



Total Solution Provider in Saw Device

SD813CP2

PTT SAW Duplexer for 813/ 858MHz
Revision 0: July, 2008



- 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



□ Electrical Characteristics

Maximum Ratings

ITEM	UNIT	MIN.	TYP.	MAX.
Operation Temperature Range	°C	-30	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Maximum Input Power	W	1.2 W > 50000 Hours, CW tone(Ta= +50°C)		
Ant. Tx. Rx Terminating Impedance	Ω	50		
Package type		P2		
Length x Width	mm ²	3.8 x 3.8		
Height	mm	-	-	1.45

Electrical Specification

Tx → Ant.		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	806 ~ 821	dB	-	1.45	2.2
Ripple	806 ~ 821	dB _{p-p}	-	0.4	1.0
Return Loss	806 ~ 821	dB	13	10	-
Absolute Attenuation	0.3 ~ 790	dB	13	20	-
	851 ~ 866	dB	50	54	-
	1570 ~ 1580	dB	20	25	-
	1702 ~ 1732	dB	20	24	-
	2400 ~ 2485	dB	10	13	-
	2485 ~ 6000	dB	1	5	-
Ant. → Rx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	851 ~ 866	dB	-	1.7	2.5
Ripple	851 ~ 866	dB _{p-p}	-	0.6	1.2
Return Loss	851 ~ 866	dB	10	13	-
Absolute Attenuation	0.3 ~ 790	dB	25	32	-
	806 ~ 821	dB	52	56	-
	2400 ~ 2485	dB	35	42	-
	2485 ~ 6000	dB	10	13	-



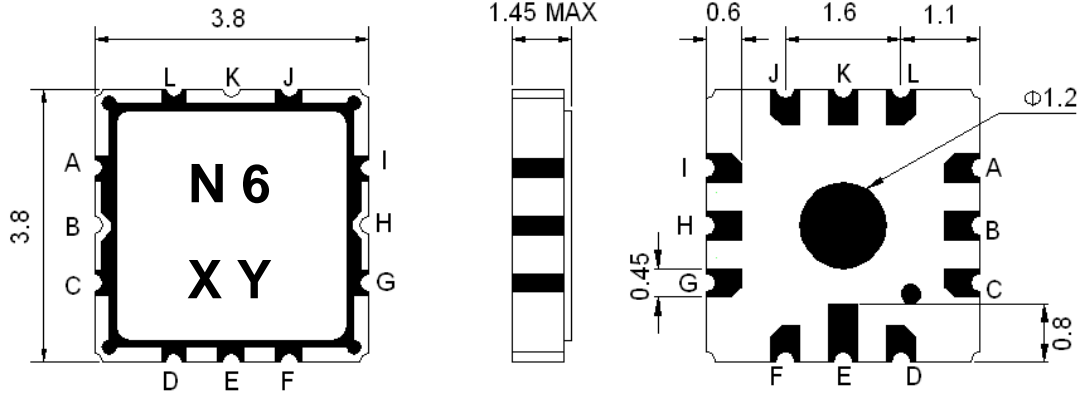
SD813CP2

PTT SAW Duplexer for 813/ 858MHz

Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	806 ~ 821	dB	55	58	-
	851 ~ 866	dB	50	57	-

