Rev.00

RoHS Compliant

Datasheet of SAW Duplexer

1814 Band8 Unbalanced

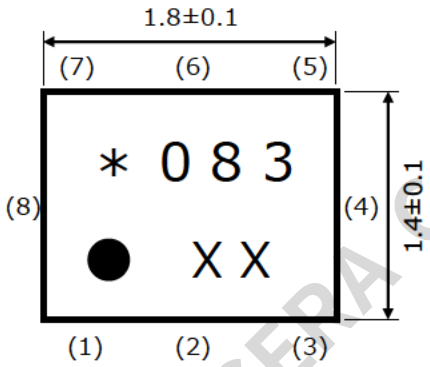
KYOCERA Part No. : SD18 0897R8UUC1

Rating

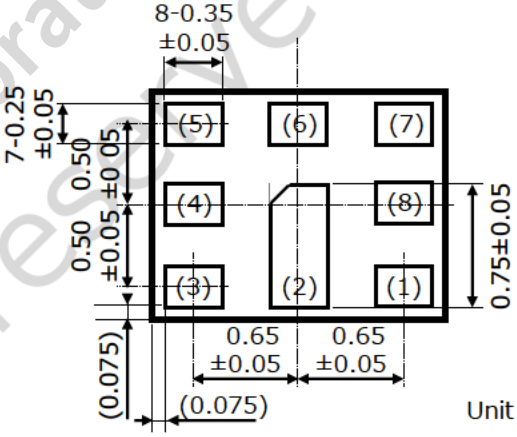
Items	Rating	Unit	Note
Operating Temperature Range	-20 to +85	deg.C	
Storage Temperature Range	-40 to +85	deg.C	
Max Input Power (Tx port)	+29	dBm	5,000hours, Ta=50deg.C, CW
Tx Port Nominal Impedance	50+5.6nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//8.2nH	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

Dimensions

(Top View)



(Bottom View)



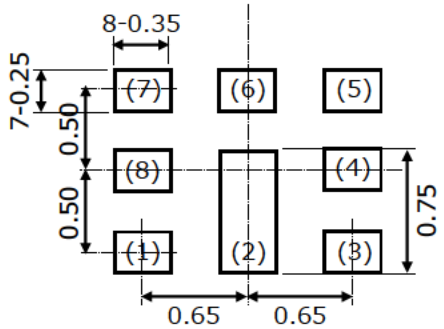
Unit : mm

* : Identification logo
083 : Identification no.
● : Index mark of pin 1
XX : Date code

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

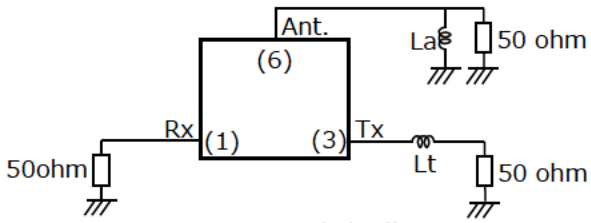
Recommendable Land Pattern

(Top View)



Measurement Circuit

(Top View)



Lt : 5.6nH (Ideal)
La : 8.2nH (Ideal)

