



Total Solution Provider in Saw Device

SD710AP3

SAW Duplexer For 710MHz / 740MHz
Revision 0: November,2009



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

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□ Electrical Characteristics

Maximum Ratings

ITEM	UNIT	MIN.	TYP.	MAX.
Operation Temperature Range	°C	0	-	50
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Tx Band Input Power Level within 704~ 716 MHz	dBm	30dBm > 50000 Hours, CW tone(Ta= +50°C)		
Ant. Tx. Rx Terminating Impedance	Ω	50 Ω		
Package type		P3		
Length x Width	mm ²	3.8 x 3.8		
Height	mm	-	-	1.45

Electrical Specification

Tx_710.0MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	704.0 ~ 716.0	dB	-	2.2	2.5
Bandwidth	704.0 ~ 716.0	MHz	12	20	-
Ripple	704.0 ~ 716.0	dB _{p-p}	-	1.0	1.2
Return Loss	704.0 ~ 716.0	dB	9.5	12	-
Absolute Attenuation	734.0 ~ 746.0	dB	45	54	-
	873.0 ~ 885.0	dB	40	42	-
	1042.0 ~ 1054.0	dB	45	48	-
	1468.0 ~ 1432.0	dB	40	46	-
	2112.0 ~ 2148.0	dB	30	42	-



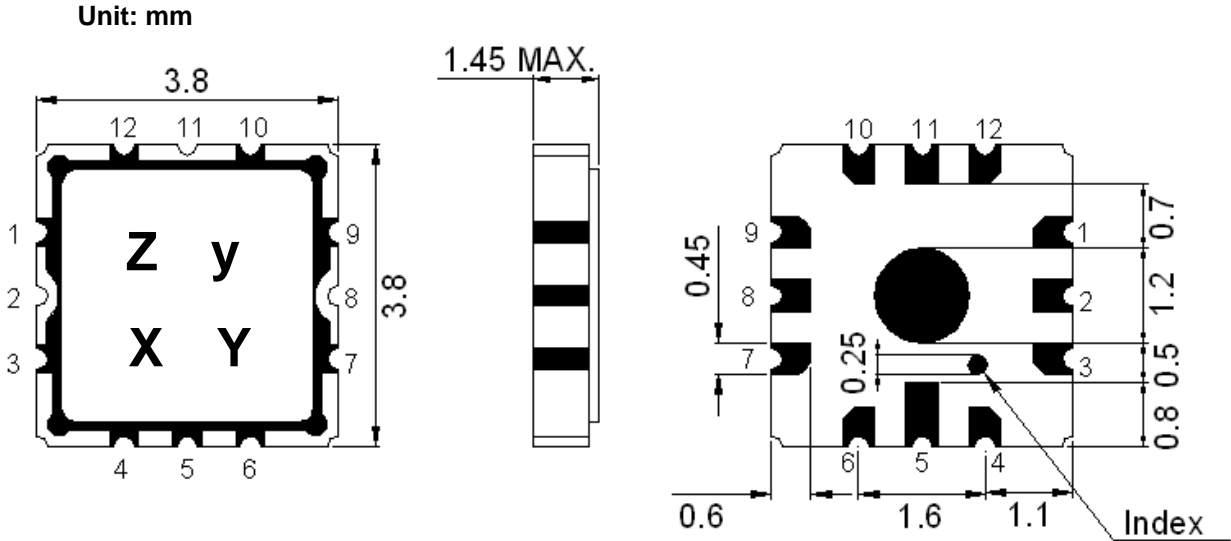
SD710AP3

SAW Duplexer for 710MHz / 740MHz

Rx_740.0MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	734.0 ~ 746.0	dB	-	1.5	2.5
Bandwidth	734.0 ~ 746.0	MHz	12	18	-
Ripple	734.0 ~ 746.0	dB _{p-p}	-	0.9	1.2
Return Loss	734.0 ~ 746.0	dB	9.5	11	-
Absolute Attenuation	D.C. ~ 636.0	dB	35	40	-
	776.0 ~ 1000.0	dB	35	44	-
	1000.0 ~ 2000.0	dB	35	42	-
	2000.0 ~ 3000.0	dB	10	16	-
	704.0 ~ 716.0	dB	45	50	-
	664.0 ~ 676.0	dB	35	42	-
	594.0 ~ 606.0	dB	35	40	-
	869.0 ~ 894.0	dB	35	46	-
Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	D.C. ~ 704.0	dB	45	51	-
	704.0 ~ 716.0	dB	48	50	-
	734.0 ~ 746.0	dB	50	60	-
	747.0 ~ 1000.0	dB	40	55	-
	1000.0 ~ 2000.0	dB	35	44	-
	2000.0 ~ 3000.0	dB	10	14	-

