

RoHS Compliant

Datasheet of SAW Duplexer 1612 Band20 Unbalanced

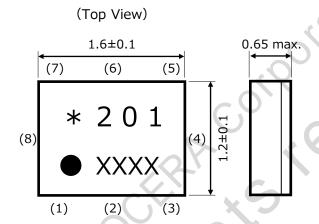
KYOCERA Part No.: SD16-0847R8UUA1



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)	+30	dBm	5,000hours, Ta=50deg.C, DFT-s-OFDM
	+28.5	dBm	5,000hours, Ta=50deg.C, CP-OFDM
Tx Port Nominal Impedance	50+3.6nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//12nH	ohm	Unbalance
Rx Port Nominal Impedance	50+3.6nH	ohm	Unbalance

Dimensions



0.56

±0.05

(Bottom View)

Unit: mm

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

XXXX : Production code

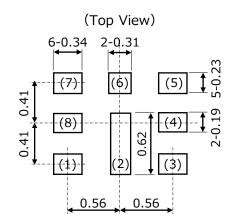
Pin No.	Function			
(1)	Rx			
(3)	Tx			
(6)	Ant.			
Others	GND			

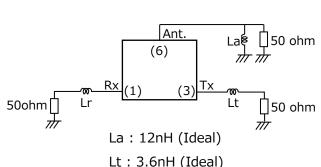
0.56

±0.05

Recommendable Land Pattern

Measurement Circuit





(Top View)

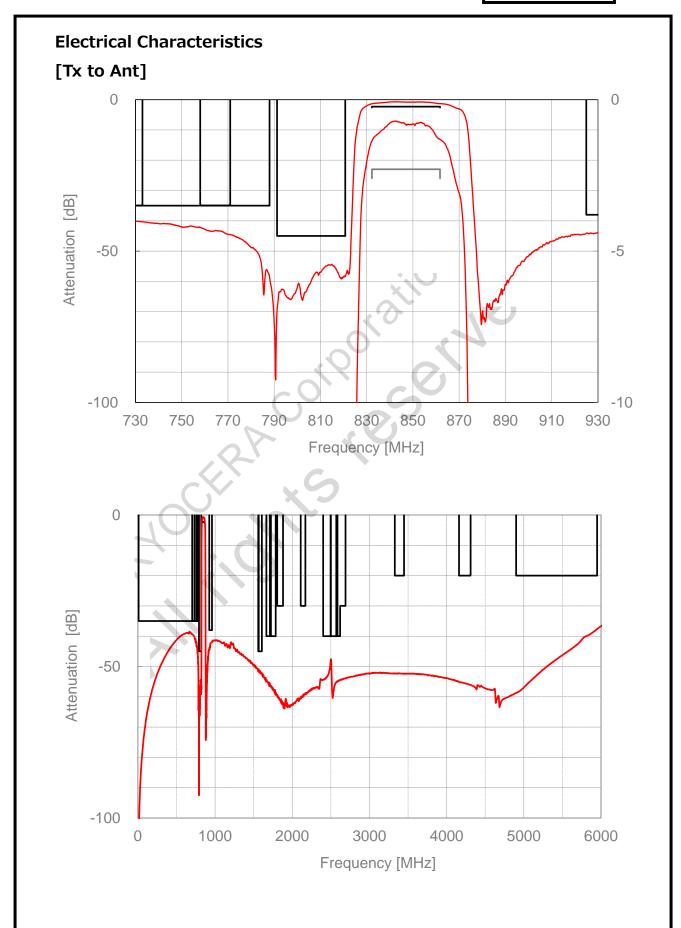
Lt: 3.6nH (Ideal) Lr: 3.6nH (Ideal)