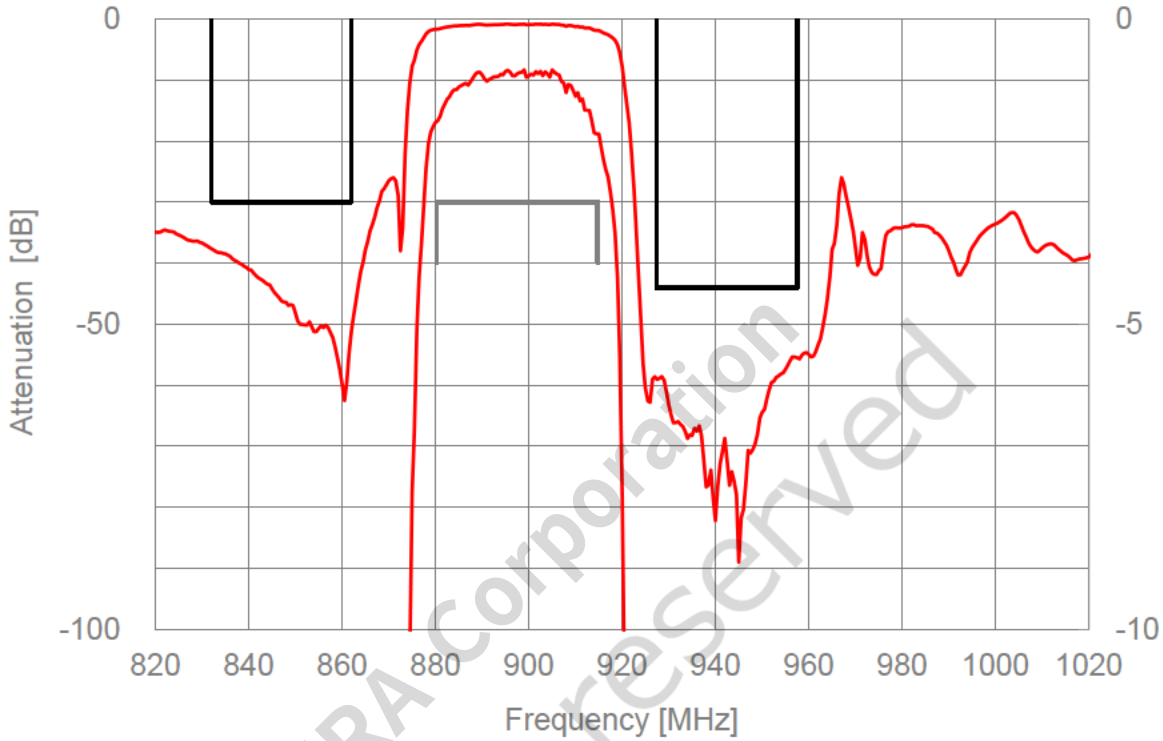
Electrical Characteristics

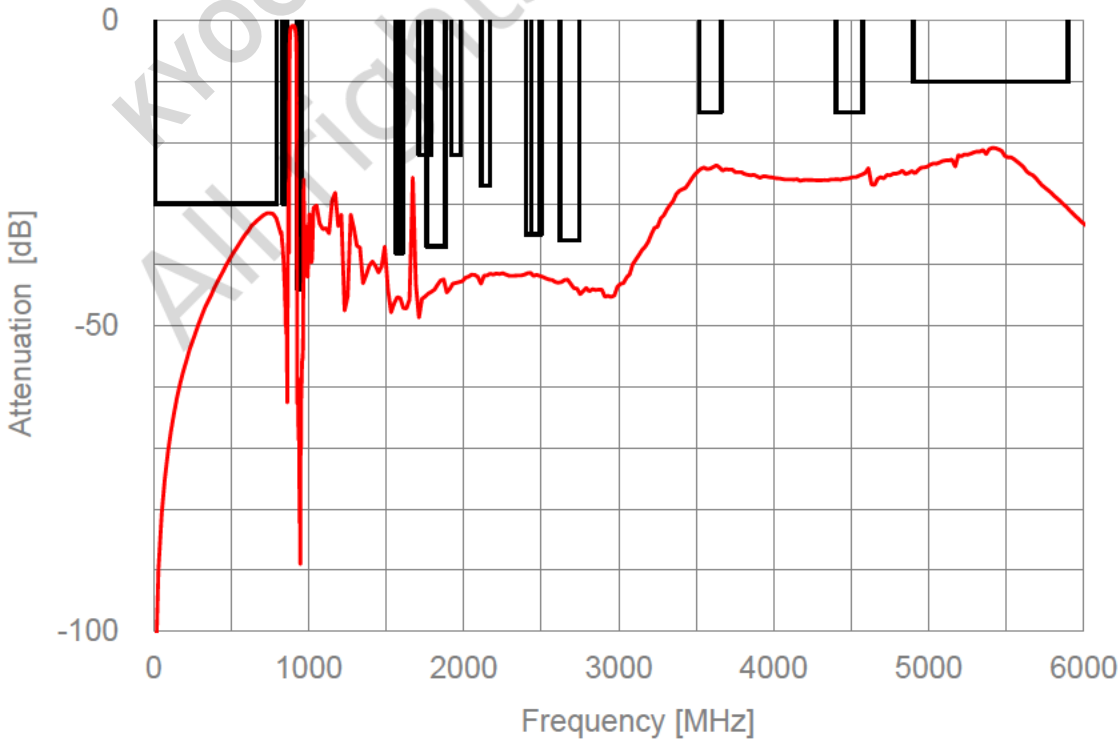
Items			Frequency (MHz)			Characteristics min.	Characteristics typ.	Characteristics max.	Unit	Note
Tx to Ant	Nominal Center Frequency		-				897.5		MHz	
	Insertion Loss		880.24	to	914.76	-	2.0	3.0	dB	
	Ripple		880.24	to	914.76	-	1.2	2.3	dB	
	VSWR	Tx	880.24	to	914.76	-	1.3	2.0	-	
		Ant	880.24	to	914.76	-	1.3	2.0	-	
	Attenuation		10	to	716	30	32	-	dB	
			716	to	728	30	32	-	dB	
			728	to	793	30	32	-	dB	
			832	to	862	30	38	-	dB	
			927.4	to	957.6	44	56	-	dBint[1)]	
			1559	to	1563	38	45	-	dB	
			1565.42	to	1573.374	38	45	-	dB	
			1573.374	to	1577.466	38	45	-	dB	
			1577.466	to	1585.42	38	45	-	dB	
			1597.5515	to	1605.886	38	46	-	dB	
			1710	to	1785	22	44	-	dB	
			1760	to	1840	37	43	-	dB	
			1840	to	1880	37	42	-	dB	
			1920	to	1980	22	43	-	dB	
			2110	to	2170	27	42	-	dB	
			2400	to	2500	35	41	-	dB	
