

# Datasheet of SAW Duplexer 1612 Band7 Unbalanced

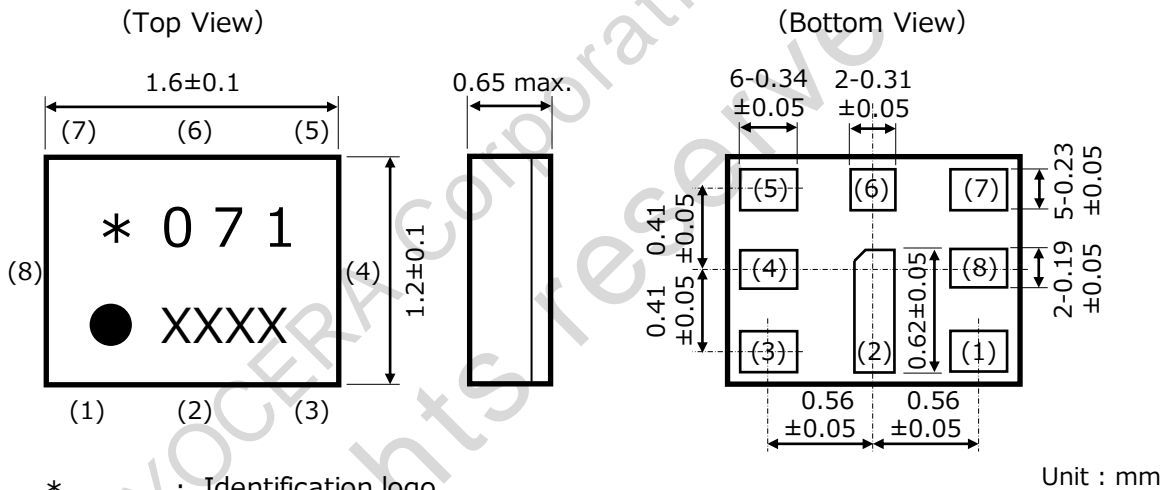
KYOCERA Part No. : SD16-2535R8UUA1

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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	
Max Input Power (Tx port)	+30	dBm	5,000hours, Ta=50deg.C, CW
	+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//6.2nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//2.6nH	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

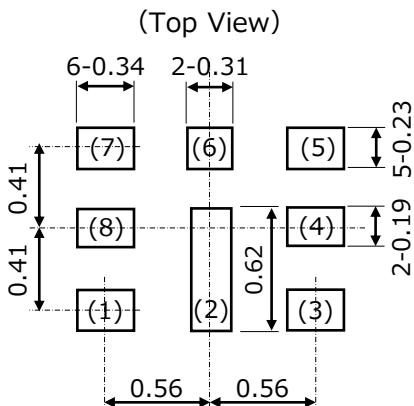
### Dimensions



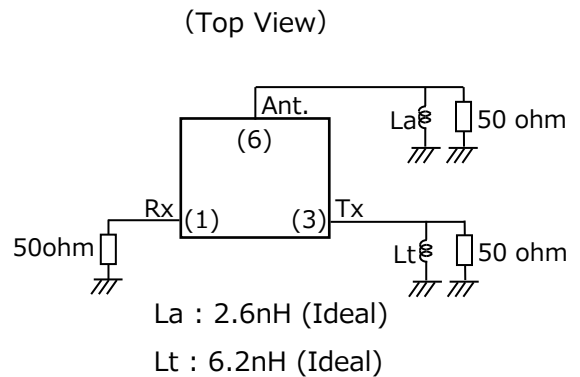
- \* : Identification logo
- 071 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

