

# SD902BP2

GSM SAW Duplexer

Revision 0: March, 2009



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
- 

**SAWNICS Inc.**

## □ 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	5		
Ant. Tx. Rx Terminating Impedance	Ω	50 Ω		
Package type		P2		
Length x Width	mm <sup>2</sup>	3.8 x 3.8		
Height	mm	-	-	1.45

### Electrical Specification

Tx_902.5MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	890 ~ 915	dB	-	1.7	2.2
Ripple	890 ~ 915	dB <sub>p-p</sub>	-	0.7	1.2
VSWR	Ant. Port	-	-	1.6	2.0
	Tx Port	-	-	1.5	2.0
Absolute Attenuation	0.3 ~ 860	dB	10	16	-
	935 ~ 960	dB	45	50	-
	1570 ~ 1580	dB	10	18	-
	1710 ~ 2170	dB	8	15	-
	2300 ~ 2500	dB	3	7	-



**SD902BP2**

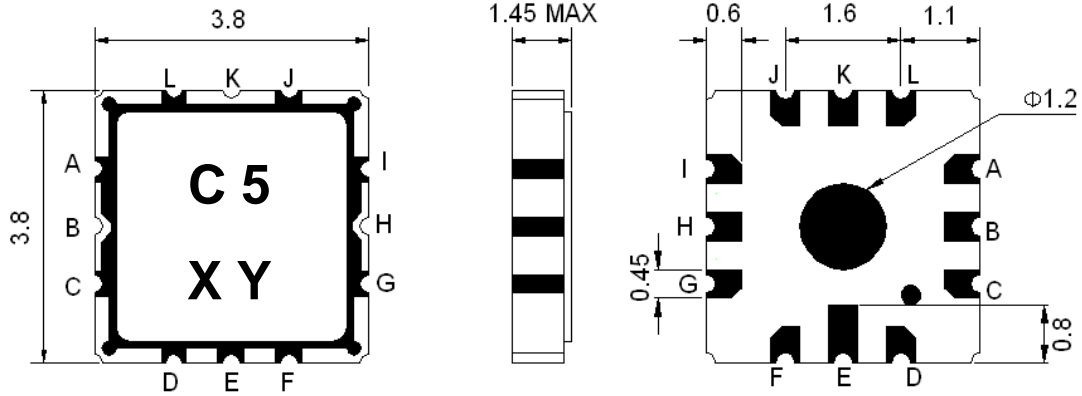
**SAW Duplexer for GSM**

Rx_947.5MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	935 ~ 960	dB	-	2.3	2.8
Ripple	935 ~ 960	dB <sub>p-p</sub>	-	1.0	1.5
VSWR	Ant. Port	-	-	1.7	2.0
	Rx Port	-	-	1.6	2.0
Absolute Attenuation	0.3 ~ 860	dB	25	32	-
	890 ~ 915	dB	50	55	-
	1570 ~ 1580	dB	45	55	-
	1710 ~ 2170	dB	50	57	-
	2300 ~2500	dB	40	48	-

Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	890 ~ 915	dB	50	55	-
	935 ~ 960	dB	48	53	-