			2434	to	2494	35	42	-	dB	
			2620	to	2745	36	42	-	dB	
			3520	to	3660	15	24	-	dB	
			4400	to	4575	15	25	-	dB	
			4900	to	5900	10	21	-	dB	
Ant to Rx	Nominal Center Frequency		-				942.5		MHz	
	Insertion Loss		925	to	960	-	2.1	3.5	dB	
	Ripple		925	to	960	-	0.9	2.3	dB	
	VSWR	Ant	925	to	960	-	1.5	2.0	-	
		Rx	925	to	960	-	1.6	2.0	-	
	Attenuation		0	to	880	45	58	-	dB	
			45			50	100	-	dB	
			835	to	870	40	58	-	dB	
			880.24	to	914.76	45	59	-	dB	
			902.5	to	910	30	59	-	dB	
			980	to	1045	13	18	-	dB	
			1427	to	1448	40	66	-	dB	
			1710	to	1785	40	59	-	dB	
			1805	to	1920	40	58	-	dB	
			1920	to	1980	40	57	-	dB	
			2400	to	2500	40	55	-	dB	
			2500	to	2570	40	56	-	dB	
			2685	to	2790	40	55	-	dB	
			2775	to	2880	40	55	-	dB	
			2880	to	3700	35	49	-	dB	
			3700	to	3840	40	49	-	dB	
			4625	to	4800	40	50	-	dB	
			4900	to	5950	40	49	-	dB	
TX to RX	Isolation		880.24	to	914.76	55	59	-	dB	
			927.4	to	957.6	50	58	-	dBint[1)]	

