

Datasheet of SAW Quadplexer

2520 Band25,66 Unbalanced

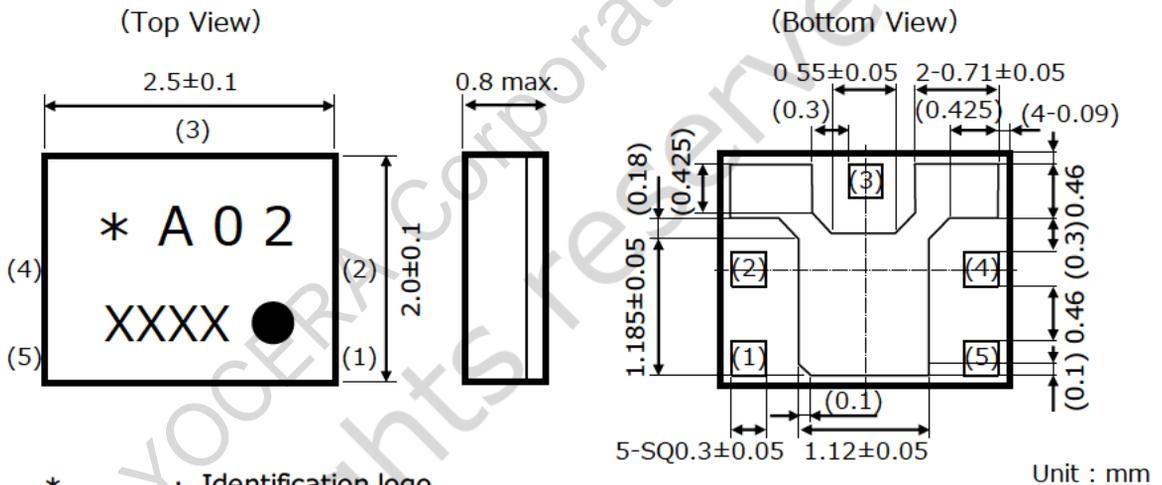
KYOCERA Part No. : SQ25-1745K6SUA1

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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	Band25	50	ohm Unbalance
Nominal Impedance	Band66	50//4.9nH,0.8pF	ohm Unbalance
Ant. Port Nominal Impedance		50	ohm Unbalance
Rx Port	Band25	50	ohm Unbalance
Nominal Impedance	Band66	50//1.8nH	ohm Unbalance

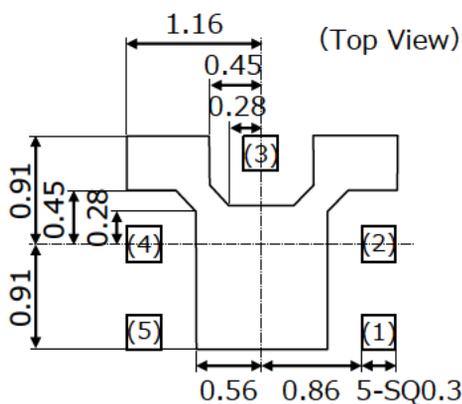
Dimensions



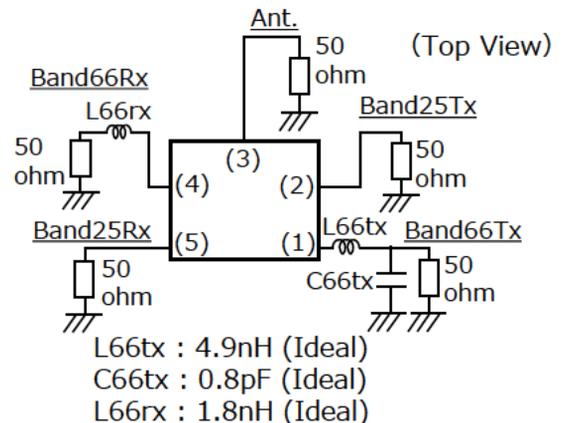
- * : Identification logo
- A02 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

Pin No.	Function
(1)	Band66 Tx
(2)	Band25 Tx
(3)	Ant.
(4)	Band66 Rx
(5)	Band25 Rx
Others	GND