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

### Recommendable Land Pattern



### Measurement Circuit



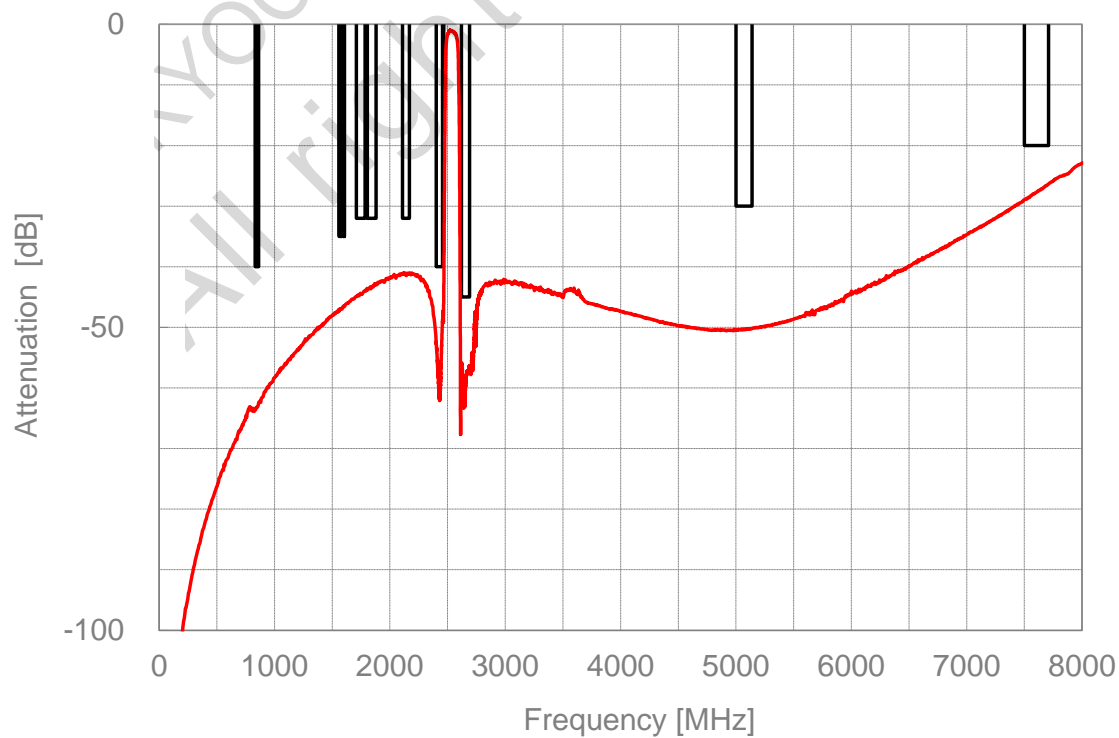
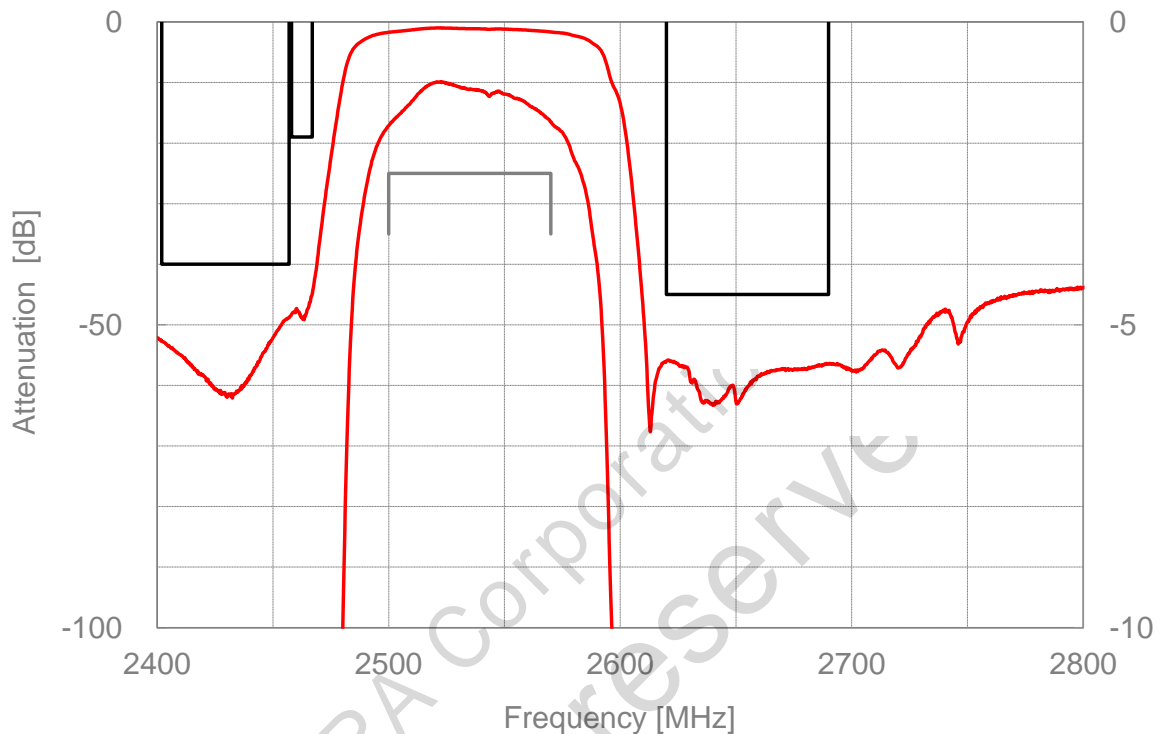
## Electrical Characteristics

