

**RoHS Compliant** 

# Datasheet of SAW Duplexer 1612 Band66 Unbalanced

KYOCERA Part No.: SD16-1745R8UUA1

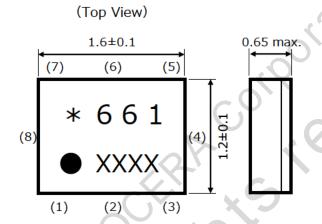
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### **Rating**

Items	Rating	Unit	Note
Operating Temperature Range	-20 to +85	deg.C	
Storage Temperature Range	-40 to +85	deg.C	
	+31	dBm	5,000hours, Ta=50deg.C, CW
Max Input Power (Tx port)	+31	dBm	5,000hours, Ta=50deg.C, DFT-s-OFDM
	+29.5	dBm	5,000hours, Ta=50deg.C, CP-OFDM
Tx Port Nominal Impedance	50+4.3nH//1.0pF	ohm	Unbalance
Ant. Port Nominal Impedance	50//3.0nH	ohm	Unbalance
Rx Port Nominal Impedance	50//4.3nH	ohm	Unbalance

#### **Dimensions**



6-0.34 2-0.31 ±0.05 ±0.05 (5) (6) (7) 1.00 (5) (8) 1.00 (4) (8) 1.00 (4) (8) 1.00 (4) (8) 1.00 (6) (7) 1.00 (7) 1.00 (8) 1.00 (9) 1.00 

0.56

 $\pm 0.05$ 

(Bottom View)

Unit: mm

\* : Identification logo
661 : Identification no.
• : Index mark of pin 1

XXXX : Production code

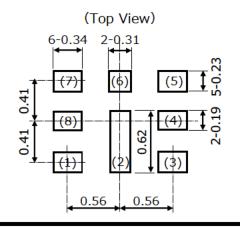
Pin No.	Function
(1)	Rx
(3)	Tx
(6)	Ant.
Others	GND

