

Datasheet of SAW Quadplexer 2520 Band2,66 Unbalanced

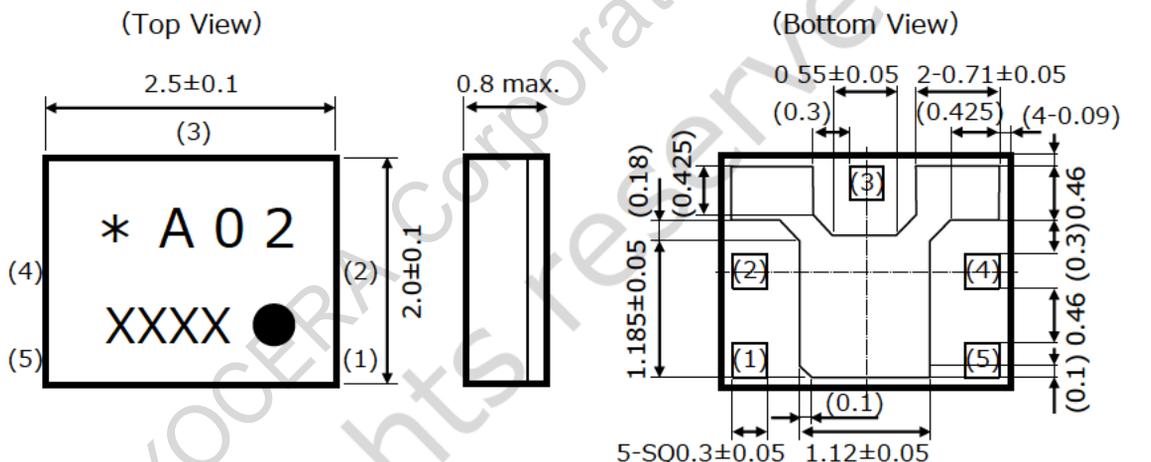
KYOCERA Part No. : SQ25-1745K6SUA2

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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)	+30	dBm	5,000hours, Ta=50deg.C, CW	
Tx Port	Band2	50	ohm	Unbalance
Nominal Impedance	Band66	50//4.9nH,0.8pF	ohm	Unbalance
Ant. Port Nominal Impedance		50	ohm	Unbalance
Rx Port	Band2	50	ohm	Unbalance
Nominal Impedance	Band66	50//1.8nH	ohm	Unbalance

Dimensions

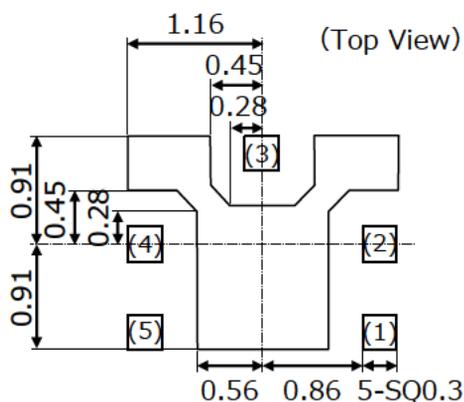


- * : Identification logo
- A02 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

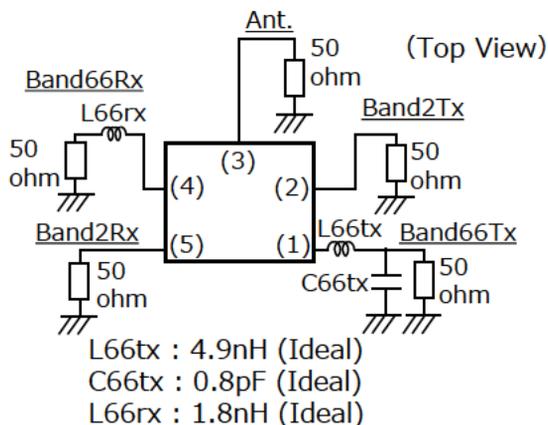
Pin No.	Function
(1)	Band66 Tx
(2)	Band2 Tx
(3)	Ant.
(4)	Band66 Rx
(5)	Band2 Rx
Others	GND