1) dBint : Integrated any 4.5MHz

Electrical Characteristics

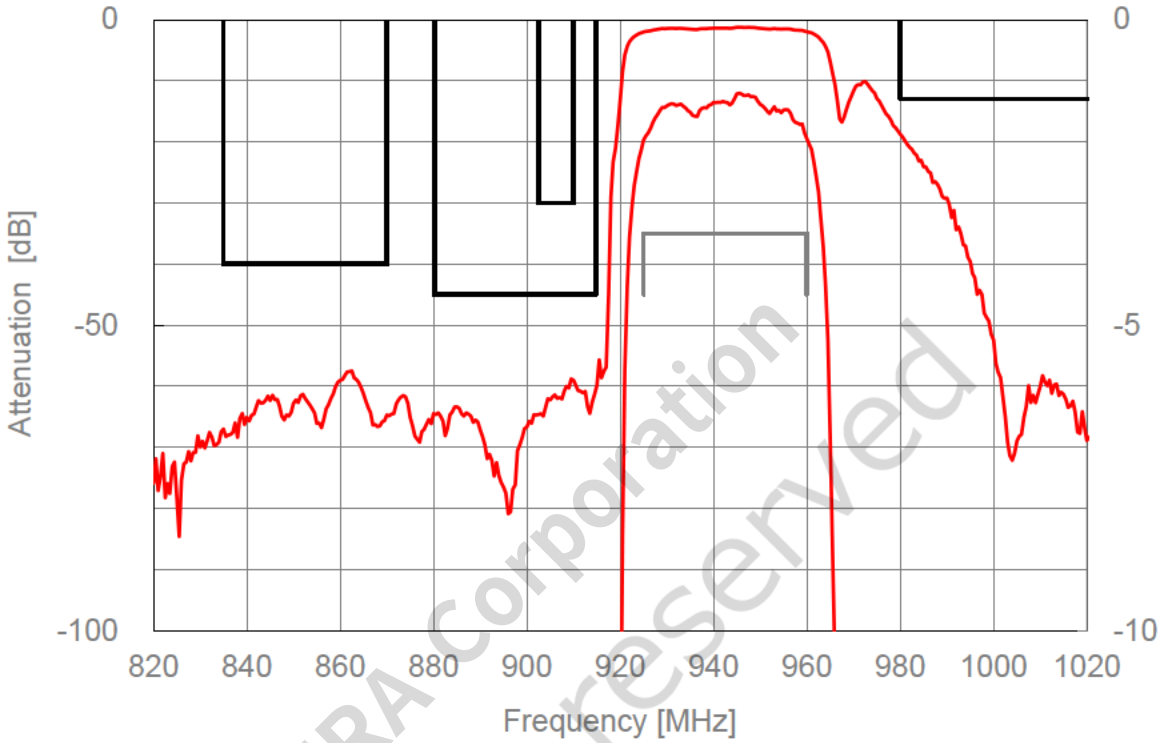
[Tx to Ant]

