

Datasheet of SAW Duplexer 2520 Band1 for Base station

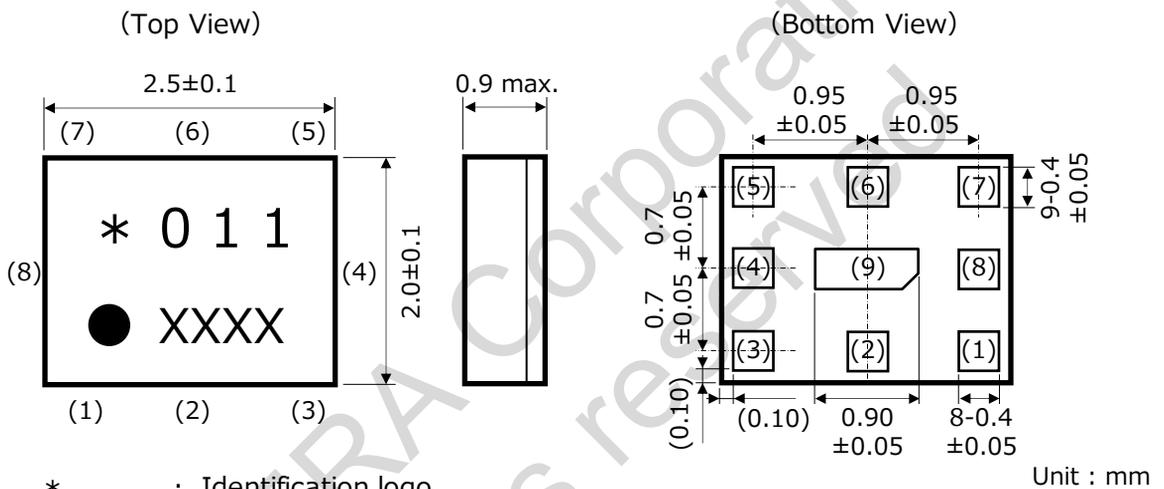
KYOCERA Part No. : SD25-2140R9UUA1

KYOCERA Corporation
All rights reserved

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

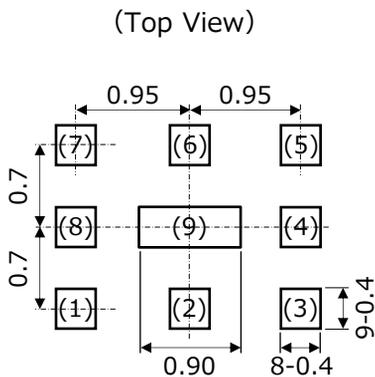
Dimensions



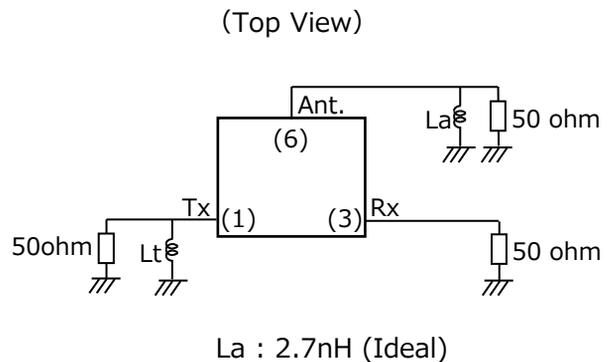
- * : Identification logo
- 011 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