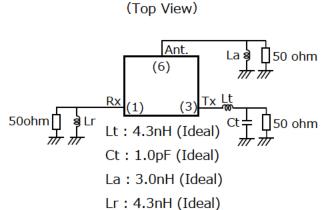
0.56

±0.05

#### **Recommendable Land Pattern**

#### **Measurement Circuit**



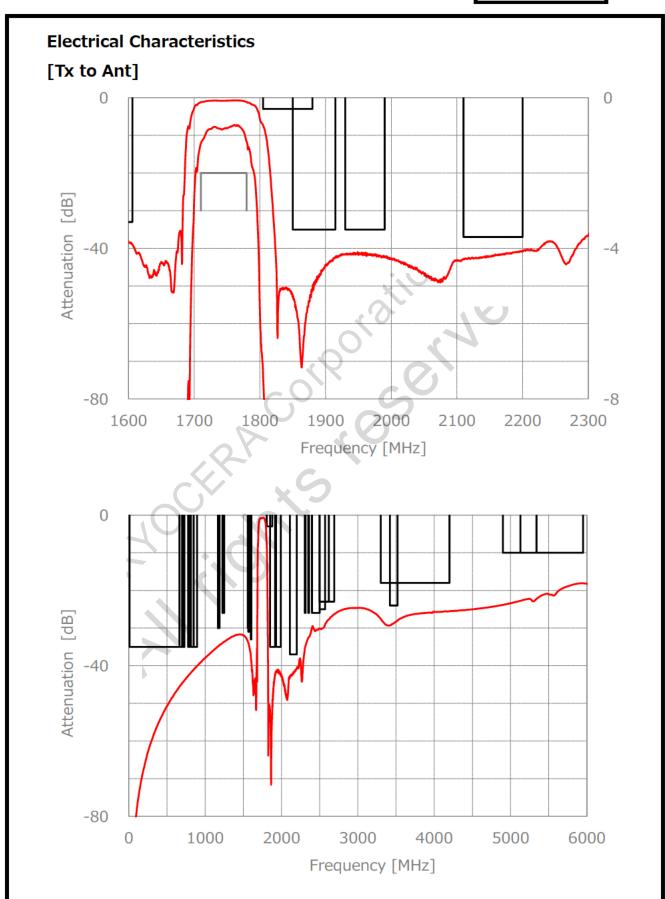




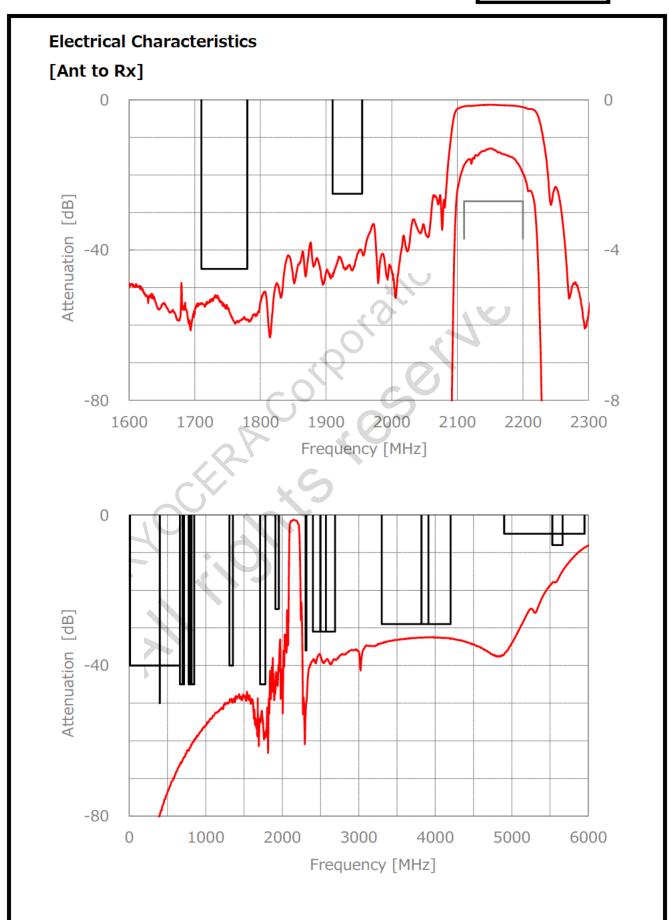
## **Electrical Characteristics**

	Items		Frequency Range (MHz)	Unit		haracteristi	_	Note
					min.	typ.	max.	
Tx to Ant	Insertion Loss		1710.24 - 1779.76	dB	-	1.2	2.0	
	Ripple Any20MHz		1710 - 1780	dB	-	0.4	1.4	
	VSWR	Tx	1710 - 1780	-	-	1.5	2.0	
		Ant	1710 - 1780	-	-	1.5	2.0	
	Attenuation		10 - 728	dB	35	44	-	
			663 - 698	dB	35	45	-	
			699 - 716	dB	35	44	-	
			717 - 728	dB	35	44	-	
			777 - 798	dB	35	42	-	
			814 - 849	dB	35	41	-	
			851 - 894	dB	35	40	-	
			1166 - 1187	dB	30	35	-	
			1226 - 1250	dB	26	34	-	
			1559 - 1563	dB	30	34	-	
			1565.42 - 1573.37	dB	31	34 🌣	1. 1	
			1573.37 - 1577.47	dB	31	35	<u> </u>	
			1577.47 - 1585.42	dB	31	35	-	
			1597.55 - 1605.89	dB	33	37	-	17.1
			1805 - 1880	dB	3	7		
				_	35		-	
			1850 - 1915 1930 - 1990	dB dB	35	42 41	- 4	
			2110 - 2200	dB	37	41	-	
			2305 - 2315	dB	26	35		
			2350 - 2360	dB	26	32	-	
			2400 - 2500	dB	26	29	-	
			2496 - 2690	dB	23	26		
			2500 - 2570	dB	25	29	-	
			2620 - 2690	dB	23	26	-	
			3300 4200	dB	18	26	-	
			3420 - 3520	dB	24	28	-	
			4900 - 5950	dB	10	18	-	
			5130 - 5340	dB	10	22	-	
Ant to Rx	Insertion Loss		2110.24 - 2199.76	dB	-	1.9	2.7	
	Ripple Any20MHz		2110 - 2200	dB	-	0.4	1.6	
	VSWR	Rx	2110 - 2200	-	-	1.6	2.1	
		Ant	2110 - 2200	-	-	1.5	2.1	
	Attenuation		10 - 663	dB	40	66	-	
			400 - 400.1	dB	50	80	-	
			663 - 698	dB	45	65	-	
			699 - 716	dB	45	64	-	
			777 - 798	dB	45	62	-	
			814 - 849	dB	45	60	-	
		4	1310 - 1355	dB	40	49	-	
			1710 - 1780	dB	45	52	-	
			1910 - 1955	dB	25	40	-	
			2305 - 2315	dB	36	50	-	
			2400 - 2500	dB	31	37	-	
			2496 - 2690	dB	31	37	-	
		$\blacksquare$	2500 - 2570	dB	31	37	-	
			3300 - 4200	dB	29	32	-	
	<u> </u>		3820 - 3910	dB	29	32	-	
			4900 - 5950	dB	5	9	-	
			5530 - 5665	dB	8	15	-	<u> </u>
Tx to Rx	Isolation		1710 - 1780	dB	52	57	-	