Unit : mm

Recommendable Land Pattern



Measurement Circuit



Electrical Characteristics

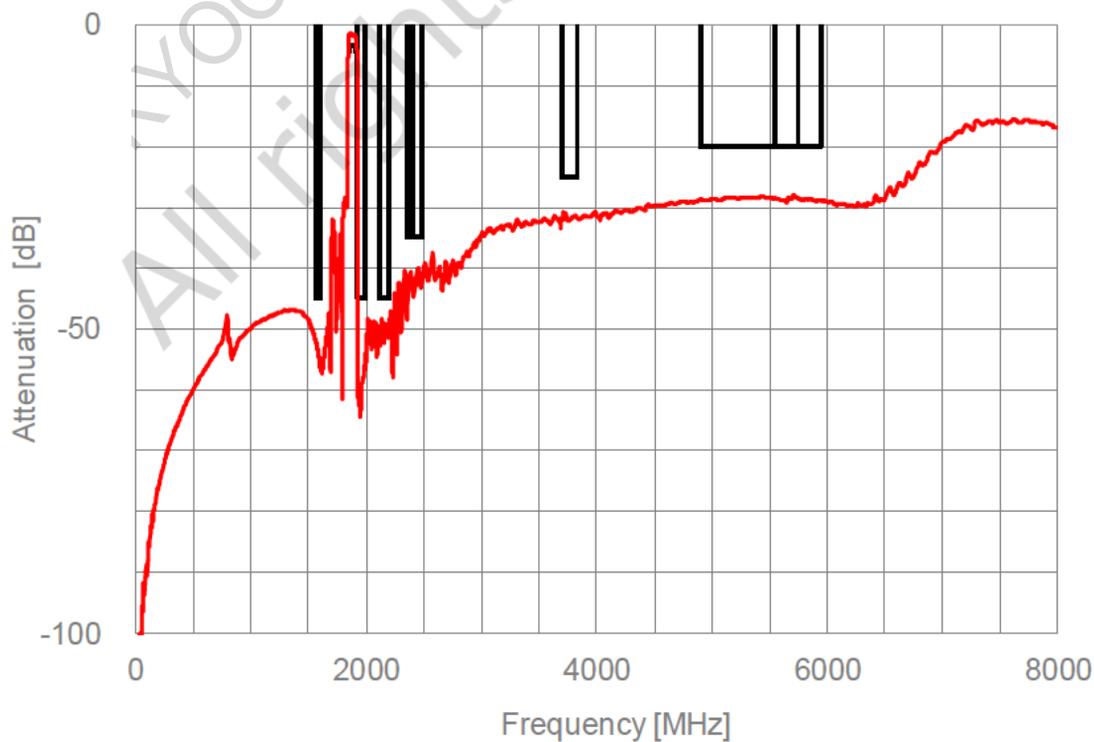
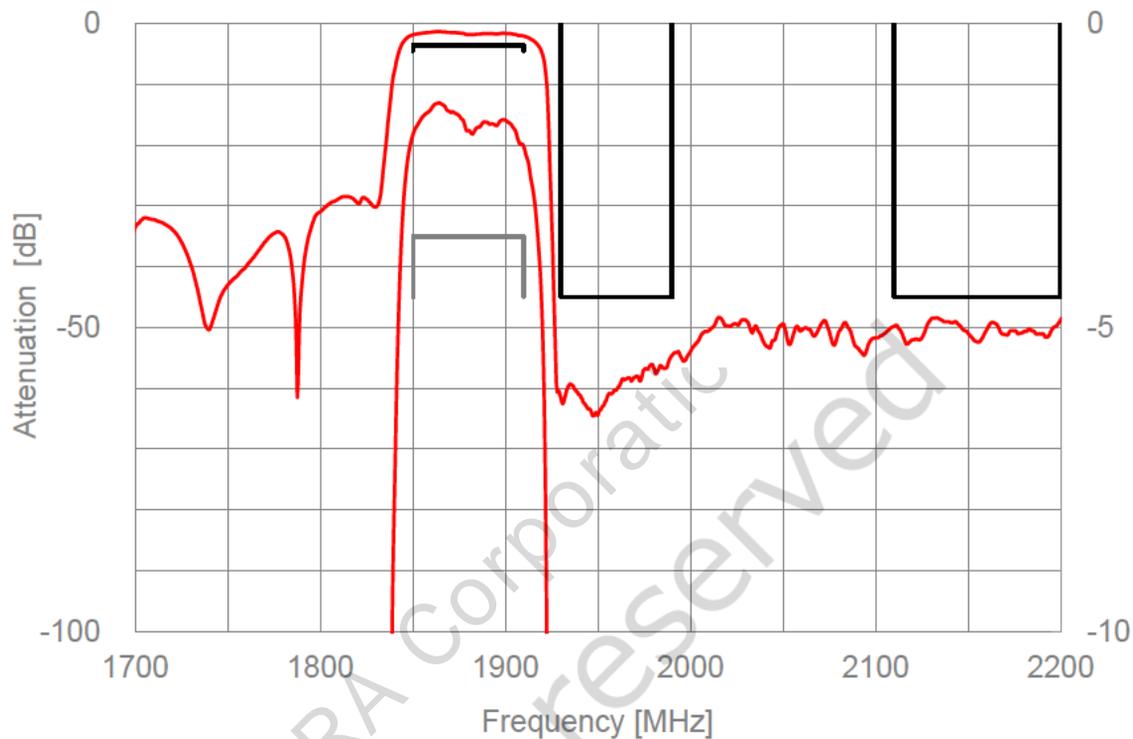
Items		Frequency (MHz)	Characteristics			Unit	Notes	
			Min.	Typ.	Max.			
Band2 TX to ANT	Insertion Loss	1850.15 - 1909.85	-	2.0	3.5	dB	B2	
	Ripple(any 20MHz)	1850.15 - 1909.85	-	0.7	2.0	dB	B2	
	VSWR	Tx	1850.15 - 1909.85	-	1.5	2.0		B2
		Ant	1850.15 - 1909.85	-	1.5	2.0		B2
	Attenuation		1930 - 1990	45	55	-	dB	B2 RX
			1559 - 1608	45	52	-	dB	GNSS
			2110 - 2200	45	48	-	dB	B66 RX
			2350 - 2360	35	46	-	dB	B30 RX
			2400 - 2485	35	40		dB	Bluetooth
			3700 - 3830	25	31		dB	2H
		4900 - 5950	20	28	-	dB	5G	
Band2 ANT to Rx	Insertion Loss	1930.15 - 1989.85	-	2.8	3.5	dB	B2	
	Ripple(any 20MHz)	1930.15 - 1989.85	-	0.9	2.0	dB	B2	
	VSWR	Rx	1930.15 - 1989.85	-	1.9	2.5		B2
		Ant	1930.15 - 1989.85	-	7	2.5		B2
	Attenuation		1850 - 1910	45	57	-	dB	B2 TX
			1710 - 1780	50	57	-	dB	B66 TX
			2305 - 2315	45	55	-	dB	B30 Tx
			2400 - 2500	45	50	-	dB	Bluetooth
			3860.5 - 3989.5	25	54	-	dB	2H
			4900 - 5950	25	46	-	dB	5G
Band2 TX to Rx	Isolation	1850.15 - 1909.85	55	61	-	dB	B2 TX	
		1930.15 - 1989.85	50	61	-	dB	B2 RX	

Electrical Characteristics

Items		Frequency (MHz)	Characteristics			Unit	Notes	
			Min.	Typ.	Max.			
Band66 TX to ANT	Insertion Loss	1710.15 - 1779.85	-	2.2	3.3	dB		
	Ripple(any 20MHz)	1710.15 - 1779.85	-	0.9	2.0	dB		
	VSWR	Tx	1710.15 - 1779.85	-	1.4	2.0		
		Ant	1710.15 - 1779.85	-	1.3	2.0		
	Attenuation		2110 - 2200	50	55	-	dB	B66 RX
			1559 - 1608	45	49	-	dB	GNDD
			1930 - 1990	50	53	-	dB	B2 RX
			2350 - 2360	35	47	-	dB	B30 RX
		2400 - 2485	35	39	-	dB	Bluetooth	
		3420 - 3560	25	31	-	dB	2H	
	4900 - 5950	20	24	-	dB	5G		
	5130 - 5340	20	26	-	dB			
Band66 ANT to Rx	Insertion Loss	2110.15 - 2199.85	-	2.4	3.1	dB		
	Ripple(any 20MHz)	2110.15 - 2199.85	-	0.7	2.0	dB		
	VSWR	Rx	2110.15 - 2199.85	-	1.6	2.5		
		Ant	2110.15 - 2199.85	-	6	2.5		
	Attenuation		1710 - 1780	50	54	-	dB	B66 TX
			1850 - 1910	45	51	-	dB	B2 TX
			2305 - 2315	35	43	-	dB	B30 TX
			2400 - 2500	28	32	-	dB	Bluetooth
		4220 - 4400	25	30	-	dB	2H	
		4900 - 5950	25	33	-	dB	5G	
Band66 TX to Rx	Isolation	2110.15 - 2199.85	53	59	-	dB	RX	
		1710.15 - 1779.85	55	60	-	dB	TX	
Band2Tx to Band66Rx	Cross Isolation	2110.15 - 2199.85	52	59	-	dB	B66 RX	
		1850.15 - 1909.85	55	58	-	dB	B2 TX	
Band66Tx to Band2Rx	Cross Isolation	1930.5 - 1989.85	52	55	-	dB	B2 RX	
		1710.15 - 1779.85	55	58	-	dB	B66 TX	