□ Package Dimensions

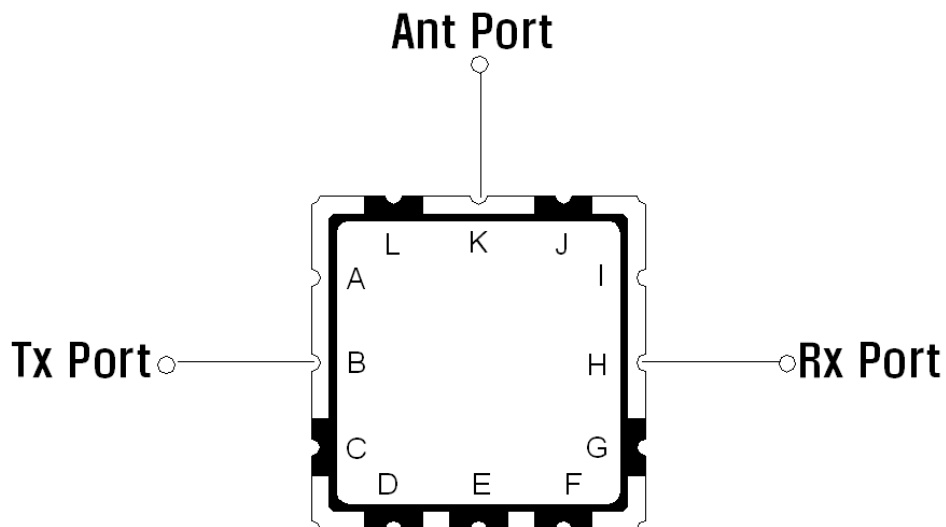
Unit: mm



Marking Descriptions	
N	Application
6	Series Number
X	Date Code(Year)
Y	Date Code(Month)

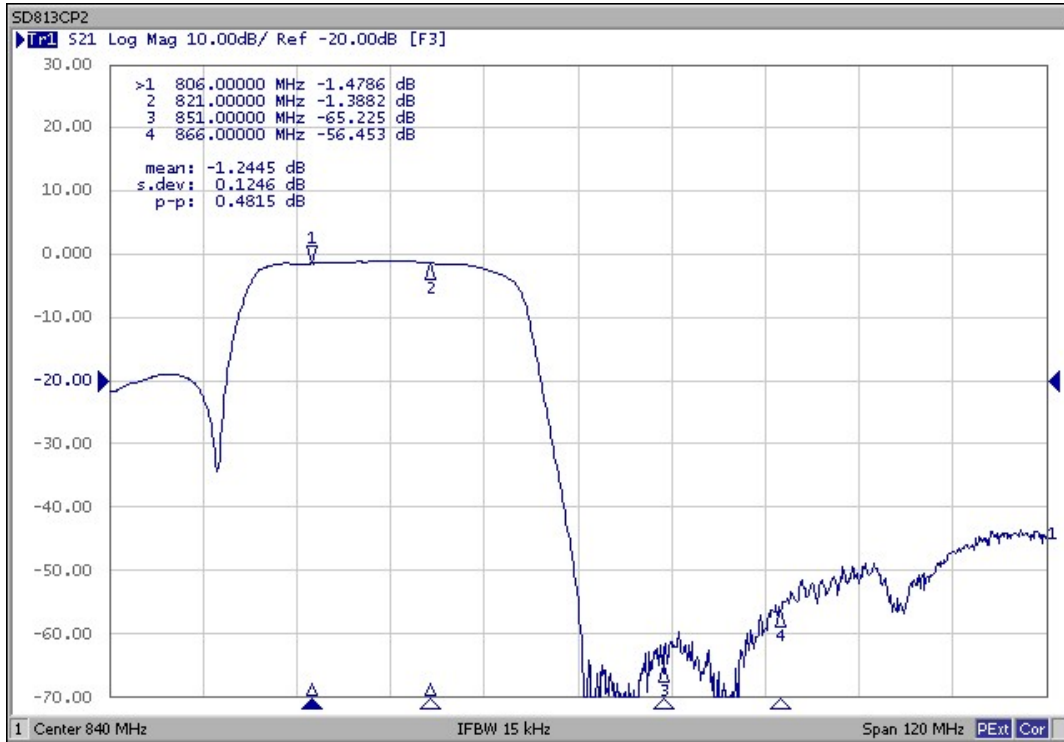
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Rx Port(858.5MHz)
K	Antenna
B	Tx Port (813.5MHz)

