Rev.00

RoHS Compliant

Datasheet of SAW Duplexer

1814 Band7 Balanced

KYOCERA Part No. : SD18-2535R8UBM1

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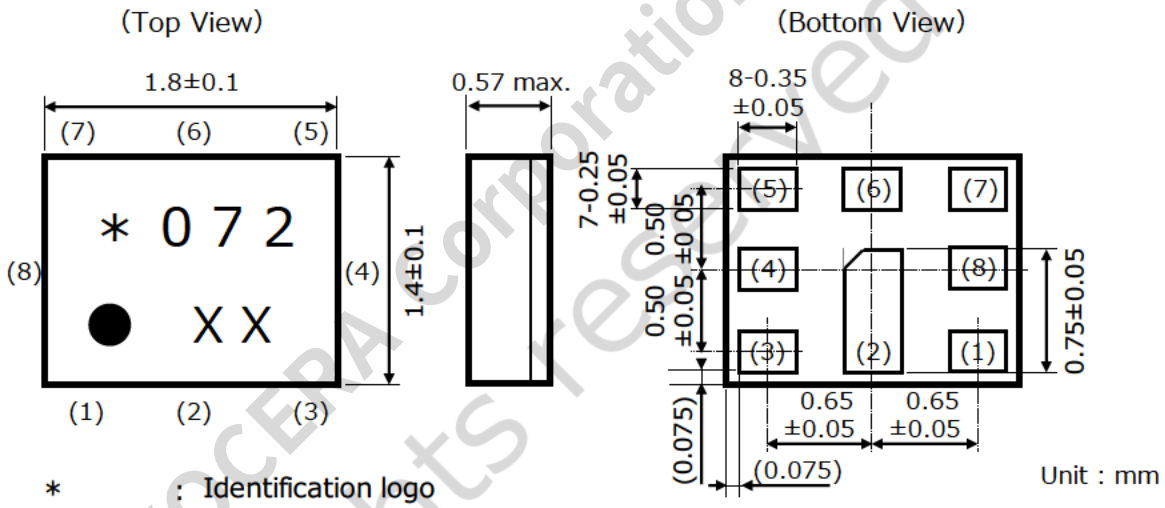
Rating

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)	+29	dBm	5,000hours, Ta=50deg.C, CW
Tx Port Nominal Impedance	50	ohm	Unbalance
Ant. Port Nominal Impedance	50//2.4nH	ohm	Unbalance
Rx Port Nominal Impedance	100//11nH	ohm	Balance

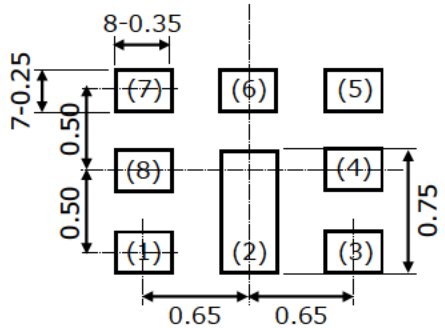
Dimensions



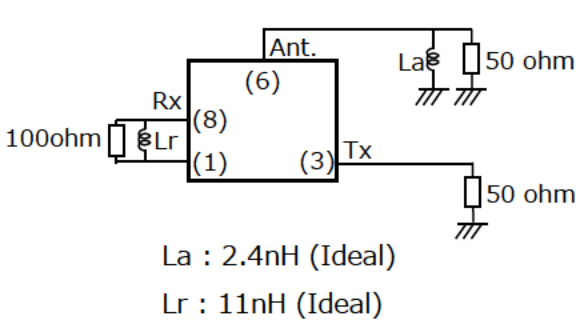
* : Identification logo
072 : Identification no.
● : Index mark of pin 1
XX : Date code

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

Recommendable Land Pattern



Measurement Circuit



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Electrical Characteristics

Items			Frequency (MHz)			Characteristics min.	Characteristics typ.	Characteristics max.	Unit	Note
Tx to Ant	Nominal Center Frequency		-				2535		MHz	
	Insertion Loss		2500	to	2570	-	1.9	3.0	dB	
	Ripple		2500	to	2570	-	0.7	2.0	dB	
	VSWR	Tx	2500	to	2570	-	1.6	2.0	-	
		Ant.	2500	to	2570	-	1.5	2.0	-	
	Absolute Attenuation		925	to	960	30	56	-	dB	
			880	to	915	32	57	-	dB	
			1559	to	1563	35	46	-	dB	
			1565.42	to	1573.37	35	46	-	dB	
			1573.37	to	1577.47	35	46	-	dB	
			1577.47	to	1585.42	35	46	-	dB	
			1597.55	to	1605.89	35	46		dB	
			1805	to	1830	28	44	-	dB	
			1710	to	1785	30	44	-	dB	
			2402	to	2442	40	4	-	dB	
			2442	to	2457	45	60	-	dB	
			2458	to	2467	50	56	-	dB	
			2472			35	56	-	dB	
			2482			6	15	-	dB	
			2620	to	2690	45	57	-	dB	
			4992	to	5 40	30	49	-	dB	
			7488	to	7710	25	55	-	dB	
Ant to Rx	Nominal Center Frequency		-				2655		MHz	
	Insertion Loss		2620	to	2690	-	2.0	2.5	dB	
	Ripple		2620	to	2690	-	0.6	1.5	dB	
	VSWR	Ant	2620	to	2690	-	1.4	2.0	-	
		Rx	2620	to	2690	-	1.3	2.0	-	
	Absolute Attenuation		880	to	915	37	96	-	dB	
			1710	to	1785	35	62	-	dB	
			2402	to	2482	41	47	-	dB	
			2500	to	2570	45	52	-	dB	
			2775	to	6000	35	38	-	dB	
			4900	to	5300	47	53	-	dB	
			5300	to	5950	40	53	-	dB	
	Amplitude Imbalance		2620	to	2690	-2.0	1.3	+2.0	dB	
	Phase mbalance		2620	to	2690	-15	-5.1	+15	deg.	
Tx to Rx	Differential Mode		2500	to	2570	52	55	-	dB	
	Isolation		2620	to	2690	51	61	-	dB	
	Common Mode Isolation		2500	to	2570	44	47	-	dB	