Recommendable Land Pattern



Measurement Circuit



Electrical Characteristics

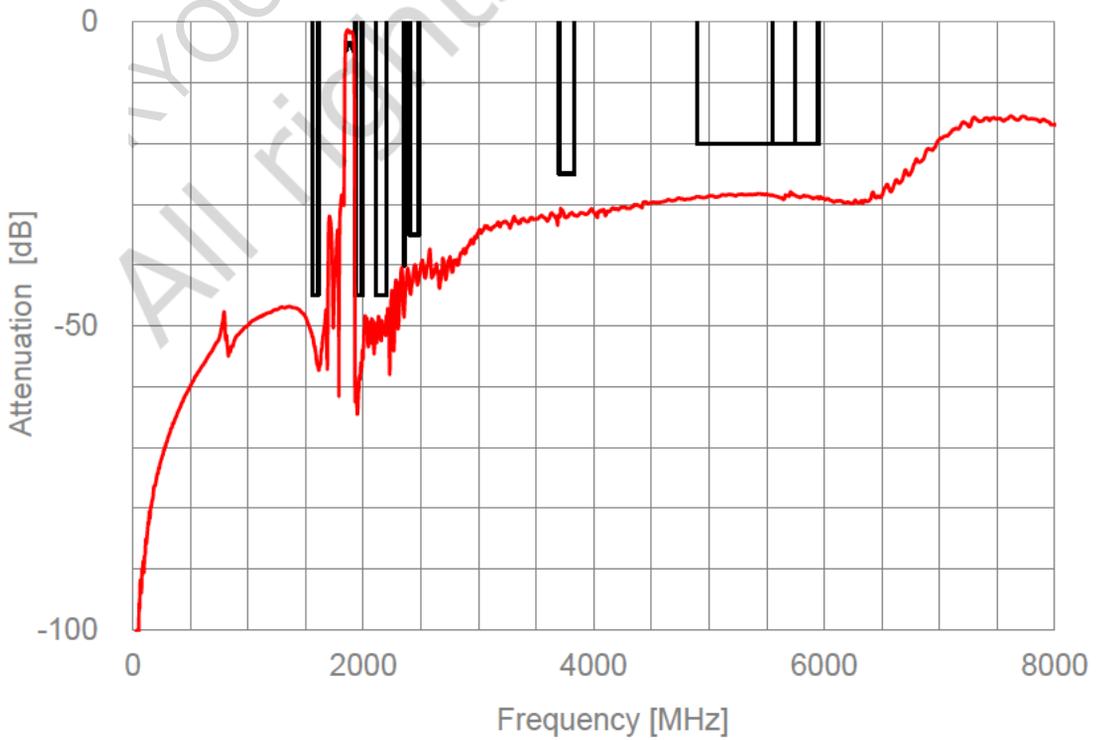
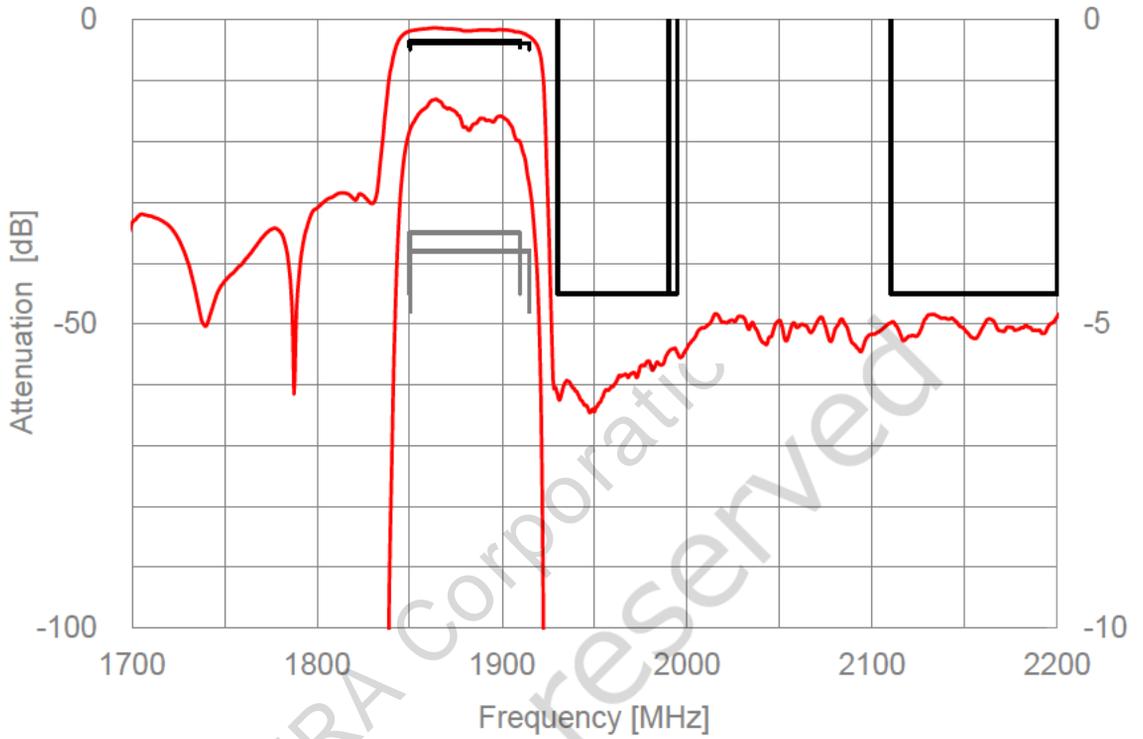
Items		Frequency (MHz)	Characteristics			Unit	Notes	
			Min.	Typ.	Max.			
Band25 TX to ANT	Insertion Loss	1850.15 - 1909.85	-	2.0	3.5	dB	B2	
		1850.25 - 1914.75	-	2.6	3.8	dB	B25	
	Ripple(any 20MHz)	1850.15 - 1909.85	-	0.7	2.0	dB	B2	
		1850.25 - 1914.75	-	1.3	2.1	dB	B25	
	VSWR	Tx	1850.15 - 1909.85	-	1.5	2.0		B2
			1850.25 - 1914.75	-	1.5	2.0		B25
		Ant	1850.15 - 1909.85	-	1.5	2.0		B2
			1850.25 - 1914.75	-	1.5	2.0		B25
	Attenuation		1930 - 1990	45	55	-	dB	B2 RX
			1930.25 - 1994.75	45	54	-	dB	B25 RX
			1559 - 1608	45	52	-	dB	GNSS
			2110 - 2200	45	48	-	dB	B66 RX
			2350 - 2360	40	46	-	d	B 0 RX
			2400 - 2485	35	40	-	dB	Bluetooth
		3700 - 3830	25	31	-	dB	2H	
		4900 - 5950	20	28	-	dB	5G	
	5550 - 5745	20	28	-	dB	3H		
Band25 ANT to Rx	Insertion Loss	1930.15 - 1989.85	-	2.8	3.5	dB	B2	
		1930.25 - 1994.75	-	2.8	3.5	dB	B25	
	Ripple(any 20MHz)	1930.15 - 1989.85	-	0.9	2.0	dB	B2	
		1930.25 - 1994.75	-	0.9	2.0	dB	B25	
	VSWR	Rx	1930.15 - 1989.85	-	1.9	2.5		B2