Items		Frequency (MHz)	Characteristics			Unit	Notes	
			Min.	Typ.	Max.			
Tx to Ant	Insertion Loss	2500 - 2570	-	1.7	2.5	dB		
	Ripple	2500 - 2570	-	0.7	2.0	dB		
	VSWR	Tx	2500 - 2570	-	1.5	2.2		
		Ant	2500 - 2570	-	1.4	2.2		
	Attenuation	832 - 862	40	63	-	dB	B20 Tx CA	
		1559 - 1563	35	47	-	dB	Compass	
		1565.42 - 1573.37	35	47	-	dB	Wideband GPS Lower	
		1573.37 - 1577.47	35	47	-	dB	GPS main	
		1577.47 - 1585.42	35	47	-	dB	Wideband GPS Upper	
		1597.55 - 1605.89	35	46	-	dB	GLONASS	
		1710 - 1785	32	44	-	dB	B3 Tx CA	
		1805 - 1880	32	43	-	dB	B3 Rx	
		2110 - 2170	32	41	-	dB	B1 Rx	
		2403 - 2466	33	49	-	dBint <sup>*1)</sup>	WLAN CH1-10	
		2453 - 2471	18	43	-	dBint <sup>*1)</sup>	WLAN CH11	
		2458 - 2476	9	31	-	dBint <sup>*1)</sup>	WLAN CH12	
		2463 - 2481	6	19	-	dBint <sup>*1)</sup>	WLAN CH13	
		2403 - 2466	34	49	-	dBint <sup>*1)</sup>	WLAN CH1-10, +23 to 27deg.C	
		2453 - 2471	32	44	-	dBint <sup>*1)</sup>	WLAN CH11, +23 to 27deg.C	
		2458 - 2476	24	31	-	dBint <sup>*1)</sup>	WLAN CH12, +23 to 27deg.C	
2463 - 2481		13	19	-	dBint <sup>*1)</sup>	WLAN CH13, +23 to 27deg.C		
2402 - 2442	40	53	-	dB	ISM			
2442 - 2457	40	49	-	dB	ISM			
2458 - 2467	19	45	-	dB	ISM			
2620 - 2690	45	56	-	dB	Rx			
5000 - 5140	30	50	-	dB	2f			
7500 - 7710	20	26	-	dB	3f			
Ant to Rx	Insertion Loss	2620 - 2690	-	1.8	2.6	dB		
	Ripple	2620 - 2690	-	0.7	2.0	dB		
	VSWR	Rx	2620 - 2690	-	1.4	2.2		
		Ant	2620 - 2690	-	1.5	2.2		
	Attenuation	718 - 748	40	62	-	dB	B28 Tx CA	
		814 - 862	40	60	-	dB	B26/B20 Tx CA	
		880 - 915	40	59	-	dB	B8 Tx CA	
		1710 - 1785	40	47	-	dB	B3 Tx CA	
		1920 - 1980	40	46	-	dB	B1 Tx CA	
		2402 - 2470	41	51	-	dB	WLAN coexistence	
2500 - 2570		45	53	-	dB	Tx		
2775 - 6000		35	48	-	dB			
4900 - 5950	40	62	-	dB	ISM 5G			
Tx to Rx	Isolation	2500 - 2570	51	55	-	dB		
		2620 - 2690	54	57	-	dB		