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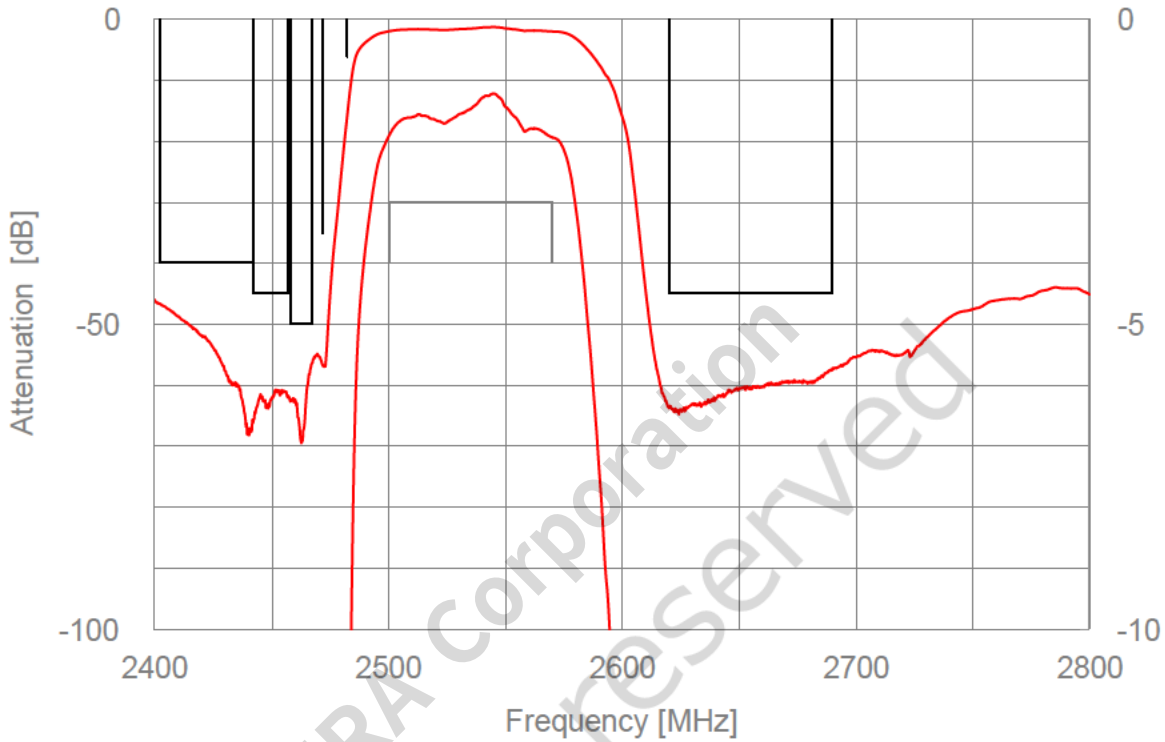
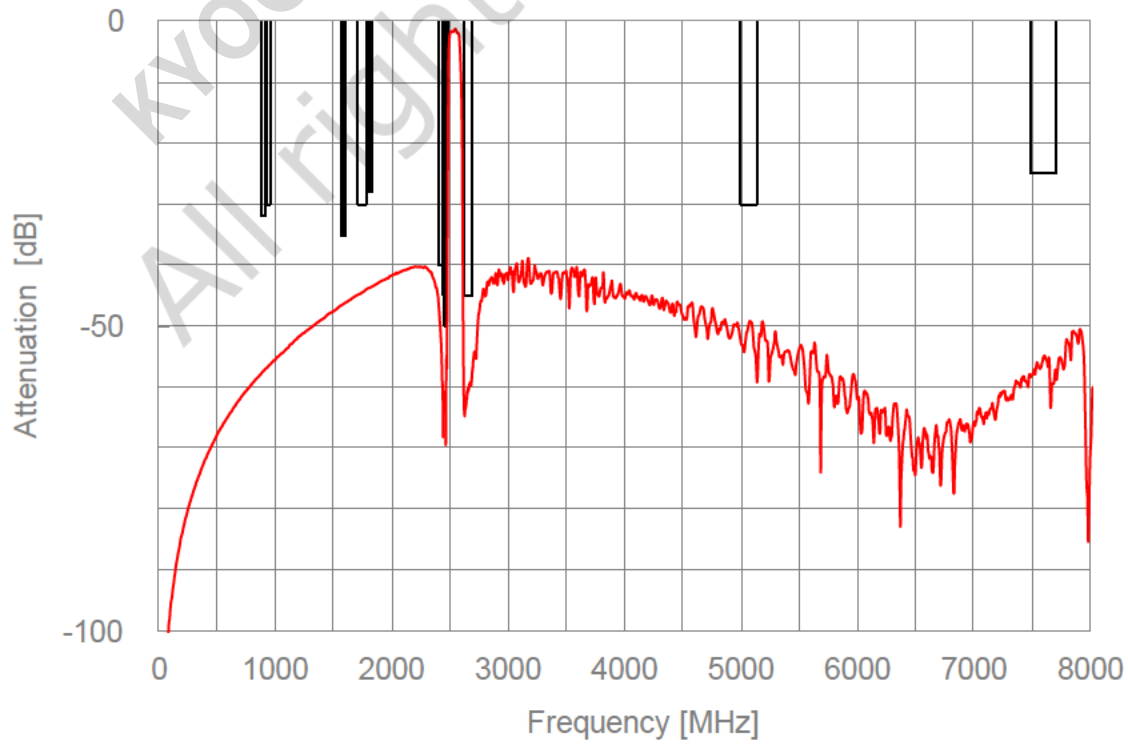
Electrical Characteristics