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

Recommendable Land Pattern



Measurement Circuit

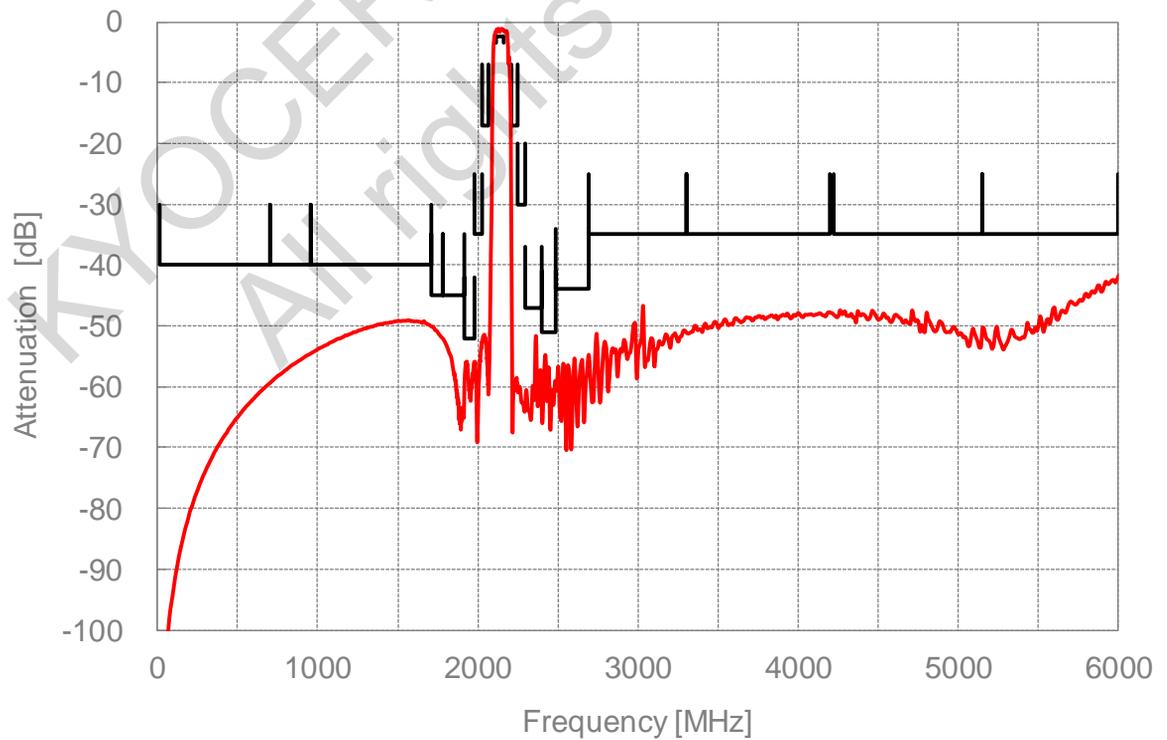
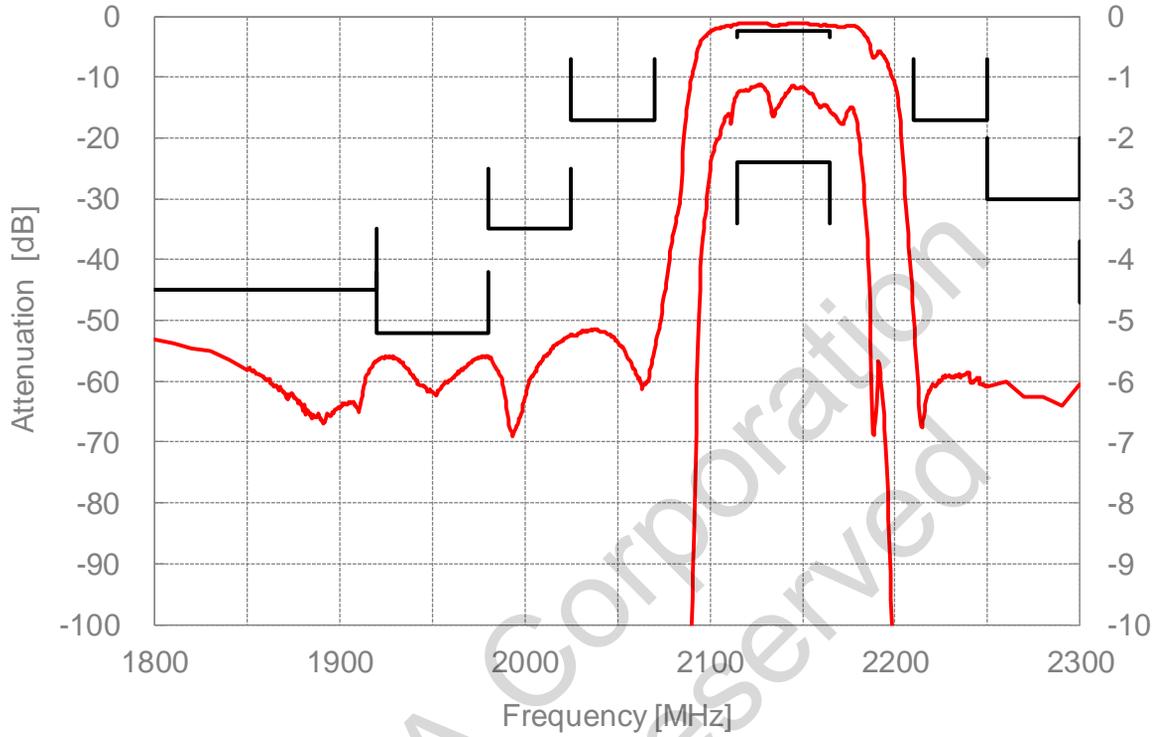