*Note : Including losses due to Test PCB(0.3dB)

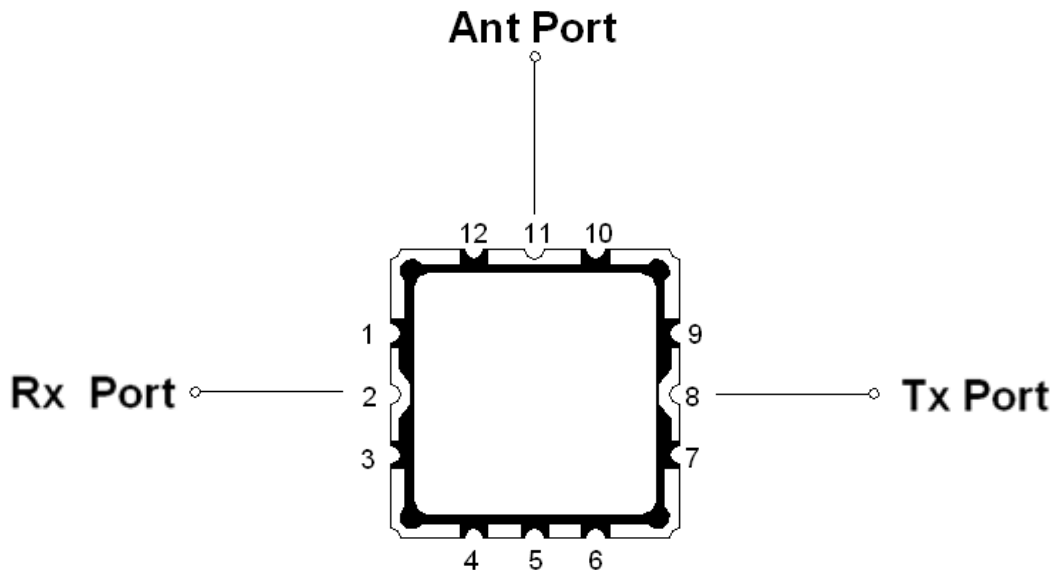
□ Package Dimensions



Marking Descriptions	
Z	Wireless Application
y	Series Number
X	Date Code(Year)
Y	Date Code(Month)

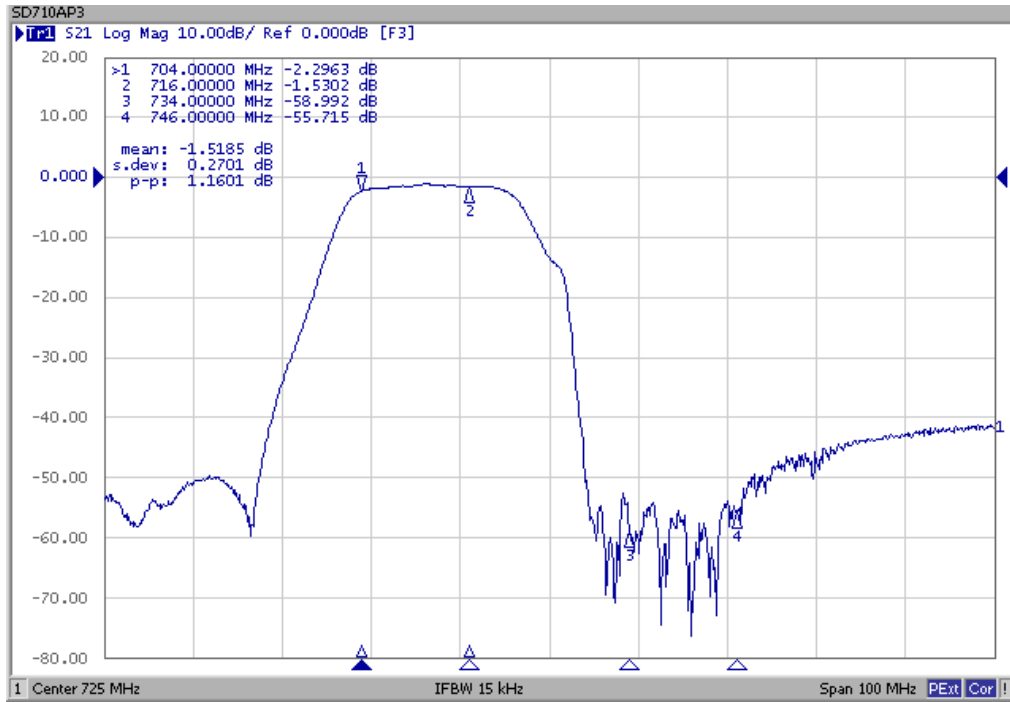
Pin Description	
the others	Ground
2	Rx Port(740.0MHz)
11	Antenna
8	Tx Port (710.0MHz)

