Rev.00

RoHS Compliant

Datasheet of SAW Duplexer

2520 Band1 for Base station

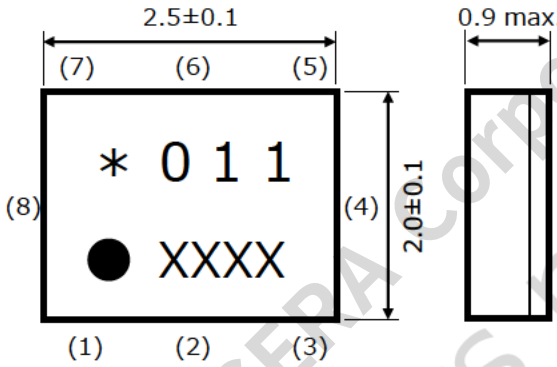
KYOCERA Part No. : SD25 2140R9UUA1

Rating

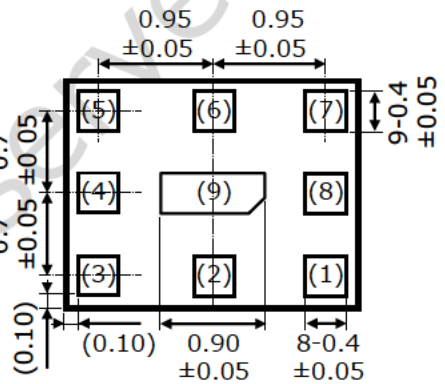
Items	Rating	Unit	Note
Operating Temperature Range	-40 to +95	deg.C	
Storage Temperature Range	-40 to +95	deg.C	
Max Input Power (Tx port)	+30	dBm	LTE 5MHz (PAR=6.95dB) 10 years @95deg.C
Tx Port Nominal Impedance	50	ohm	Unbalance
Ant. Port Nominal Impedance	50//2.7nH	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

Dimensions

(Top View)



(Bottom View)



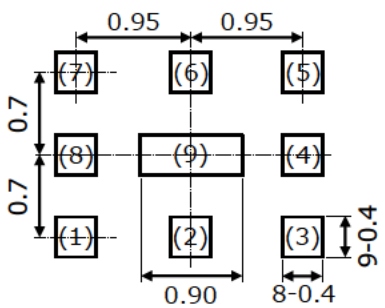
Unit : mm

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

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

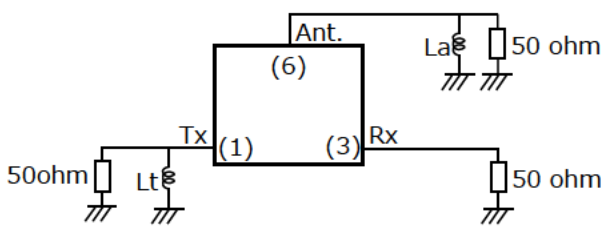
Recommendable Land Pattern

(Top View)



Measurement Circuit

(Top View)