Electrical Characteristics

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

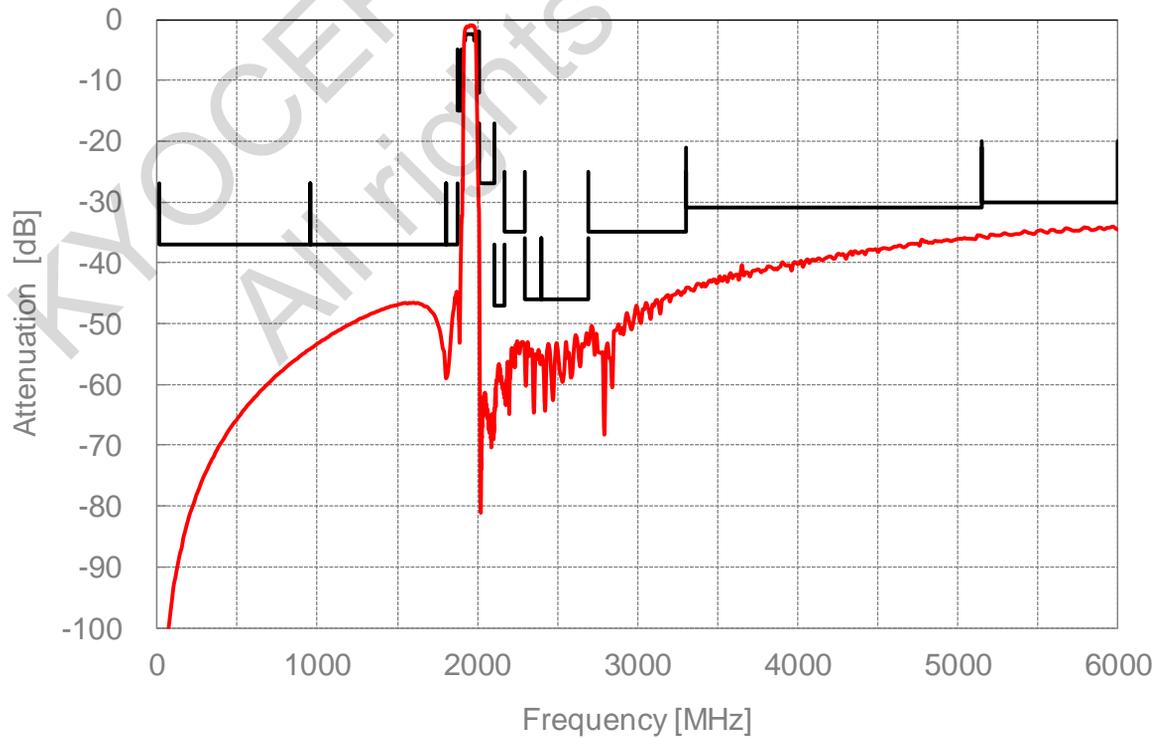
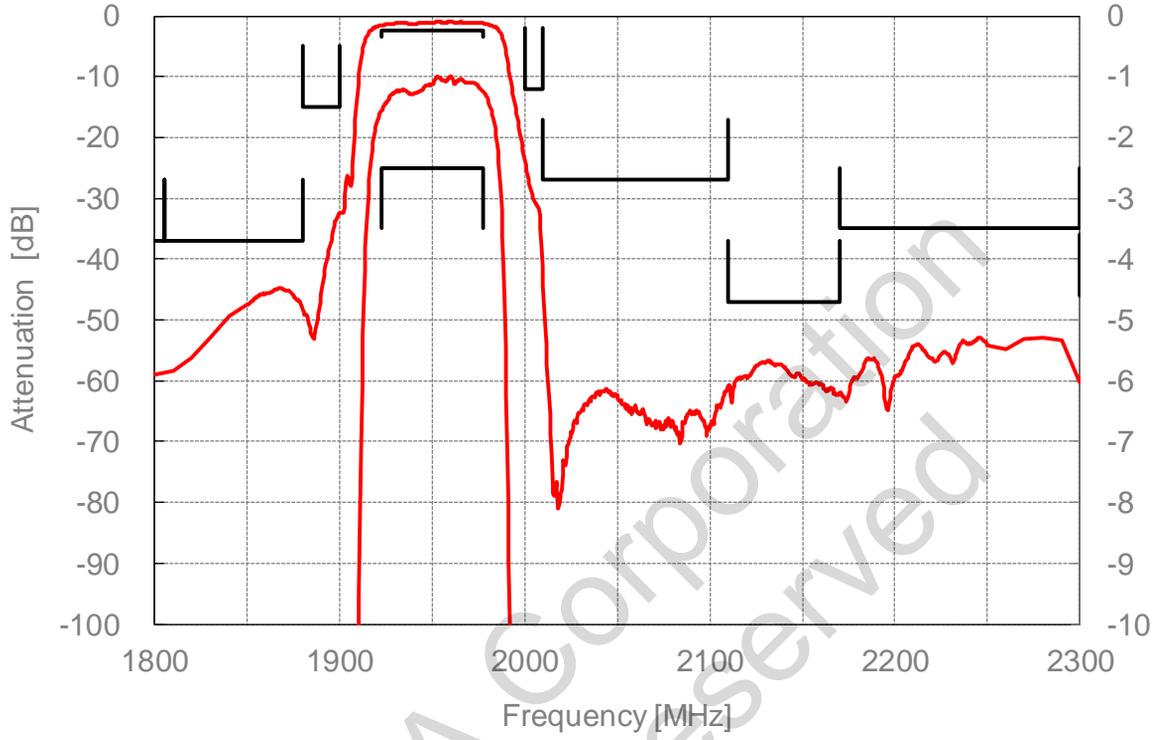
Electrical Characteristics