□ Testing Environment



□ Frequency Characteristics

Tx Characteristic

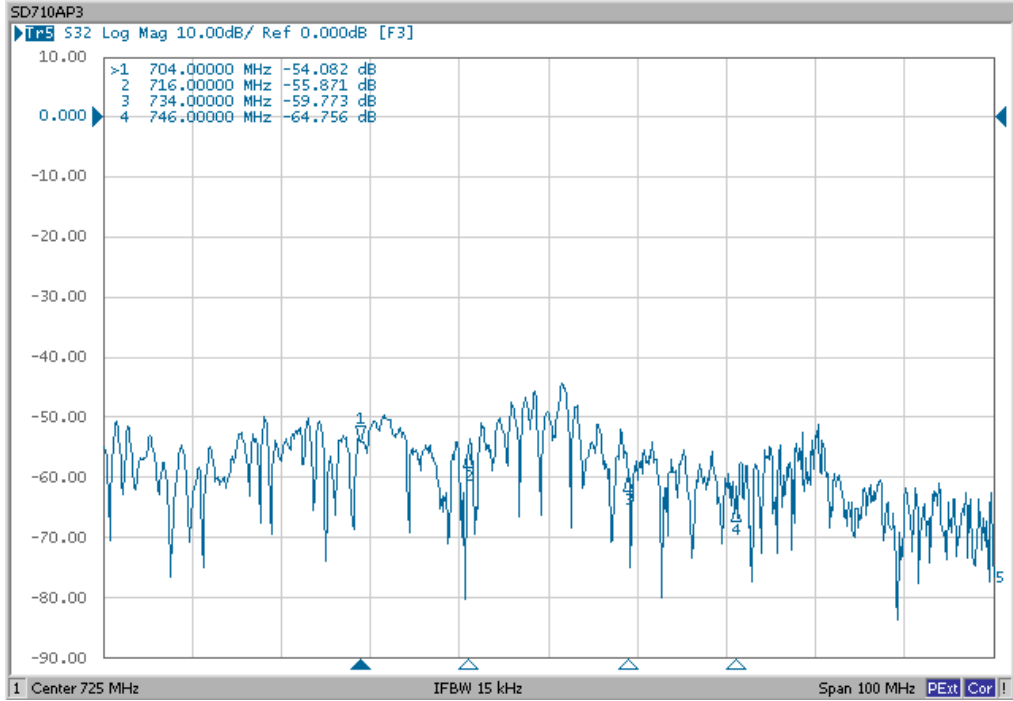


Rx Characteristic



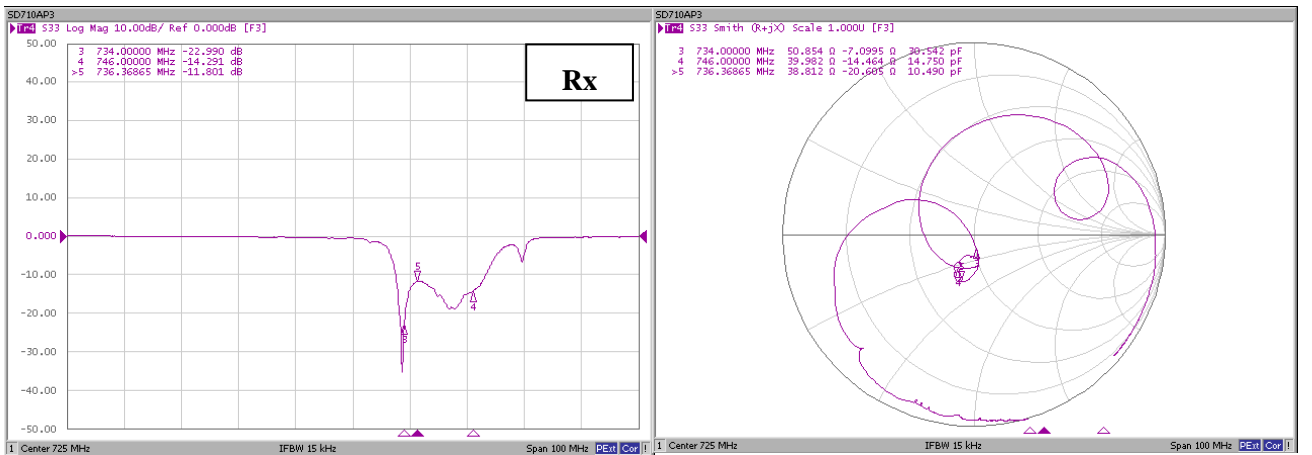