[Tx to Ant]





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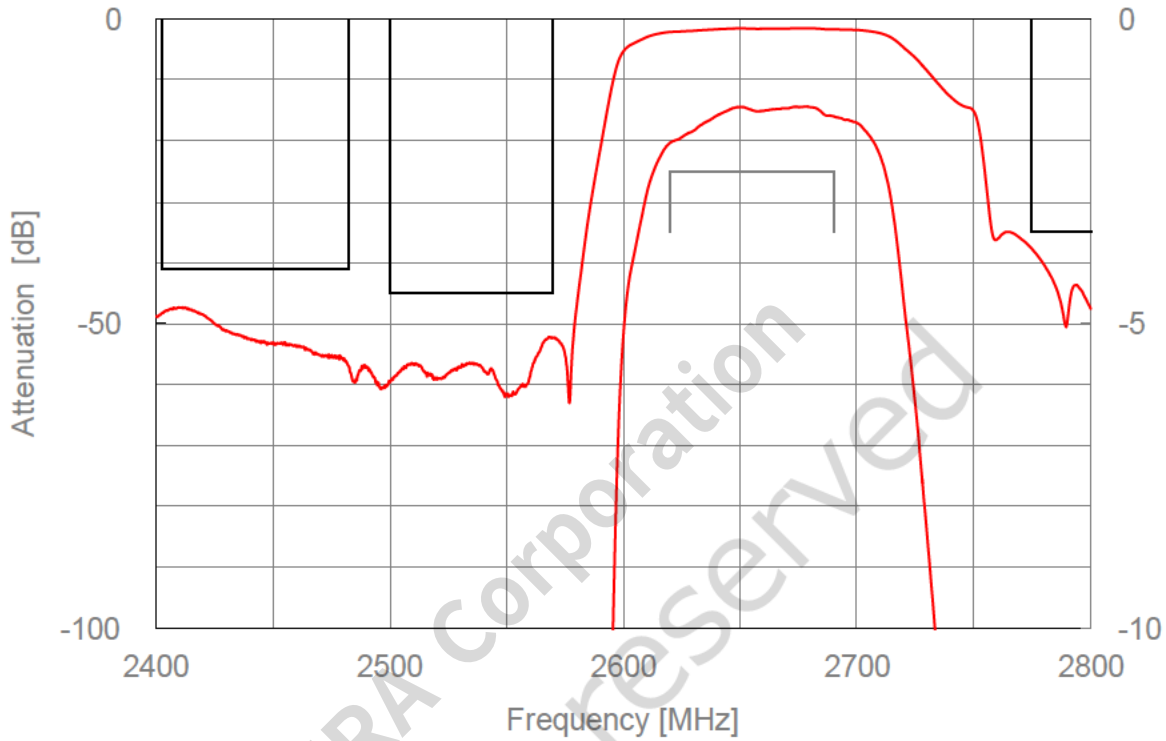
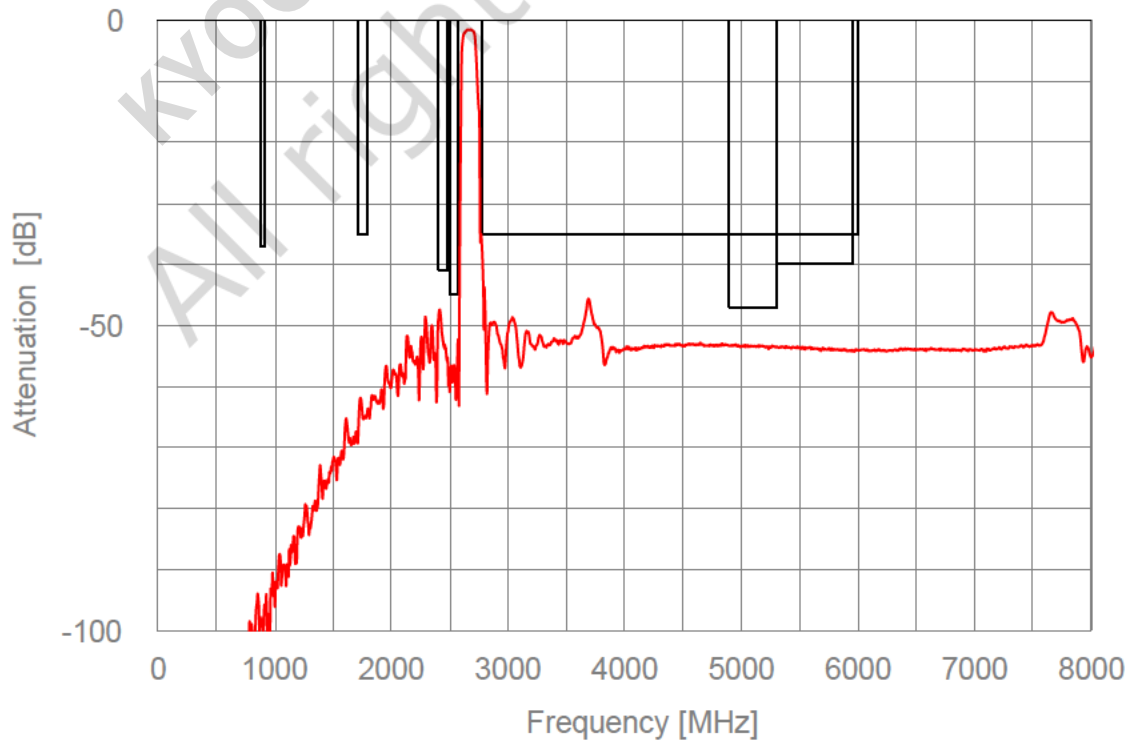
Electrical Characteristics