\*1) dBint : Integrated any 18MHz

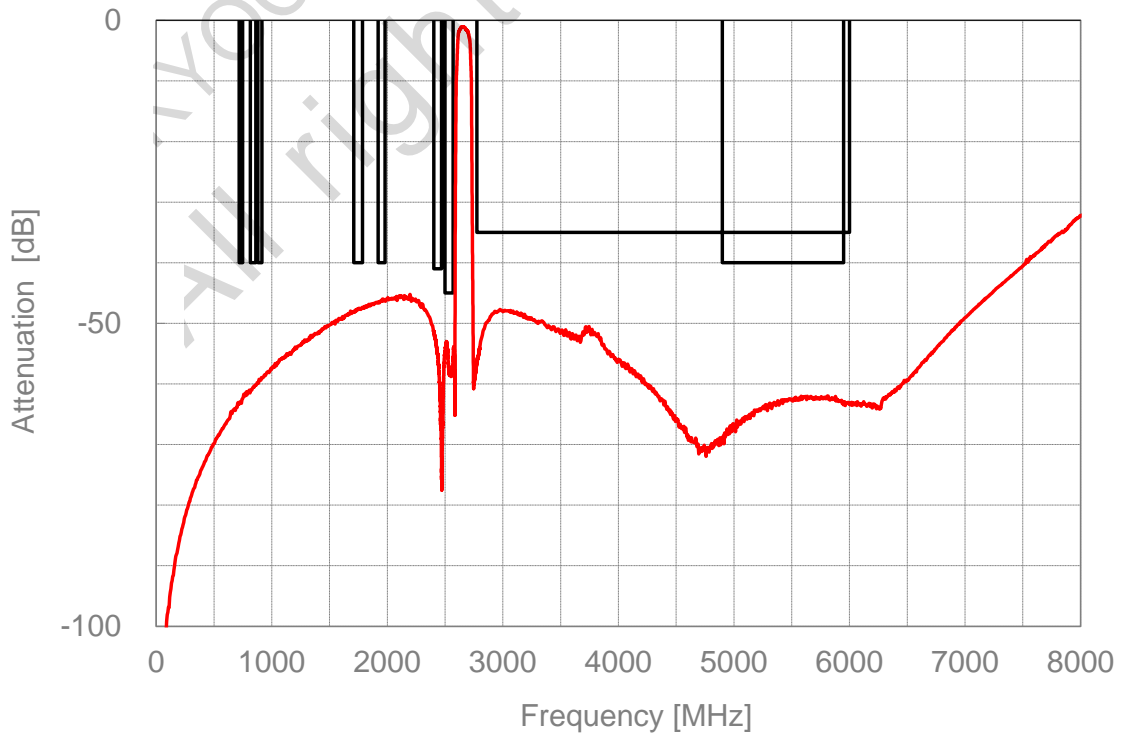
