

**RoHS Compliant** 

# Datasheet of SAW Duplexer 1814 Band71 Unbalanced

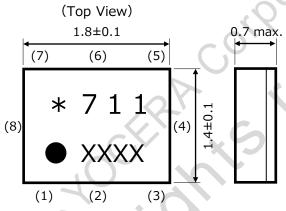
KYOCERA Part No.: SD18-0680R8UUA1



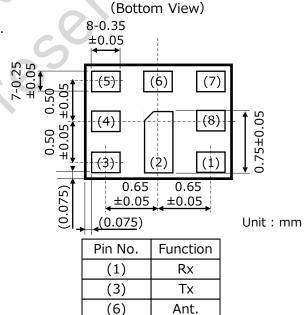
## Rating

	Items	Rating	Unit	Note	
Operating	Temperature Range	-30 to +90	deg.C		
Storage Temperature Range		-40 to +90	deg.C		
Max Input Power		+31	dBm	5,000Hours,CW,Ta=50deg.C	
		+31	dBm	5,000Hours,QPSK,LTE,Ta=50deg.C	
	Tx Band	+31	dBm	5,000Hours,DFT-s-OFDM-QPSK,Ta=50deg.C	
		+29.5	dBm	5,000Hours,CP-OFDM-QPSK,Ta=50deg.C	
ESD Machine Model		50	Volt	Complied to JESD22-A115	
Moisture	Sensitivity Level	3		Complied to J-STD-033B.1	
Tx Port N	ominal Impedance	50 ohm Ur		Unbalance	
Ant. Port	Nominal Impedance	50//15nH(shunt)	ohm -	Unbalance	
Rx Port N	lominal Impedance	edance 50		Unbalance	

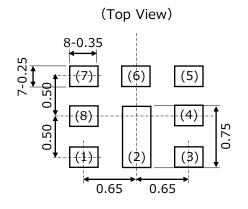
#### **Dimensions**



\* : Identification mark
711 : Identification no.
● : Index mark of pin 1
XXXX : Production code

