

KYOCERA SAW Duplexer
- 1814 Band66 Unbalanced-Rx –
Type Name : SD18-1745R8UUB1

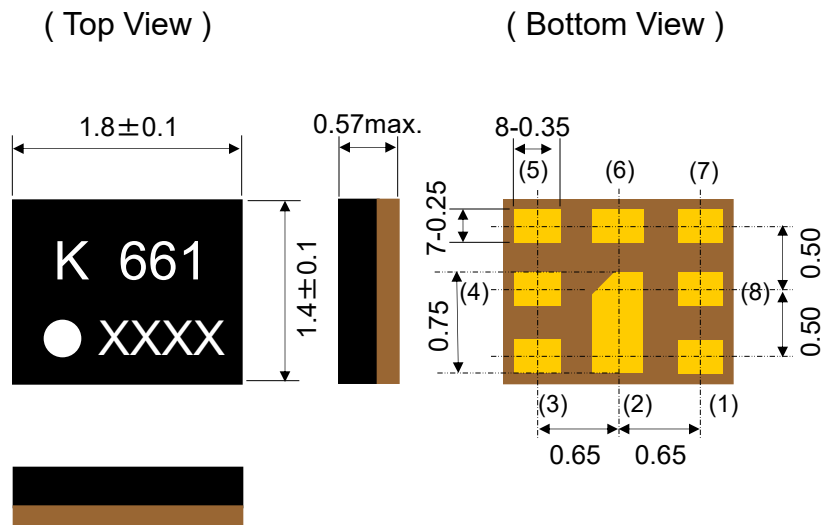
Nov., 17, 2023

KYOCERA Corporation

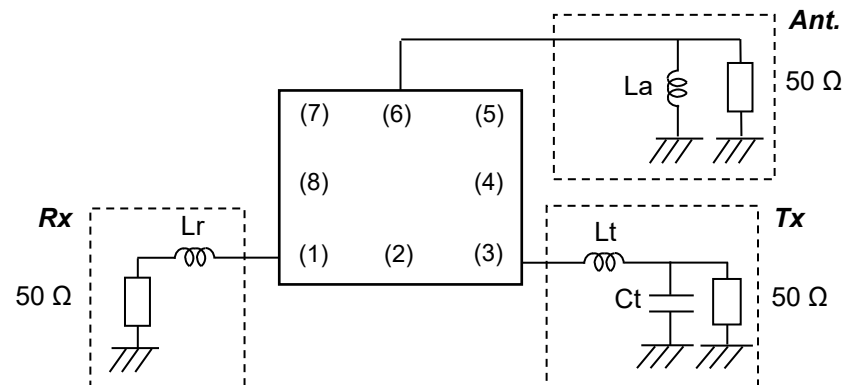
Corporate Electronic Devices Group

Electronic Devices Division

■ Dimensions



■ Test Circuit



- Unit : mm
- K : KYOCERA logo
- 661 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

Pin allocation

No.	Function
1	Rx
2	GND
3	Tx
4	GND
5	GND
6	Ant
7	GND
8	GND

- L_t : 3.9nH (Ideal)
- C_t : 0.4pF (Ideal)
- L_a : 3.6nH (Ideal)
- L_r : 1.5nH (Ideal)