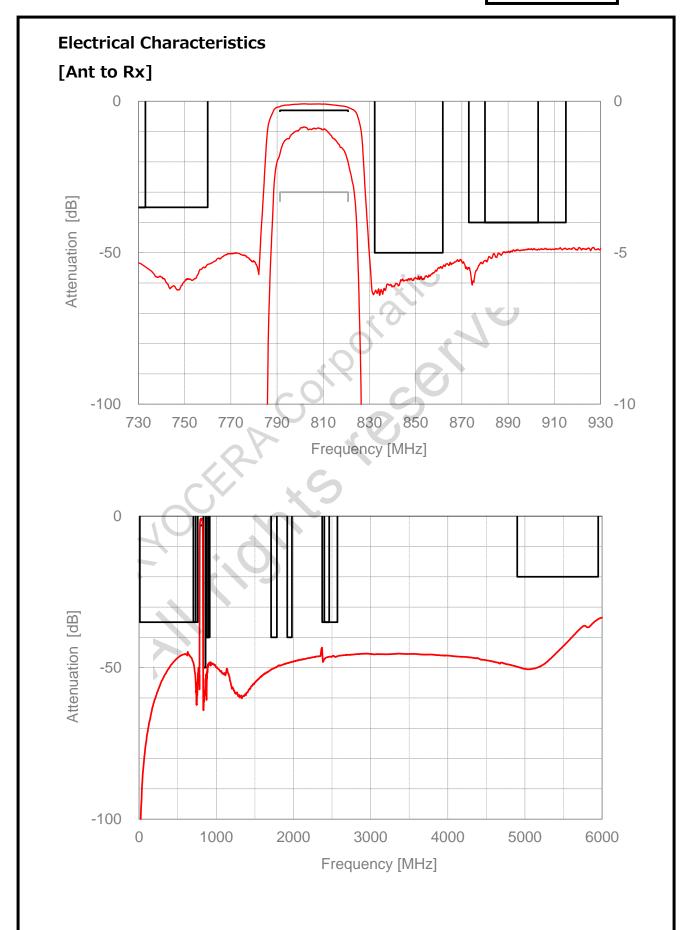
Electrical Characteristics

Items			Frequency Characteristics (MHz) Min. Typ. Max.		ics Max.	Unit	Notes		
T	T		022.25	061.75		Тур.		ID	1
Tx to Ant	Insertion Loss			- 861.75	-	1.4	2.3	dB	
	Ripple any20MHz		002.20	- 861.75 - 861.75	-	0.7	1.8 2.0	dB	
	VSWR	Tx		001170		1.5		***************************************	•
		Ant		- 861.75	-	1.4	2.0	ID	
	Attenuation		10	- 771	35	39	-	dB	
			703	- 733	35	39	-	dB	
			758	- 788	35	42	-	dB	
			, , , , , , , ,	- 820.75	45	54	-	dB	
			925	- 960	38	42	-	dB	
				- 1563	45	52	-	dB	
				- 1605.89	45	51	-	dB	
				- 1606	45	51	-	dB	
				- 1724	40	55		dB	
			1710	- 1785	40	56	\searrow	dB	
				- 1880	30	60	-	dB	
				- 2170	30	58	-	dB	
				- 2500	40	48	-	dB	
				- 2586	40	47	- 4	dB	
			2570	- 2620	40	54		dB	
			- 2690	30	53	-	dB		
			- 3448	20	52		dB		
			4160	- 4310	20	55	(//-)	dB	
			4900	- 5950	20	37		dB	
Ant to Rx Insertion Loss			- 820.75	-	1.9	3.0	dB		
	Ripple any20MHz		791.25	- 820.75	- /	1.1	2.4	dB	
	VSWR	Rx	791.25	- 820.75	- \	1.4	2.2		
		Ant	791.25	820.75	7	1.5	2.3		
	Attenuation		10	- 760	35	44	-	dB	
			703	- 733	35	48	-	dB	
10CX		832.25	- 861.75	50	54	-	dB		
		873	- 903	40	49	-	dB		
			880	- 915	40	48		dB	
		1710	- 1785	40	50		dB		
		1920	- 1980	40	48	-	dB		
		2373	- 2463	35	45	-	dB		
		2400	- 2500	35	46	-	dB		
				- 2570	35	46	-	dB	
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- 5950	20	34	_	dB	
Tx to Rx	Isolation			- 820.75	53	57	-	dB	
			832.25	- 861.75	54	58	-	dB	