			1930.25 - 1994.75	-	2.0	2.5		B25
		Ant	1930.15 - 1989.85	-	1.7	2.5		B2
			1930.25 - 1994.75	-	1.7	2.5		B25
	Attenuation		1850 - 1910	45	57	-	dB	B2 TX
			1850.25 - 1914.75	45	57	-	dB	B25 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	
Band25 TX to Rx	Isolation	1850.15 - 1909.85	55	61	-	dB	B2 TX	
		1850.25 - 1911.75	55	61	-	dB	B25 TX	
		1911.75 - 1914.75	50	60	-	dB	B25 TX	
		1930.15 - 1989.85	50	61	-	dB	B2 RX	
		1930.25 - 1933.25	50	64	-	dB	B25 RX	
		1933.25 - 1994.75	55	61	-	dB	B25 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
			1930 - 1995	50	53	-	dB	B25 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	-	1.6	2.5		
	Attenuation		1710 - 1780	50	54	-	dB	B66 TX
			1850 - 1910	45	51	-	dB	B2 TX
			1850 - 1915	45	51	-	dB	B25 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	
Band25Tx to Band66Rx	Cross Isolation	2110.15 - 2199.85	52	59	-	dB	B66 RX	
		1850.15 - 1909.85	55	58	-	dB	B2 TX	
		1850.25 - 1914.75	55	58	-	dB	B25 TX	
Band66Tx to Band25Rx	Cross Isolation	1930.15 - 1989.85	52	55	-	dB	B2 RX	
		1930.25 - 1994.75	52	55	-	dB	B25 RX	
		1710.15 - 1779.85	55	58	-	dB	B66 TX	