- Port extension (Time) : 101ps
- Port extension (Loss) : 0.18dB

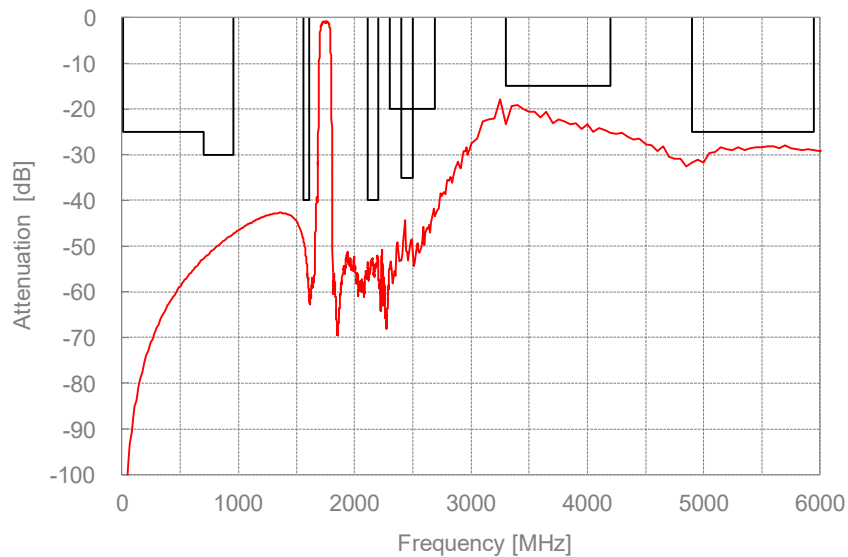
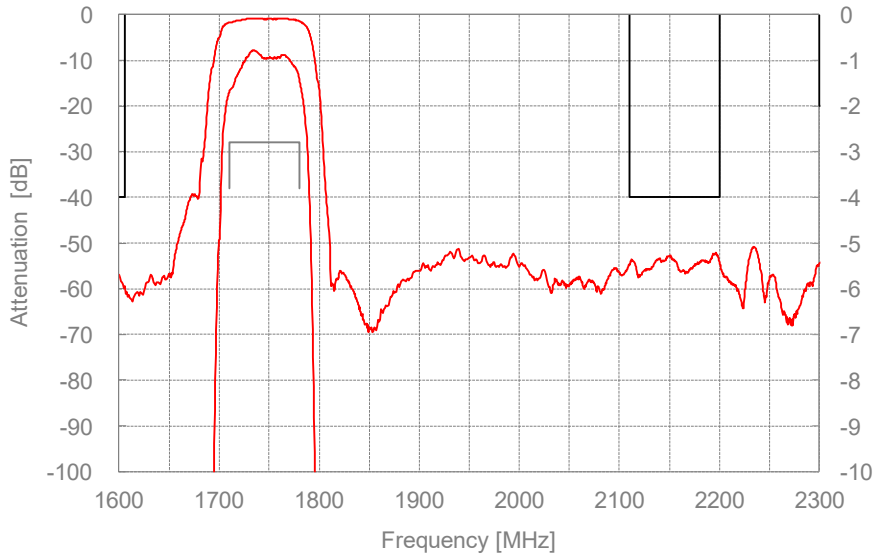
Items	Rating	Unit	Note
Operating Temperature Range	-20 to +85	deg.C	
Storage Temperature Range	-40 to +85	deg.C	
Max Input Power	+30.5	dBm	5,000hours, Ta=50deg.C, CW
Tx Port Nominal Impedance	50//Lt=3.9nH Ct=0.4pF	ohm	Unbalance
Ant. Port Nominal Impedance	50//La=3.6nH	ohm	Unbalance
Rx Port Nominal Impedance	50//Lr=1.5nH	ohm	Unbalance

Characteristic table

Items		Frequency Range [MHz]	Unit	SD18-1745R8UUB1 Rev3			Note	
				Min.	Typ.	Max.		
Band66 Tx to Ant	Insertion Loss	1710 - 1780	dB	-	1.7	2.8		
	Ripple@20MHz	1710 - 1780	dB	-	0.9	1.9		
	VSWR	Tx	1710 - 1780	-	-	1.5	2.0	
		Ant	1710 - 1780	-	-	1.6	2.0	
	Attenuation	10 - 699	dB	25	53	-		
		699 - 960	dB	30	47	-		
		1559 - 1606	dB	40	49	-		
		2110 - 2200	dB	40	52	-		
		2400 - 2500	dB	35	44	-		
		2300 - 2690	dB	20	42	-		
3300 - 4200		dB	15	19	-			
4900 - 5950	dB	25	28	-				
Band66 Ant to Rx	Insertion Loss	2110 - 2200	dB	-	1.8	2.9		
	Ripple@20MHz	2110 - 2200	dB	-	0.5	1.7		
	VSWR	Rx	2110 - 2200	-	-	1.6	2.0	
		Ant	2110 - 2200	-	-	1.7	2.1	
	Attenuation	10 - 699	dB	40	54	-		
		699 - 849	dB	40	51	-		
		1710 - 1780	dB	45	52	-		
		1850 - 1915	dB	39	44	-		
2305 - 2315		dB	30	39	-			
2400 - 2500		dB	30	34	-			
2300 - 2690		dB	30	34	-			
4900 - 5950	dB	10	16	-				
Band66 Tx to Rx	Isolation	1710 - 1780	dB	55	63	-		
		2110 - 2200	dB	50	55	-		
Operating Temperature Range			deg.C	-20 to +85				