**□ Package Dimensions**

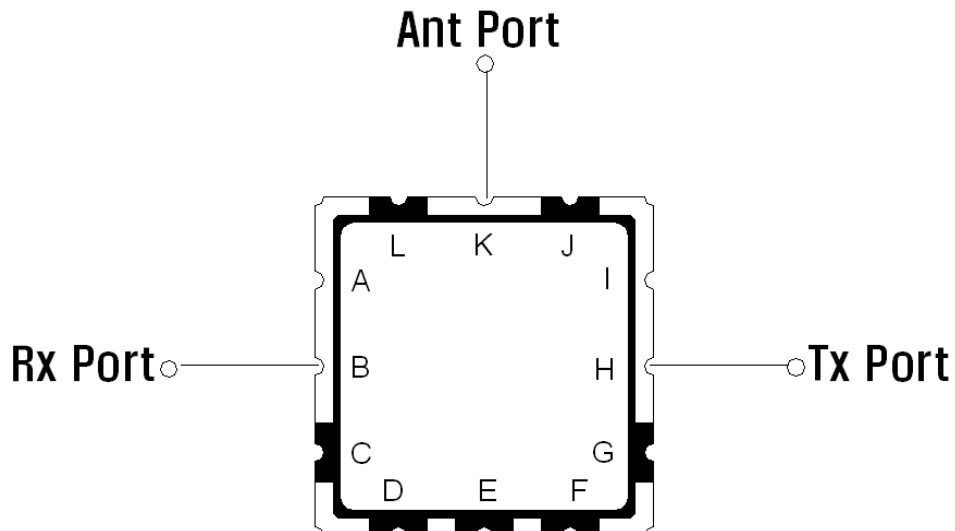
Unit: mm



Marking Descriptions	
C	GSM Application
5	SAW Duplexer
X	Date Code(Year)
Y	Date Code(Month)

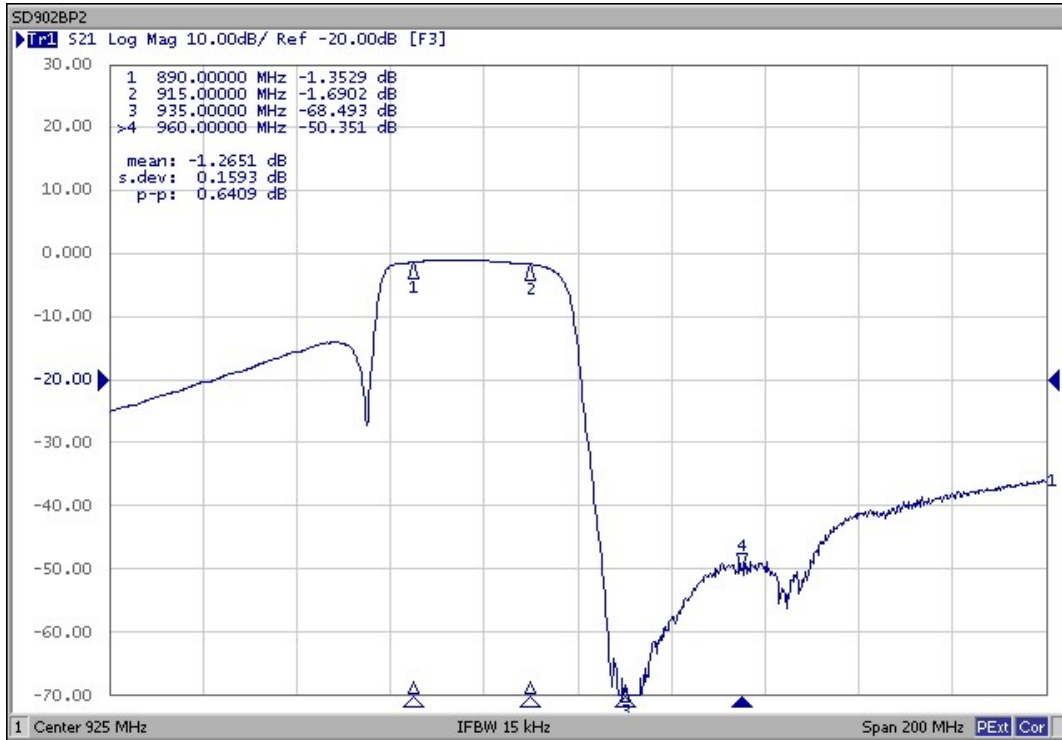
Pin Description	
A, C, D, E, F, G, I, J, L	Ground
B	Rx Port(947.5MHz)
K	Antenna
H	Tx Port (902.5MHz)

