Rev.00

RoHS Compliant

Datasheet of SAW Duplexer

1814 Band7 Unbalanced

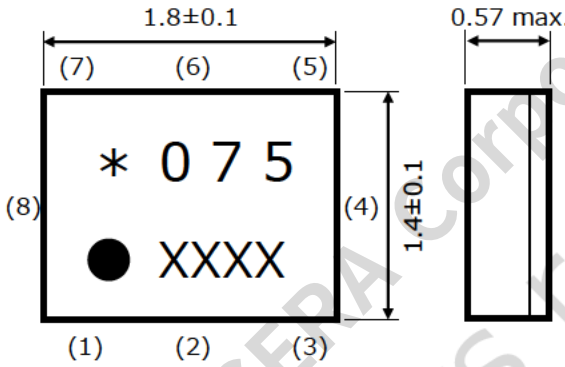
KYOCERA Part No. : SD18 2535R8UUB1

Rating

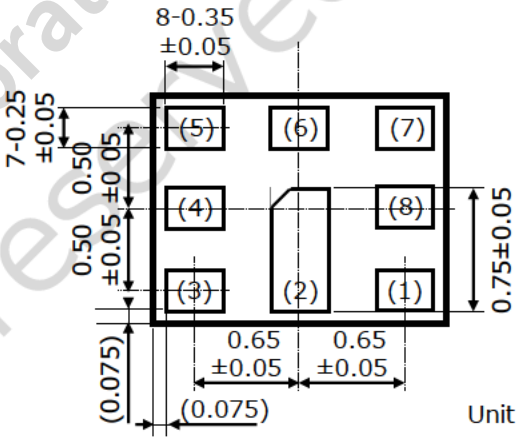
Items	Rating	Unit	Note
Operating Temperature Range	-20 to +85	deg.C	
Storage Temperature Range	-40 to +90	deg.C	
Max Input Power (Tx port)	+29.5	dBm	5,000hours, Ta=50deg.C, CW
Tx Port Nominal Impedance	50//15nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//2.4nH	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

Dimensions

(Top View)



(Bottom View)



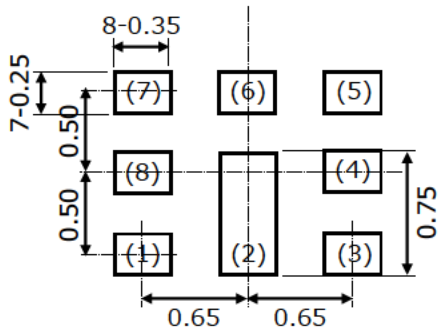
Unit : mm

* : Identification logo
075 : Identification no.
● : Index mark of pin 1
XXXX : Production code

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

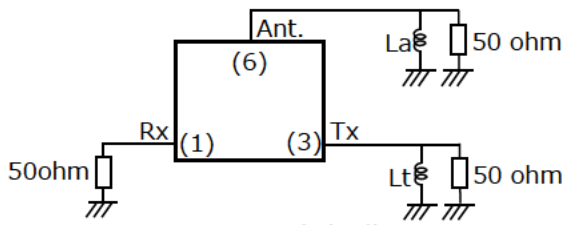
Recommendable Land Pattern

(Top View)



Measurement Circuit

(Top View)



La : 2.4nH (Ideal)

Lt : 15nH (Ideal)