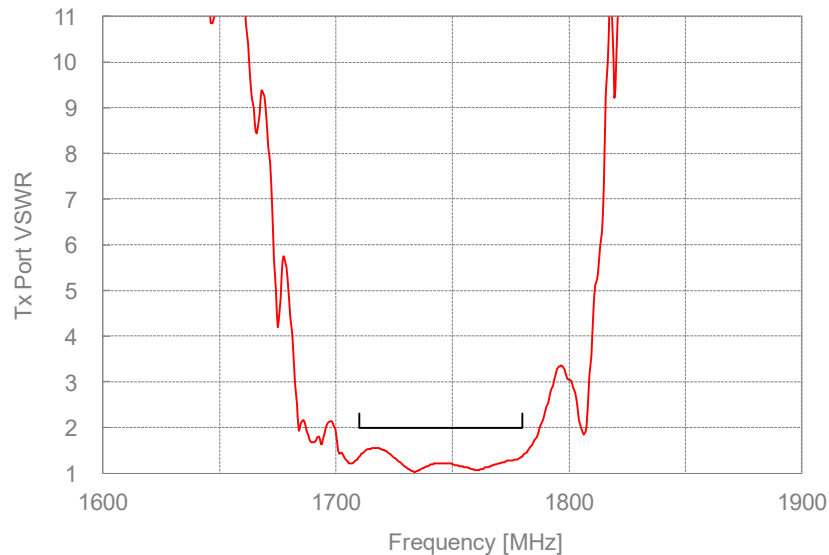
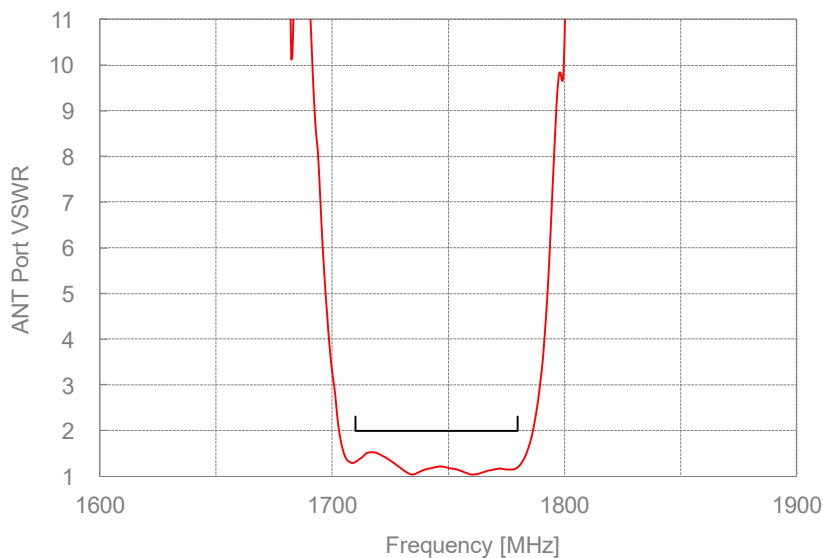
Typical Curve Data

[Tx to Ant]