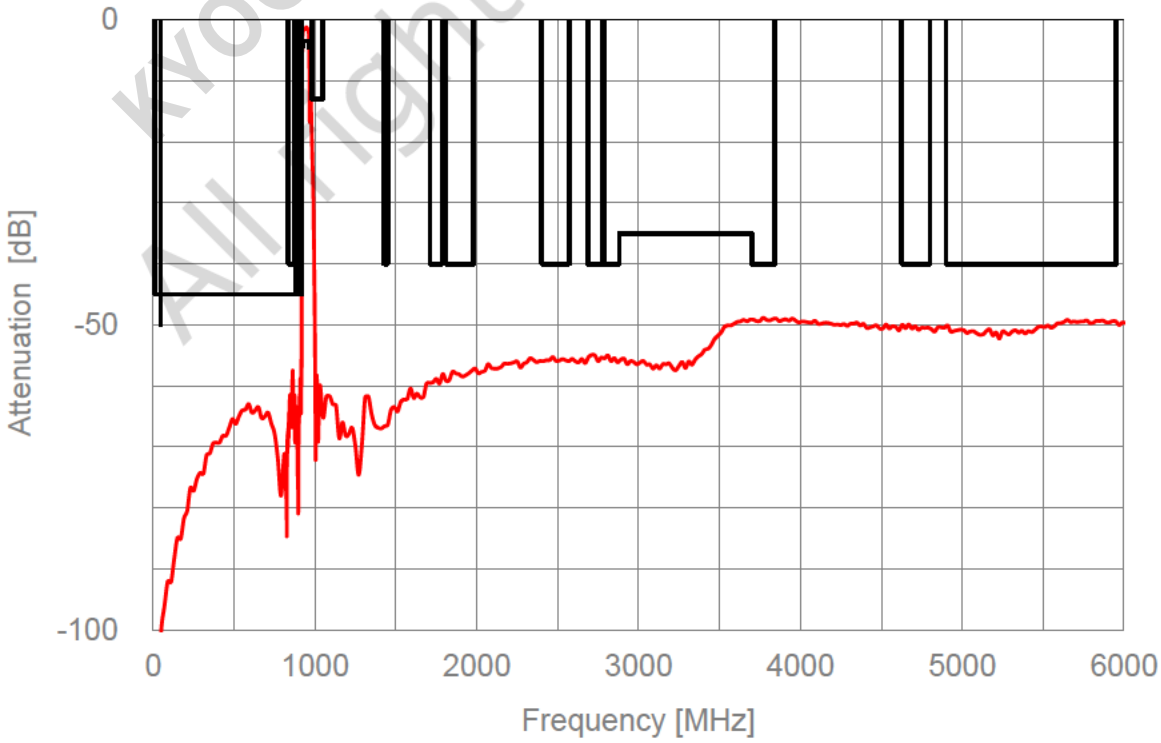




Electrical Characteristics

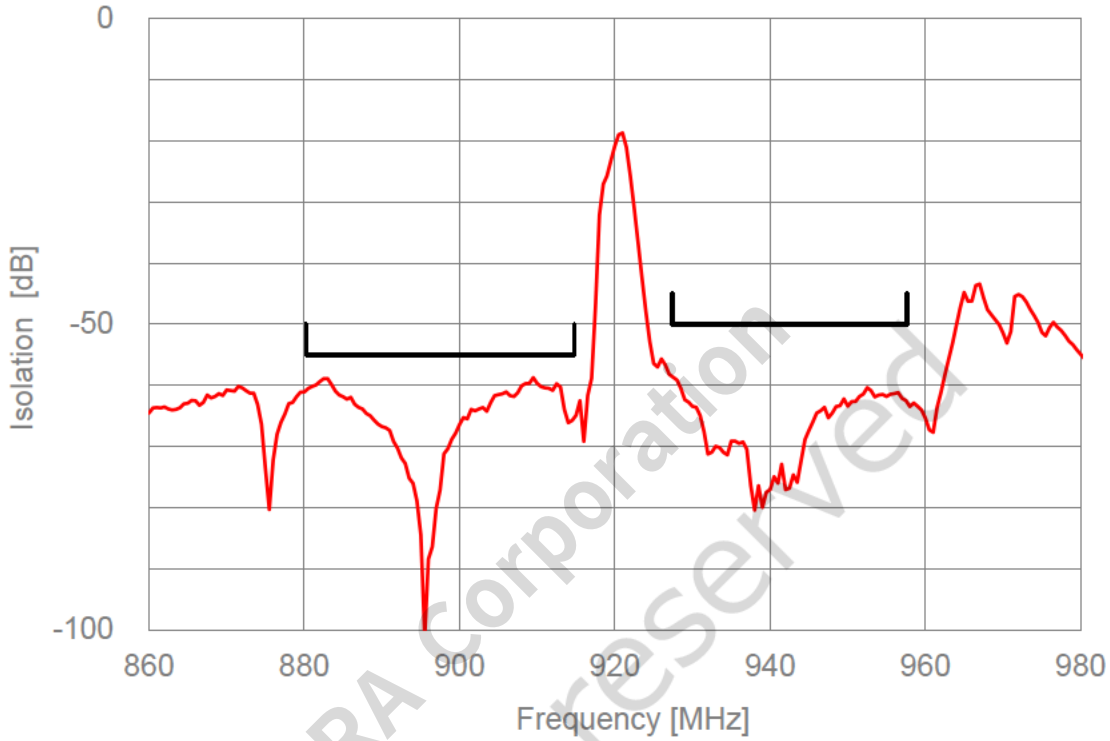
[Ant to Rx]

