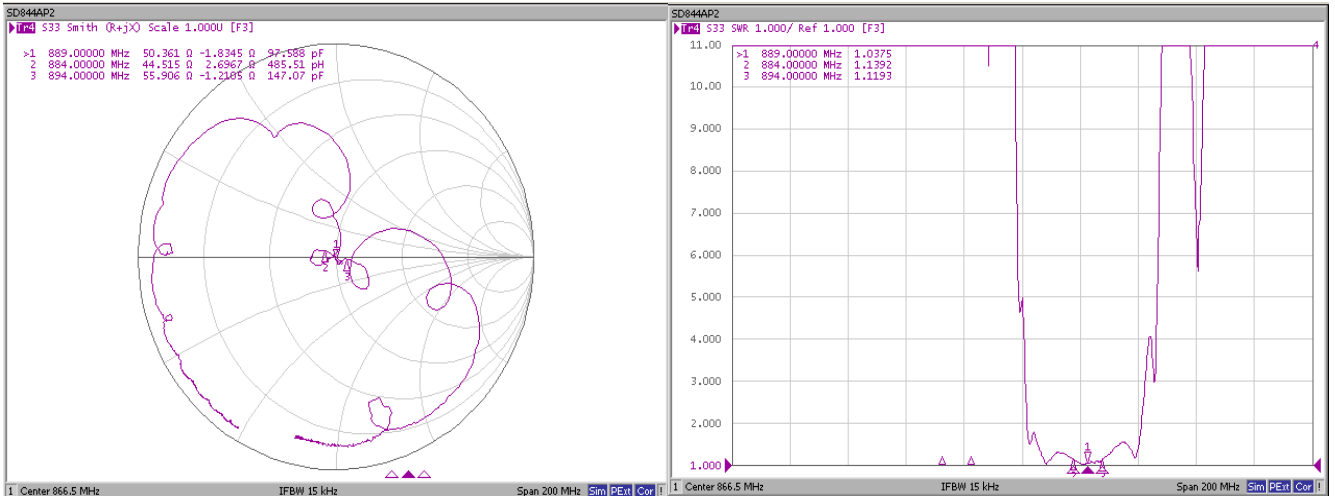
VSWR



### Rx Part

Smith Chart

VSWR



### Antenna

Smith Chart

VSWR