[Tx to Ant]



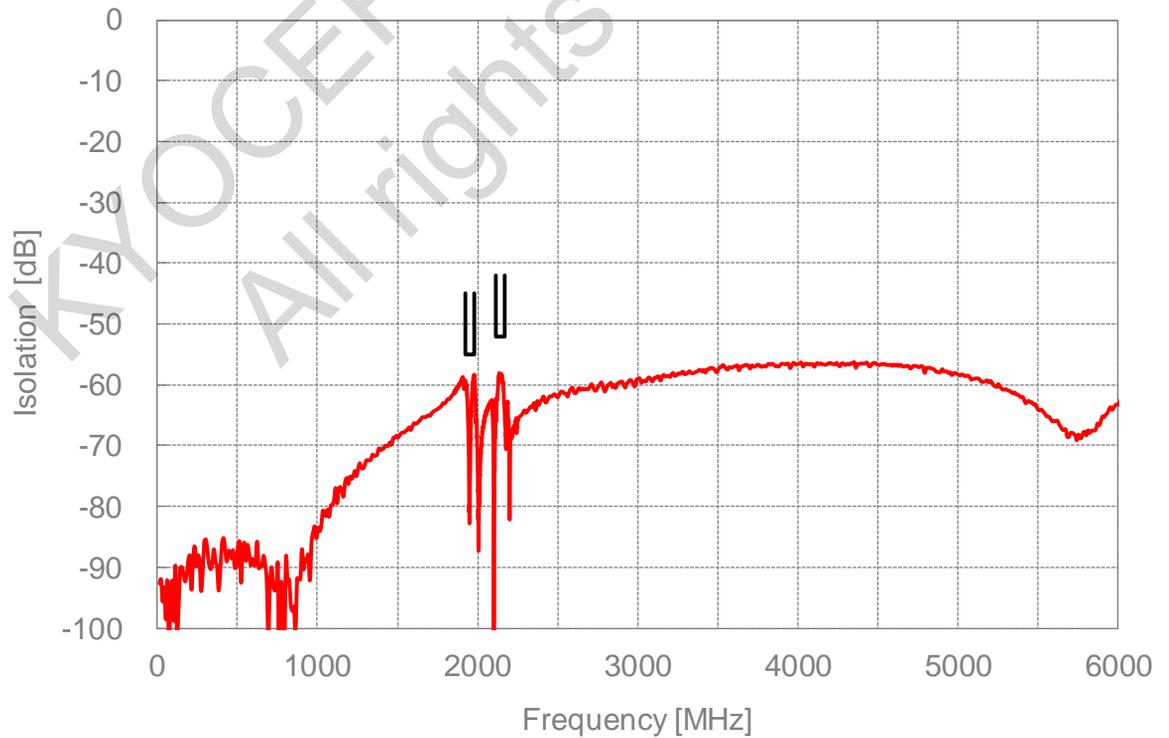