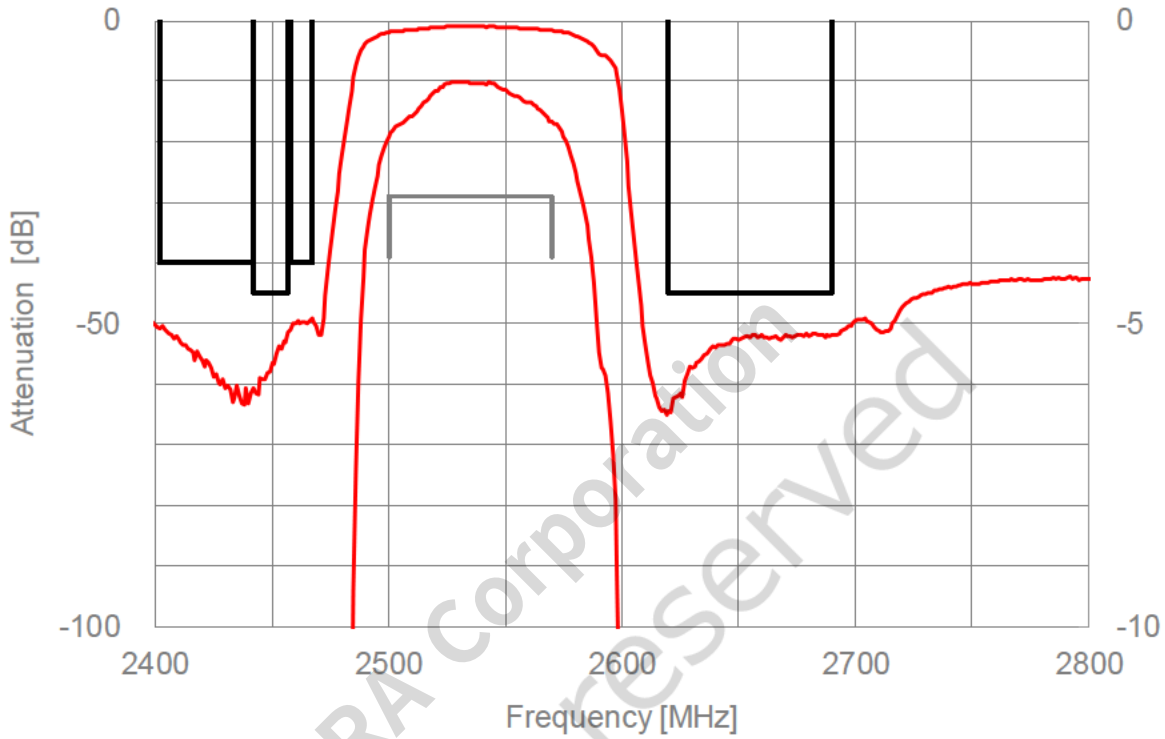
Electrical Characteristics

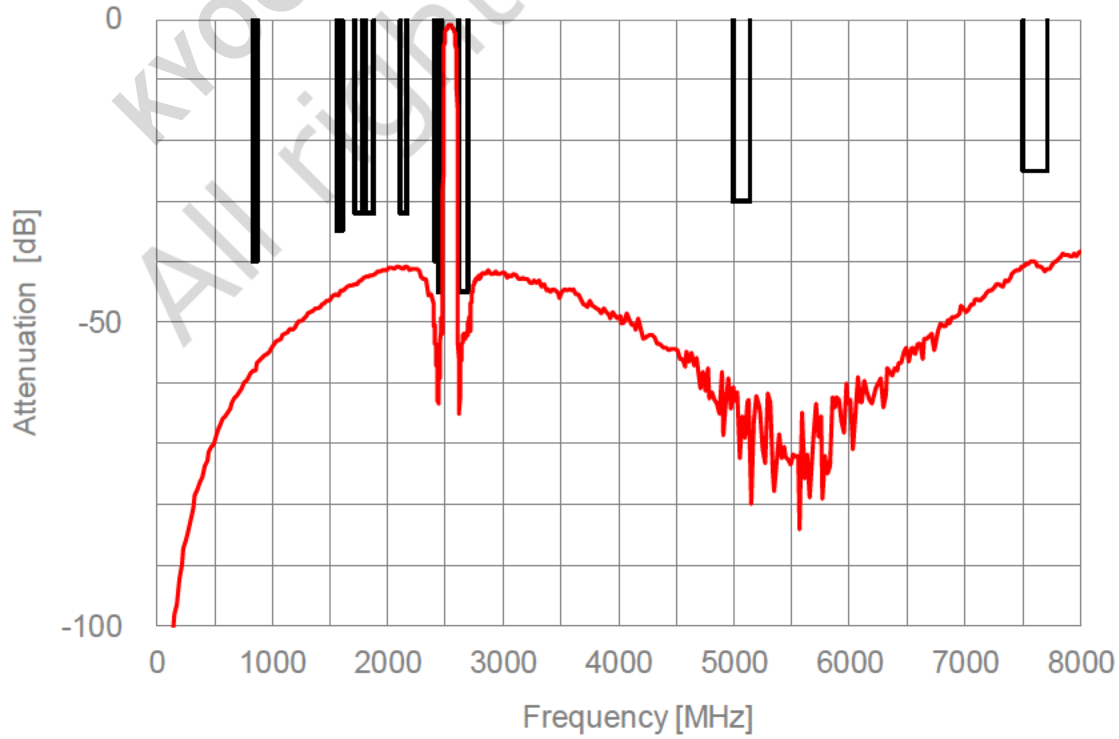
Items			Frequency (MHz)	Characteristics			Unit	Notes
				Min.	Typ.	Max.		
Tx to Ant	Insertion Loss		2500 - 2570	-	1.9	2.9	dB	
	Ripple		2500 - 2570	-	0.9	2.0	dB	
	VSWR	Tx	2500 - 2570	-	1.6	2.0		
		Ant	2500 - 2570	-	1.5	2.0		
	Attenuation		832 - 862	40	57	-	dB	B20 Tx CA
			1559 - 1563	35	45	-	dB	Compass
			1565.42 - 1573.37	35	45	-	dB	Wideband GPS Lower
			1573.37 - 1577.47	35	45	-	dB	GPS main
			1577.47 - 1585.42	35	45	-	dB	Wideband GPS Upper
			1597.55 - 1605.89	35	45	-	dB	GLONASS
			1710 - 1785	32	43	-	dB	B3 Tx CA
			1805 - 1880	32	42	-	dB	B3 Rx
			2110 - 2170	32	41	-	dB	B1 Rx
			2403 - 2466	45	51	-	dBint*1)	W AN CH -10
			2453 - 2471	35	50	-	dBint*1	WLAN CH11
			2458 - 2476	21	43	-	dBint 1)	WLAN CH12
			2463 - 2481	11	29	-	dBi t*1)	WLAN CH13
			2403 - 2466	48	51	-	dBint*1)	WLAN CH1-10, +23 to 27deg.C