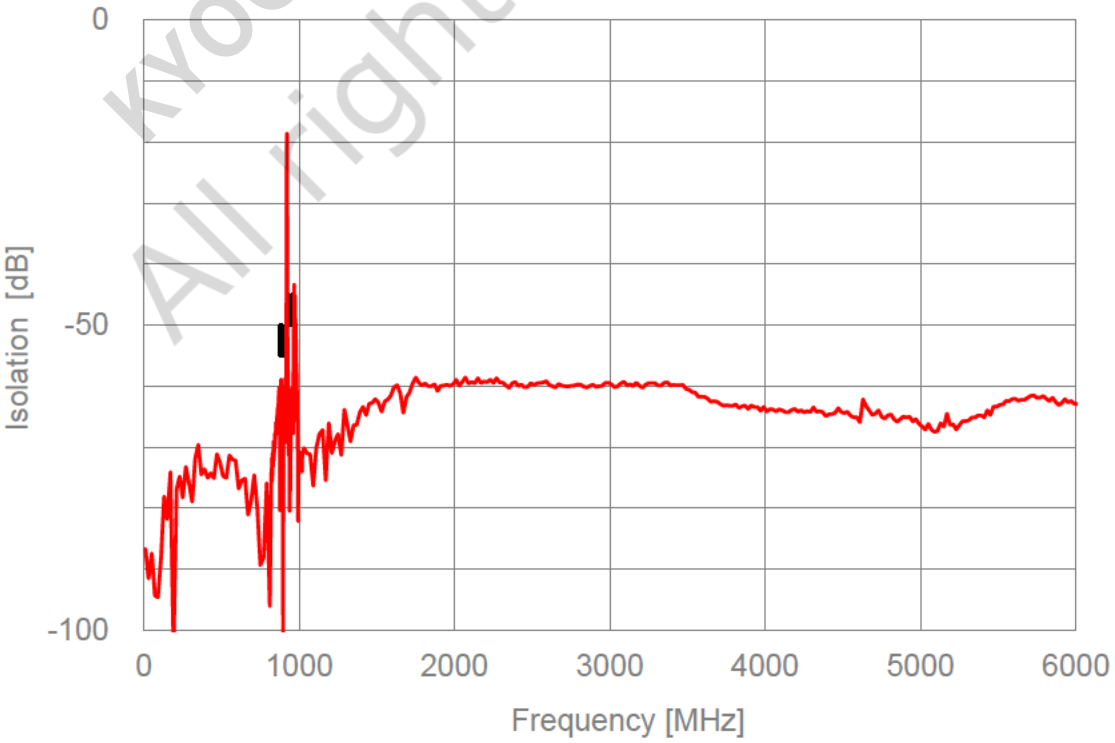




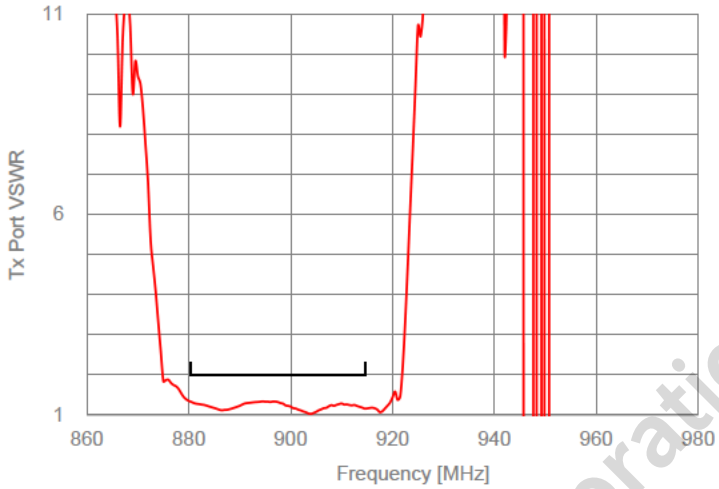
Electrical Characteristics

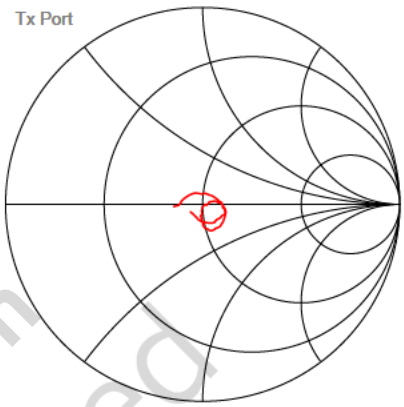
[Tx to Rx]