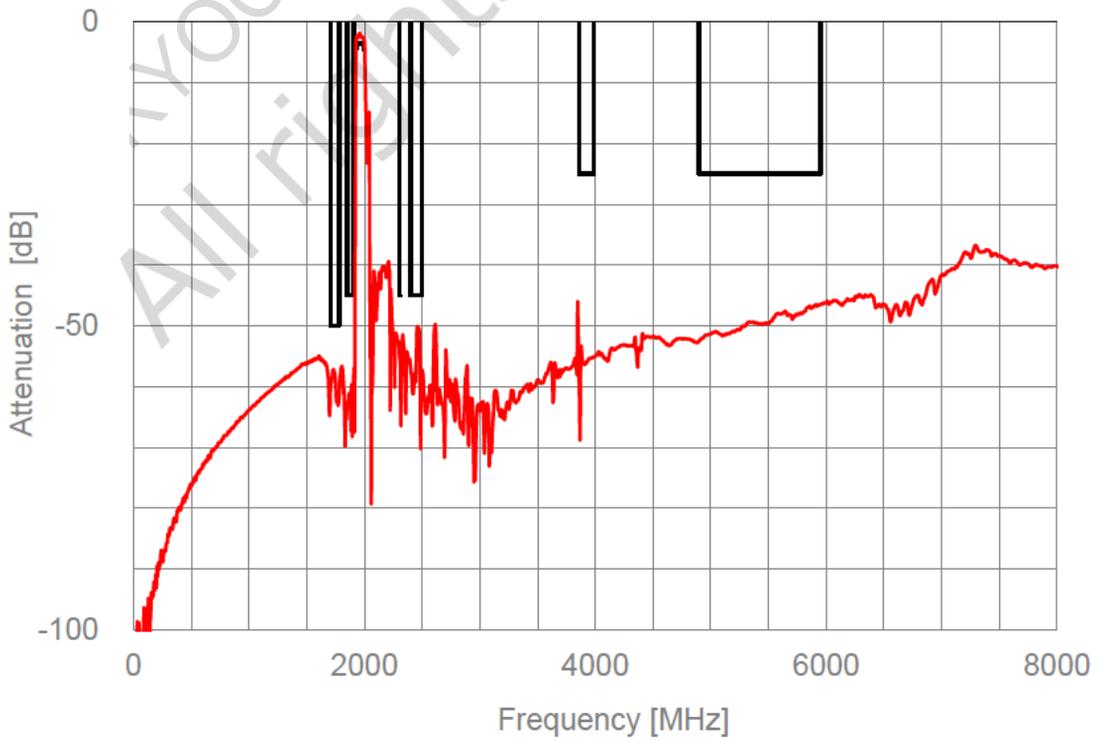