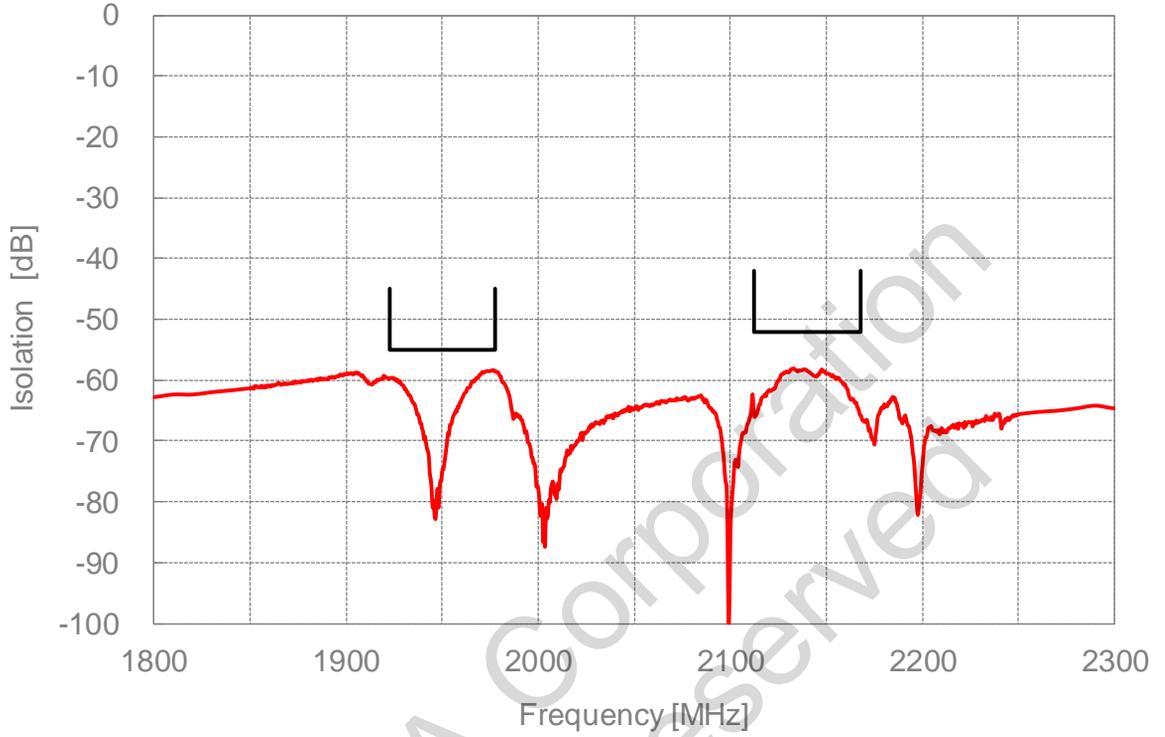
Electrical Characteristics

[Ant to Rx]

