

**RoHS Compliant** 

# Datasheet of SAW Duplexer 1814 Band13+Band14 Unbalanced NS07 Band Care

KYOCERA Part No.: SD18-0782T8UUA1



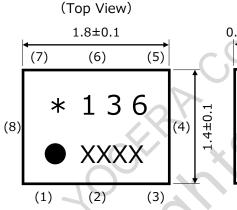
#### **Rating**

Items	Rating	Unit	Note		
Operating Temperature Range	-20 to +90	deg.C			
Storage Temperature Range	-40 to +90	deg.C			
Max Input Power	. +31   aBm		@777.5 - 786.5MHz	5,000hours, Ta=50deg.C, DFT-s-OFDM-QPSK	
	+30.5	dBm	@///.3 - /60.3M12	5,000hours, Ta=50deg.C, CP-OFDM-QPSK	
	+31	dBm	@788 - 798MHz	5,000hours, Ta=50deg.C, DFT-s-OFDM-QPSK	
	+30.5	dBm	@766 - 796MHZ	5,000hours, Ta=50deg.C, CP-OFDM-QPSK	
Tx Port Nominal Impedance	50	ohm	Unbalance		
Ant. Port Nominal Impedance	50//La=15nH	ohm	Unbalance		
Rx Port Nominal Impedance	50+Lr=4.7nH	ohm	Unbalance		

## **Dimensions**

136

XXXX



: Identification logo

0.57 max.

8-0.35 ±0.05 <del>-(-5-)</del>-(6) (7) (8)(2)0.65 0.65 (0.075)±0.05 ±0.05 (0.075)Unit: mm

Function

Rx

Tx

Ant.

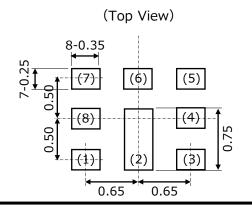
**GND** 

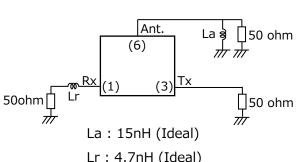
(Bottom View)

Identification no. Pin No. Index mark of pin 1 (1)Production code (3)(6) Others

#### **Recommendable Land Pattern**

#### **Measurement Circuit**





(Top View)

Lr: 4.7nH (Ideal)