[Ant to Rx]





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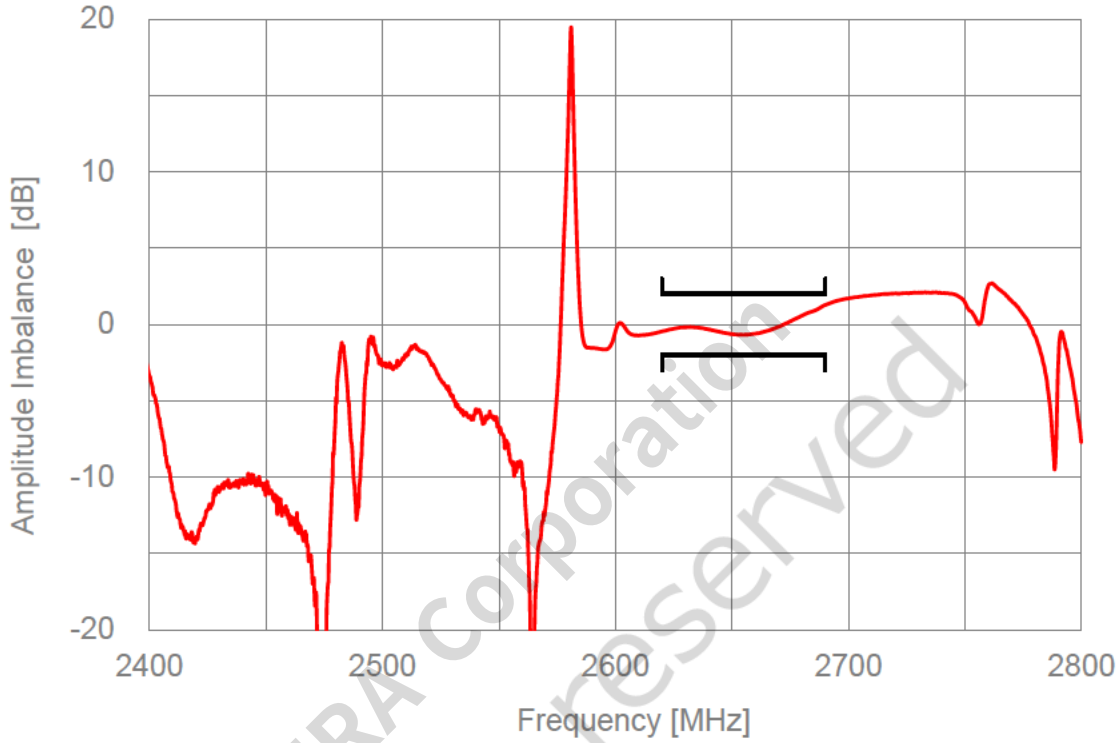
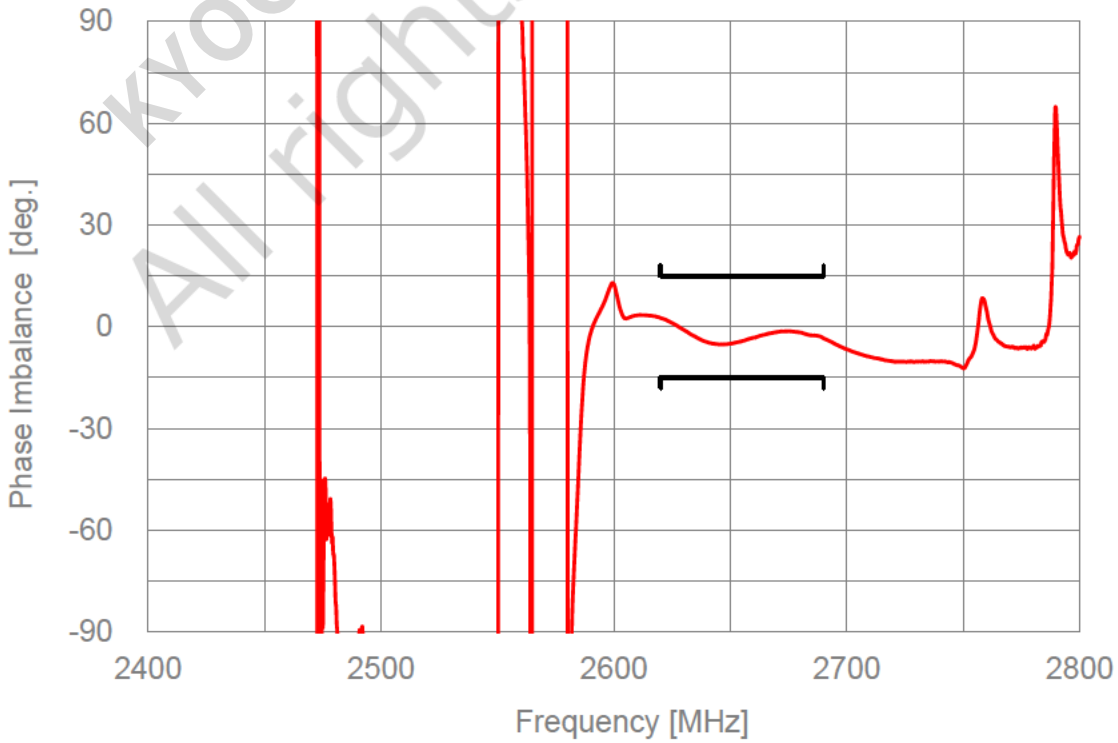
Electrical Characteristics