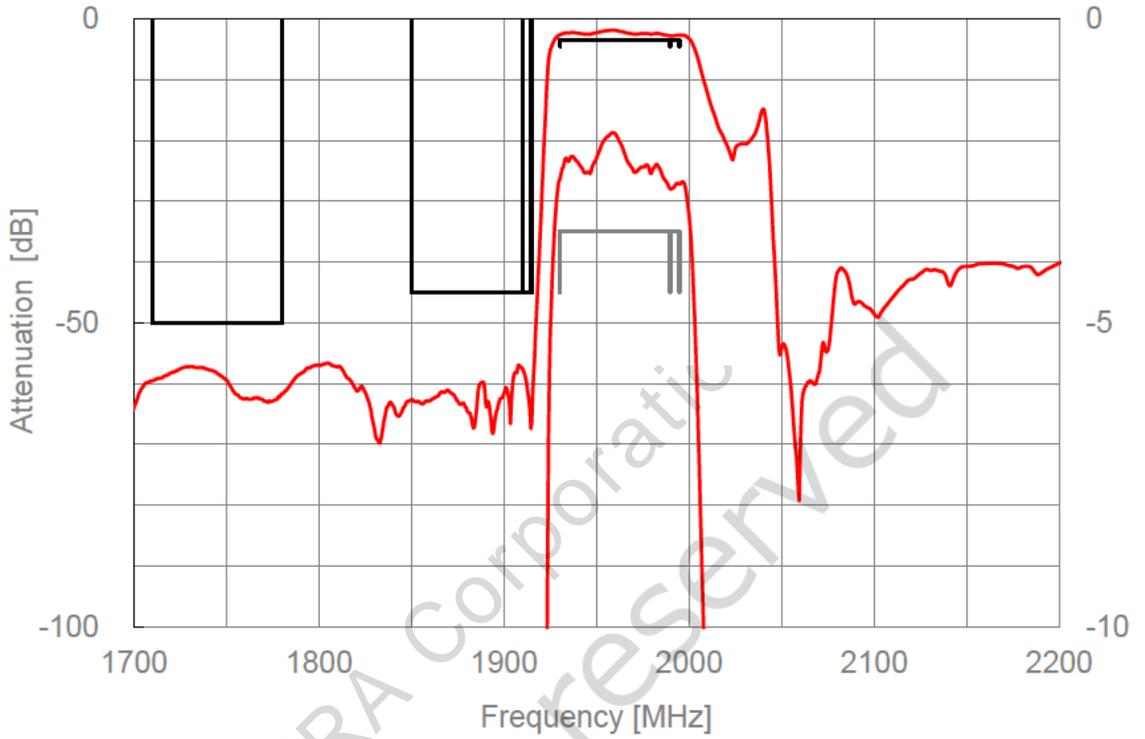
Electrical Characteristics