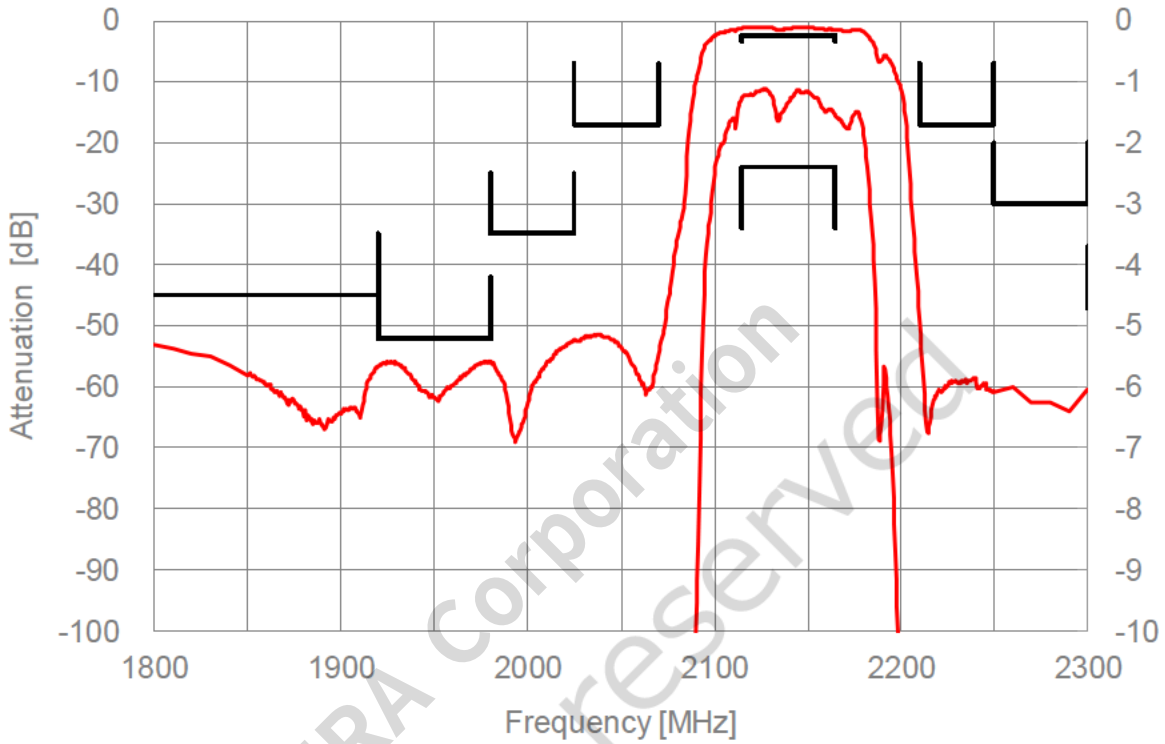
La : 2.7nH (Ideal)