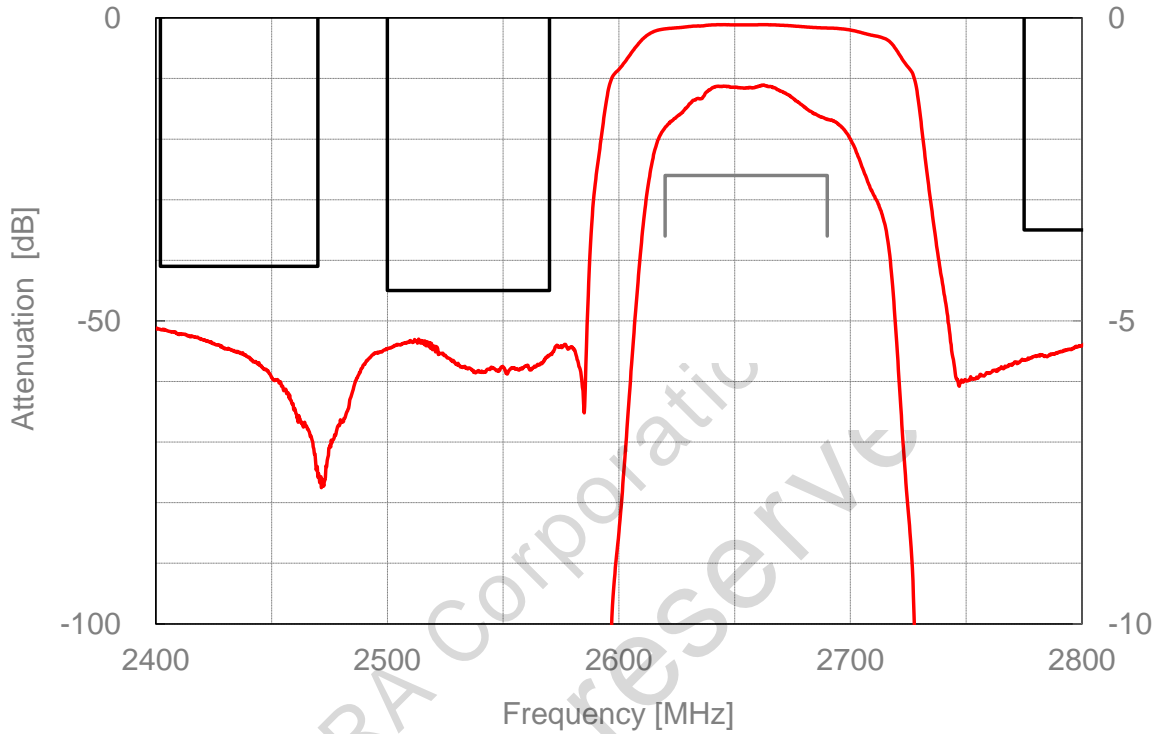
### Electrical Characteristics