[Band25 Tx to Ant]



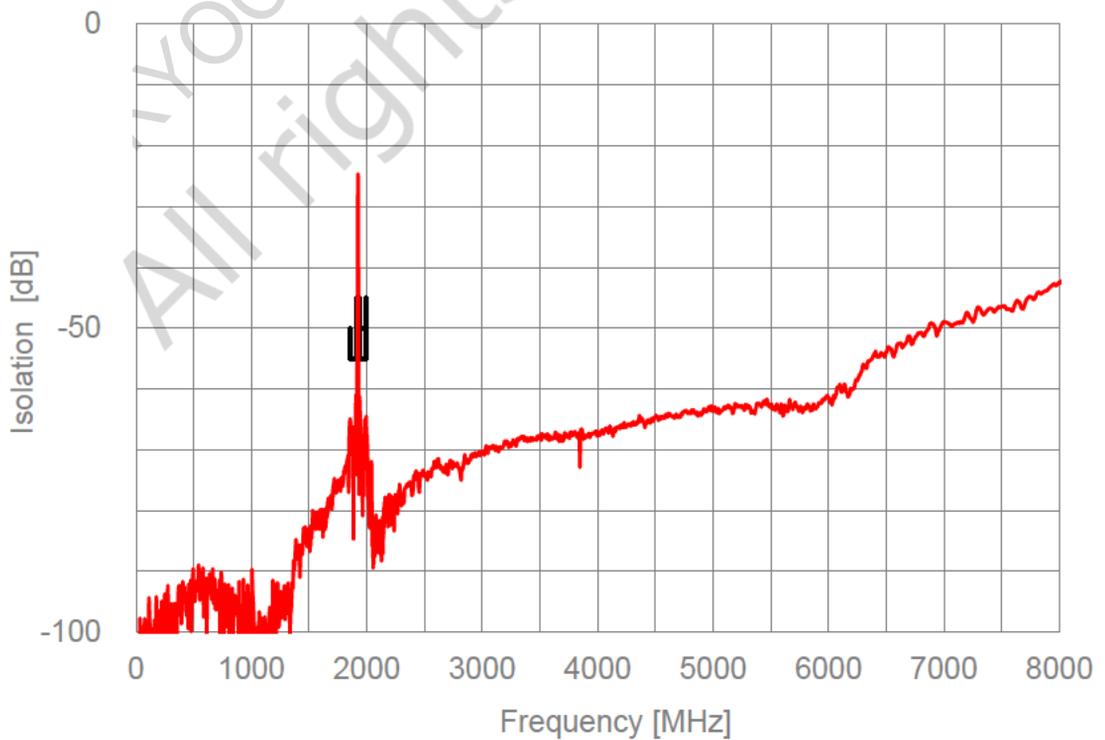
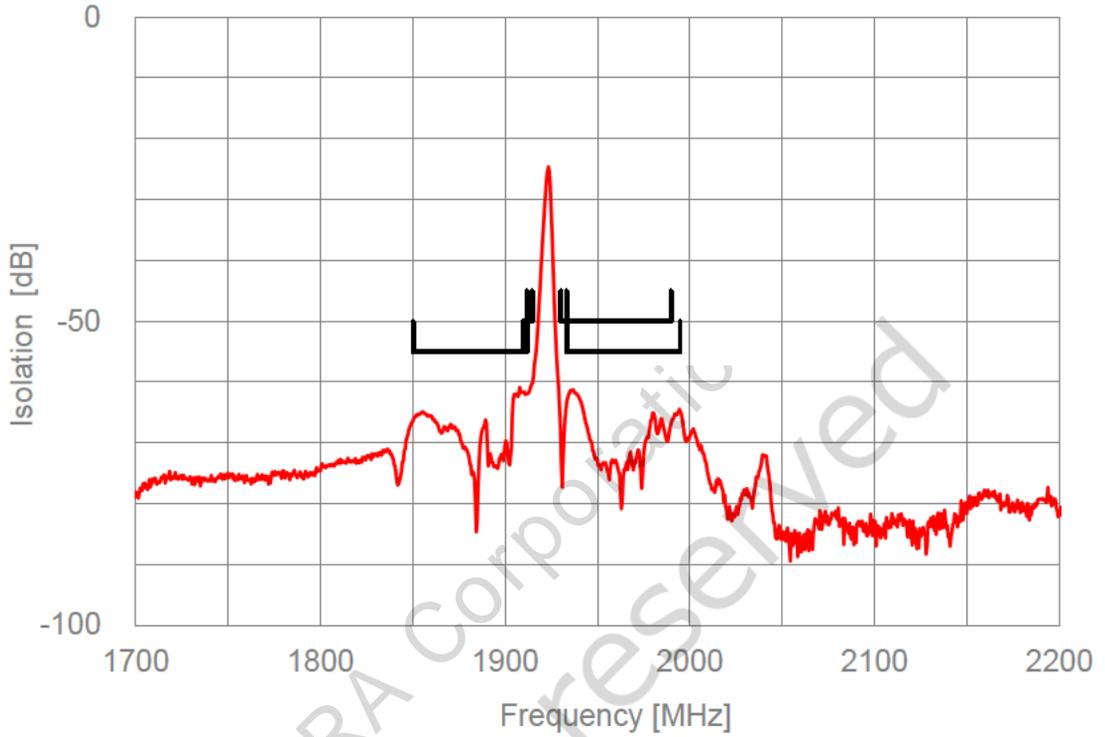
Electrical Characteristics