			2453 - 2471	47	50	-	dBint*1)	WLAN CH11, +23 to 27deg.C
			2458 - 2476	35	43	-	dBint*1)	WLAN CH12, +23 to 27deg.C
			2463 - 2481	21	29	-	dBint*1)	WLAN CH13, +23 to 27deg.C
			2402 - 2442	40	50	-	dB	ISM
			2442 - 2457	45	51	-	dB	ISM
			2458 - 2467	40	49	-	dB	ISM
			2620 - 2690	45	52	-	dB	Rx
			5000 - 5140	30	62	-	dB	2f
			7500 - 7710	25	40	-	dB	3f
Ant to Rx	Insertion Loss		2620 - 2690	-	1.9	2.9	dB	
	Ripple		2620 - 2690	-	0.7	1.5	dB	
	VSWR	Rx	2620 - 2690	-	1.7	2.0		
		Ant	2620 - 2690	-	1.6	2.0		
	Attenuation		718 - 748	40	62	-	dB	B28 Tx CA
			814 - 862	40	59	-	dB	B26/B20 Tx CA
			880 - 915	40	58	-	dB	B8 Tx CA
			1710 - 1785	40	46	-	dB	B3 Tx CA
			1920 - 1980	40	44	-	dB	B1 Tx CA
			2402 - 2470	41	46	-	dB	WLAN coexistence
			2500 - 2570	45	56	-	dB	Tx
			2775 - 6000	35	44	-	dB	
			4900 - 5950	40	57	-	dB	ISM 5G
Tx to Rx	Isolation		2500 - 2570	53	56	-	dB	
			2620 - 2690	50	54	-	dB	

