

Preliminary



SF1221F

- WCDMA SAW Duplexer
- Tx 1950 MHz, Rx 2140 MHz
- 3.0 x 2.5 x 1.25 mm Surface-Mount Case

Complies with Directive
2002/95/EC (RoHS)



ELECTRICAL PARAMETERS

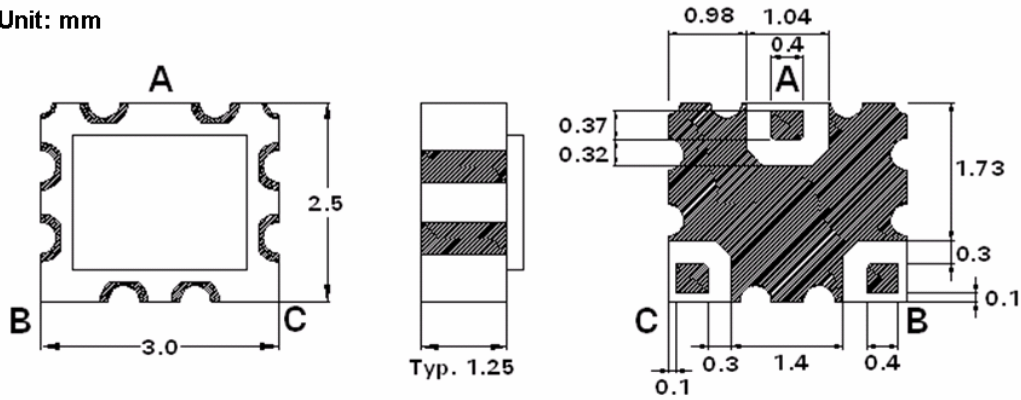
ITEM	UNIT	MIN.	TYP.	MAX.		
Operation Temperature Range	°C	-30	-	+85		
Storage Temperature Range	°C	-40	-	+85		
Maximum Input Power	W	1.0				
Ant. Tx, Rx Terminating Impedance	Ω	50 Ohm				
Package type						
Length x Width	mm ²	2.5 x 3.0				
Height	mm	1.25				
Tx_1950MHz		SPECIFICATIONS				
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.	
Insertion Loss	1920 ~ 1980	dB	-	1.2	1.7	
Ripple	1920 ~ 1980	dB _{p-p}	-	0.4	1.0	
VSWR	1920 ~ 1980	-	-	1.9	2.3	
Absolute Attenuation	D.C ~ 1000	dB	25	32	-	
	1500 ~ 1600	dB	23	28	-	
	2110 ~ 2170	dB	40	43	-	
	2400 ~ 2500	dB	20	25	-	
Absolute Attenuation	3840 ~ 3960	dB	15	20	-	
	Rx_2140MHz		SPECIFICATIONS			
	ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
	Insertion Loss	2110 ~ 2170	dB	-	1.5	2.2
Ripple	2110 ~ 2170	dB _{p-p}	-	0.6	1.3	
VSWR	2110 ~ 2170	-	-	1.8	2.0	
Absolute Attenuation	D.C ~ 1900	dB	33	37	-	
	1920 ~ 1980	dB	50	53	-	
	2400 ~ 2500	dB	48	52	-	
	4220 ~ 4340	dB	20	24	-	

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Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	1920 ~ 1980	dB	50	54	-
	2110 ~ 2170	dB	42	45	-