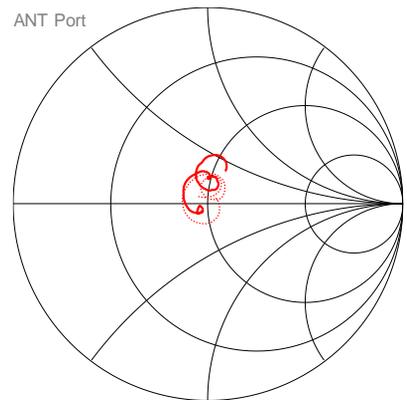
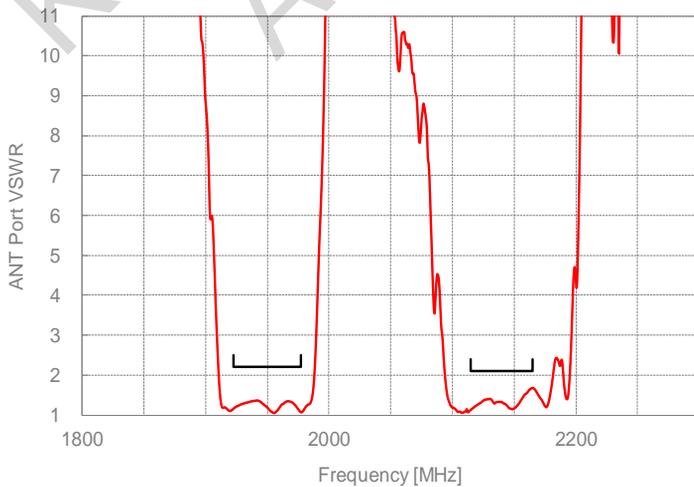
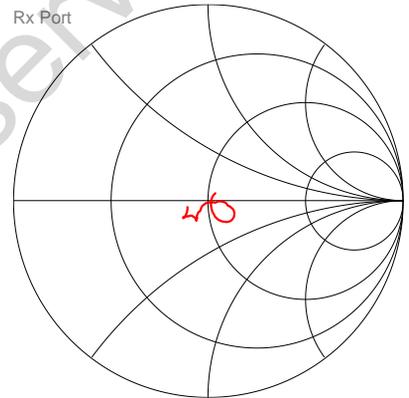
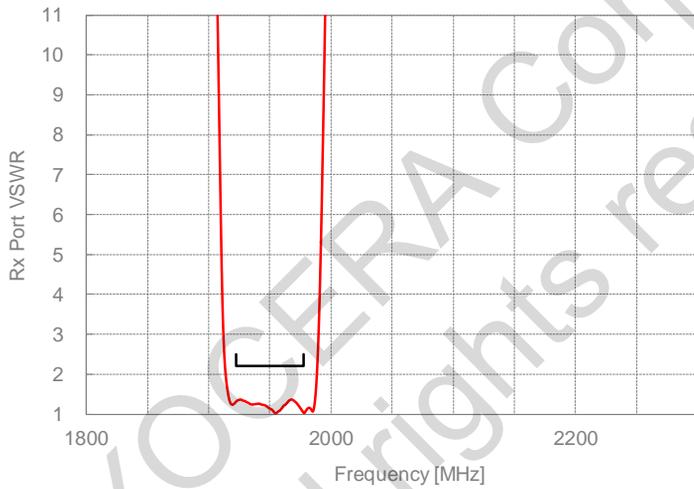
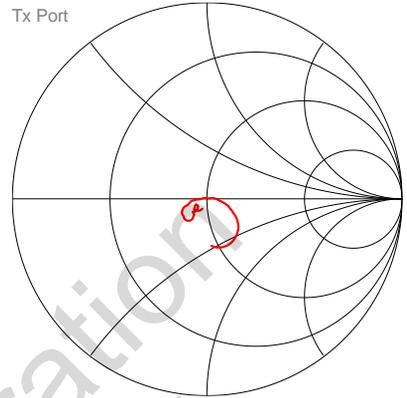
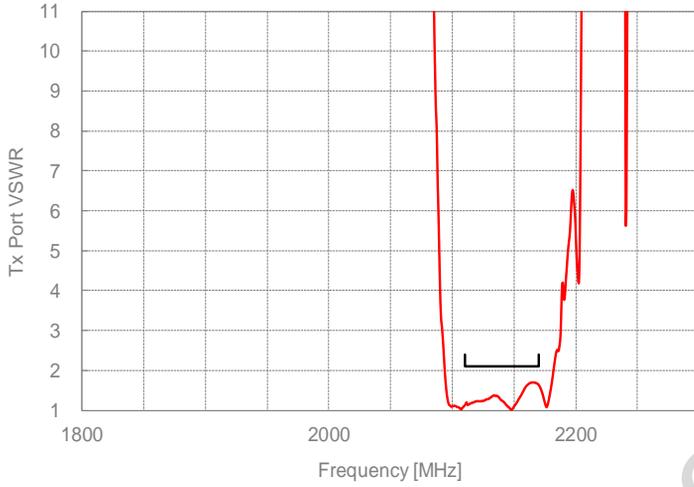


Electrical Characteristics

[Tx to Rx]