*1) dBint : Integrated any 18MHz

Electrical Characteristics

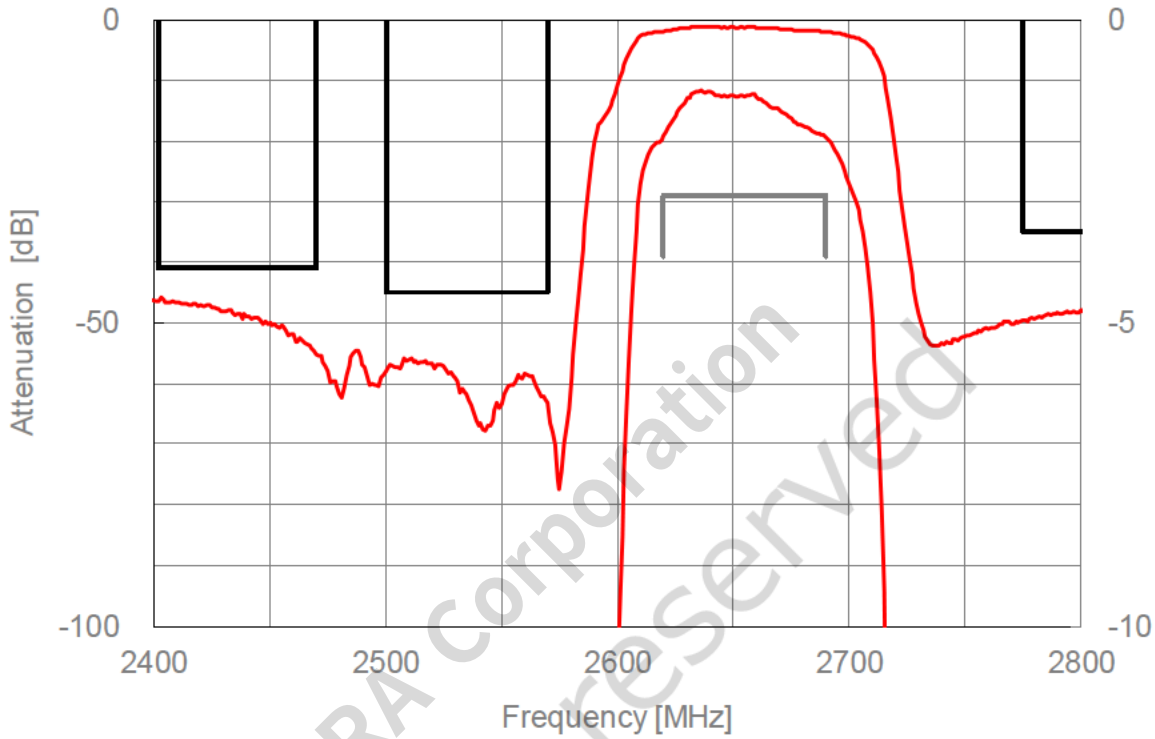
[Tx to Ant]