[Ant to Rx]





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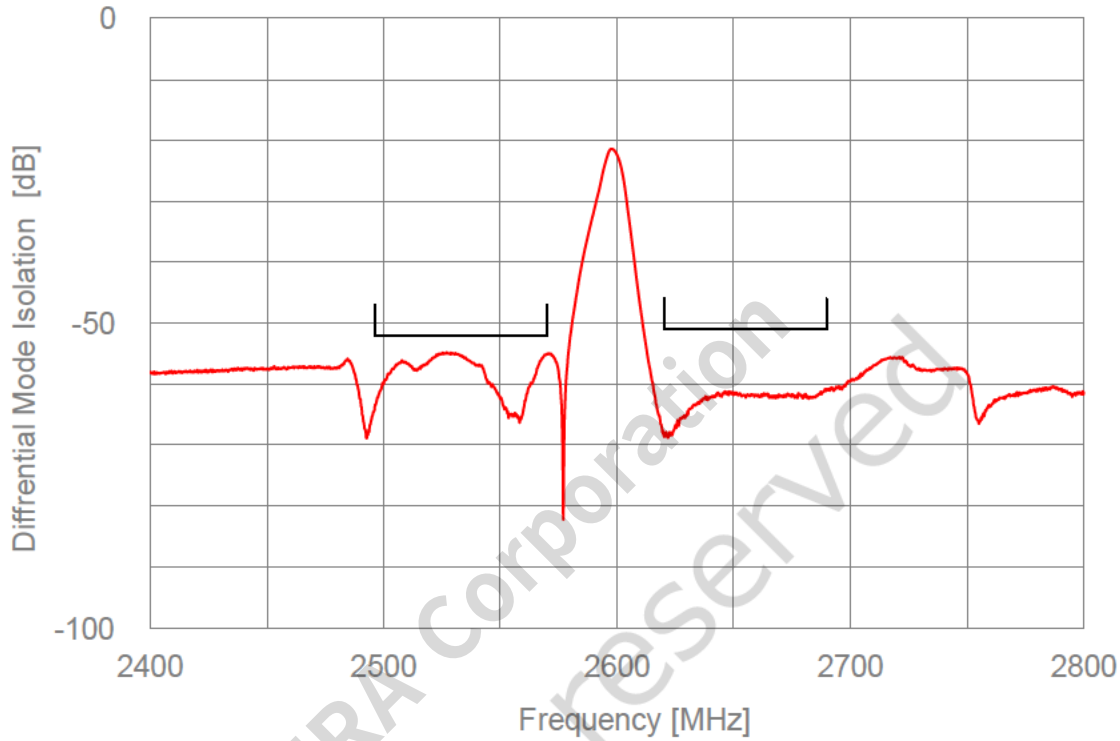
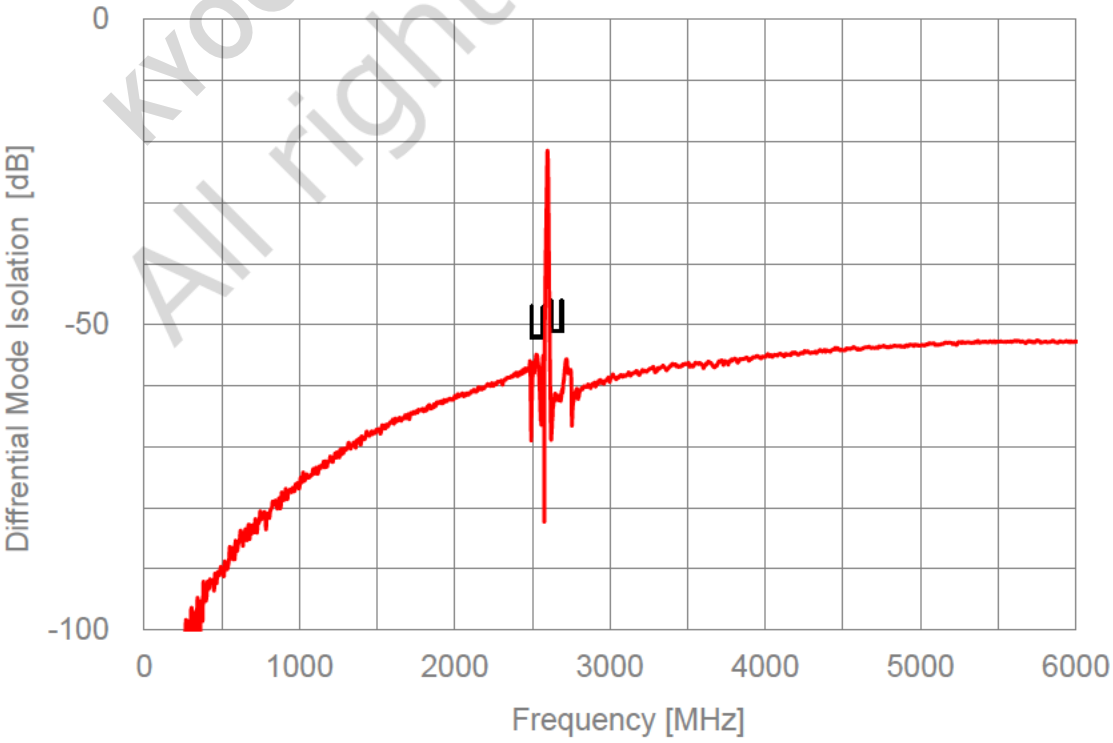
Electrical Characteristics