[Band25 Ant to Rx]



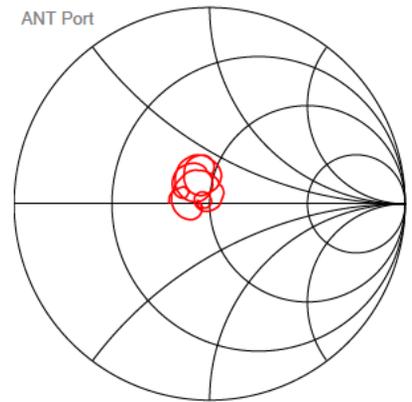
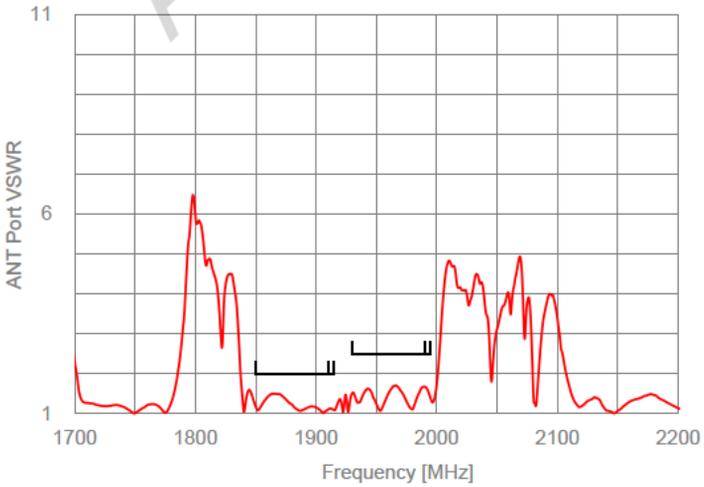
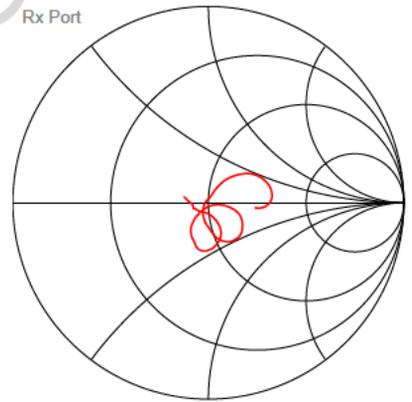
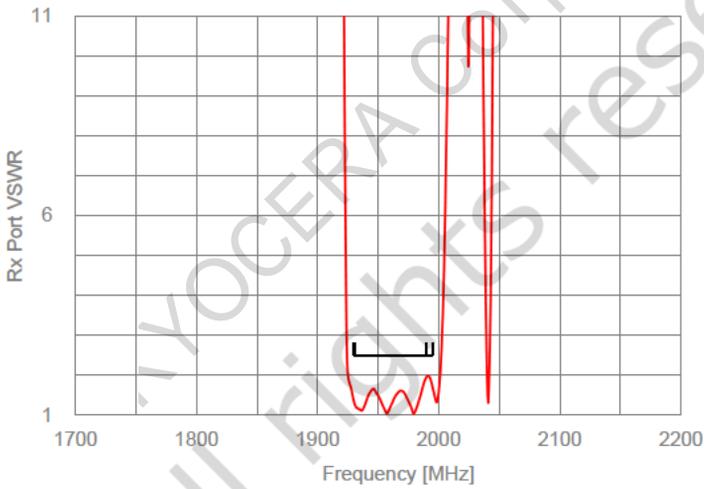
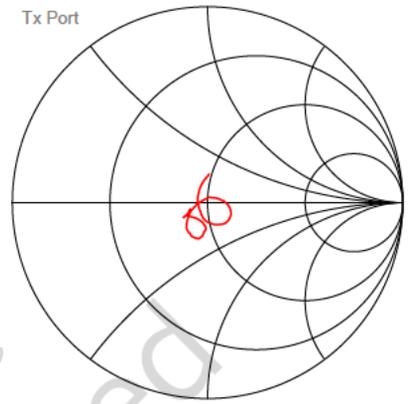
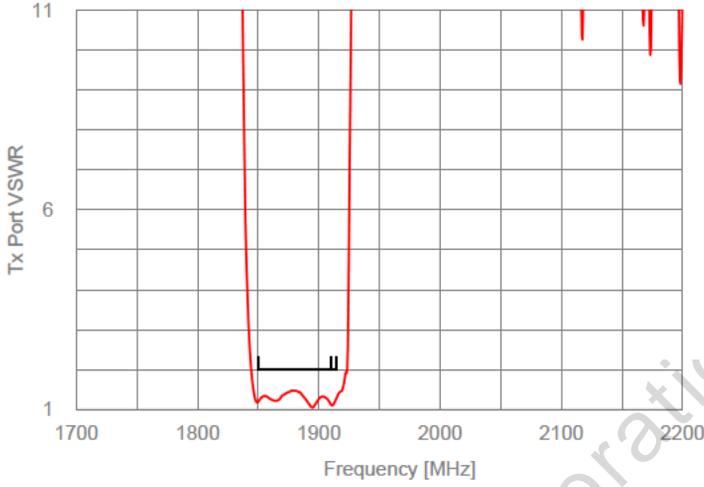
Electrical Characteristics

