

SD-075103-S33

SAW Duplexer For 751MHz / 782MHz
Revision 0: July, 2014



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

□ Electrical Characteristics

Maximum Ratings

ITEM	UNIT	MIN.	TYP.	MAX.
Operation Temperature Range	°C	-20	-	+100
Storage Temperature Range	°C	-40	-	+100
Maximum DC Voltage	V	0		
Tx Band Input Power Level within 777~ 787 MHz	dBm	30dBm > 50000 Hours, CW tone(Ta= +50°C)		
Ant. Tx. Rx Terminating Impedance	Ω	50 Ω		
Package type		S33		
Length x Width	mm ²	3.8 x 3.8		
Height	mm	-	-	1.45

Electrical Specification

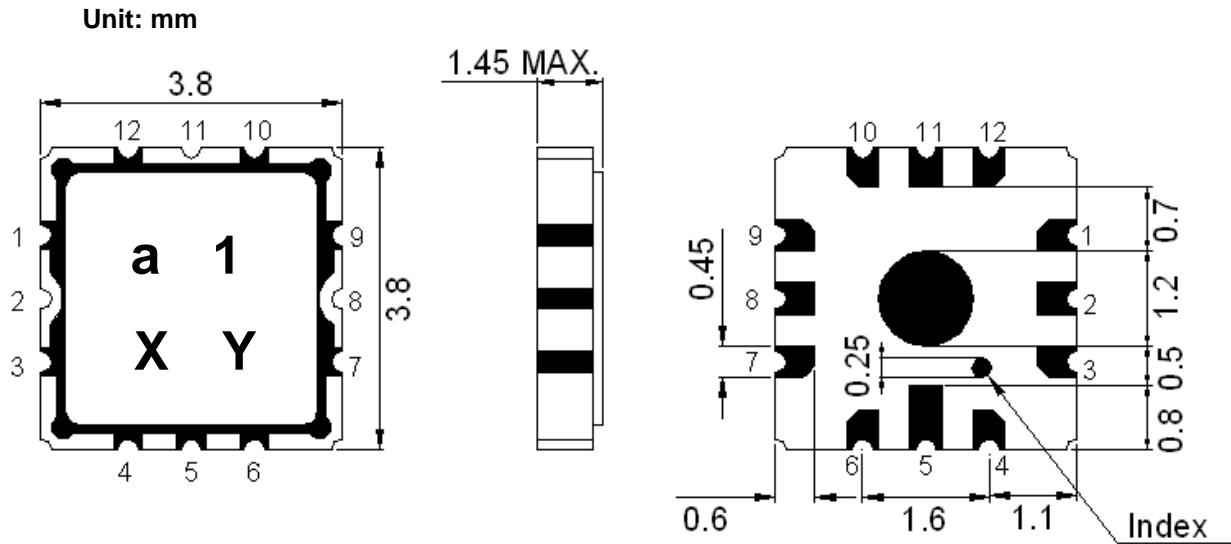
Tx_782.0MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	777.0 ~ 787.0	dB	-	1.8	2.5
Bandwidth	777.0 ~ 787.0	MHz	10	22	-
Ripple	777.0 ~ 787.0	dB _{p-p}	-	0.5	1.5
Return Loss	777.0 ~ 787.0	dB	9	11	-
Absolute Attenuation	746.0 ~ 756.0	dB	45	49	-
	946.0 ~ 956.0	dB	40	45	-
	1114.0 ~ 1124.0	dB	45	51	-
	1554.0 ~ 1564.0	dB	40	48	-
	2331.0 ~ 2341.0	dB	30	40	-



Rx_751.0MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	746.0 ~ 756.0	dB	-	1.4	2.5
Bandwidth	746.0 ~ 756.0	MHz	10	21	-
Ripple	746.0 ~ 756.0	dB _{p-p}	-	0.4	1.2
Return Loss	746.0 ~ 756.0	dB	9	11	-
Absolute Attenuation	D.C. ~ 710.0	dB	35	41	-
	788.0 ~ 1000.0	dB	35	43	-
	1000.0 ~ 2000.0	dB	35	41	-
	2000.0 ~ 3000.0	dB	10	34	-
	777.0 ~ 787.0	dB	50	59	-
	676.0 ~ 686.0	dB	35	42	-
	606.0 ~ 616.0	dB	35	41	-
	869.0 ~ 894.0	dB	35	44	-
Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	D.C. ~ 746.0	dB	45	57	-
	777.0 ~ 787.0	dB	50	61	-
	746.0 ~ 756.0	dB	48	50	-
	787.0 ~ 1000.0	dB	40	50	-
	1000.0 ~ 2000.0	dB	35	45	-
	2000.0 ~ 3000.0	dB	10	35	-