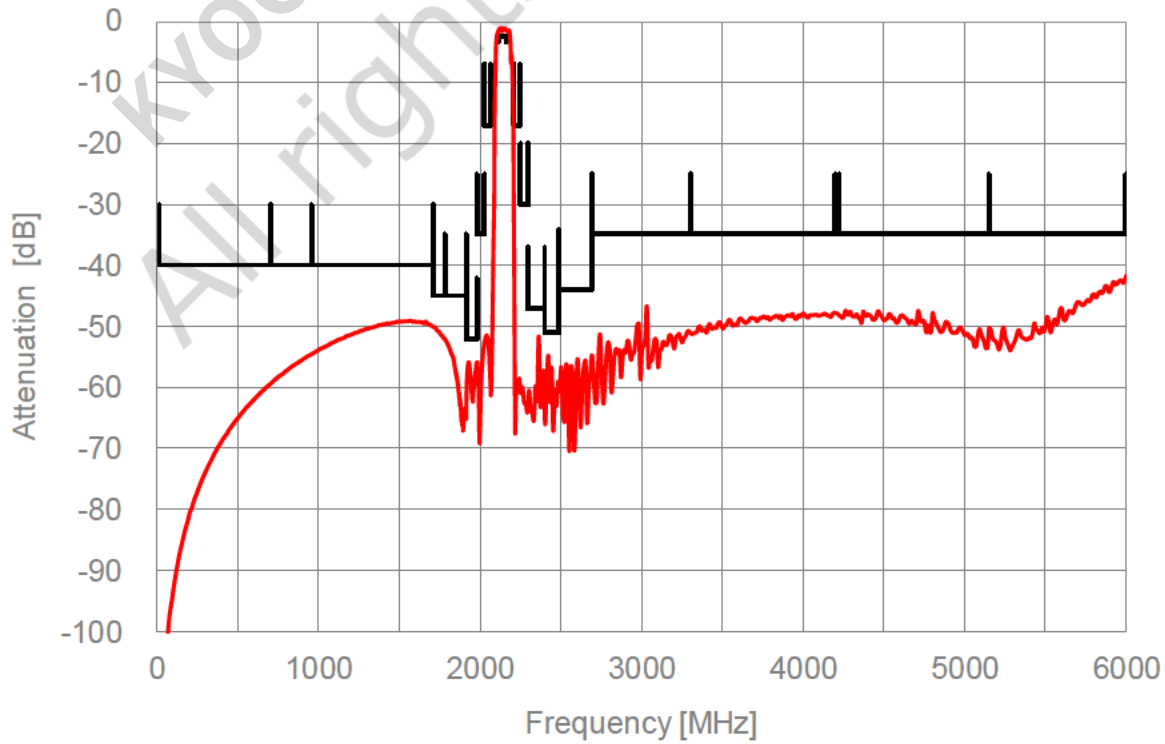
Electrical Characteristics

ITEMS		Frequency (MHz)	Characteristics			Unit	Note
			min.	typ.	max.		
Tx to Ant	Insertion Loss	2110 - 2170	-	1.6	2.4	dB	Average over any 10MHz
	Ripple(any 5MHz)	2110 - 2170	-	0.5	1.8	dB	
	VSWR (Tx)	2110 - 2170	-	1.7	2.1	-	
	VSWR (Ant)	2110 - 2170	-	1.7	2.1	-	
	Absolute Attenuation	10 - 700	40	59	-	dB	
		700 - 960	40	54	-	dB	
		960 - 1710	40	49	-	dB	
		1710 - 1785	45	50	-	dB	
		1785 - 1920	45	52	-	dB	
		1920 - 1980	52	56	-	dB	
		1980 - 2025	35	52	-	dB	
		2025 - 2070	17	51	-	dB	
		2210 - 2250	17	49	-	dB	
		2250 - 2300	30	60	-	dB	
		2300 - 2400	47	52	-	dB	
		2400 - 2484	51	55	-	dB	
		2484 - 2690	44	55	-	dB	
		2690 - 3300	35	47	-	dB	
		3300 - 4220	35	48	-	dB	
		4220 - 5150	35	47	-	dB	
		5150 - 6000	35	42	-	dB	
Ant to Rx	Insertion Loss	1920 - 1980	-	1.6	2.5	dB	Average over any 5MHz
	Ripple(any 5MHz)	1920 - 1980	-	0.3	2.0	dB	
	VSWR (Rx)	1920 - 1980	-	1.4	2.2	-	
	VSWR (Ant)	1920 - 1980	-	1.4	2.2	-	
	Absolute Attenuation	10 - 960	37	54	-	dB	
		960 - 1805	37	47	-	dB	
		1805 - 1880	37	45	-	dB	
		1880 - 1900	15	32	-	dB	
		2000 - 2010	12	24	-	dB	
		2010 - 2110	27	44	-	dB	
		2110 - 2170	47	57	-	dB	
		2170 - 2300	35	53	-	dB	
		2300 - 2400	46	53	-	dB	
		2400 - 2690	46	52	-	dB	
		2690 - 3300	35	44	-	dB	
		3300 - 5150	31	35	-	dB	
		5150 - 6000	30	34	-	dB	
Tx to Rx	Isolaion	1920 - 1980	55	59	-	dB	Average over any 5MHz
		2110 - 2170	52	58	-	dB	Average over any 5MHz