**□ Testing Environment**



### □ Frequency Characteristics

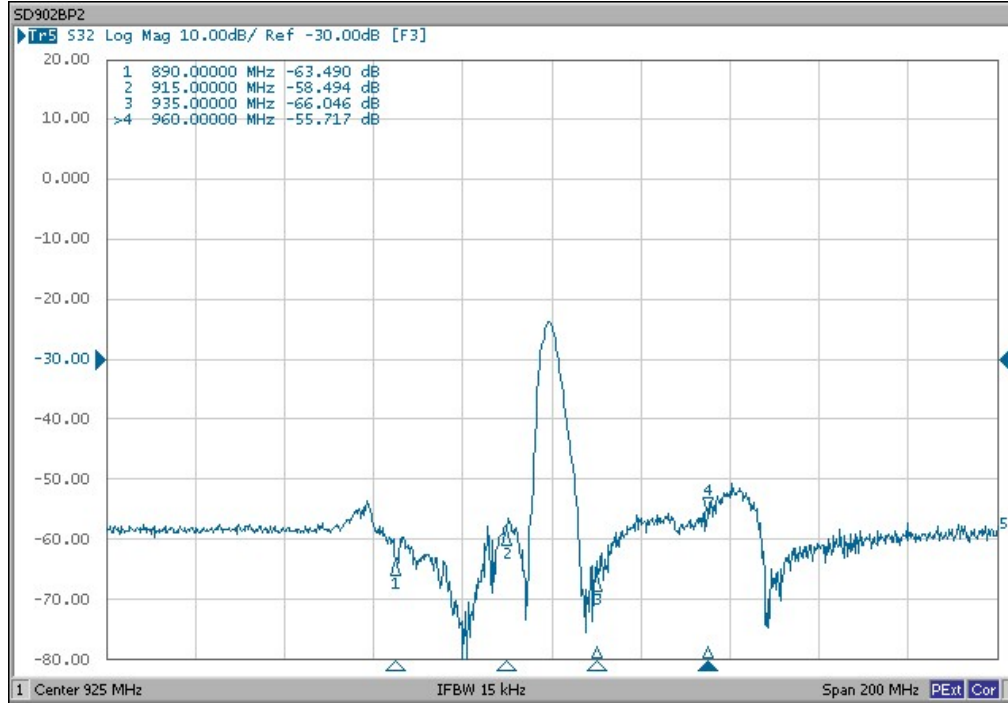
#### Tx Characteristic



#### Rx Characteristic

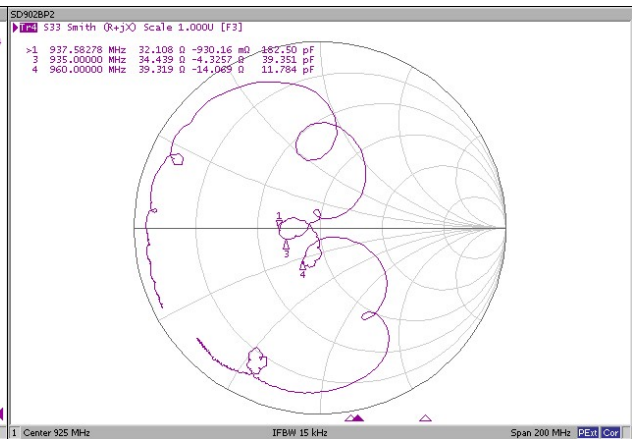
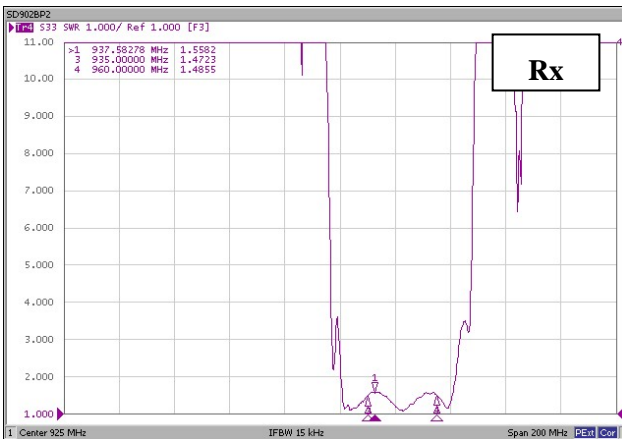