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

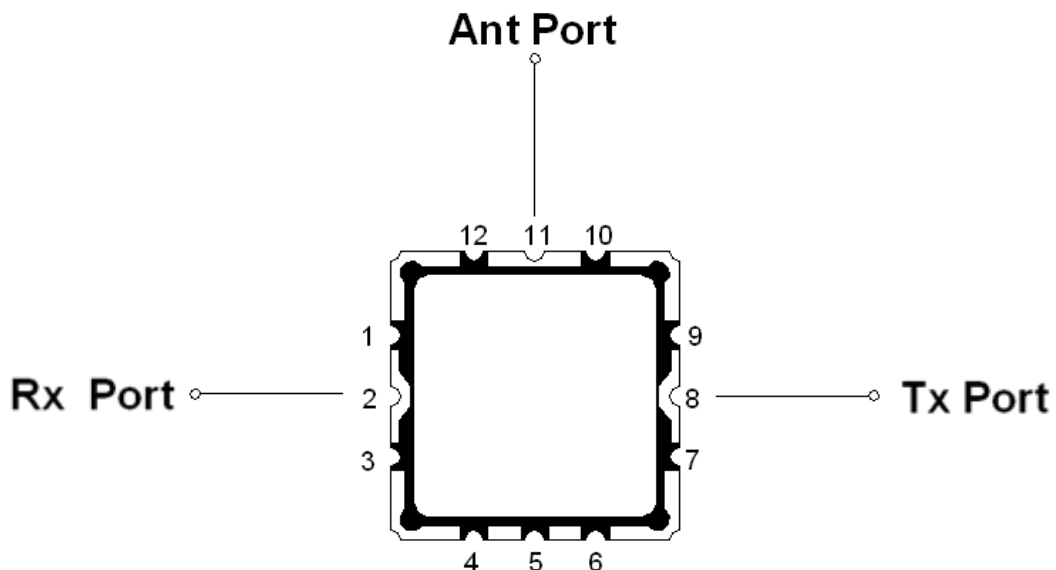
□ Package Dimensions



Marking Descriptions	
a	Wireless Application
1	Series Number
X	Date Code(Year)
Y	Date Code(Month)

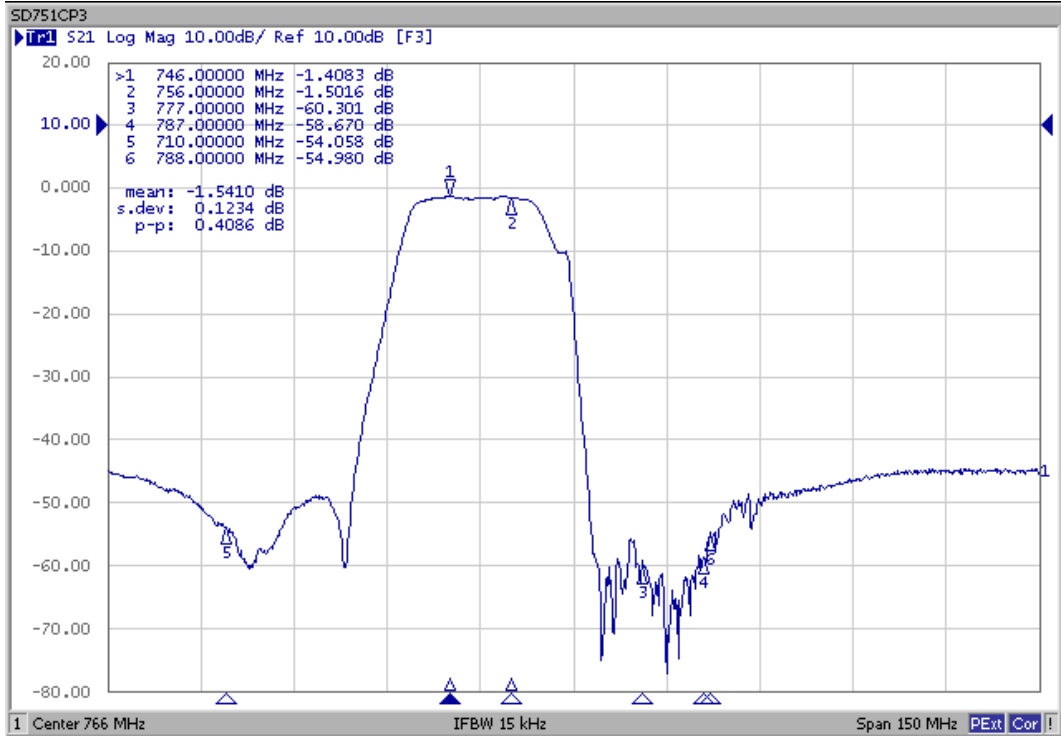
Pin Description	
the others	Ground
2	Rx Port(751.0MHz)
11	Antenna
8	Tx Port (782.0MHz)