[Tx to Ant]



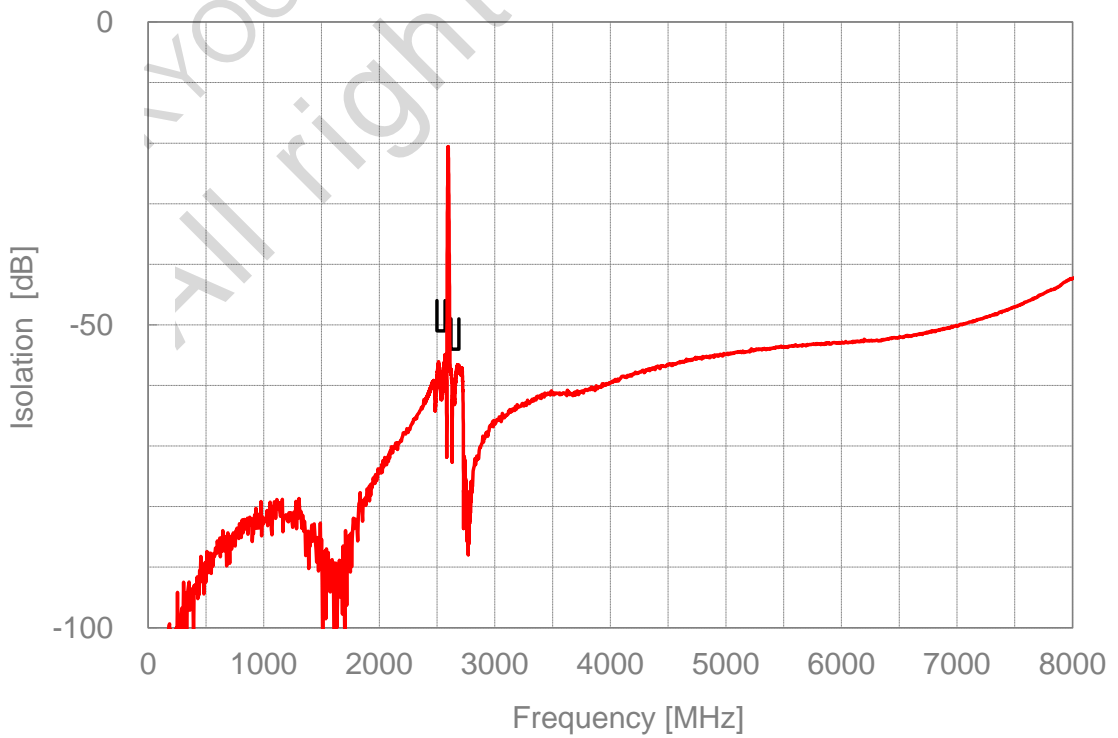
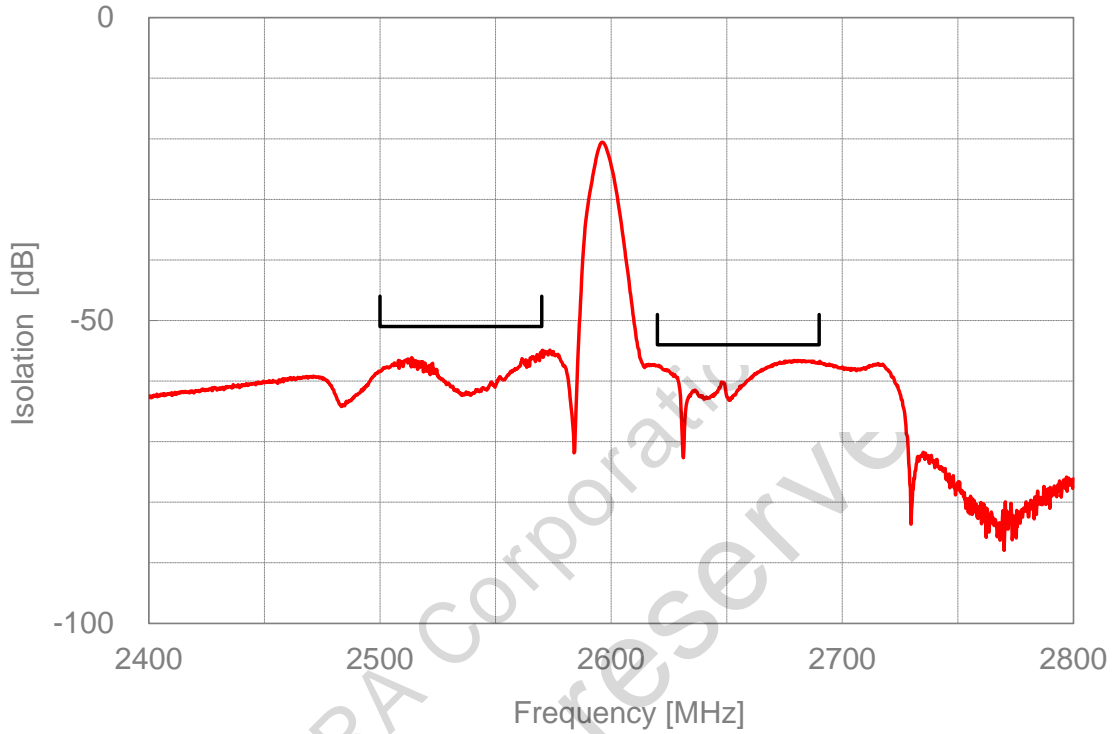
### Electrical Characteristics

[Ant to Rx]