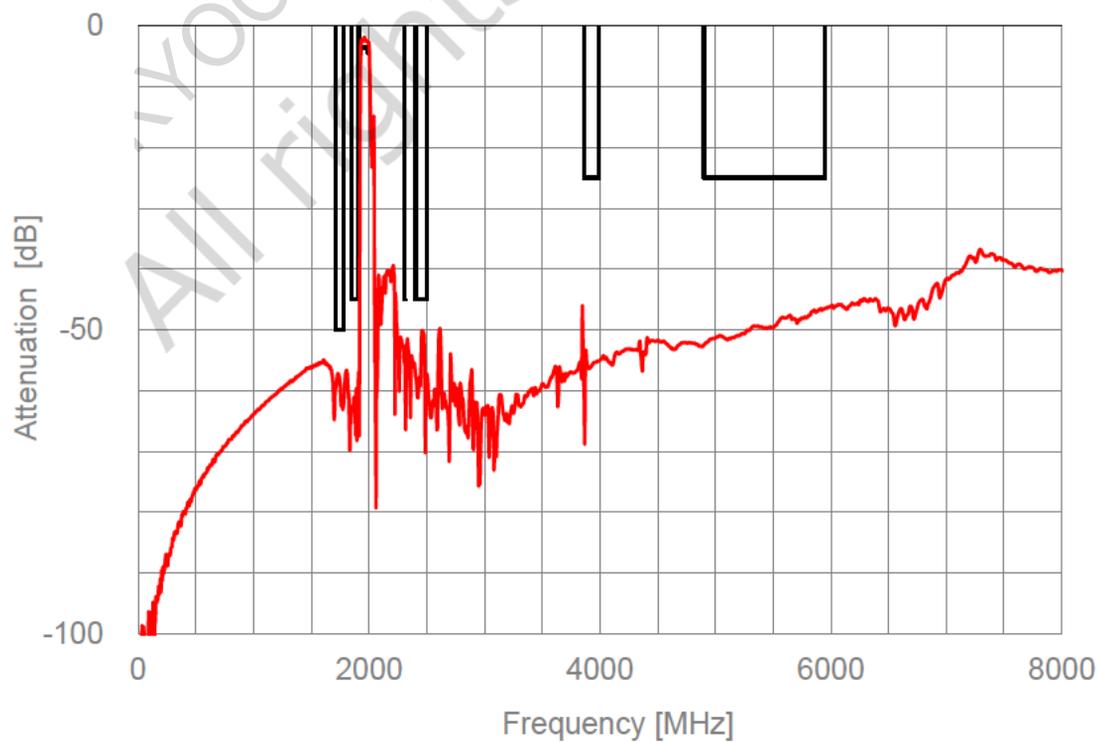
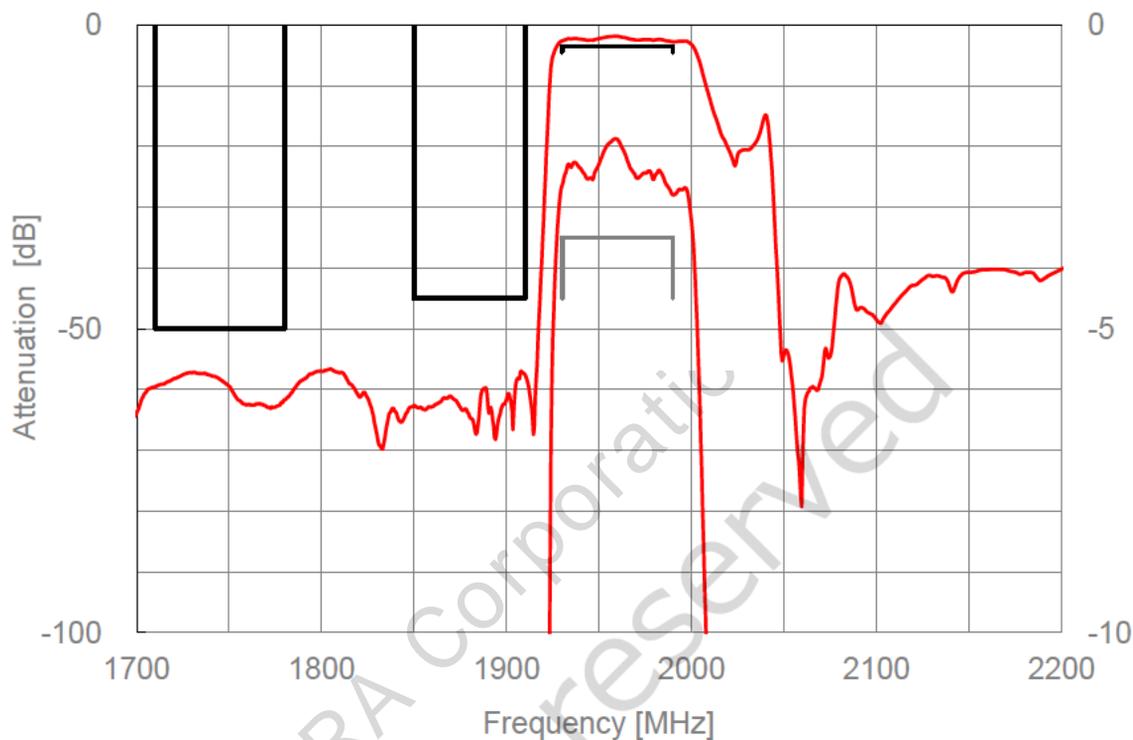
Electrical Characteristics

[Band2 Tx to Ant]



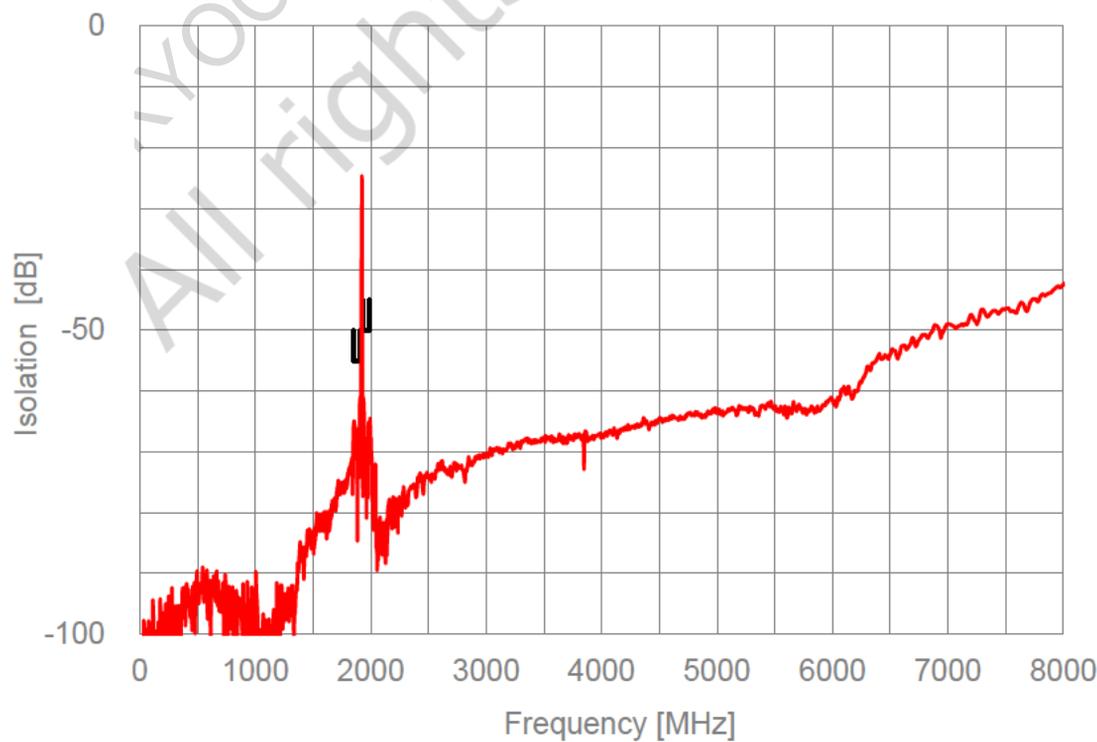
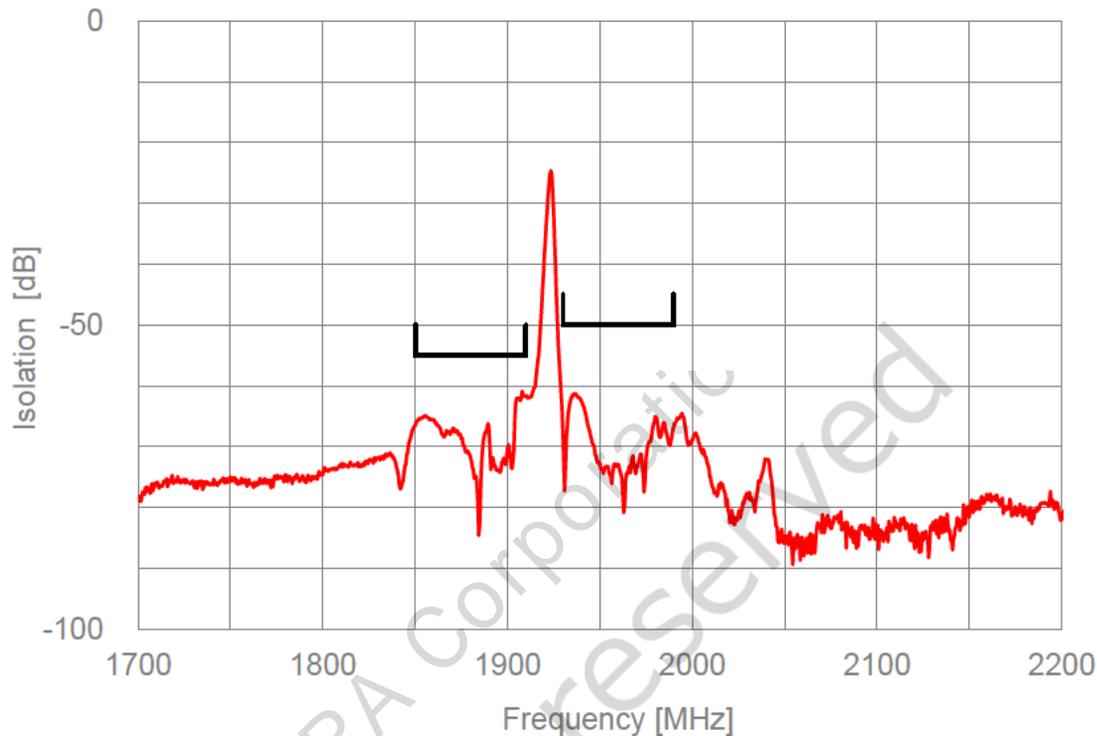
Electrical Characteristics