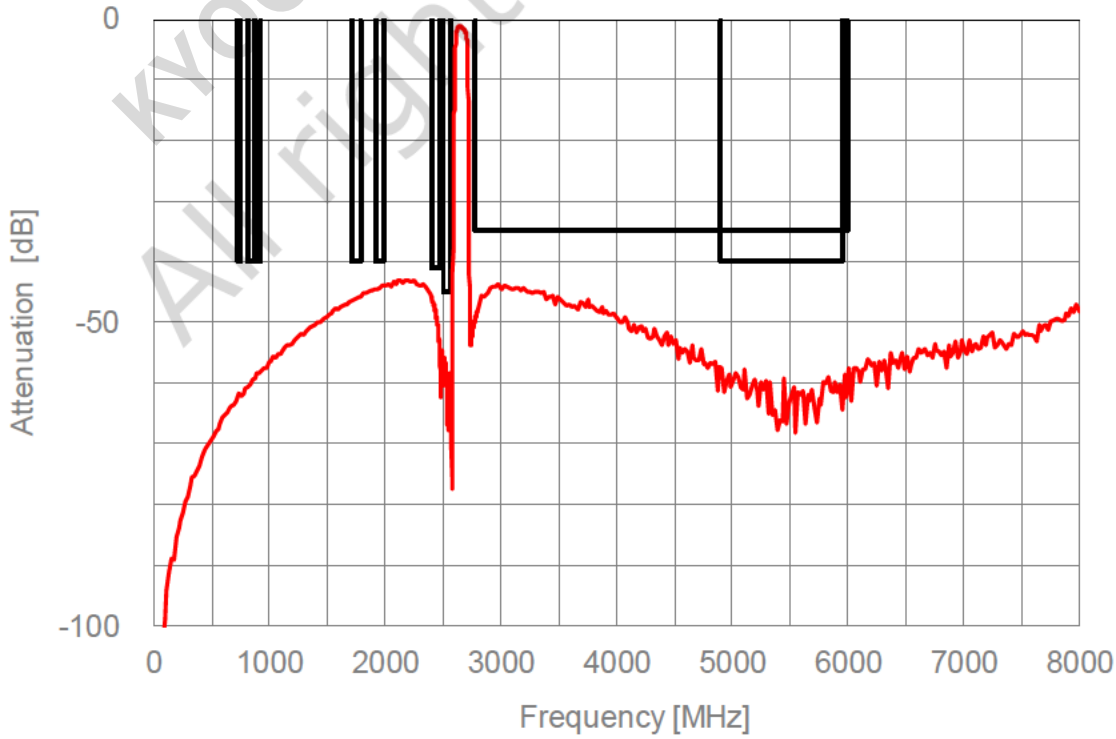




Electrical Characteristics

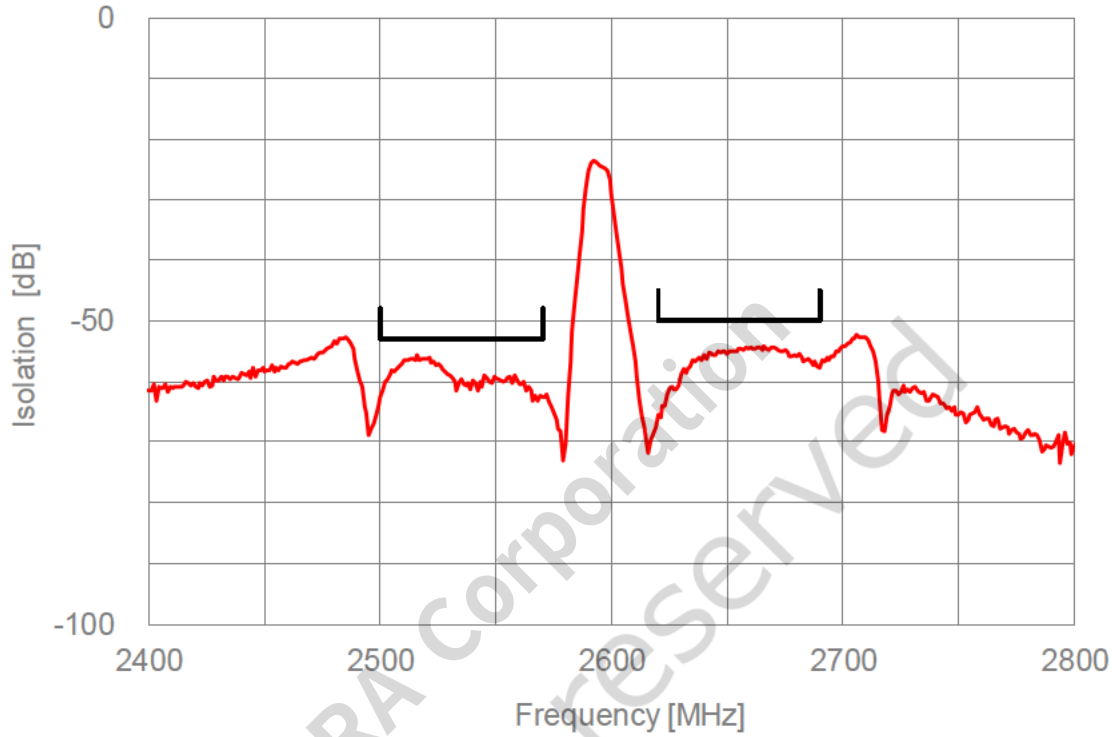
[Ant to Rx]