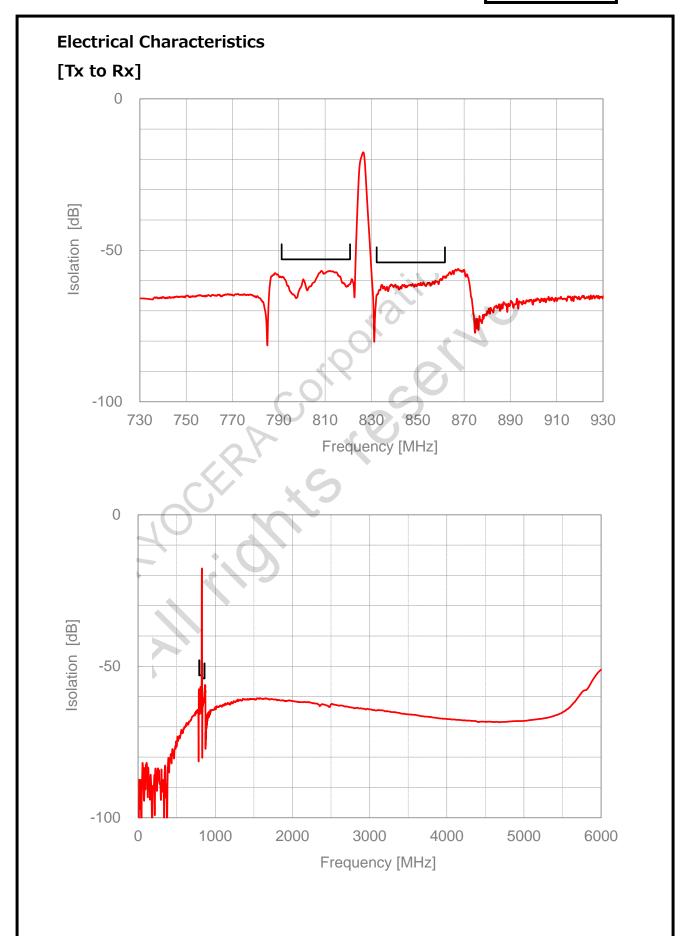




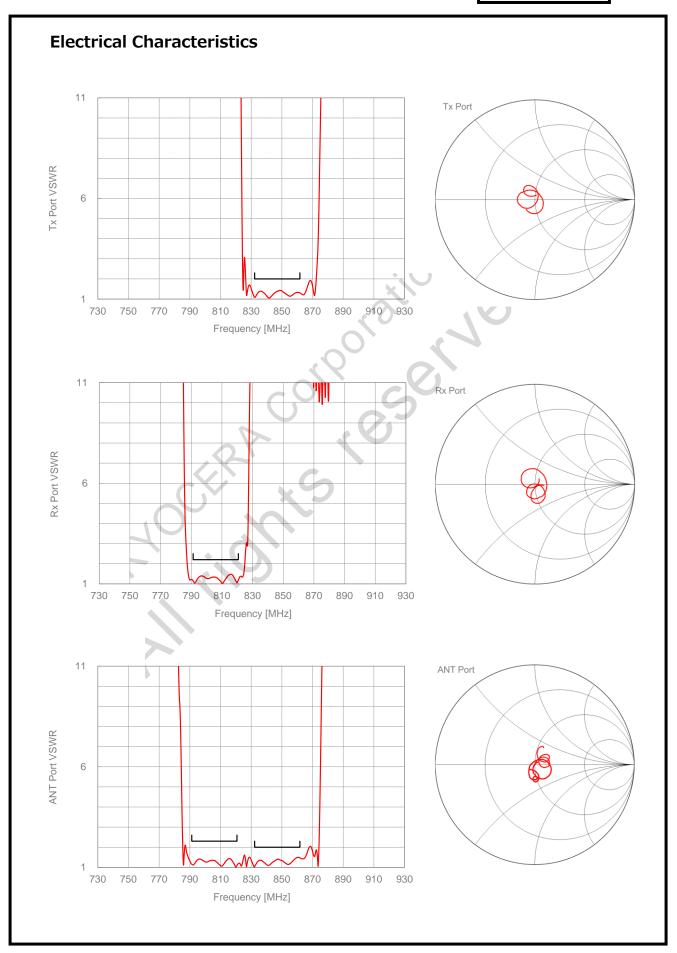








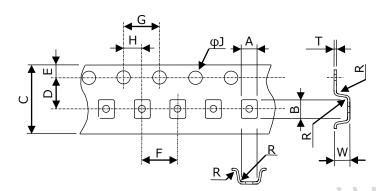






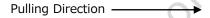
# Tape & Reel Specification

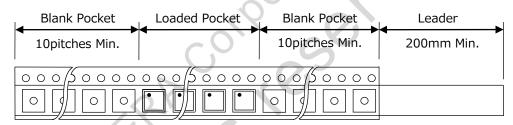
# [Tape]



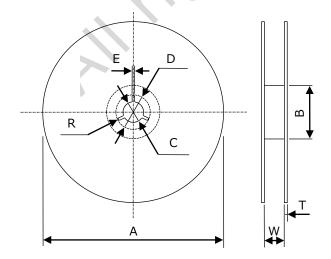
	Unit : mm
Part	Dimension
Α	1.37±0.10
В	1.80±0.10
С	8.0±0.2
D	3.50±0.05
Е	1.75±0.10
F	4.0±0.1
G	4.0±0.1
Н	2.00±0.05
φЈ	1.5+0.1/-0
R	0.2 Max
W	0.8±0.2
T	0.20±0.05

W: Dimension is depth of pockets.





# [Reel]



 $\begin{array}{c|ccc} & & & & & & & & & & \\ Part & & Dimension & & & \\ A & & 330 \pm 2 & & \\ B & & 100 \pm 2 & & \\ C & & 13.0 \pm 0.2 & & \\ D & & 21.0 \pm 0.8 & & \\ E & & 2.0 \pm 0.5 & & \\ R & & 1 & & \\ W & & 9.5 \pm 1.0 & & \\ T & & 2.0 \pm 0.2 & & \\ \end{array}$ 

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