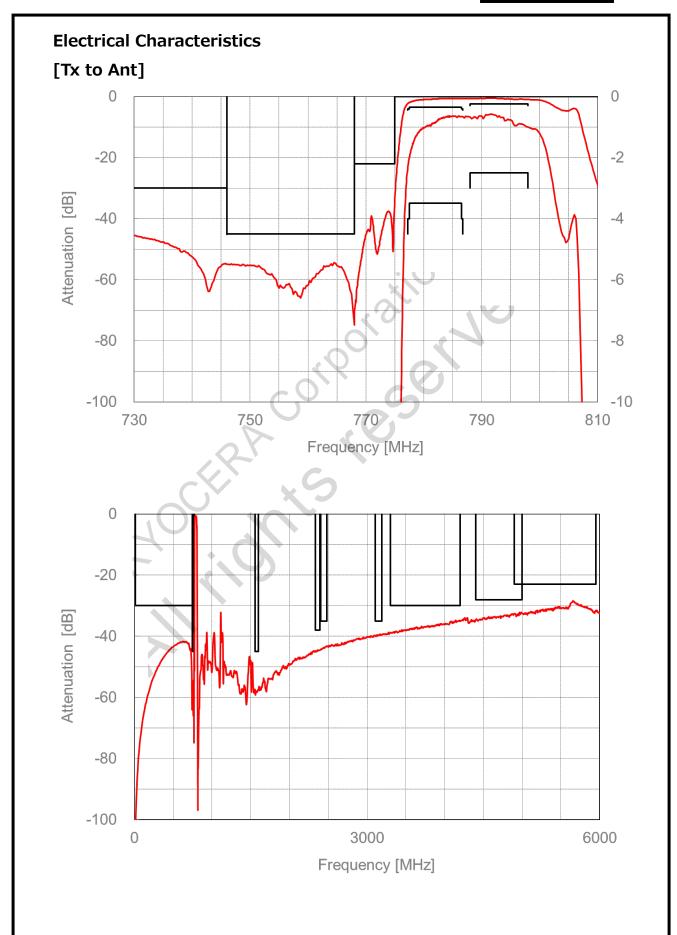


## **Electrical Characteristics**

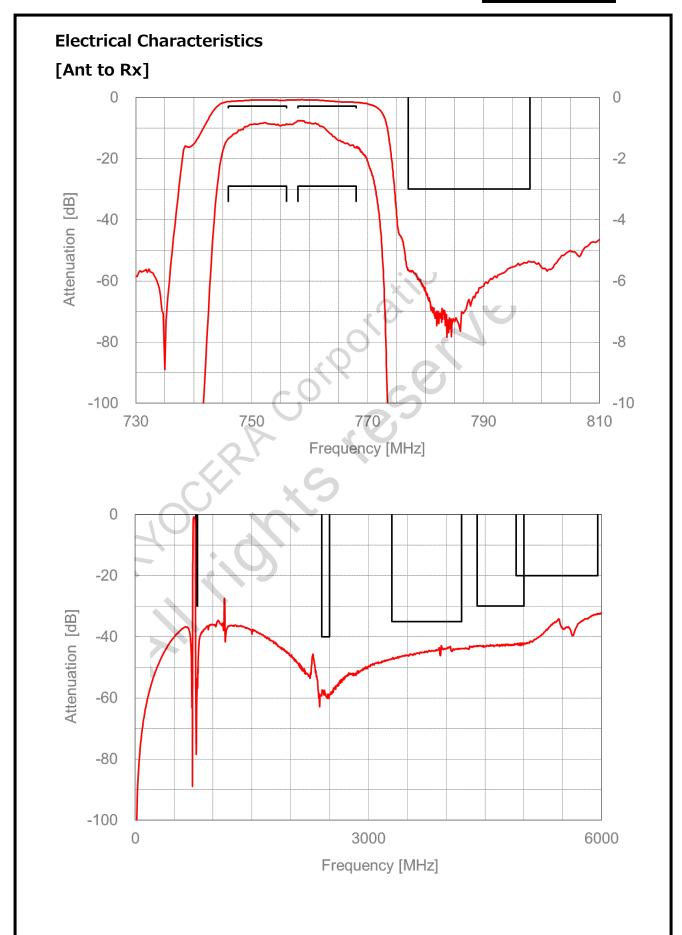
ITEMS		Frequency Range [ MHz ]		Characteristics			l lade	Natas		
				min.	typ.	max.	Unit	Notes		
Tx to Ant Insertion loss		777.5	to	786.5	-	2.0	3.5	dB	Band13	
			788	to	798	-	1.0	2.5	dB	Band14
			777.25	to	786.75	-	2.3	4.0	dB	
	VSWR	Tx	777.5	to	798	-	1.4	2.1	-	
		Ant	777.5	to	798	-	1.4	2.1	-	
	Absolute		10	to	746	30	41	-	dB	
	attenuati	attenuation		to	768	45	54	-	dB	Rx
			768	to	775	22 *	32 *	-	dB	NS07 Relative to IL(dBint*)
		1554	to	1596	43	57	-	dB	2fTx	
		2331	to	2394	38	45	-	dB	3fTx	
		2400	to	2484	35	43	-	dB	ISM	
		3108	to	3192	35	40	<u> </u>	dB	4fTx	
		3300	to	4200	30	36	-	dB	n77	
			4400	to	5000	28	34	-	dB	n79
			4900	to	5950	23	30	-	dB	ISM 5G
Ant to Rx	Insertion	loss	746	to	756		1.3	2.9	dB	Band13
			758	to	768	-	1.6	2.9	dB	Band14
	VSWR	Rx	746	to	756	-	1.8	2.2	-	
		Ant	746	to	756	-	1.7	2.1	-	
	Absolute		777	to	787	30	54	-	dB	Tx
	attenuation		2400	to	2500	40	58	-	dB	ISM 2.4G
			3300	to	4200	35	44	-	dB	n77
		4400	to	5000	30	43	-	dB	n79	
			4900	to	5950	20	34	-	dB	ISM 5G
Tx to Rx	Tx to Rx Isolation		746	to	768	53	56	-	dB	
Isolation			777	to	798	52	55	-	dB	

\*dBint : Integrated to LTE Modulation (4.5MHz)