□ Testing Environment

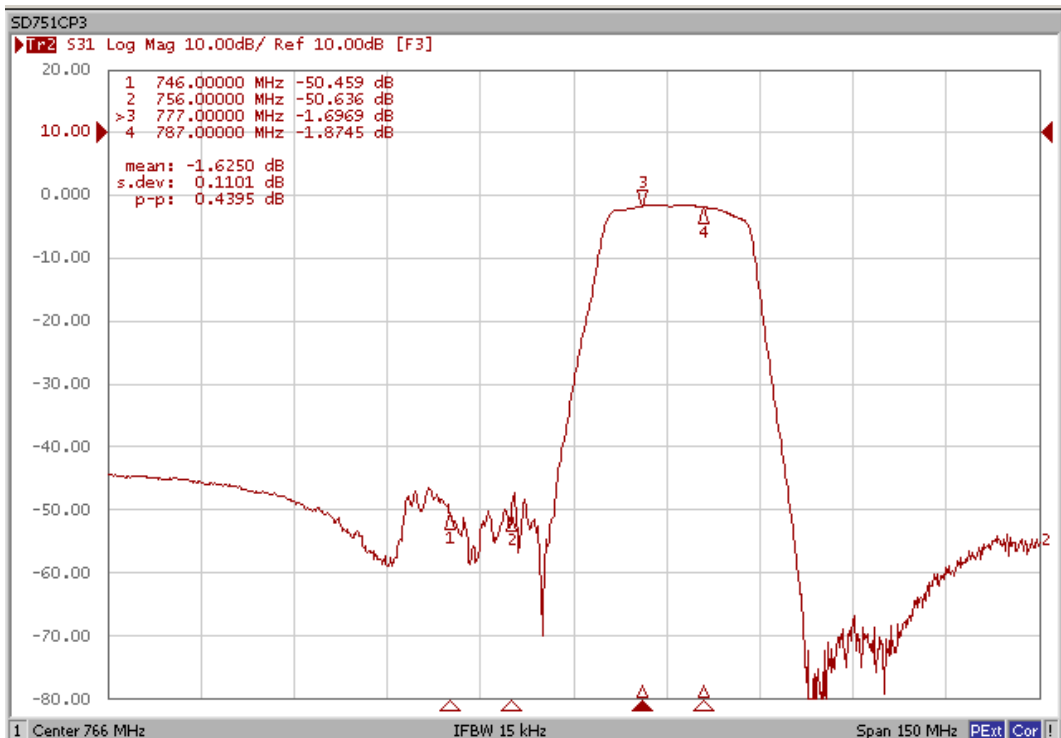


□ Frequency Characteristics

Tx Characteristic

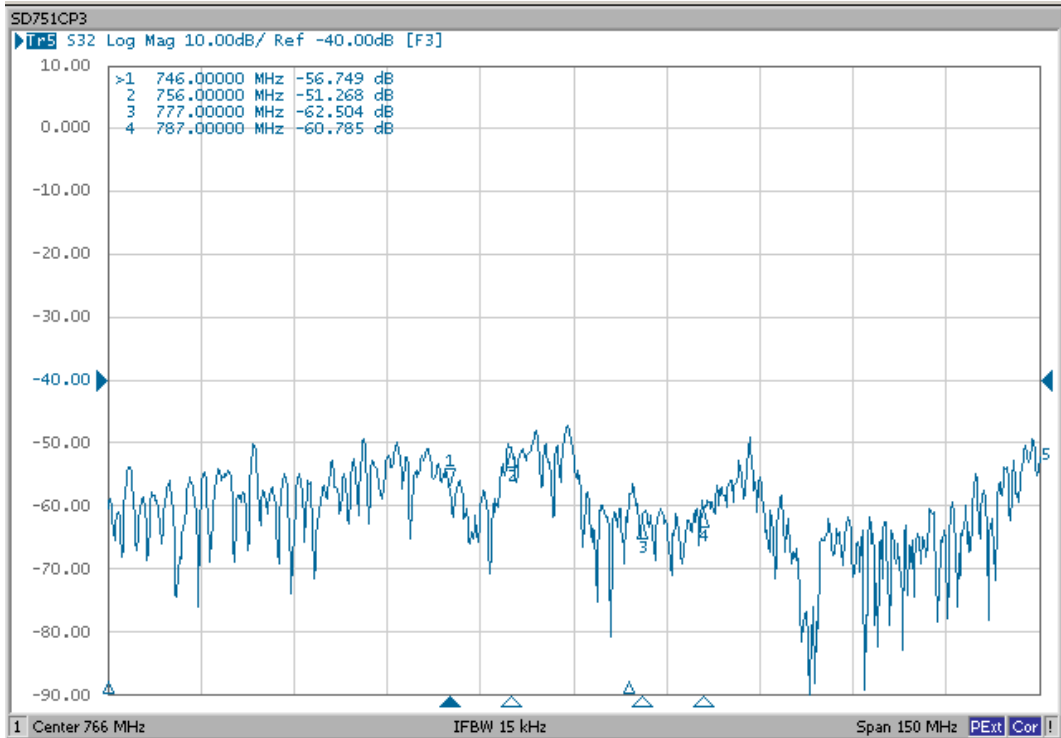