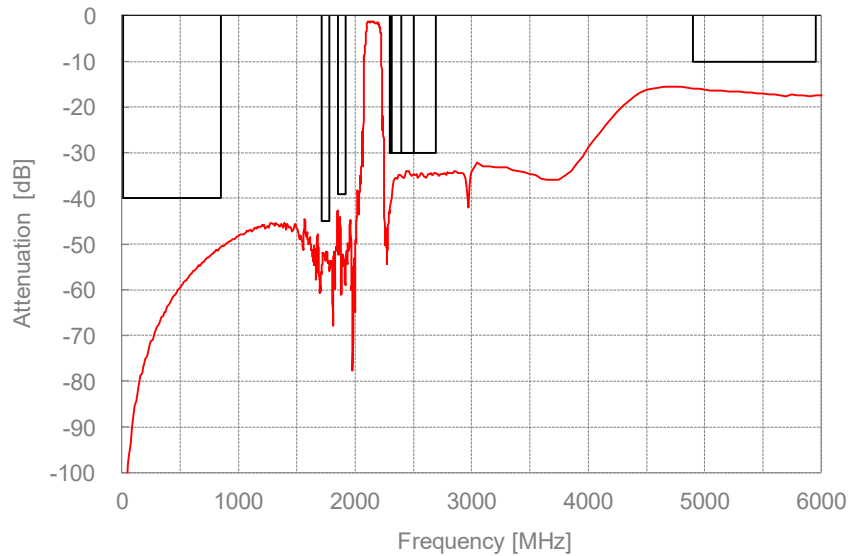
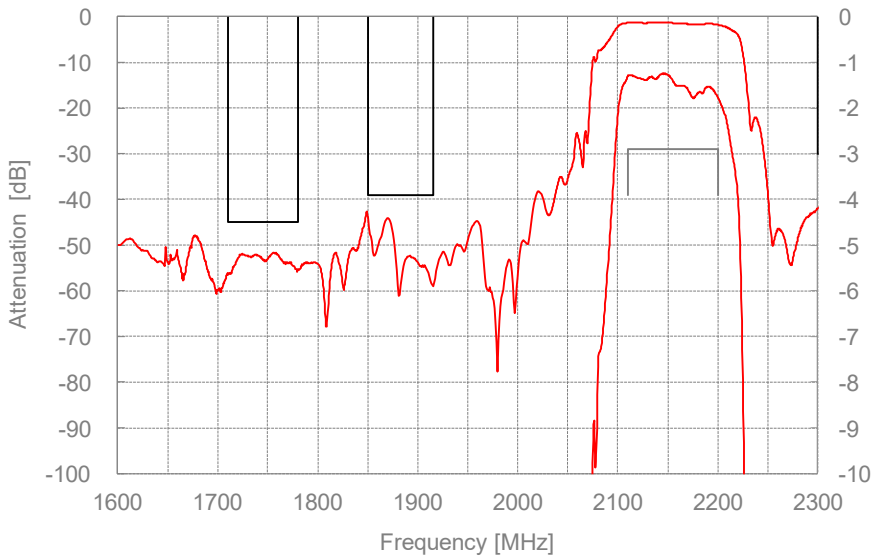
SD18-1745
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Spec.