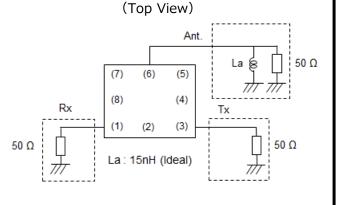


#### **Recommendable Land Pattern**



#### **Measurement Circuit**

Others



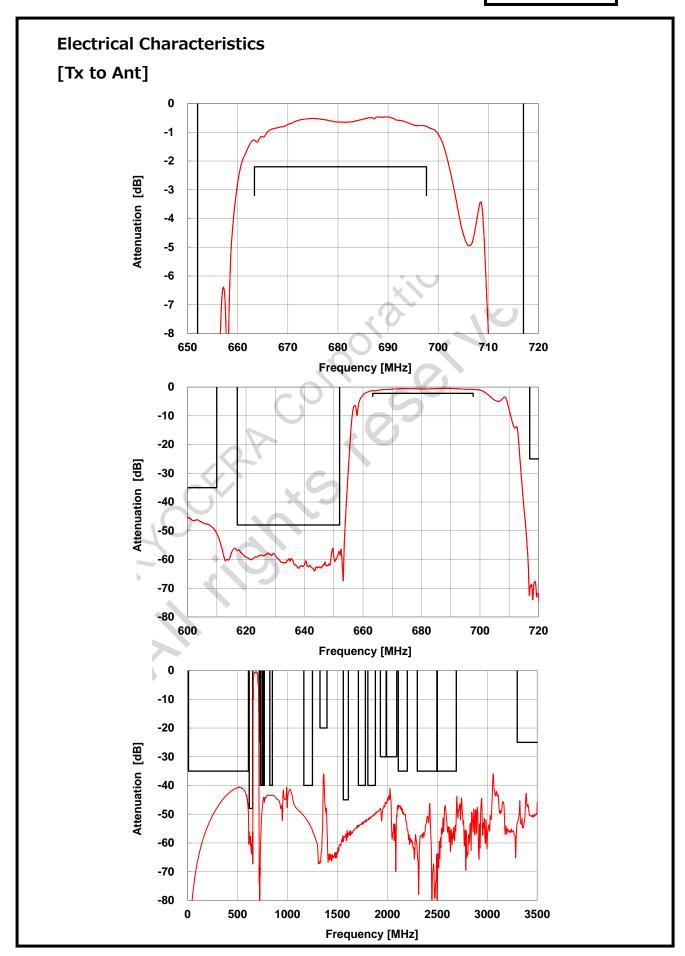
**GND** 



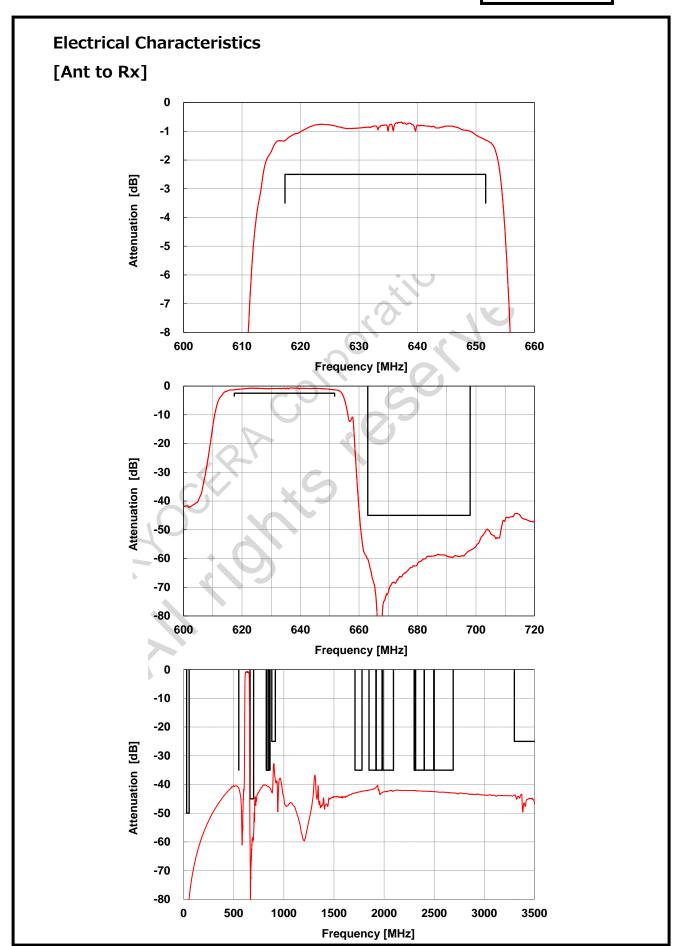
## **Electrical Characteristics**

		Frequency [MHz]		Kyocera						
ITEMS				Unit	Spe	Specification		Notes		
TIEMS					min.	typ.	max.	Notes		
Tx to Ant Insertion Loss Ripple		n Loss	663.34	-	697.66	dB	-	1.4	2.2	
		663.34	-	697.66	dB	-	0.9	2.0		
	VSWR	Tx	663.34	-	697.66	-	-	1.5	2.0	
		Ant	663.34	-	697.66	-	-	1.7	2.2	
	Attenua	ation	10	-	600	dB	35	41	-	
			617	-	652	dB	48	56	-	Rx
			717	-	728	dB	25	65	-	B29Rx
			729	-	746	dB	40	49	-	B12Rx
			746	-	756	dB	40	45	-	B13Rx
			758	-	768	dB	40	44	-	B14Rx
			824	-	849	dB	40	43		В5Тх
			1164	-	1250	dВ	40	51	-	GNSS L2
			1326	-	1396	dB	20	36	-	2f
			1559.05	-	1610	dB	45	56	-	GNSS
			1710	- (	1780	dB	40	52	-	В66Тх
			1805	-	1880	dB	40	50	-	
			1930		1990	dB	30	46	-	B2Rx
			1989	-	2094	dB	30	41	_	