[Tx to Rx]





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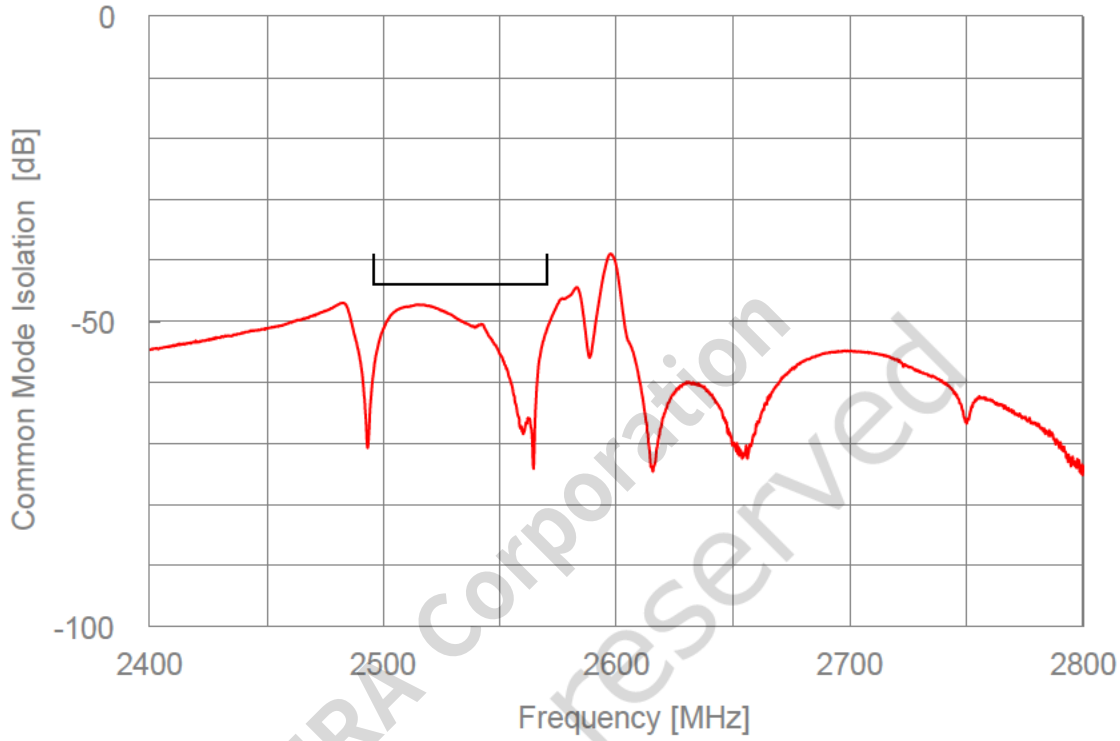
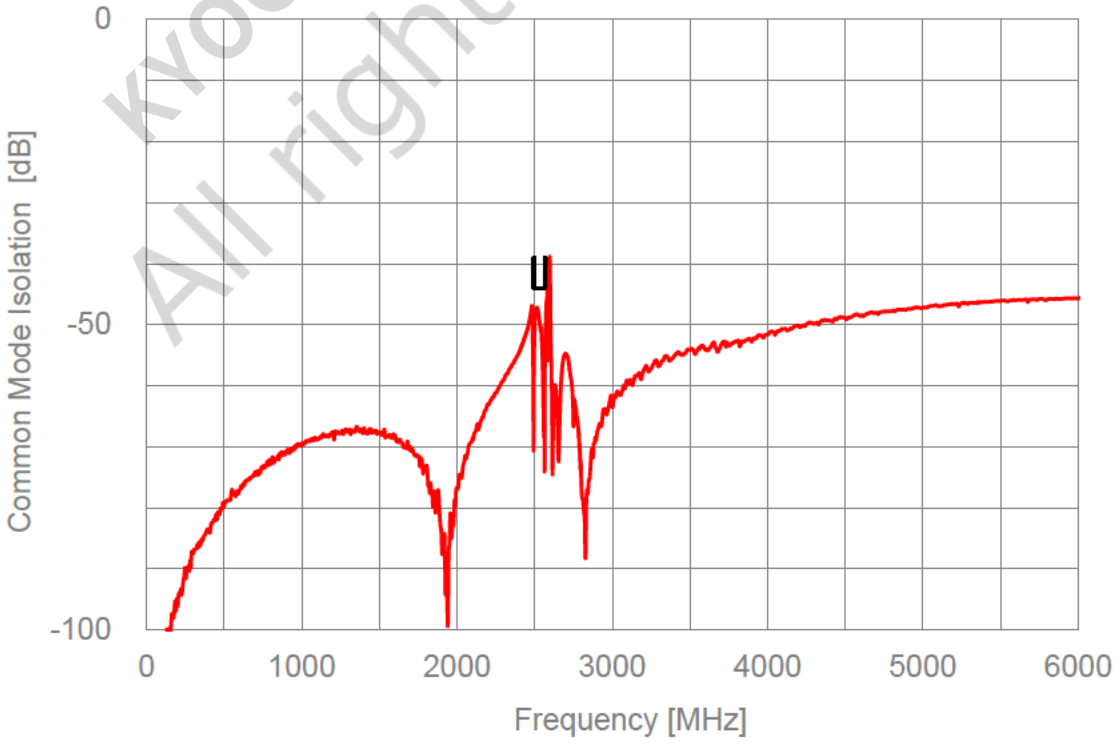
Electrical Characteristics