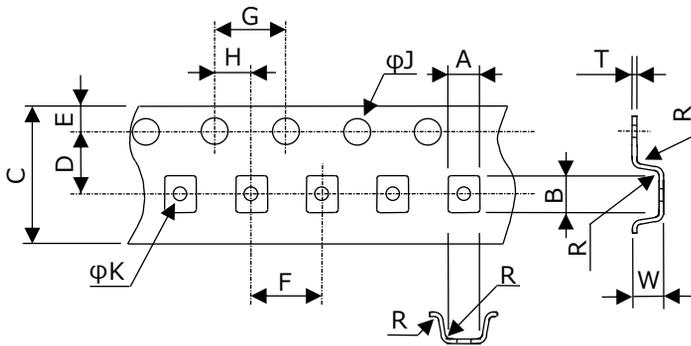


Electrical Characteristics



Tape & Reel Specification

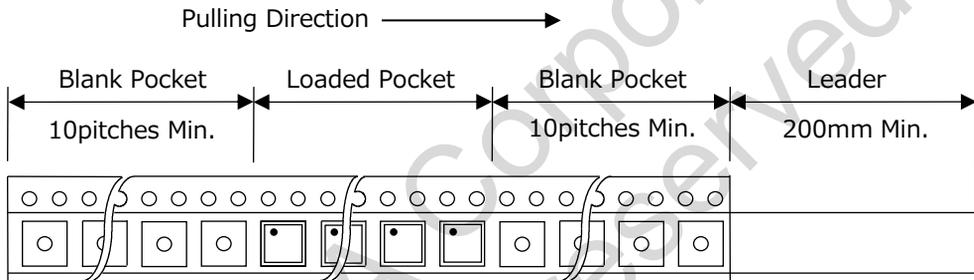
[Tape]



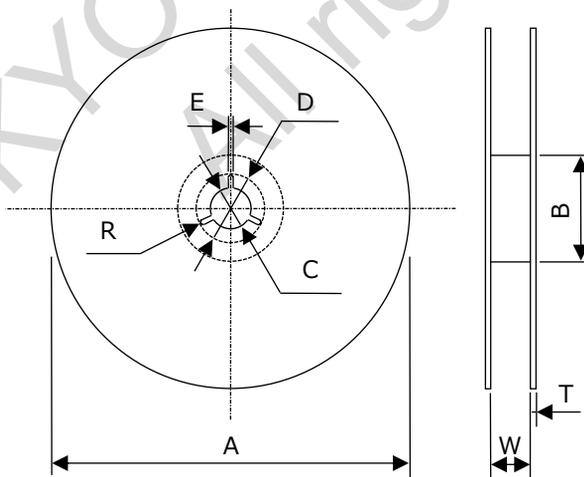
Unit : mm

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

Notice

1. Characteristics described in this datasheet are for references specifications shall be based on written documents agreed by each party.
2. Contents in this datasheet are subject to change without notice. It is recommended to confirm the latest information at the time of usage. Also, this datasheet is revised once a year. We may not be able to accept requests based on old datasheets.
3. Products in this datasheet are intended to be used in general electronic equipment such as office equipment, audio and visual equipment, communication equipment, measurement instrument and home appliances. It is absolutely recommended to consult with our sales representatives in advance upon planning to use our products in applications which require extremely high quality and reliability such as aircraft and aerospace equipment, traffic systems, safety systems, power plant and medical equipment including life maintenance systems.
4. Even though we strive for improvements of quality and reliability of products, it is requested to design with enough safety margin in equipment or systems in order not to threaten human lives directly or damage human bodies or properties by an accidental result of products.
5. It is requested to design based on guaranteed specifications for such as maximum ratings, operating voltage and operating temperature. It is not the scope of our guarantee for unsatisfactory results due to misuse or inadequate usage of products in the datasheet.
6. Operation summaries and circuit examples in this datasheet are intended to explain typical operation and usage of the product. It is recommended to perform circuit and assembly design considering surrounding conditions upon using products in this datasheet.
7. Technical information described in this datasheet is meant to explain typical operations and applications of products, and it is not intended to guarantee or license intellectual properties or other industrial rights of the third party or Kyocera.
8. Trademarks, logos and brand names used in this datasheet are owned by Kyocera or the corresponding third party.
9. Certain products in this datasheet are subject to the Foreign Exchange and Foreign Trade Control Act of Japan, and require the license from Japanese Government upon exporting the restricted products and technical information under the law. Besides, it is requested not to use products and technical information in the datasheet for the development and/or manufacture of weapons of mass destruction or other conventional weapons, nor to provide them to any third party with the possibility of having such purposes.
10. It is prohibited to reprint and reproduce a part or whole of this datasheet without permission.