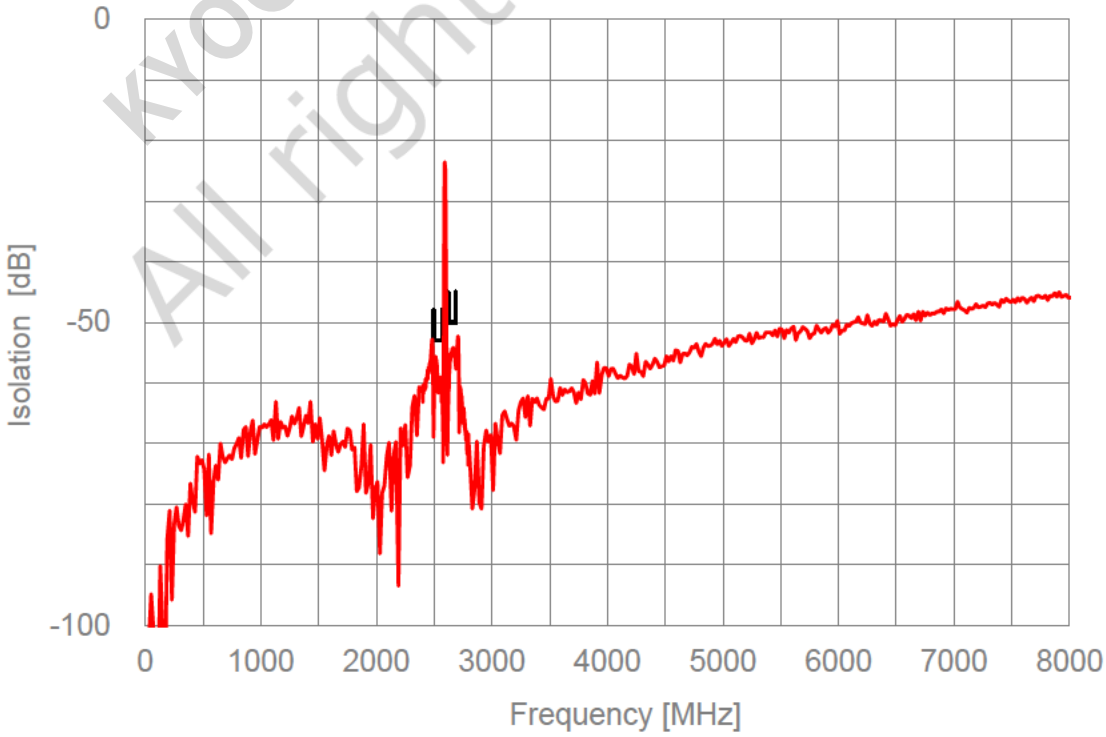




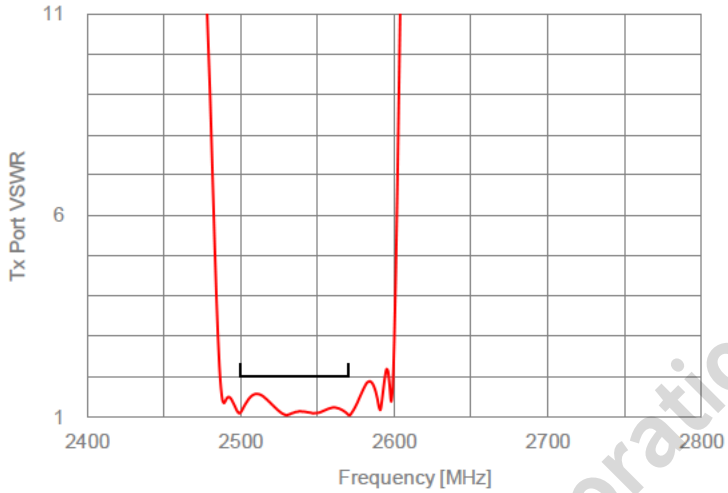
Electrical Characteristics

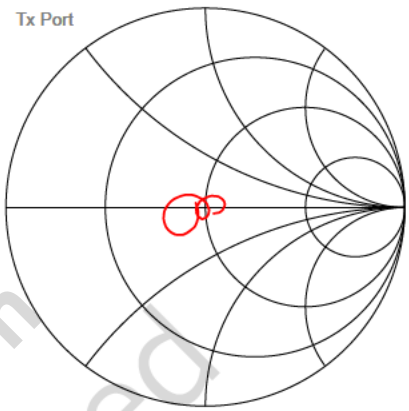
[Tx to Rx]