			2110	-	2200	dB	35	47	_	B66Rx
			2300	-	2400	dB	35	51	_	
40CX		2400		2500	dB	35	46	-	WiFi2.4GHz	
		2496	X	2690	dB	35	47	_	B41	
		3300	-	4200	dB	25	33	-	n77	
		4400		5000	dB	18	23	-	n79	
		4900	-	5950	dB	15	23	-	WiFi5GHz	
Ant to Rx	Insertic	n Loss	617.34	-	651.66	dB	-	1.3	2.5	
	Ripple	1	617.34	-	651.66	dB	-	0.6	2.2	
	VSWR	Ant	617.34	-	651.66	-	-	1.7	2.2	
		Rx	617.34	-	651.66	-	-	1.7	2.2	
	Attenuation		35	-	55	dB	50	80	-	Rx-Tx
		_	80	-	550	dB	35	40	-	
			663	-	698	dB	45	57	-	Tx
	•		824	-	849	dB	35	40	-	BC0Tx
			832	-	862	dB	35	41	-	
			880	-	915	dB	25	33	-	
			1710	-	1780	dB	35	42	-	В66Тх
			1850	-	1920	dB	35	41	-	В2Тх
			1920	-	1980	dB	35	40	-	
		1989	-	2094	dB	35	42	-		
		2300	-	2400	dB	35	42	-		
		2305	-	2315	dB	35	42	-	В30Тх	
			2400	-	2500	dB	35	42	-	WiFi2.4GHz
			2496	-	2690	dB	35	43	-	B41
			3300	-	4200	dB	25	33	-	
			4900	-	5950	dB	15	24	-	WiFi5GHz
Tx to Rx	Isolatio	n	663.34	-	697.66	dB	55	59	-	
			617.34	-	651.66	dB	53	58	-	
	-		1							