[Band2 Ant to Rx]



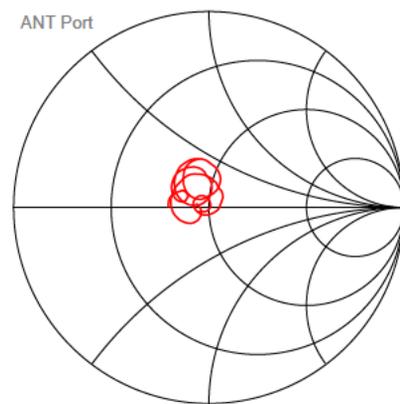
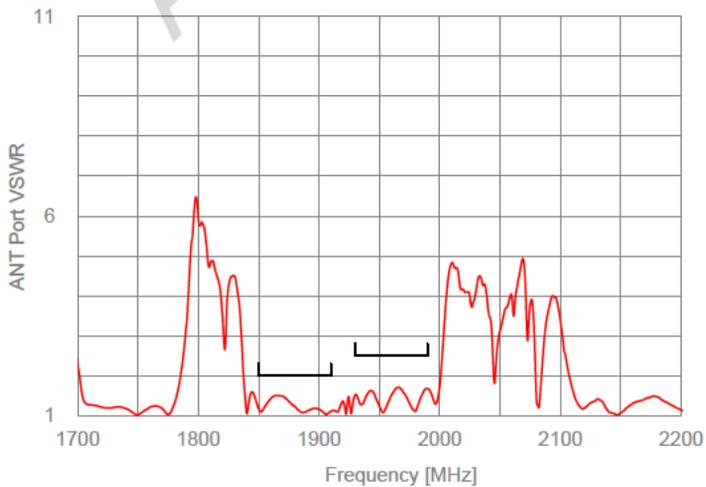
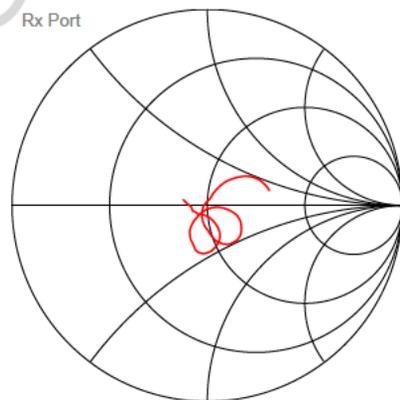
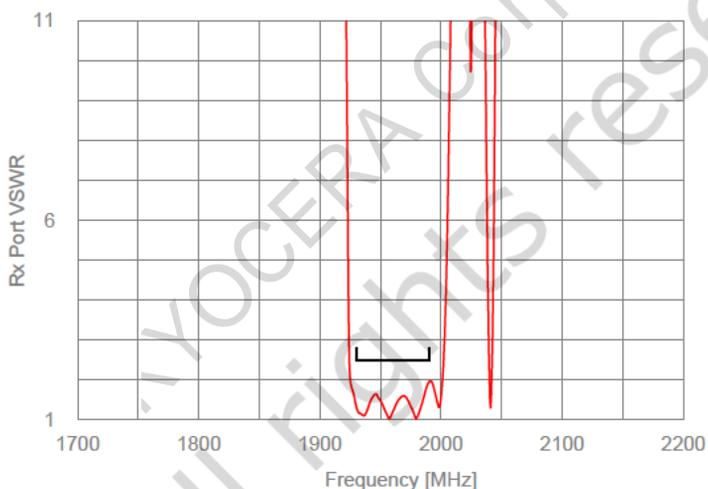
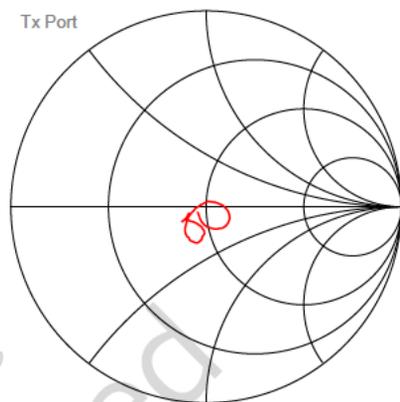
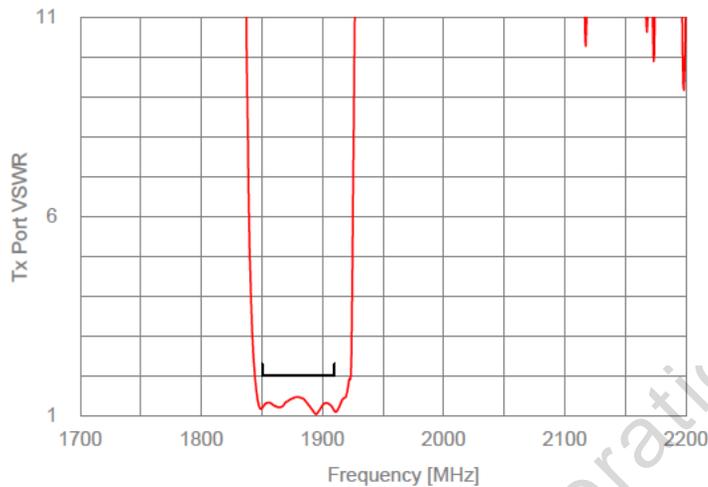
Electrical Characteristics

[Band2 Tx to Rx]