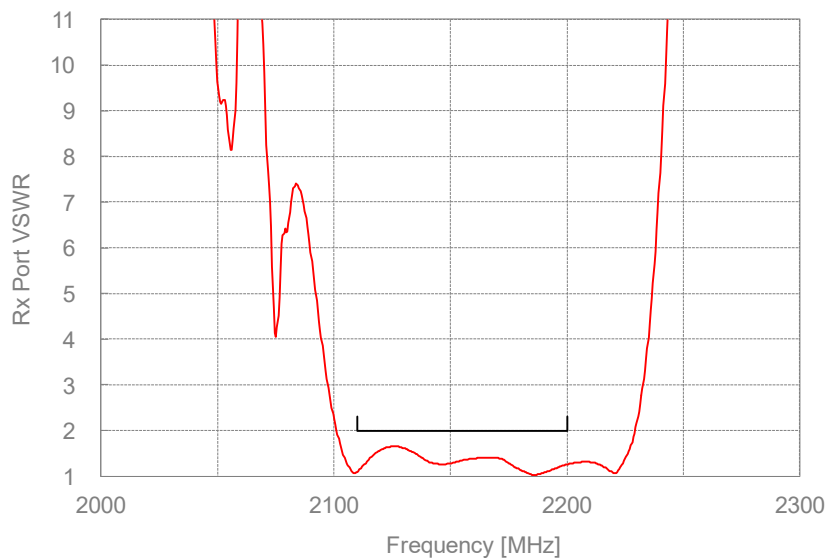
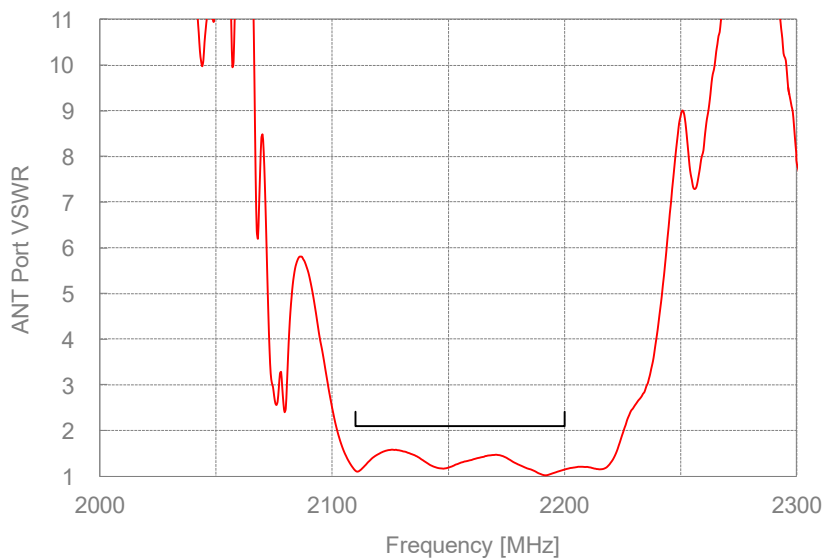


Typical Curve Data

[Ant to Rx]

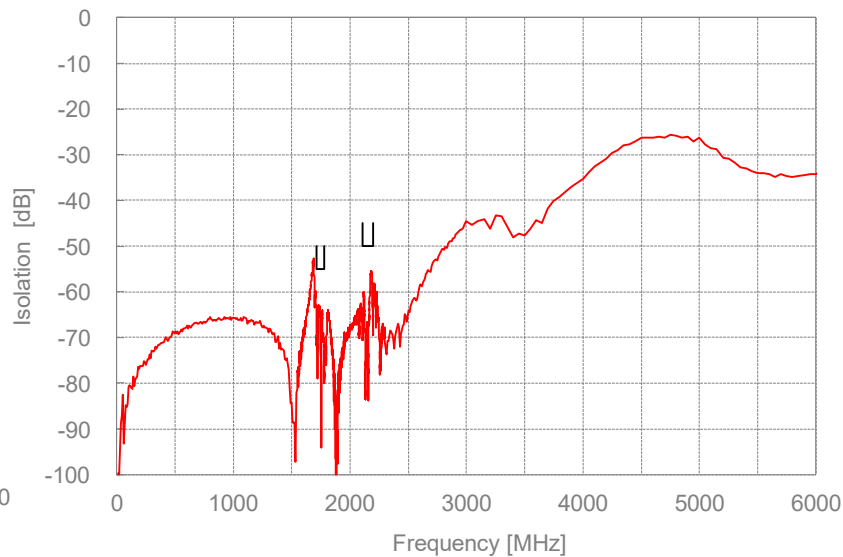
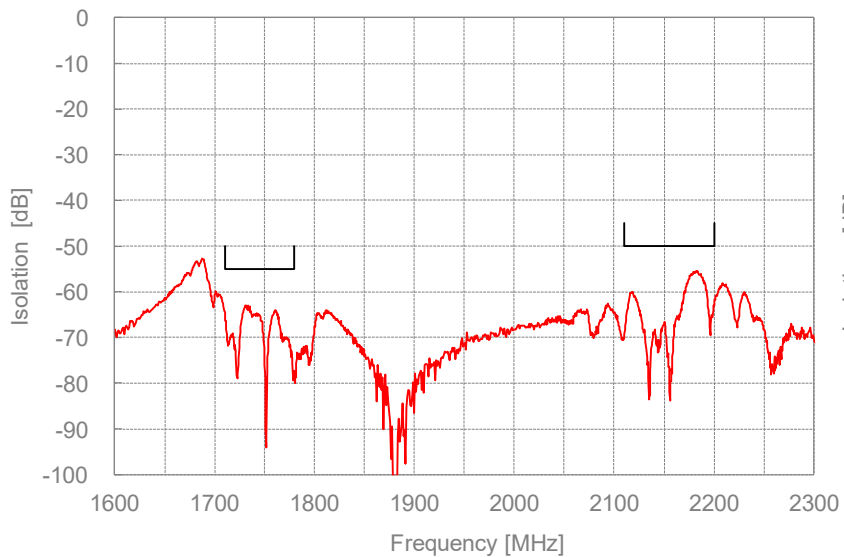