Rx Characteristic



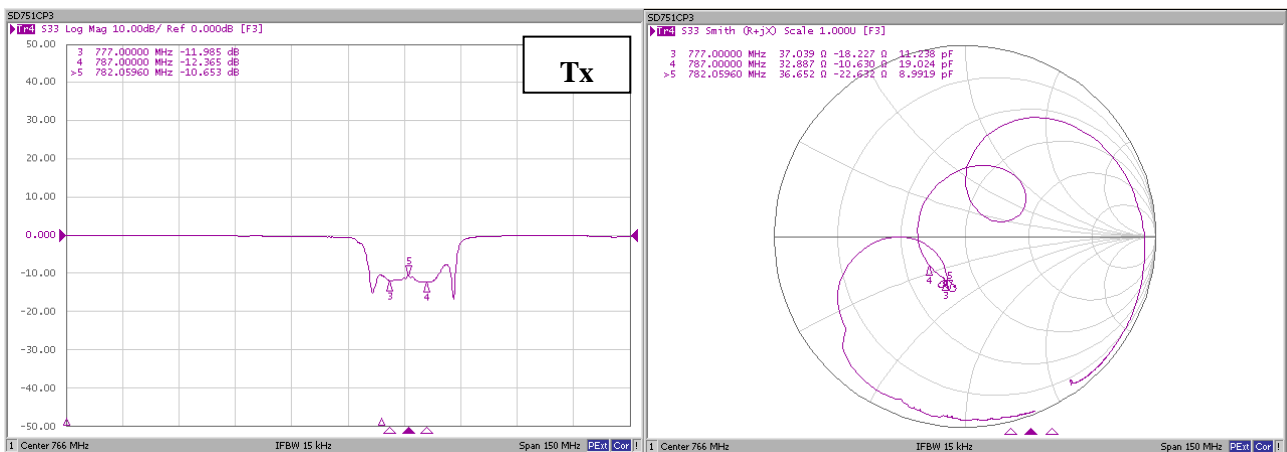
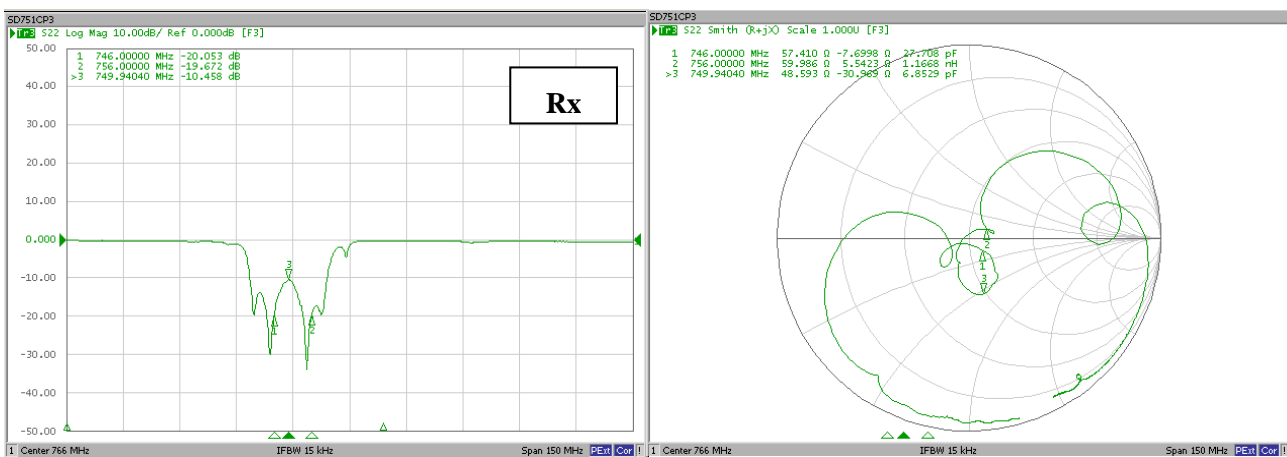