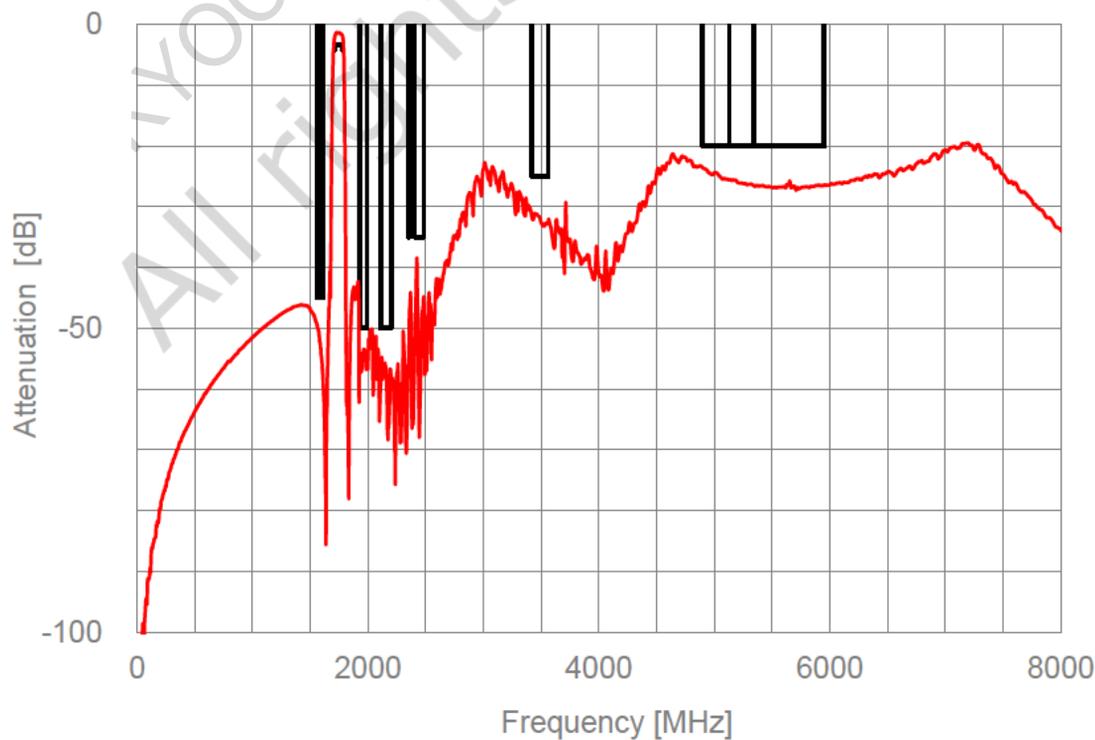
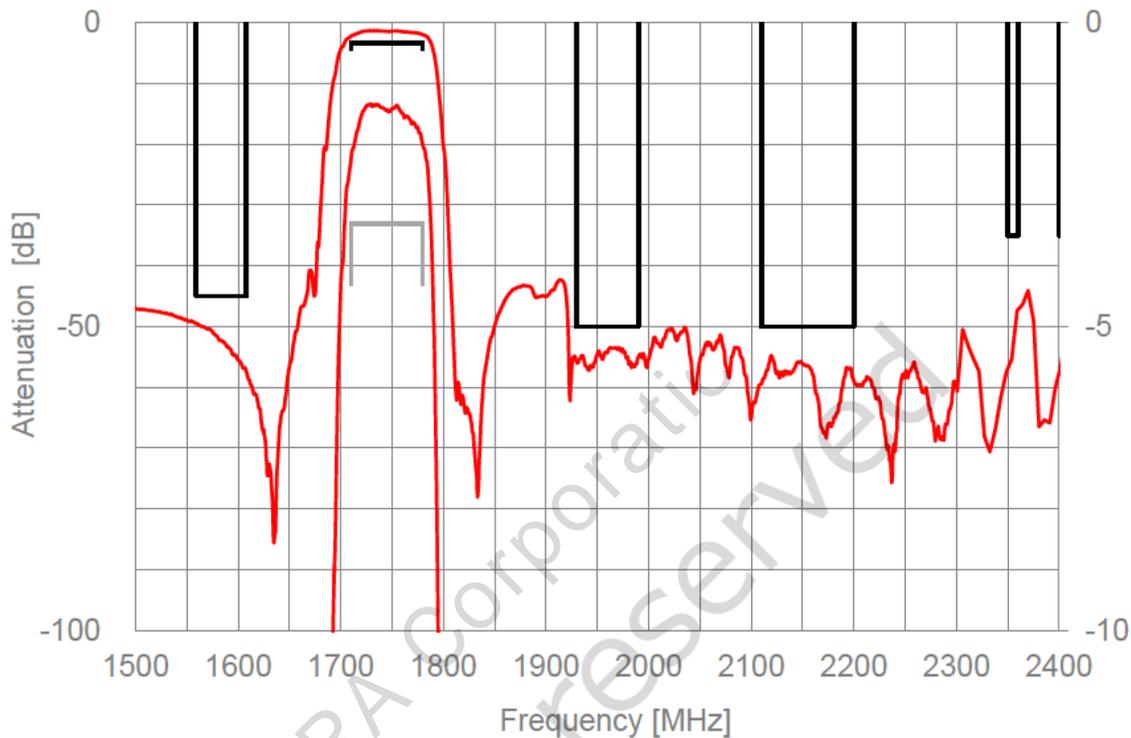
Electrical Characteristics

[Band2]