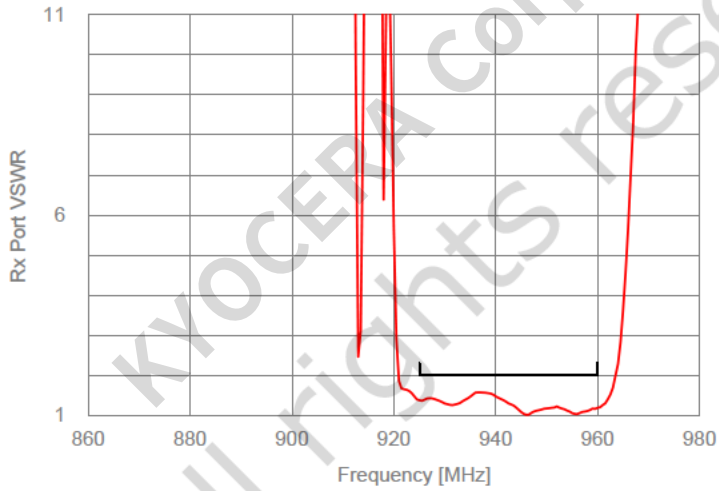


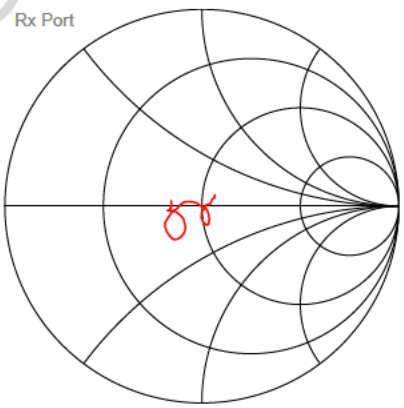


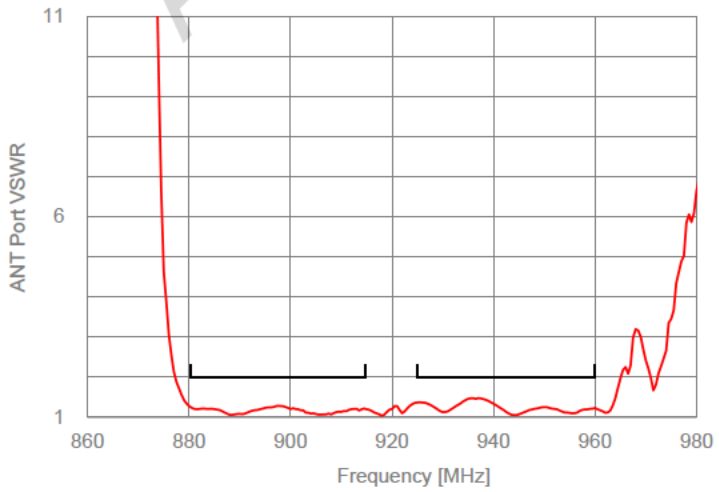
Electrical Characteristics

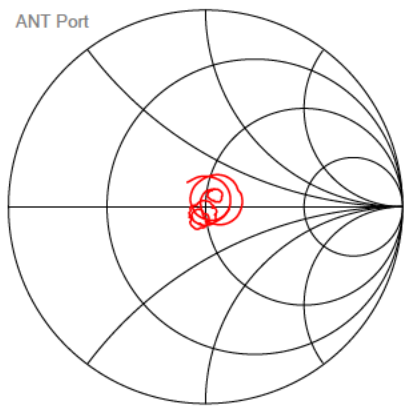






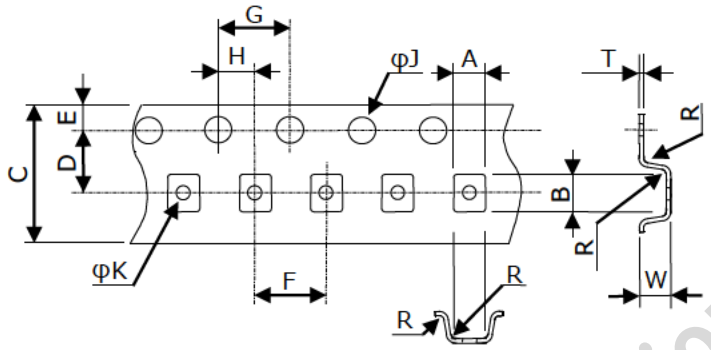