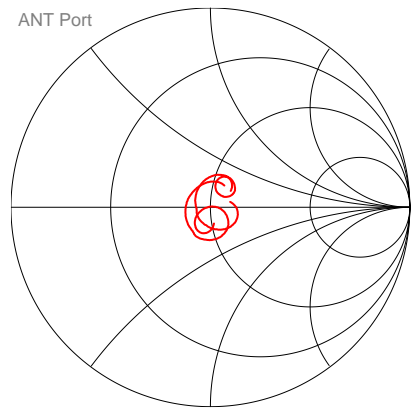
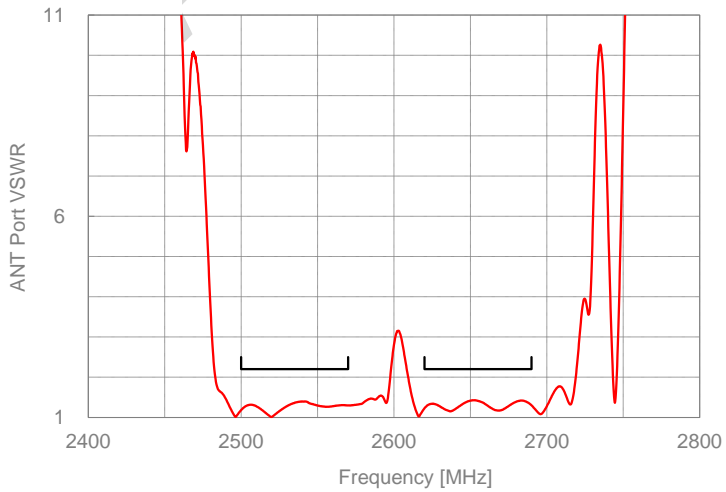
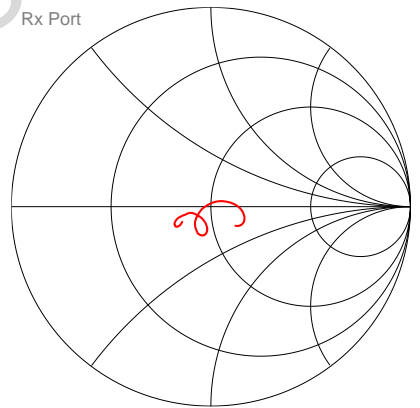
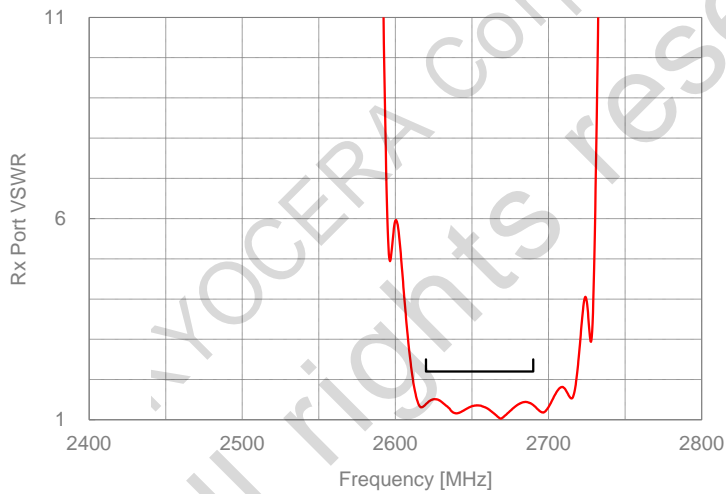
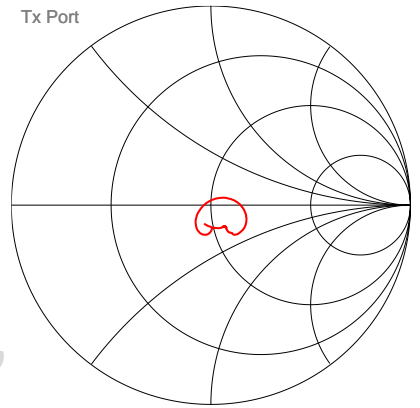
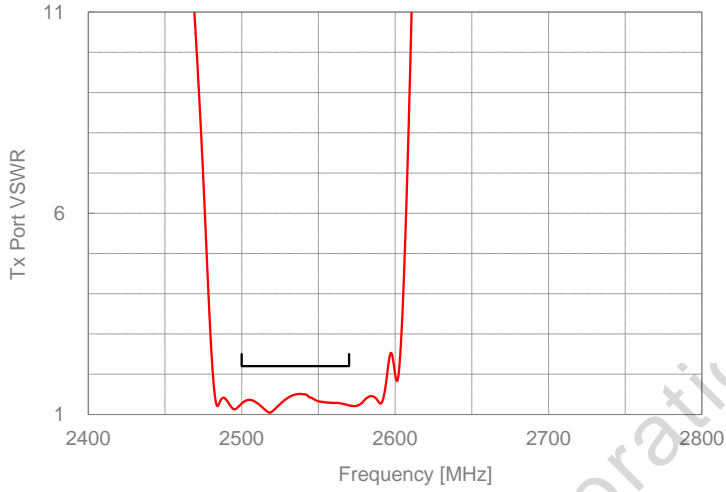