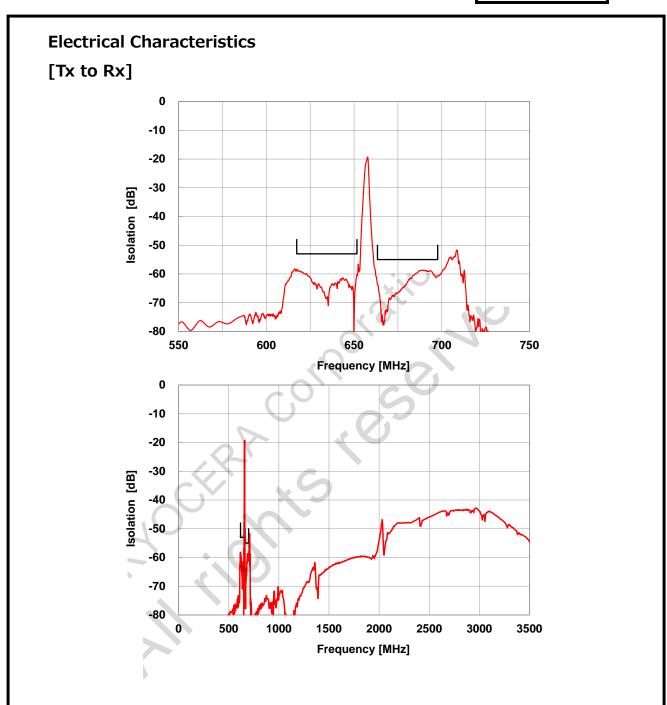




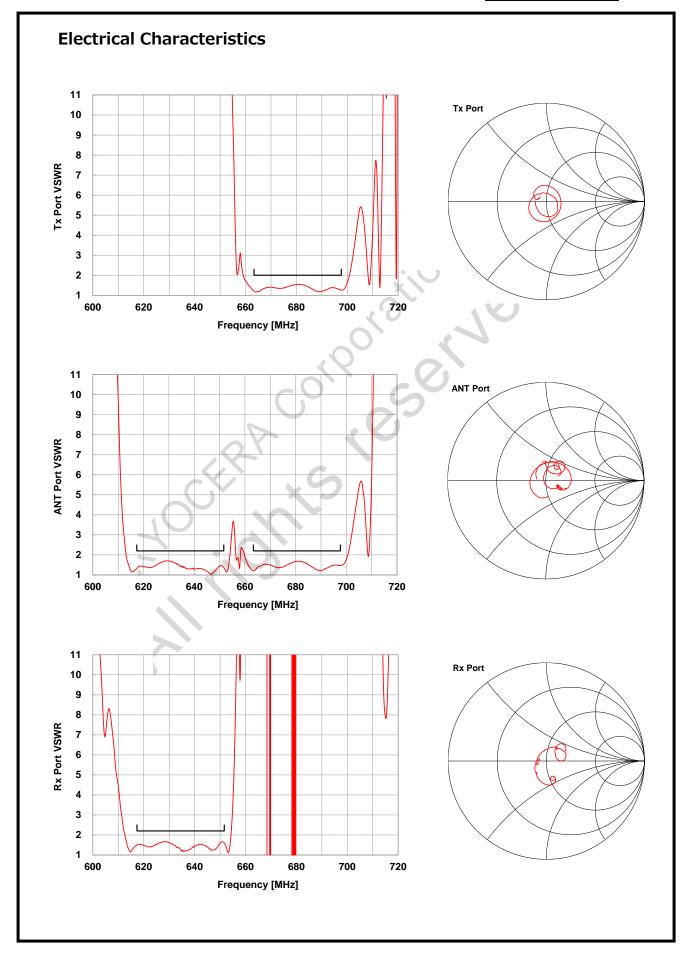










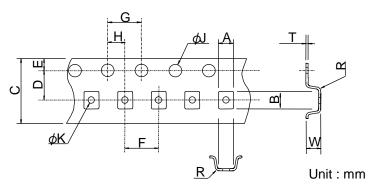


7/8



## **Tape & Reel Specification**

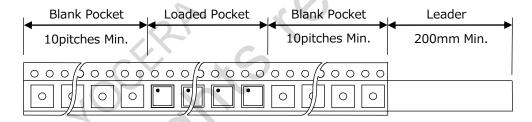
## [Tape]



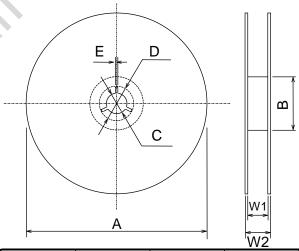
Part	Α	В	С	D	E	
Dimension	1.75±0.05	2.1±0.05	8.0±0.1	3.5±0.05	1.75±0.1	
Part	F	G	Н	φJ	φΚ	
Dimension	4.0±0.1	4.0±0.1	2.0±0.05	1.5+0.1/-0	0.8±0.05	
Part	R	W	T	+14/ D:		
Dimension	0.2 Max	0.9±0.05	0.2±0.05	* W Dimension is		

\* W Dimension is depth of pockets.

Pulling Direction —



# [Reel]



Part	Α	В	C	D	Unit : mm
Dimension	180 +0/-1.5	60 +1.0/-0	$13 \pm 0.2$	21 ± 0.8	
Part	E	W1	W2		-
Dimension	$2 \pm 0.5$	9.0 +1.0/-0	11.4 ± 1.0		



#### **Notice**

- 1. Characteristics described in this datasheet are for references specifications shall be based on written documents agreed by each party.
- 2. Contents in this datasheet are subject to change without notice. It is recommended to confirm the latest information at the time of usage. Also, this datasheet is revised once a year. We may not be able to accept requests based on old datasheets.
- 3. Products in this datasheet are intended to be used in general electronic equipment such as office equipment, audio and visual equipment, communication equipment, measurement instrument and home appliances. It is absolutely recommended to consult with our sales representatives in advance upon planning to use our products in applications which require extremely high quality and reliability such as aircraft and aerospace equipment, traffic systems, safety systems, power plant and medical equipment including life maintenance systems.
- 4. Even though we strive for improvements of quality and reliability of products, it is requested to design with enough safety margin in equipment or systems in order not to threaten human lives directly or damage human bodies or properties by an accidental result of products.
- 5. It is requested to design based on guaranteed specifications for such as maximum ratings, operating voltage and operating temperature. It is not the scope of our guarantee for unsatisfactory results due to misuse or inadequate usage of products in the datasheet.
- 6. Operation summaries and circuit examples in this datasheet are intended to explain typical operation and usage of the product. It is recommended to perform circuit and assembly design considering surrounding conditions upon using products in this datasheet.
- 7. Technical information described in this datasheet is meant to explain typical operations and applications of products, and it is not intended to guarantee or license intellectual properties or other industrial rights of the third party or Kyocera.
- 8. Trademarks, logos and brand names used in this datasheet are owned by Kyocera or the corresponding third party.
- 9. Certain products in this datasheet are subject to the Foreign Exchange and Foreign Trade Control Act of Japan, and require the license from Japanese Government upon exporting the restricted products and technical information under the law. Besides, it is requested not to use products and technical information in the datasheet for the development and/or manufacture of weapons of mass destruction or other conventional weapons, nor to provide them to any third party with the possibility of having such purposes.
- 10. It is prohibited to reprint and reproduce a part or whole of this datasheet without permission.