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Spec.



Typical Curve Data

[Tx to Rx]

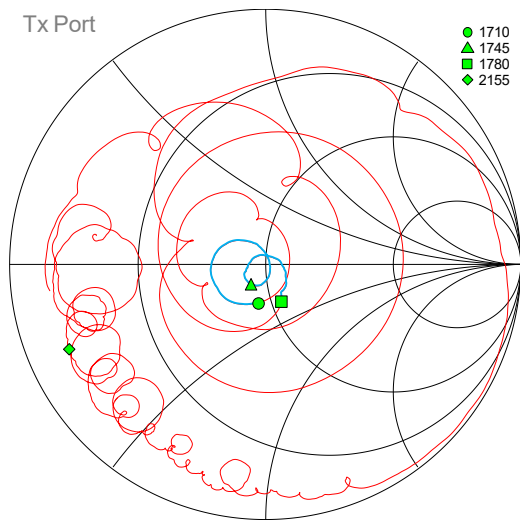


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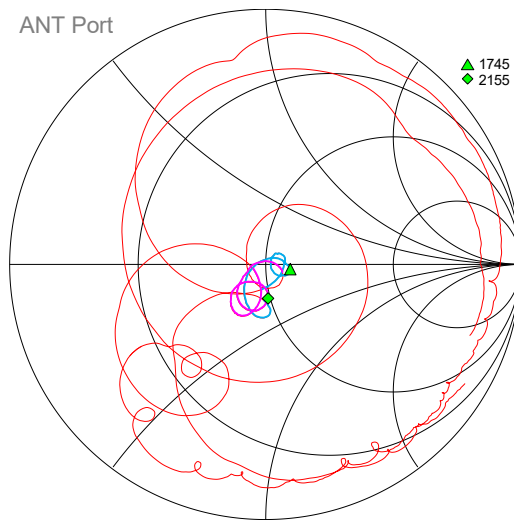
Spec.

[Port impedance]

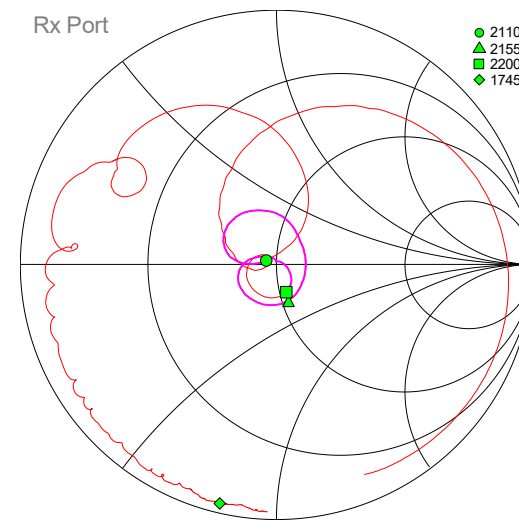
Tx Port



ANT Port



Rx Port



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