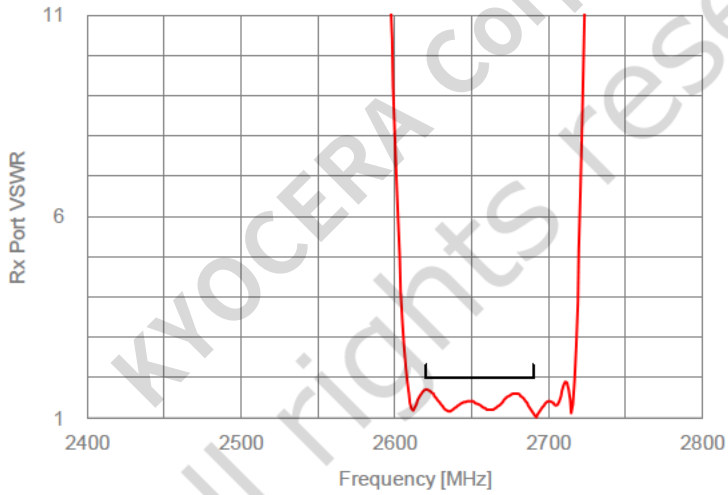


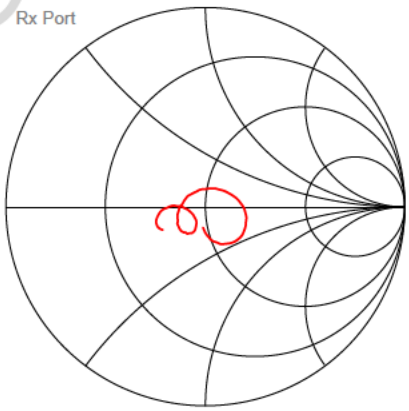


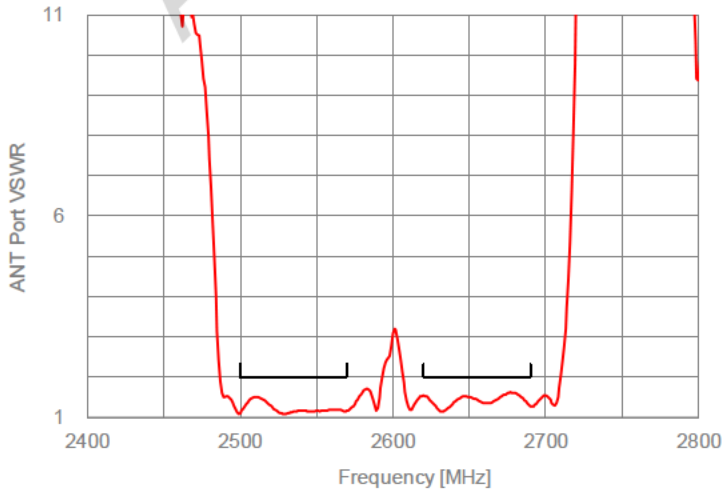
Electrical Characteristics

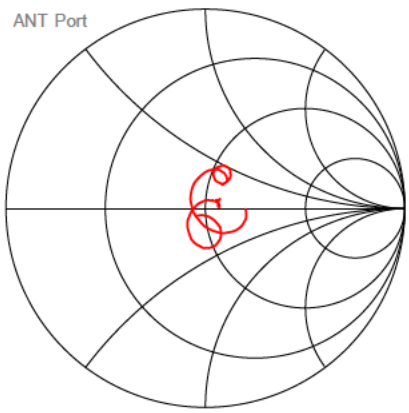






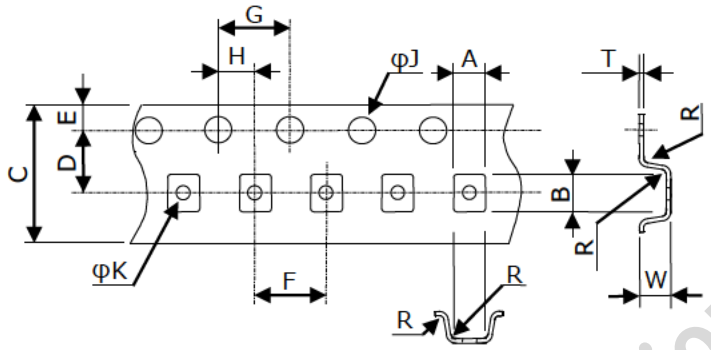






Tape & Reel Specification

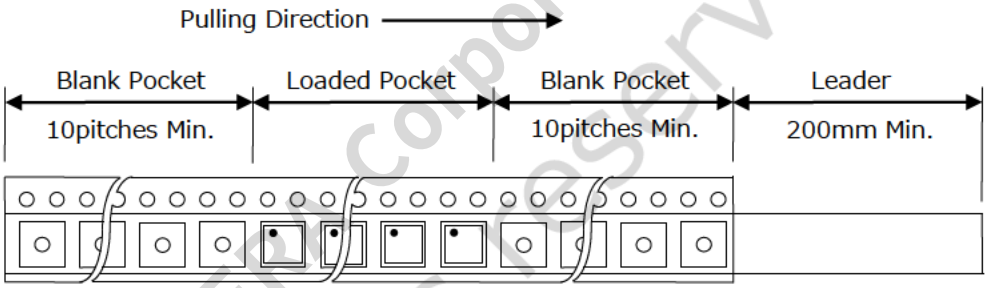
[Tape]



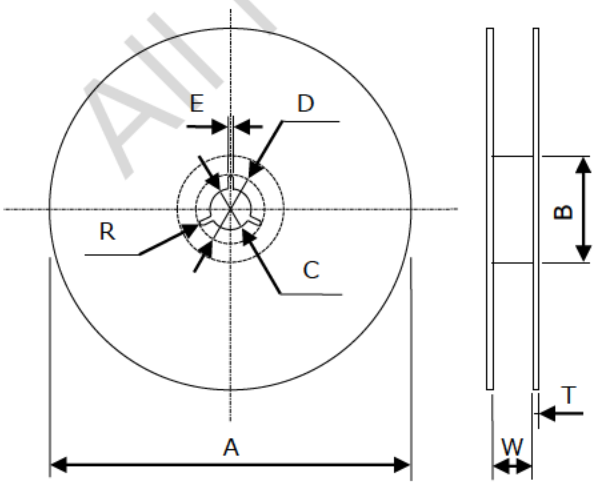
Unit : mm

Part	Dimension
A	1.7±0.1
B	2.05±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
φK	0.80±0.05
R	0.2 Max
W	0.7±0.1
T	0.20±0.05

W : Dimension is depth of pockets.



[Reel]



Unit : mm

Part	Dimension
A	178 ± 2
B	60 ± 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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