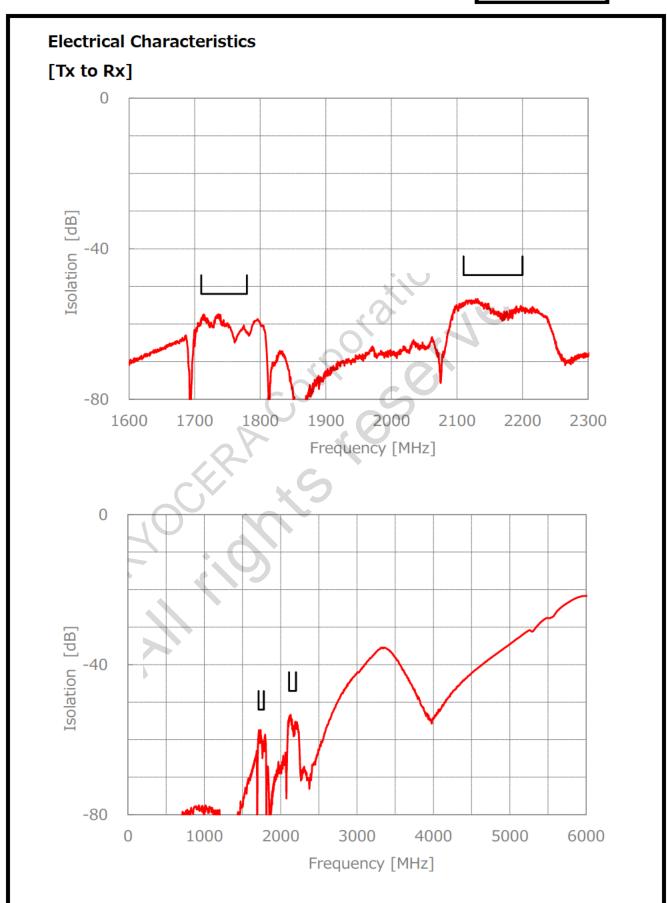






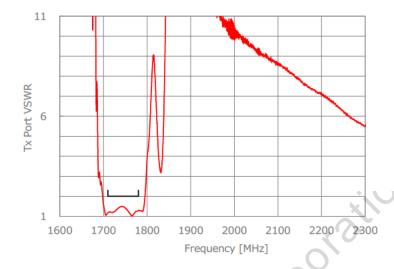


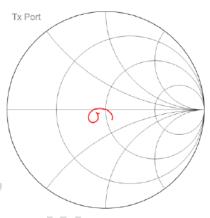


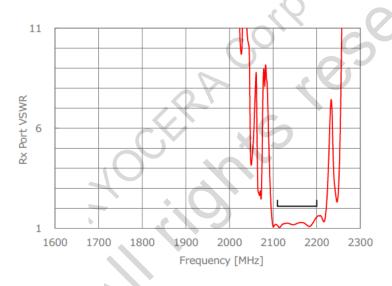


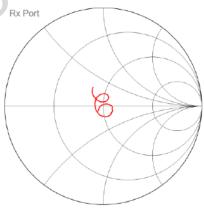


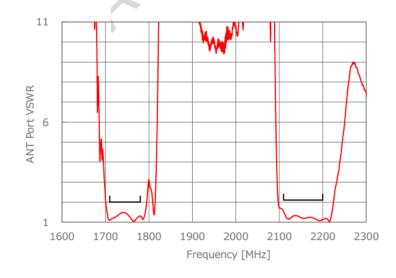
## **Electrical Characteristics**

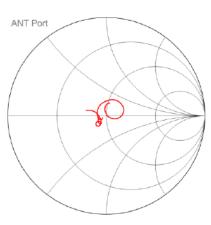








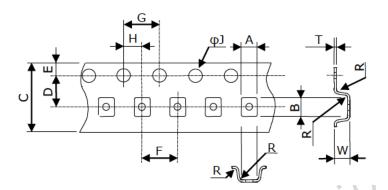






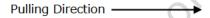
# **Tape & Reel Specification**

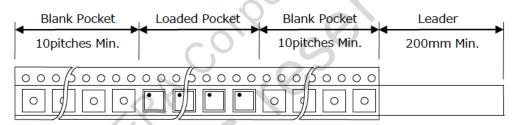
# [Tape]



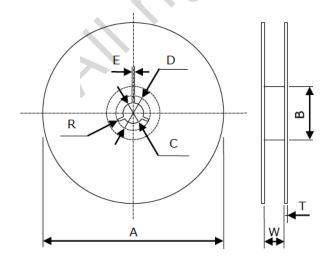
	Unit : mm
Part	Dimension
Α	1.37±0.10
В	1.80±0.10
С	8.0±0.2
D	3.50±0.05
Е	1.75±0.10
F	4.0±0.1
G	4.0±0.1
Ξ	2.00±0.05
φЈ	1.5+0.1/-0
R	0.2 Max
W	0.8±0.2
Т	0.20±0.05

W: Dimension is depth of pockets.





# [Reel]



	Unit : mm
Part	Dimension
Α	330 ± 2
В	100 ± 2
С	$13.0 \pm 0.2$
D	$21.0 \pm 0.8$
E	$2.0 \pm 0.5$
R	1
W	$9.5 \pm 1.0$
	20+02

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