[Tx to Rx]





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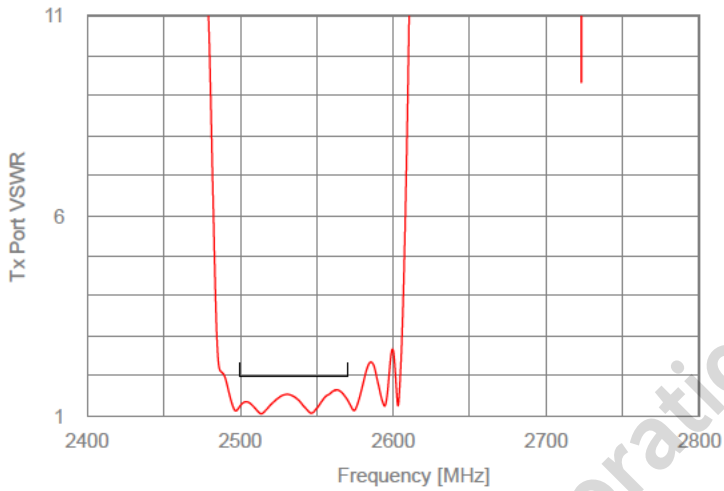
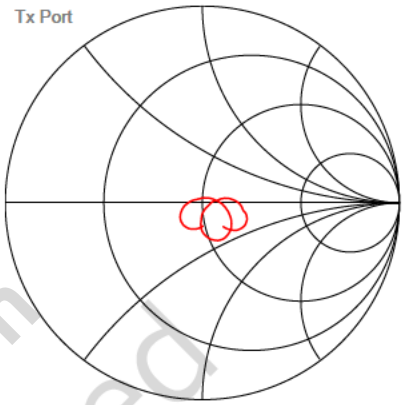
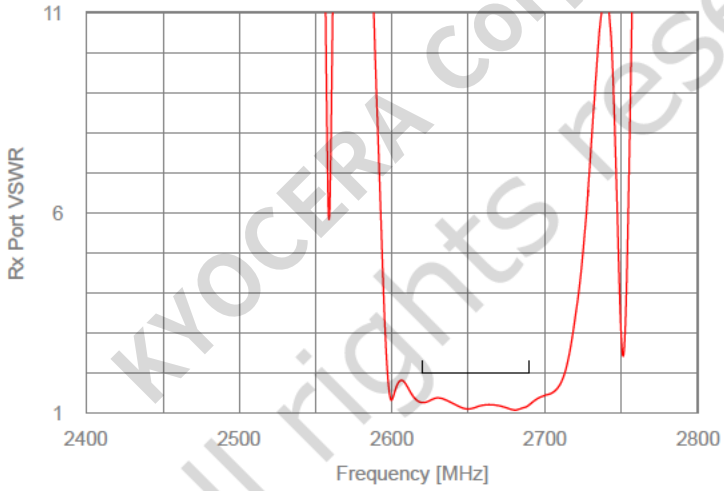
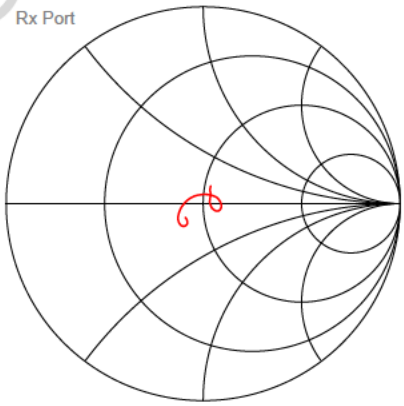
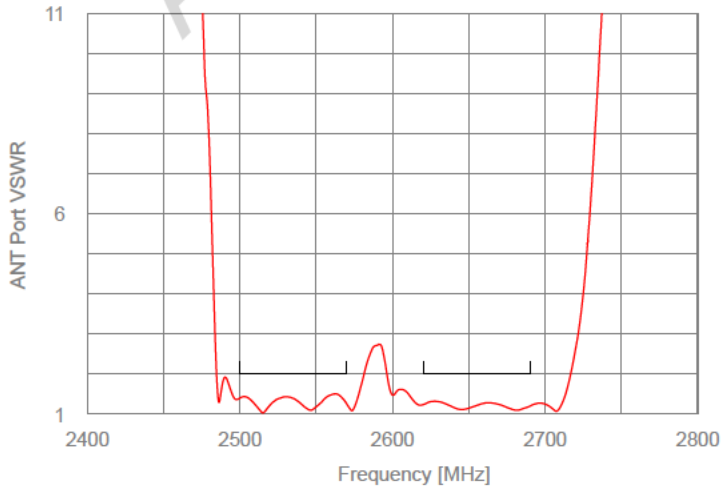
Electrical Characteristics