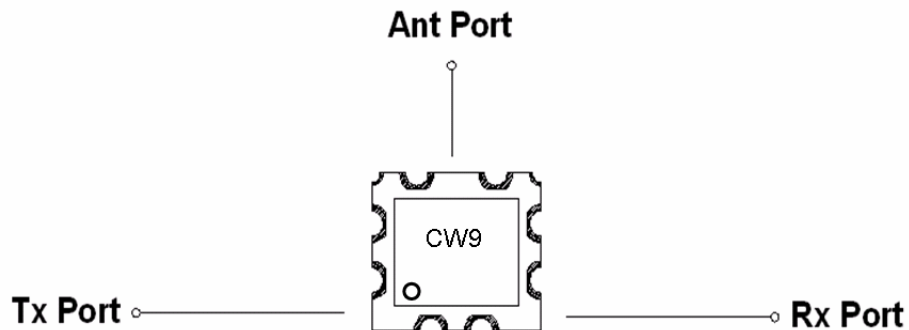
PACKAGE DRAWING

Unit: mm



Pin Description	
A	Ant Port
B	Tx Port(1950MHz)
C	Rx Port(2140MHz)
Other	GND

TESTING ENVIRONMENT



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FREQUENCY RESPONSE

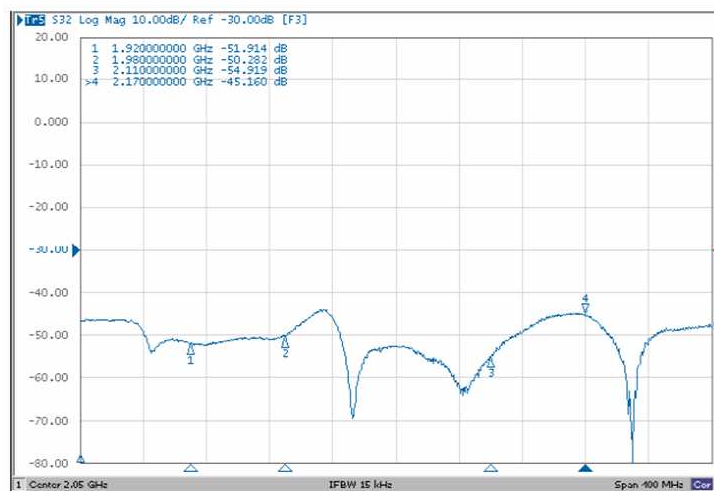
Tx Characteristic



Rx Characteristic



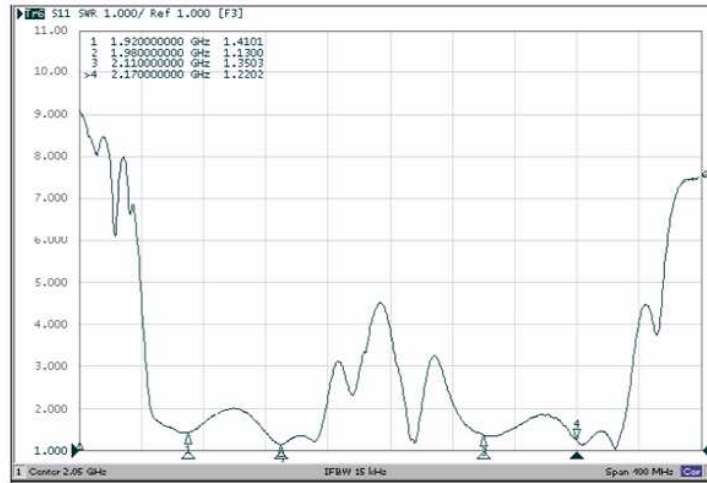
Isolation Characteristic



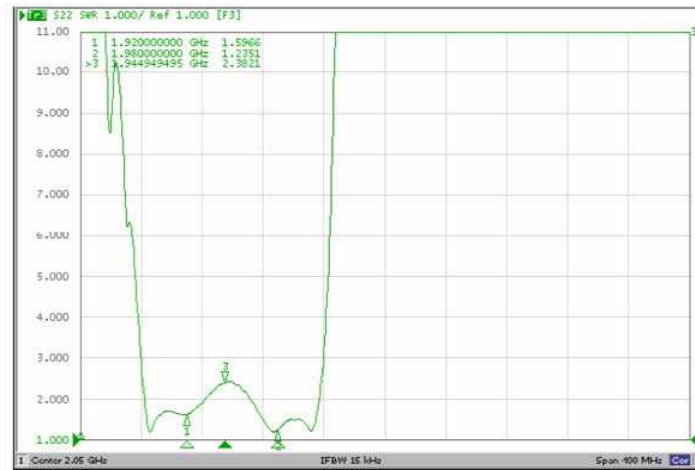
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VSWR