**Electrical Characteristics**

[Tx to Rx]

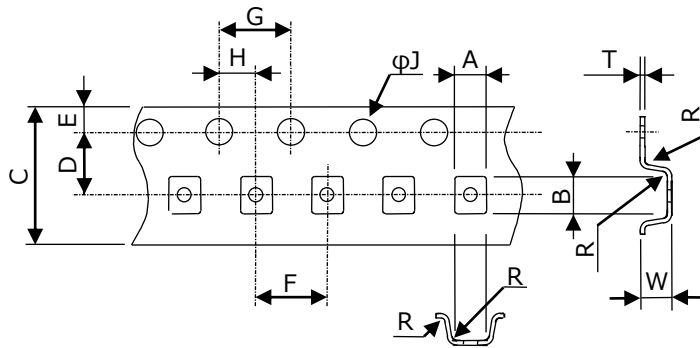


### Electrical Characteristics



### Tape & Reel Specification

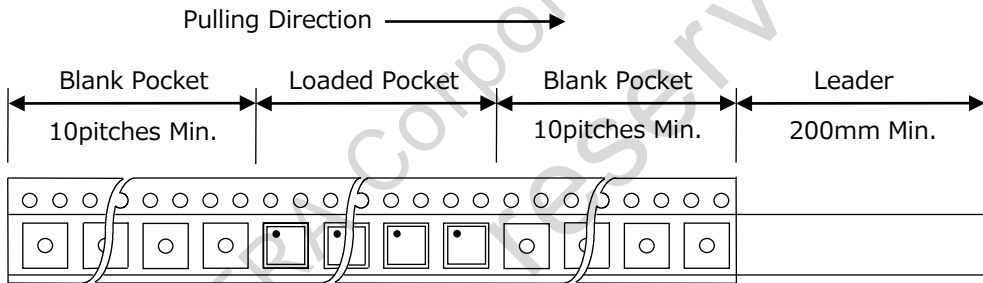
#### [Tape]



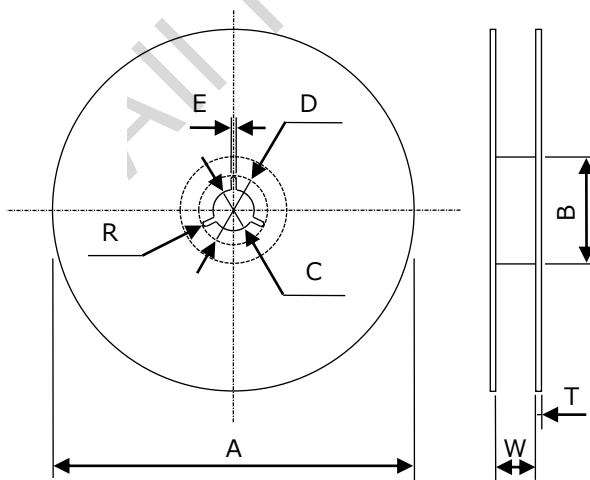
Unit : mm

Part	Dimension
A	1.37±0.10
B	1.80±0.10
C	8.0±0.2
D	3.50±0.05
E	1.75±0.10
F	4.0±0.1
G	4.0±0.1
H	2.00±0.05
φJ	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]



Unit : mm

Part	Dimension
A	330 ± 2
B	100 ± 2
C	13.0 ± 0.2
D	21.0 ± 0.8
E	2.0 ± 0.5
R	1
W	9.5 ± 1.0
T	2.0 ± 0.2



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