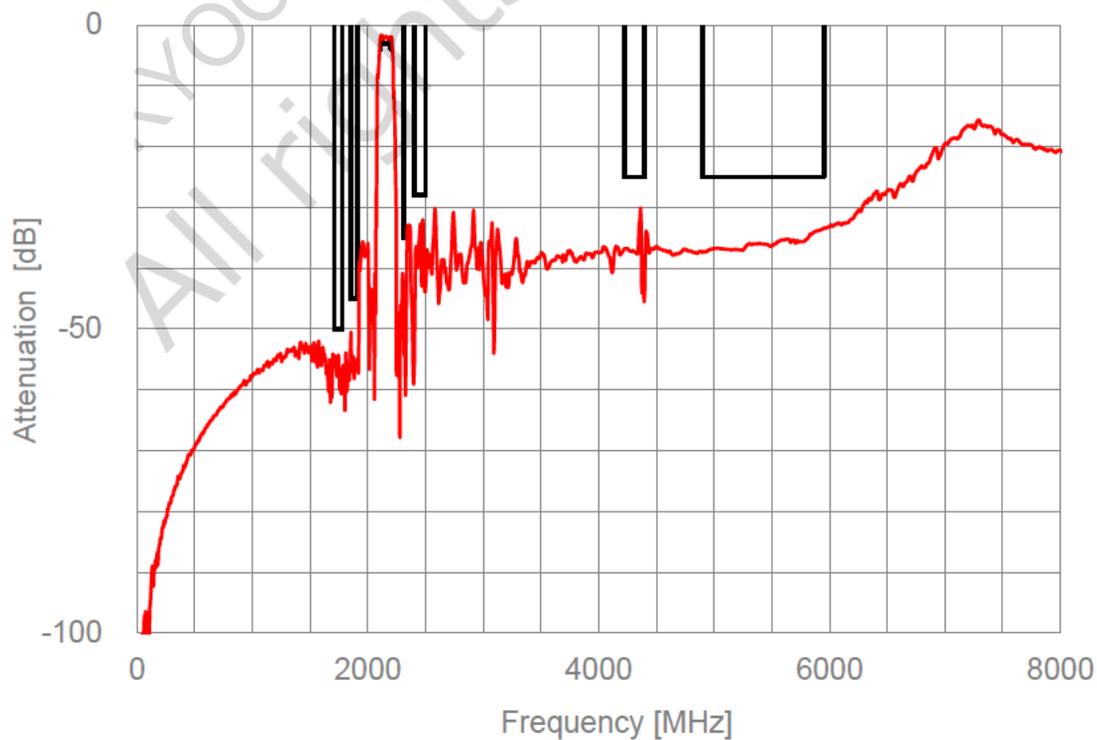
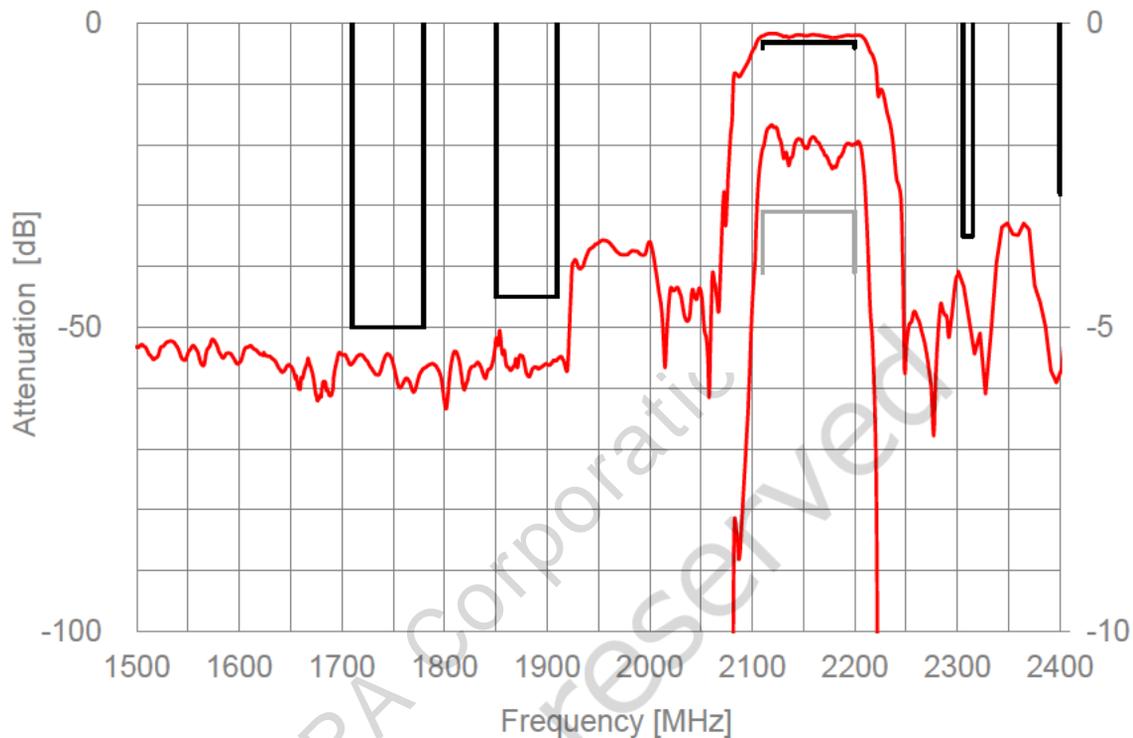
Electrical Characteristics

[Band66 Tx to Ant]



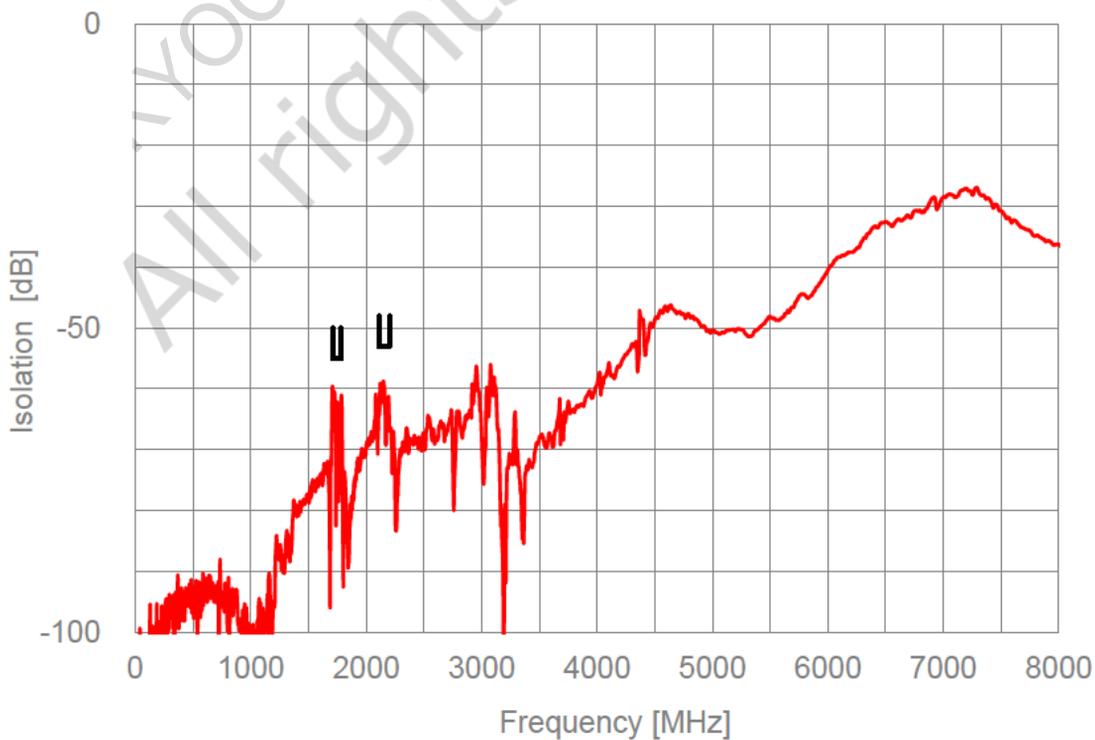
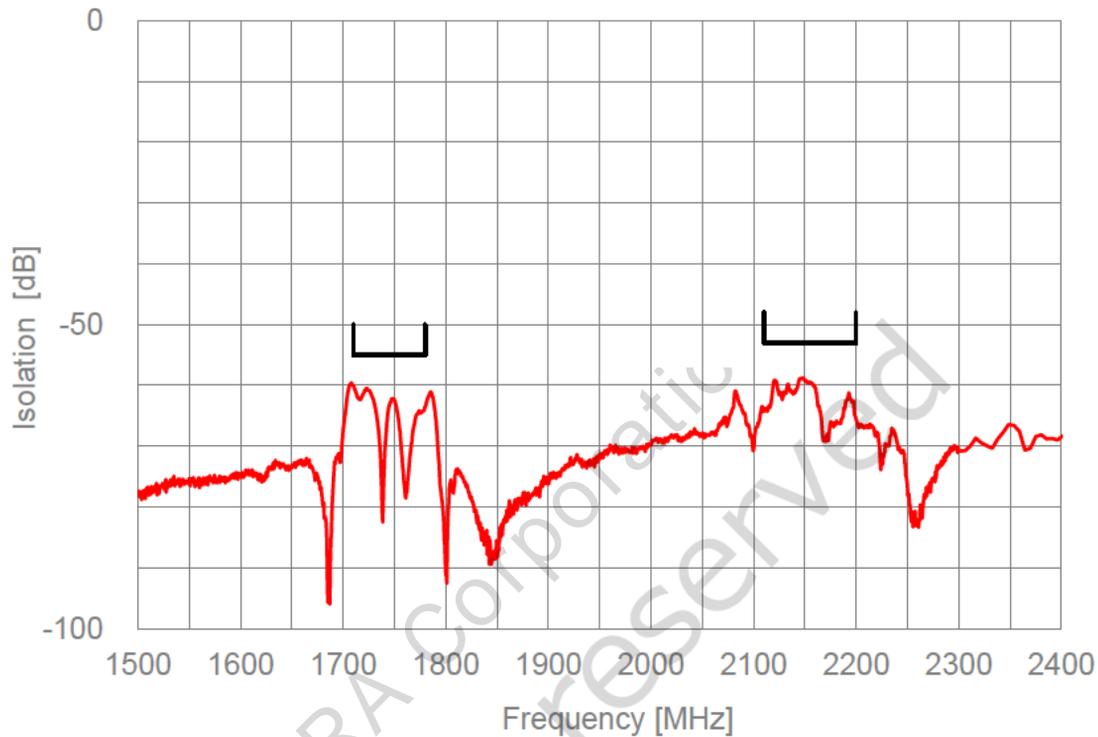
Electrical Characteristics