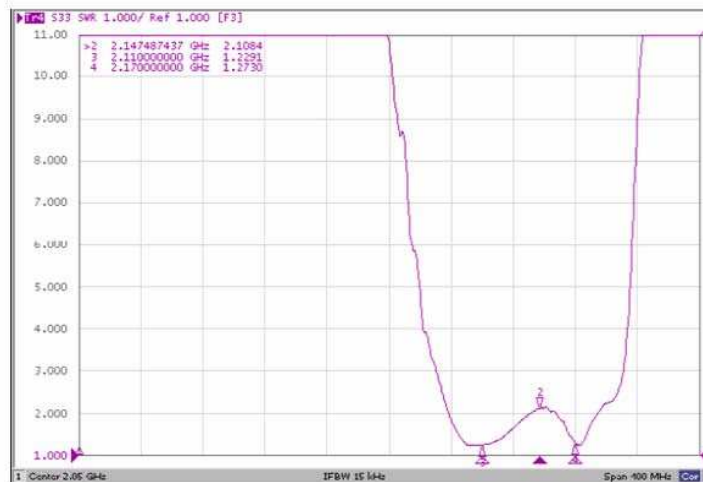
Ant



Tx



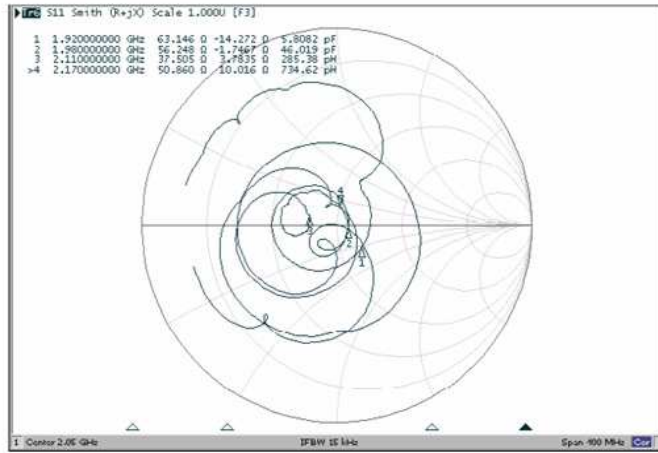
Rx



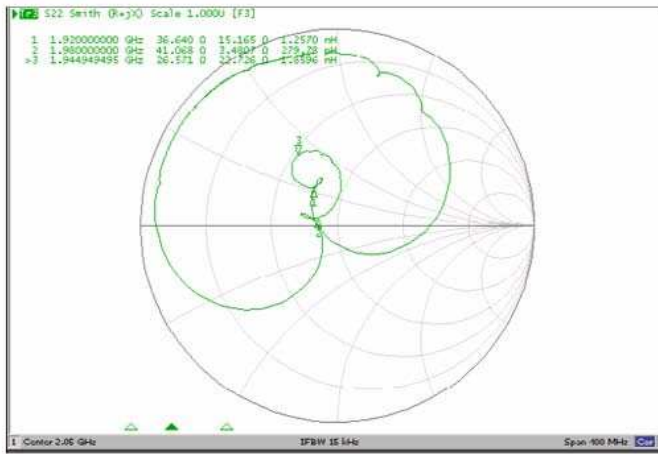
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Smith Chart

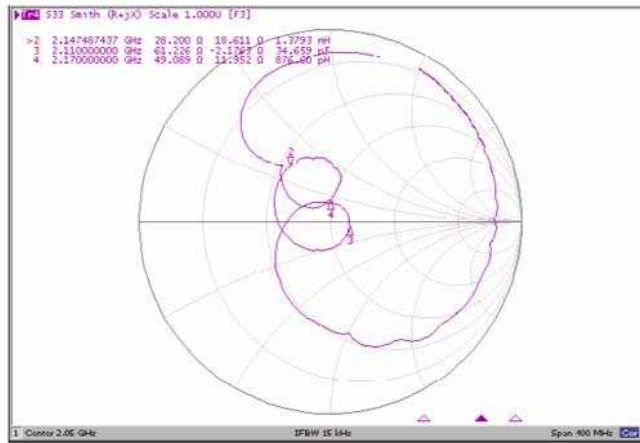
Ant



Tx



Rx



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Wide Span