□ Testing Environment

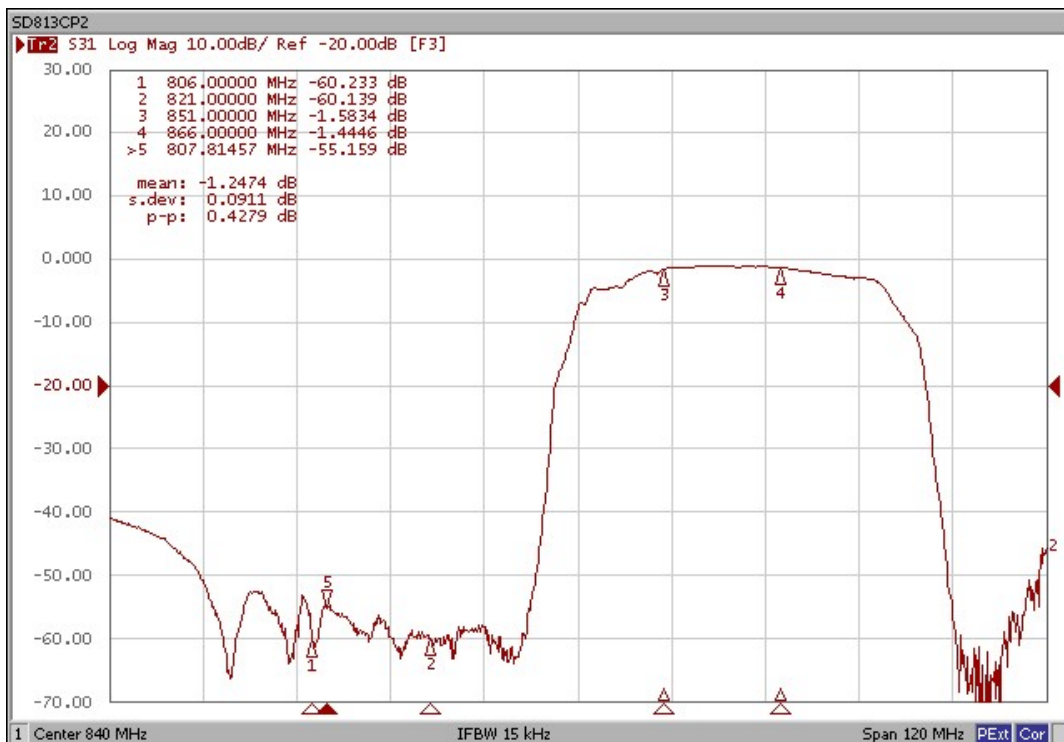


□ Frequency Characteristics

Tx Characteristic

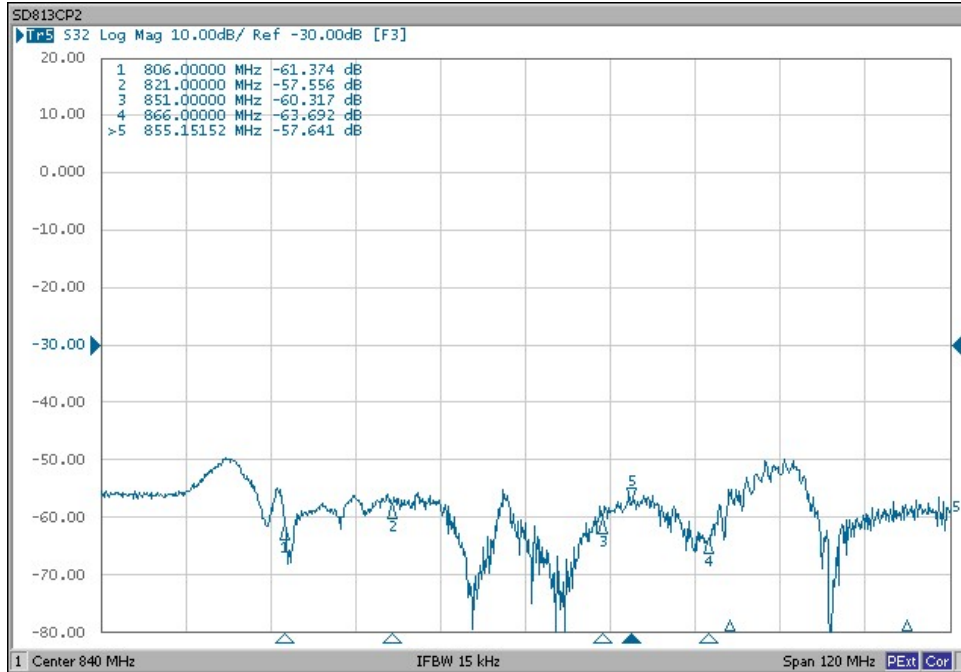


Rx Characteristic



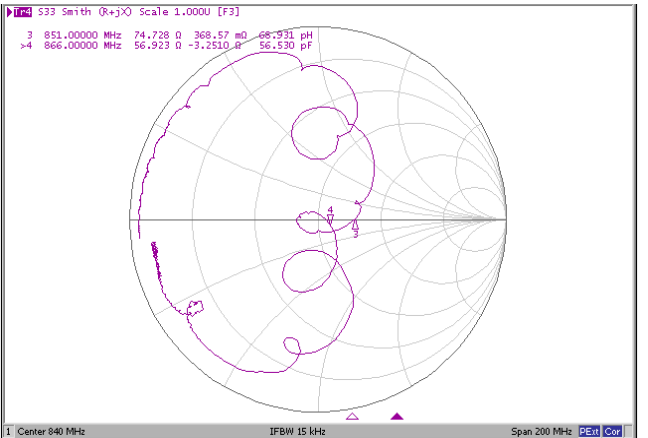