[Band66 Ant to Rx]



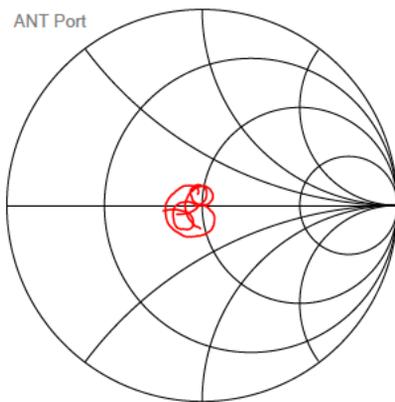
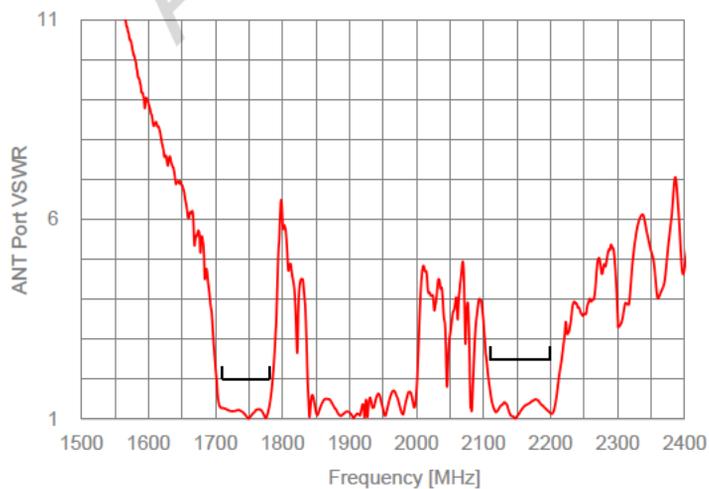
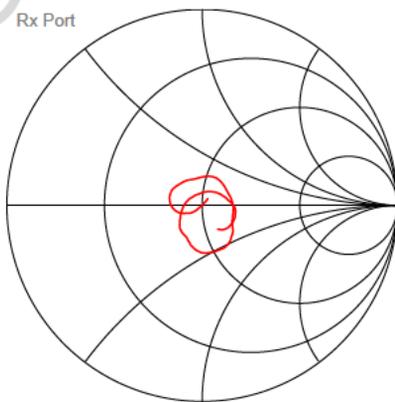
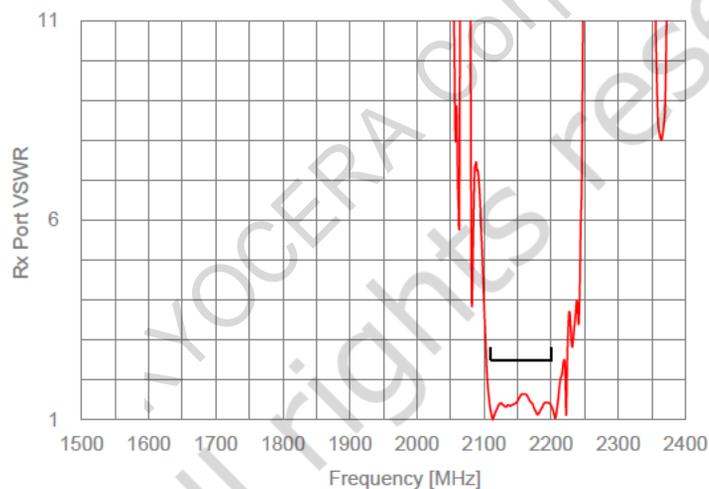
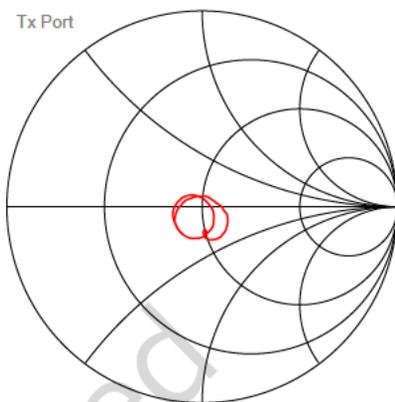
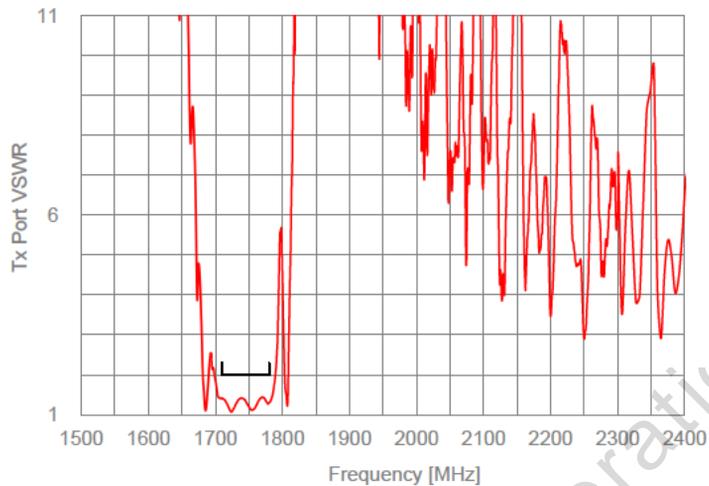
Electrical Characteristics

[Band66 Tx to Rx]