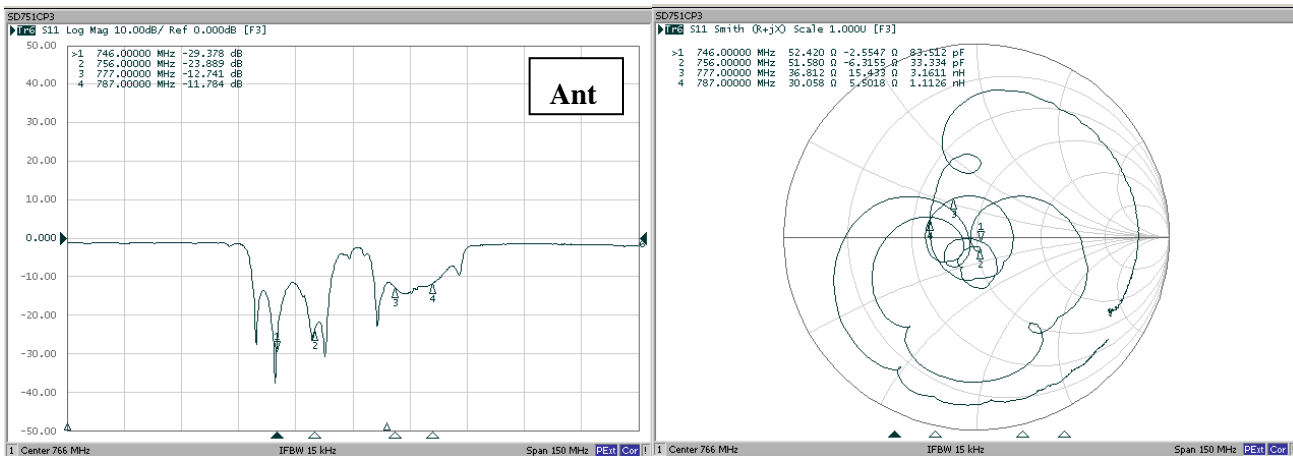


Isolation Characteristic





Return Loss & Smith Chart Characteristic





Wide Span Characteristic