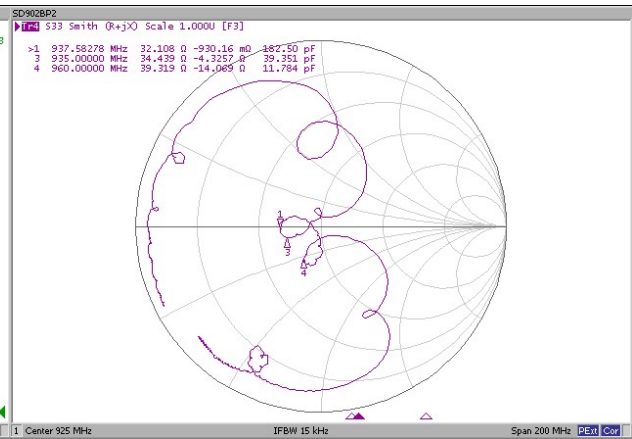
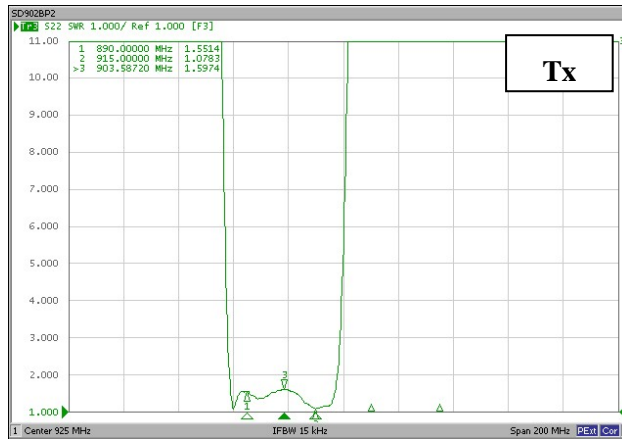
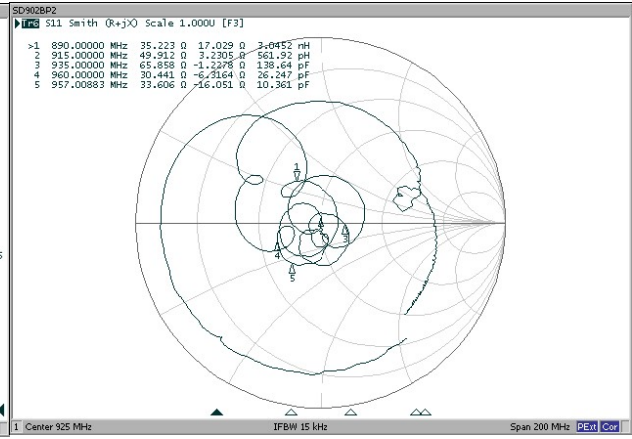
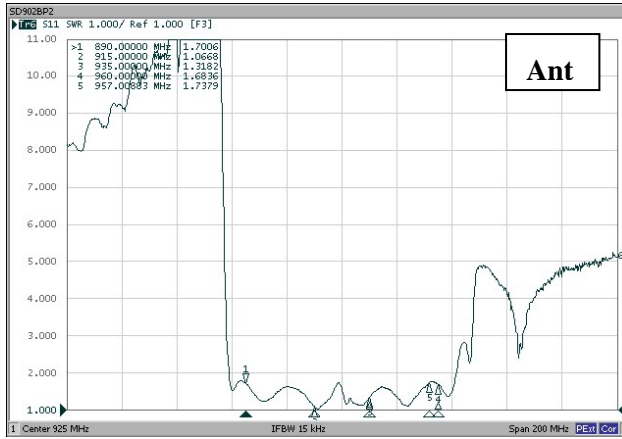


Isolation Characteristic





### VSWR & Smith Chart





### Wide Span