Electrical Characteristics

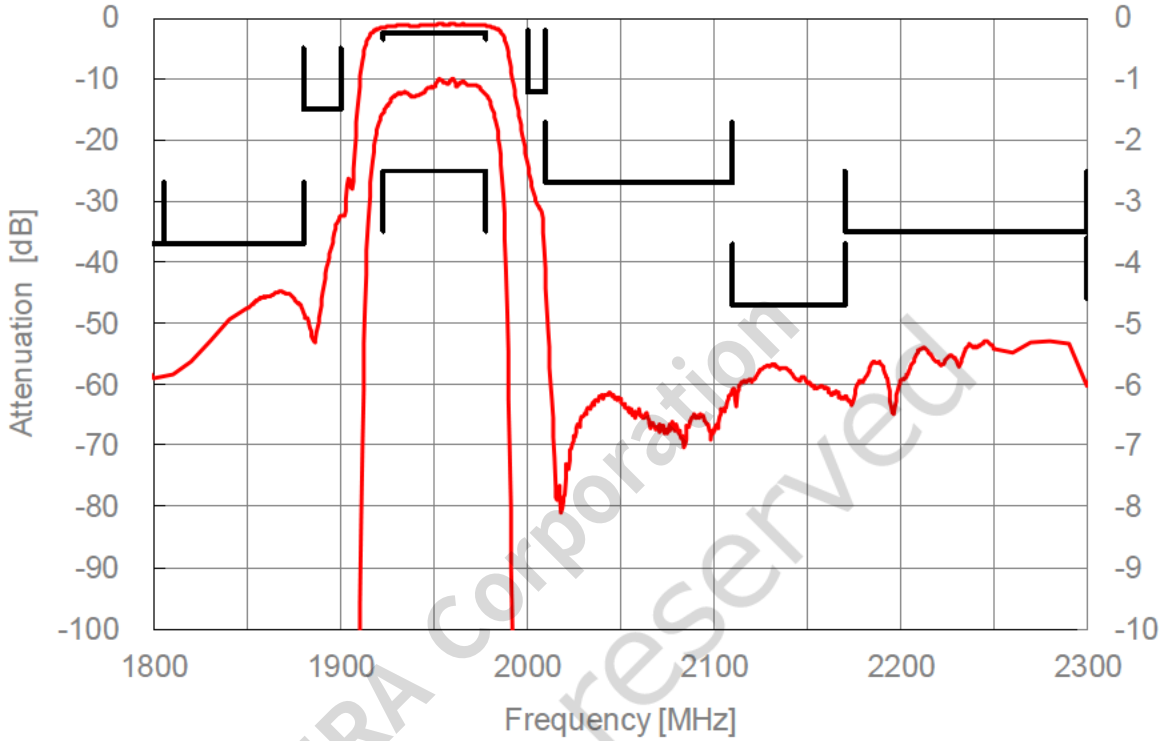
[Tx to Ant]