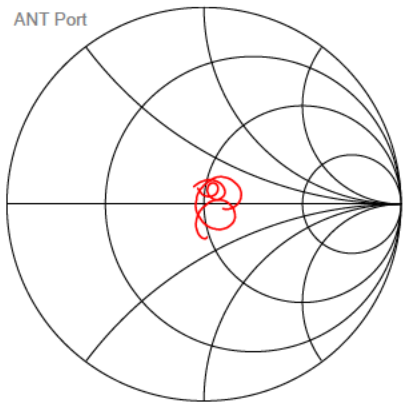












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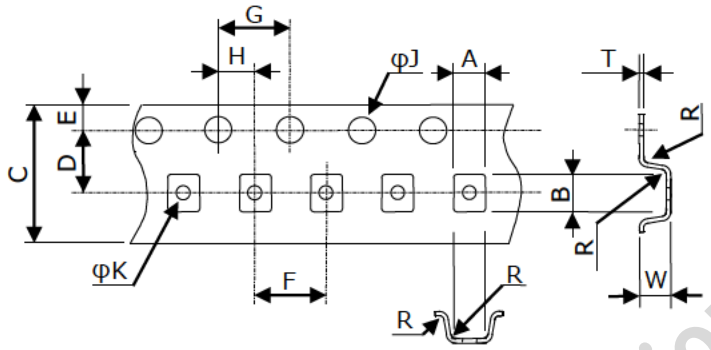
Tape & Reel Specification

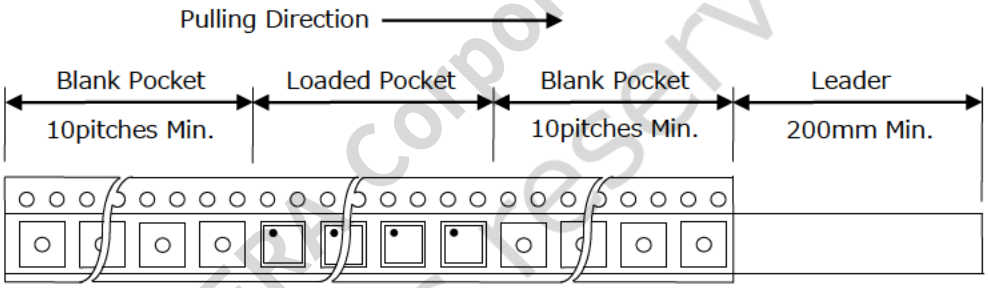
[Tape]



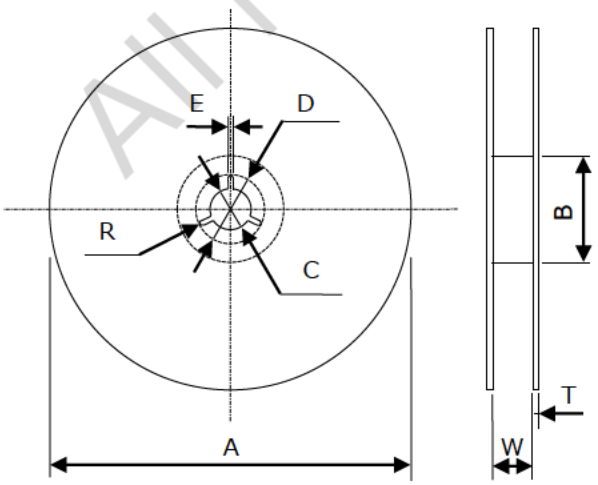
Unit : mm

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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