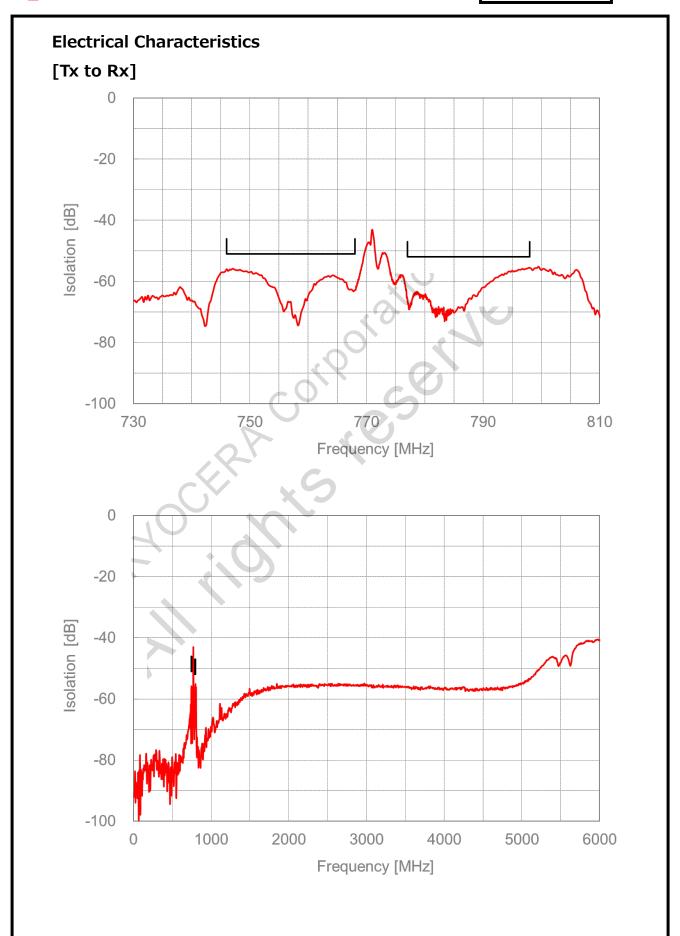




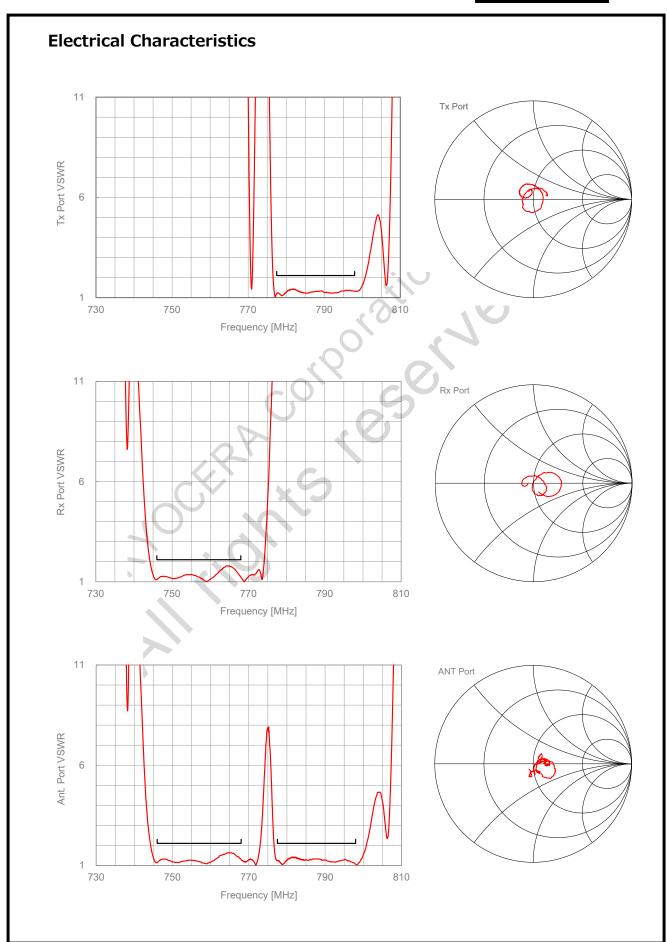








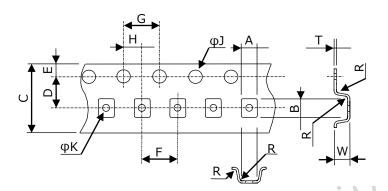






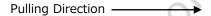
# Tape & Reel Specification

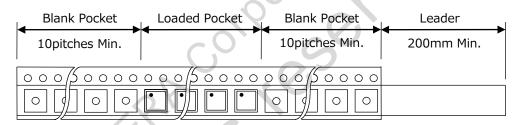
# [Tape]



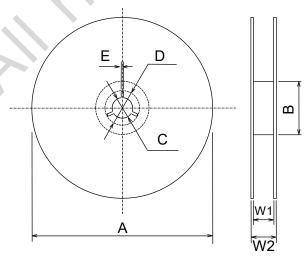
	Unit : mm
Part	Dimension
Α	1.7±0.1
В	2.05±0.10
С	8.0±0.2
D	3.50±0.05
Е	1.75±0.10
F	4.0±0.1
G	4.0±0.1
Η	2.00±0.05
φͿ	1.5+0.1/-0
φΚ	0.80±0.05
R	0.2 Max
W	0.7±0.1
T	0.20±0.05

W: Dimension is depth of pockets.





# [Reel]



Part	Α	В	С	D
Dimension	180 +0/-1.5	60 +1.0/-0	13 ± 0.2	21 ± 0.8
Part	E	W1	W2	
Dimension	2 ± 0.5	9.0 +1.0/-0	11.4 ± 1.0	

Unit: mm



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