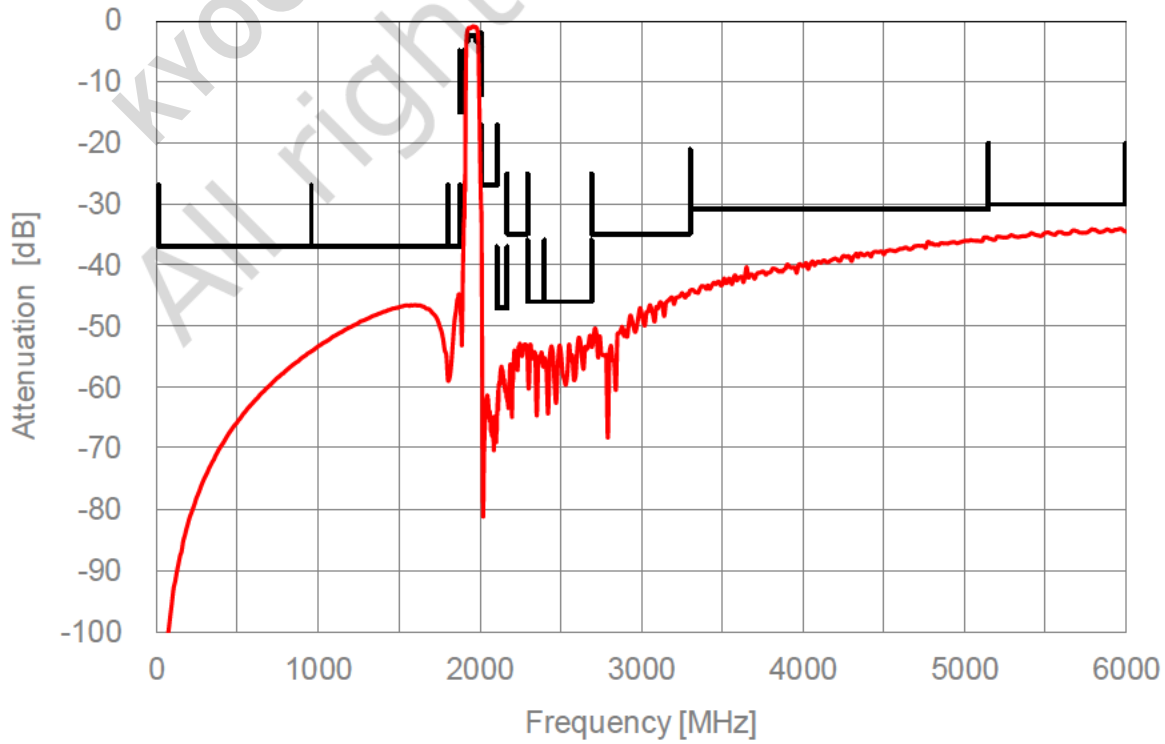




Electrical Characteristics

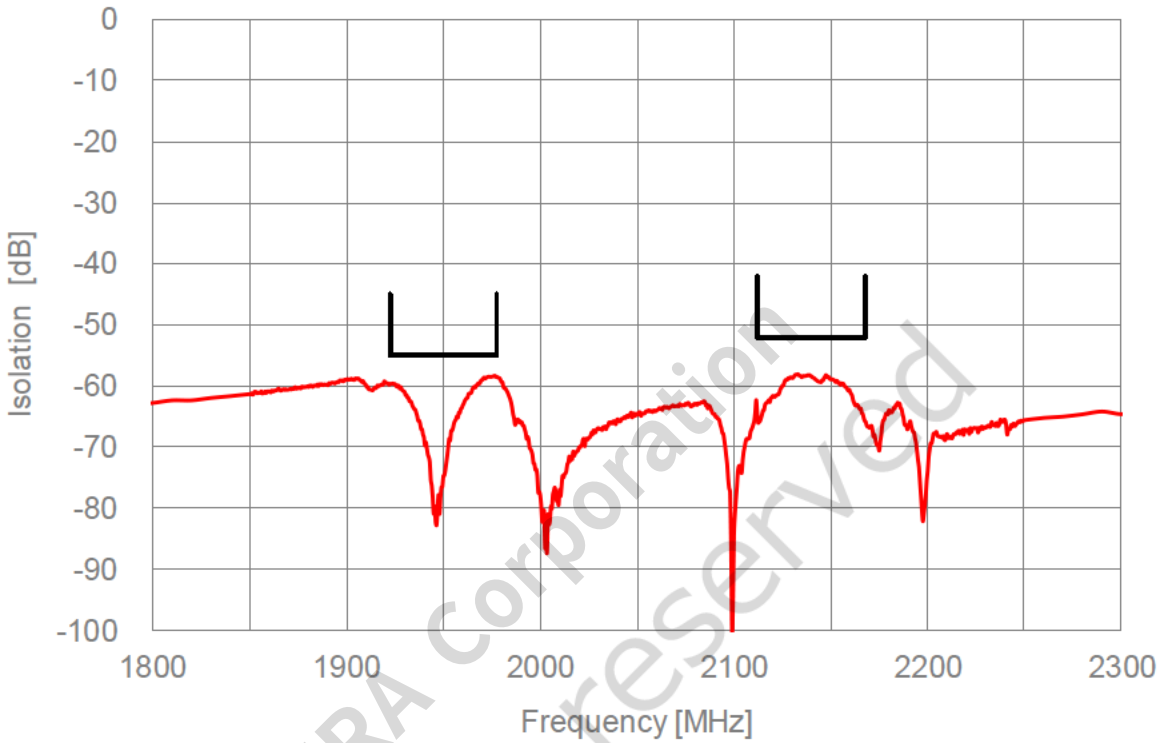
[Ant to Rx]