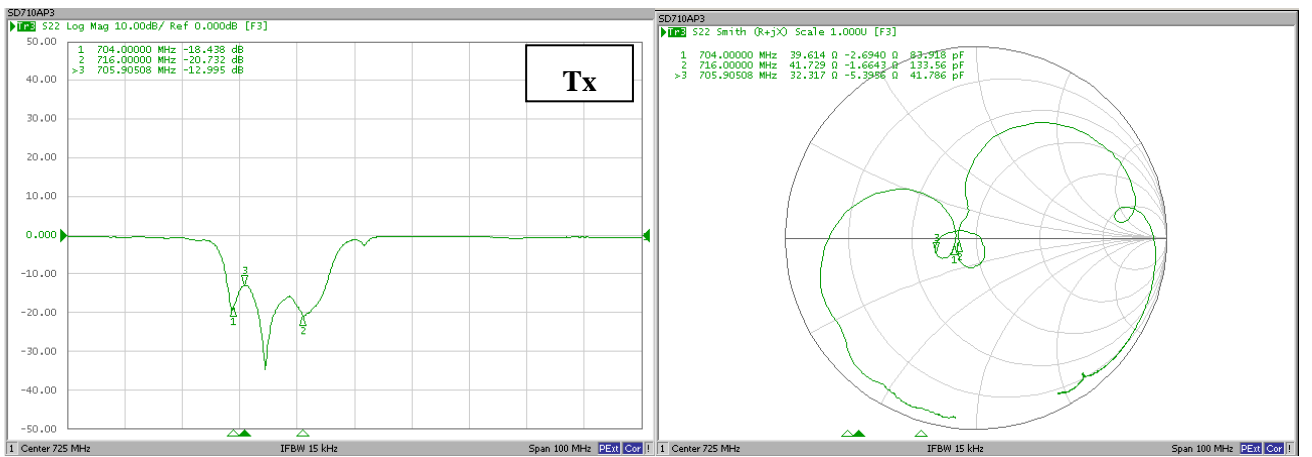
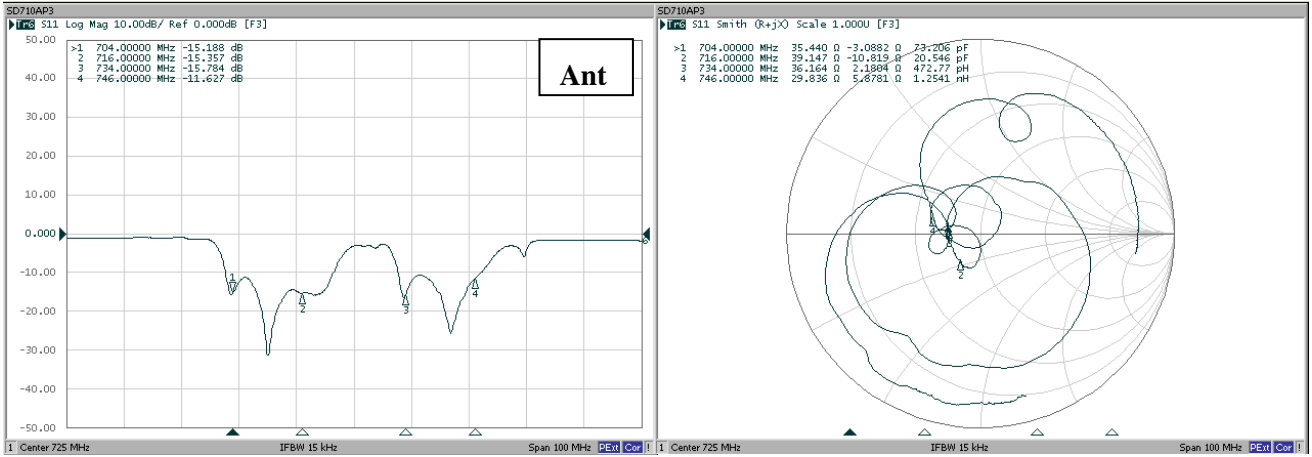


Isolation Characteristic





Return Loss & Smith Chart Characteristic





Wide Span Characteristic