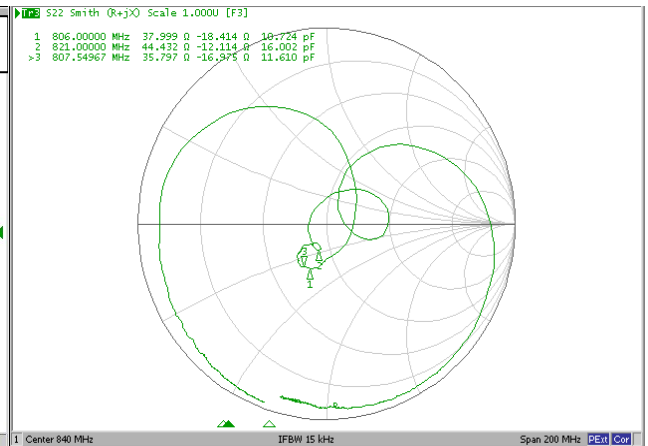
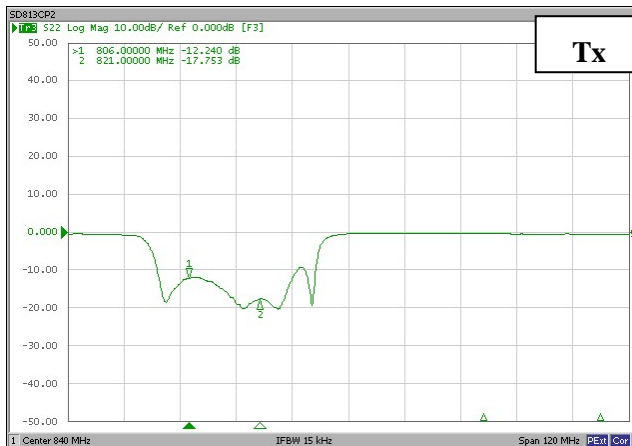
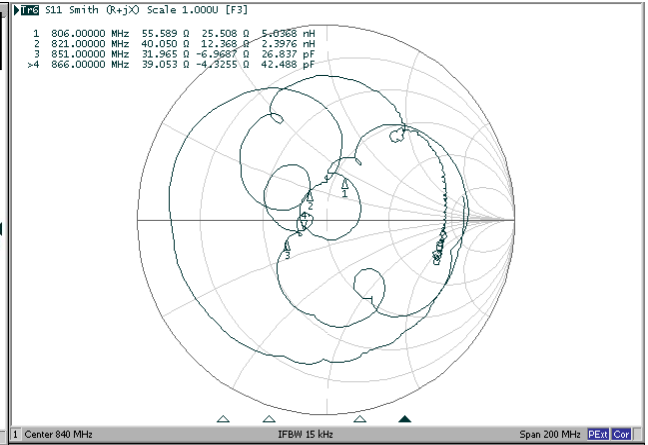
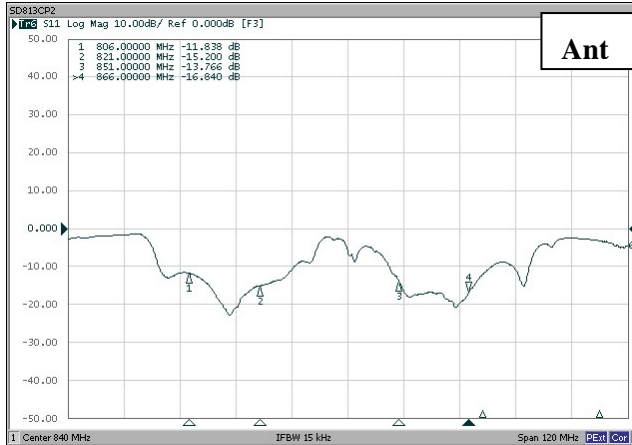


Isolation Characteristic





Return Loss & Smith Chart





Wide Span