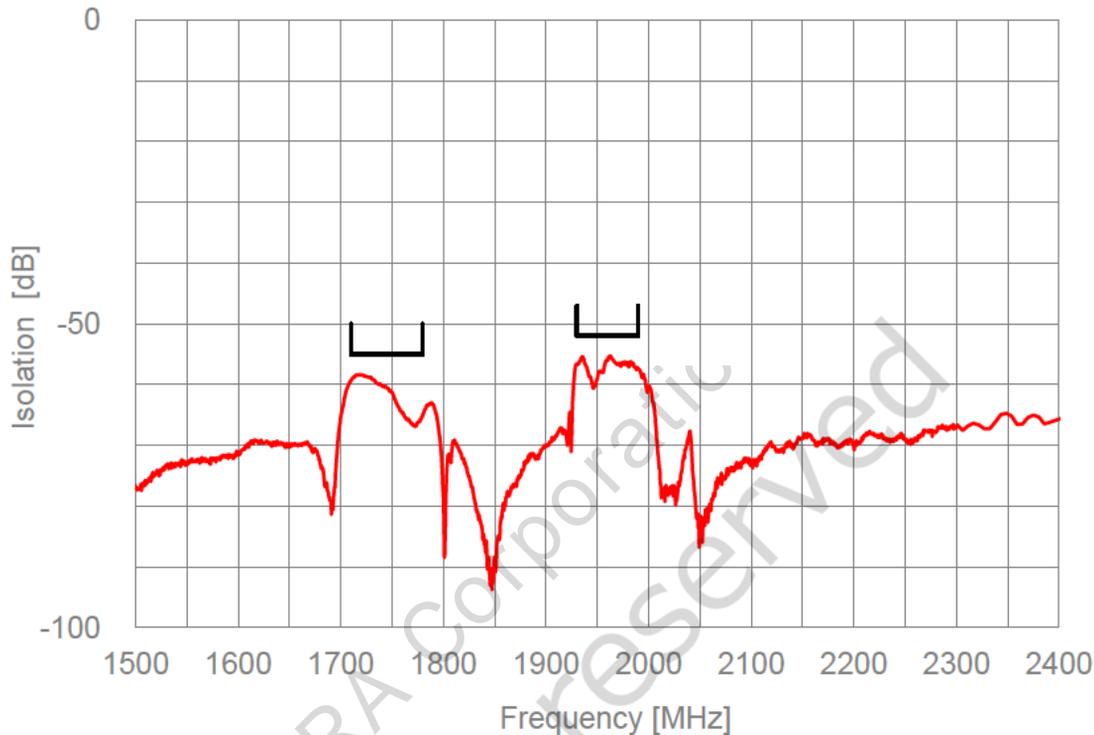
Electrical Characteristics

[Band66]

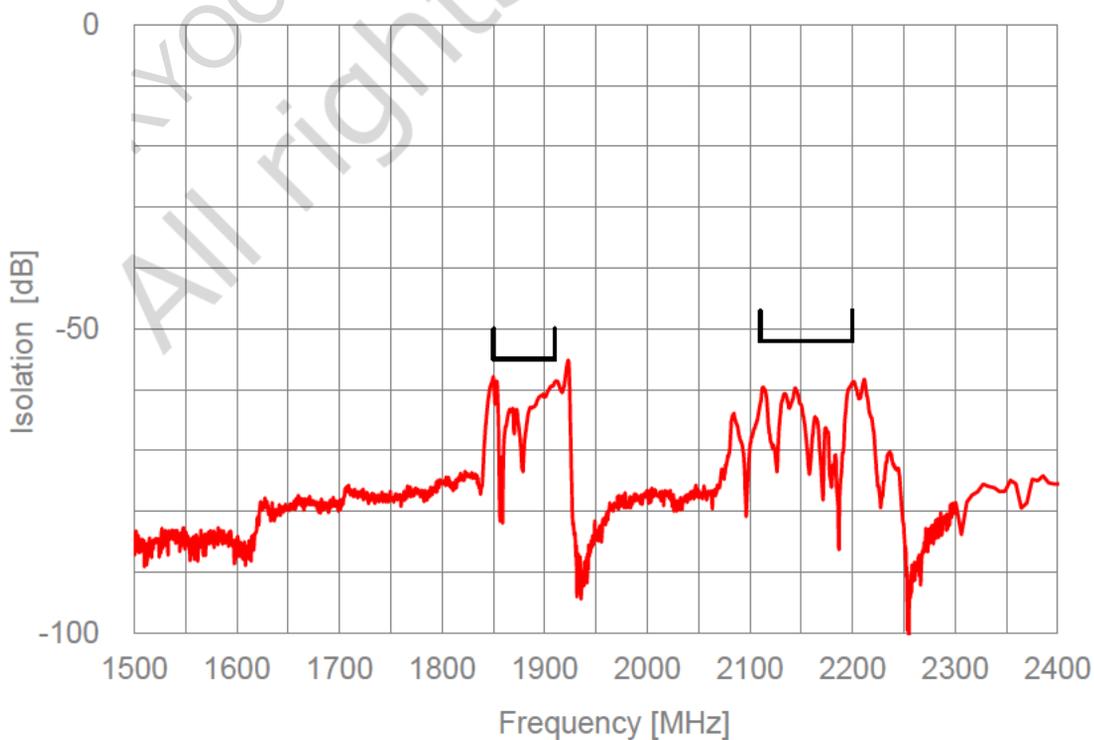


Electrical Characteristics

[Band66 Tx to Band2 Rx]

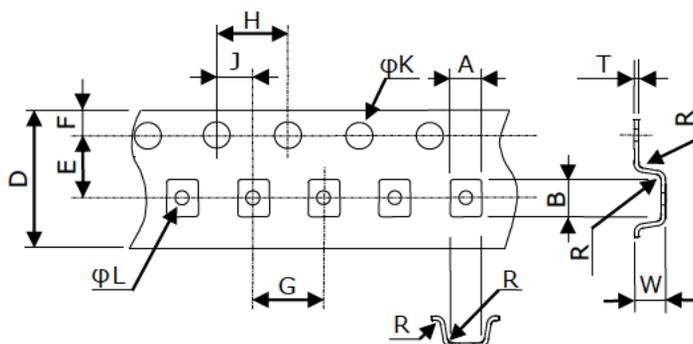


[Band2 Tx to Band66 Rx]



Tape & Reel Specification

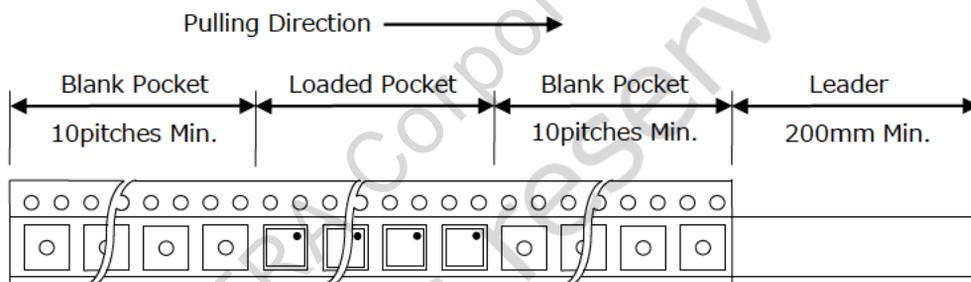
[Tape]



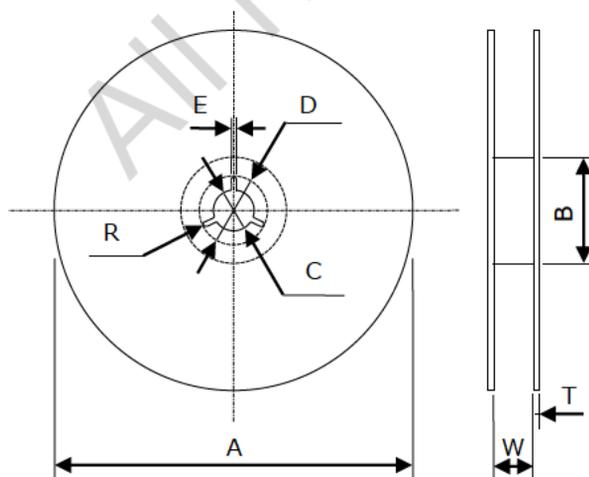
Unit : mm

Part	Dimension
A	2.3±0.1
B	2.8±0.1
D	8.0±0.1
E	3.50±0.05
F	1.75±0.10
G	4.0±0.1
H	4.0±0.1
φJ	2.00±0.05
φK	1.5±0.1
φL	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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