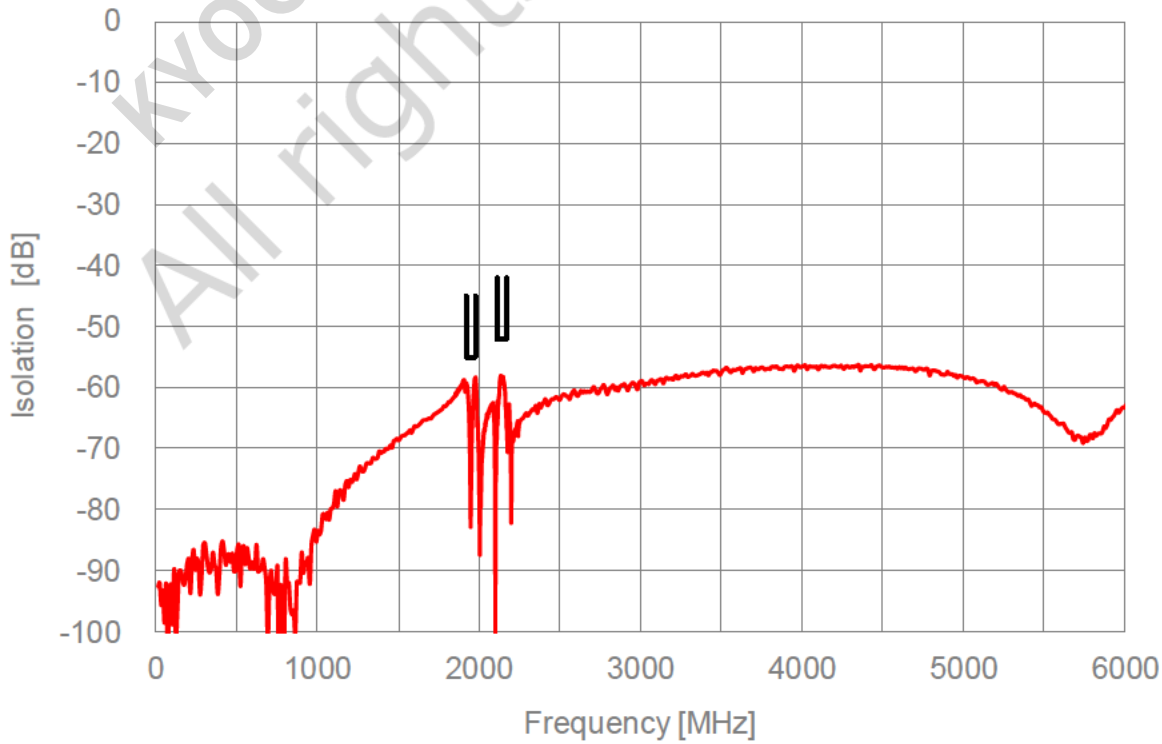




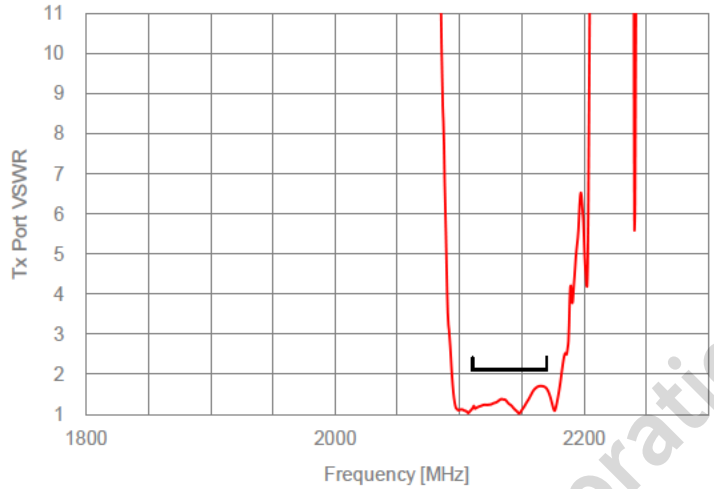
Electrical Characteristics

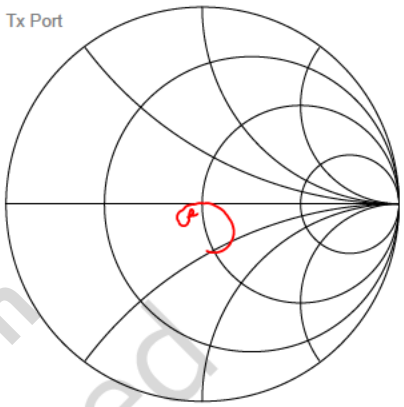
[Tx to Rx]