Tape & Reel Specification

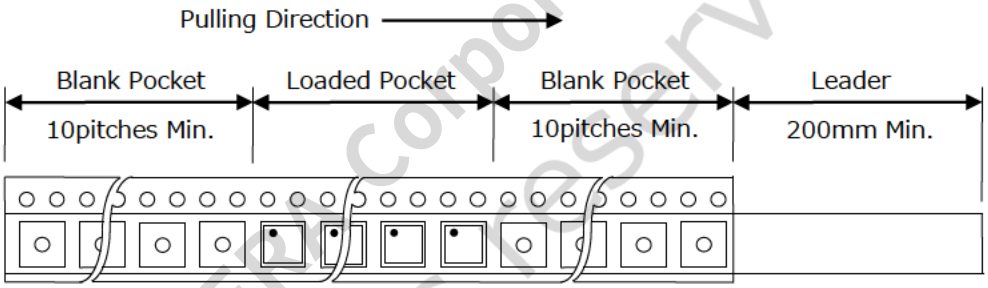
[Tape]



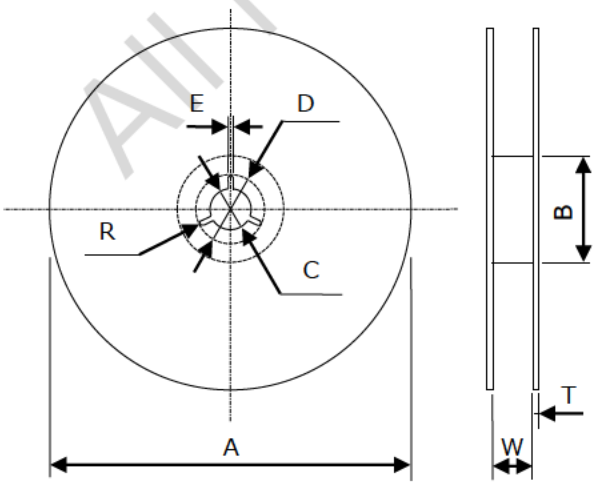
Unit : mm

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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