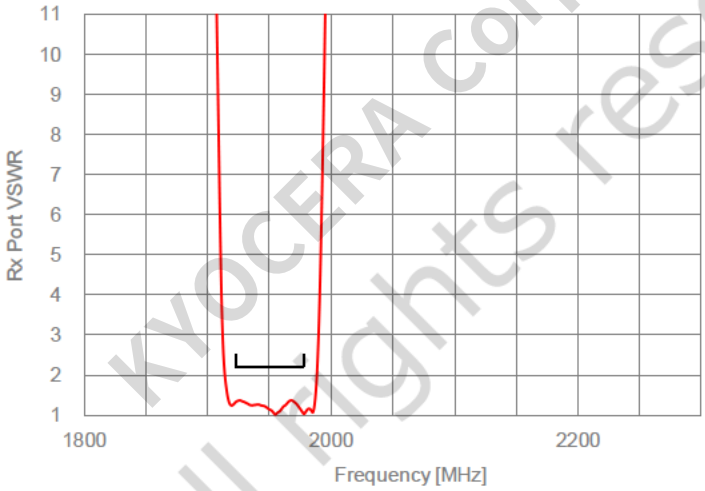


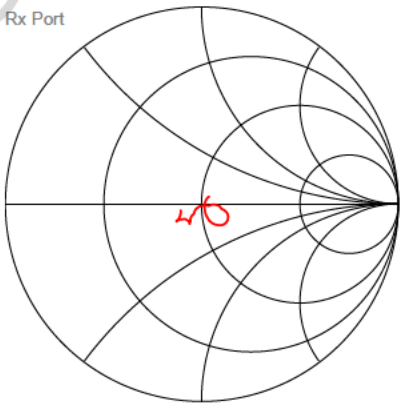


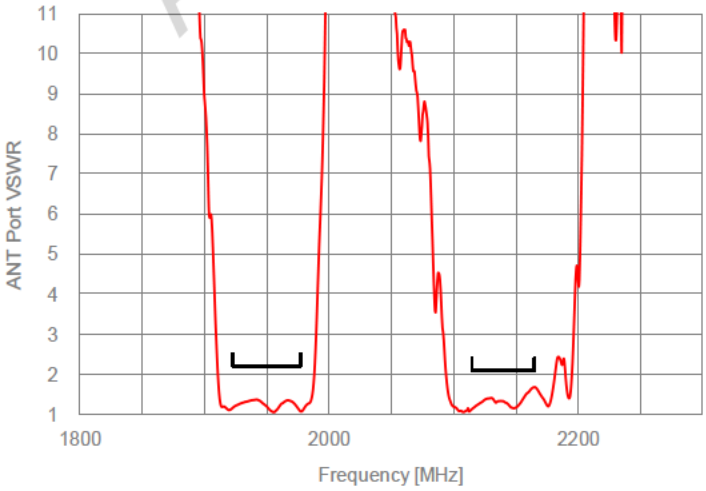
Electrical Characteristics

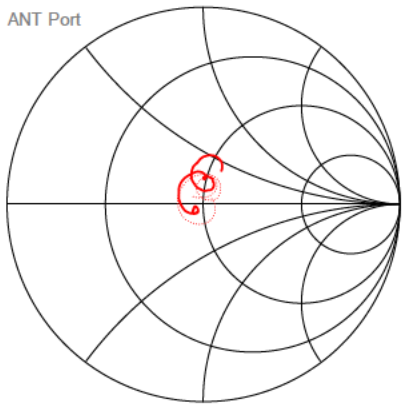






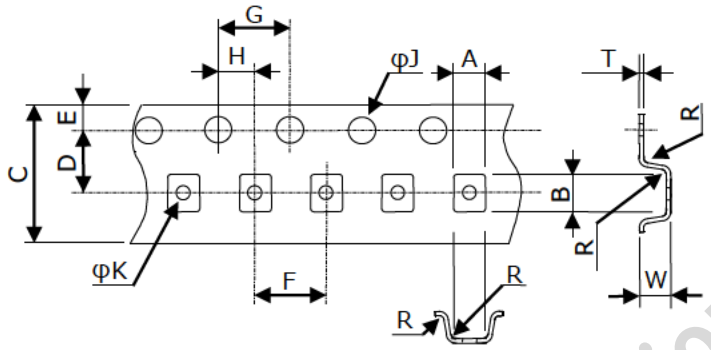






Tape & Reel Specification

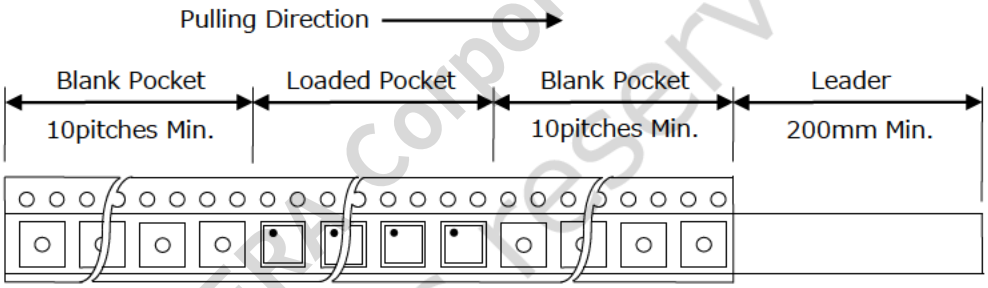
[Tape]



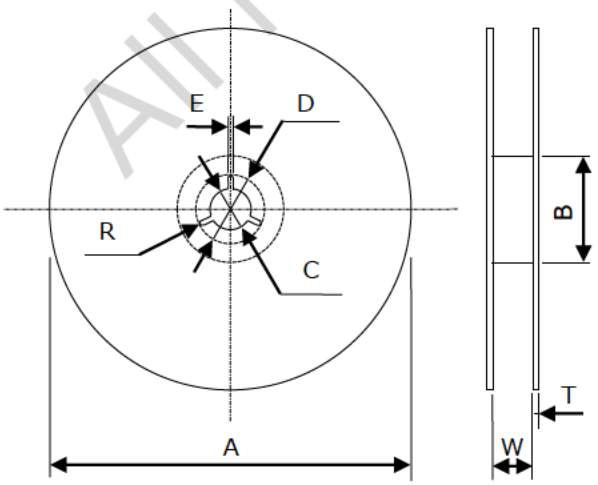
Unit : mm

Part	Dimension
A	2.3±0.1
B	2.8±0.1
C	8.0±0.1
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
φK	1.0±0.1
R	0.3 Max
W	0.9±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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