[Band25 Tx to Rx]



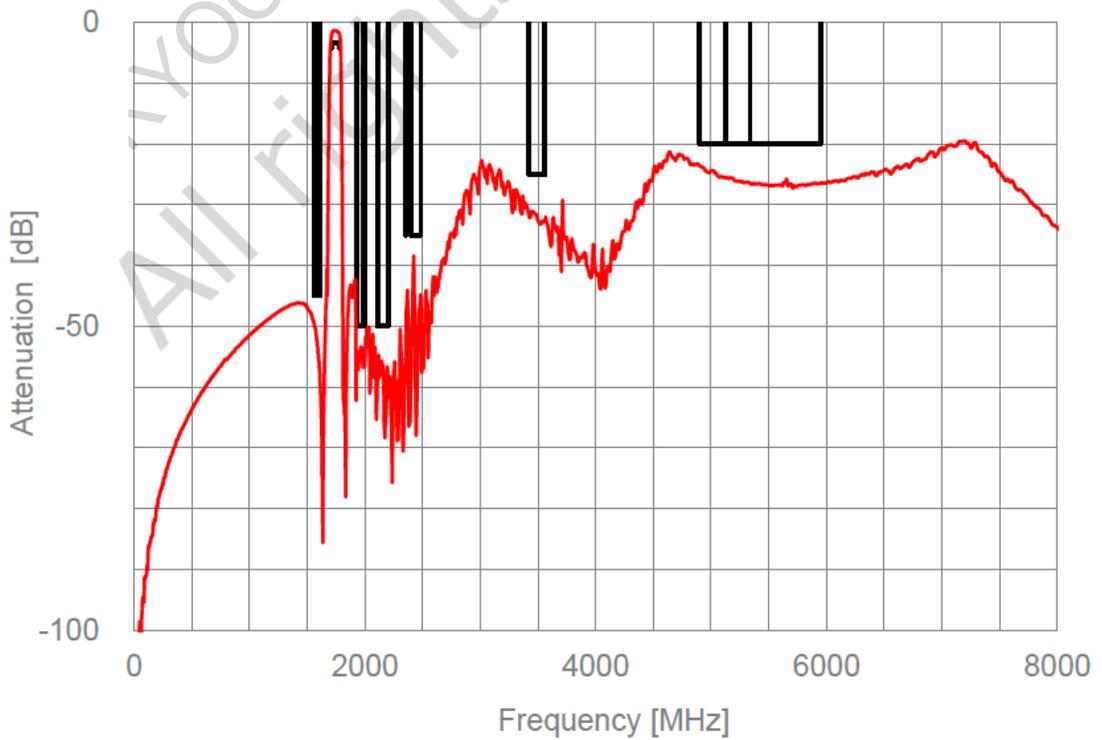
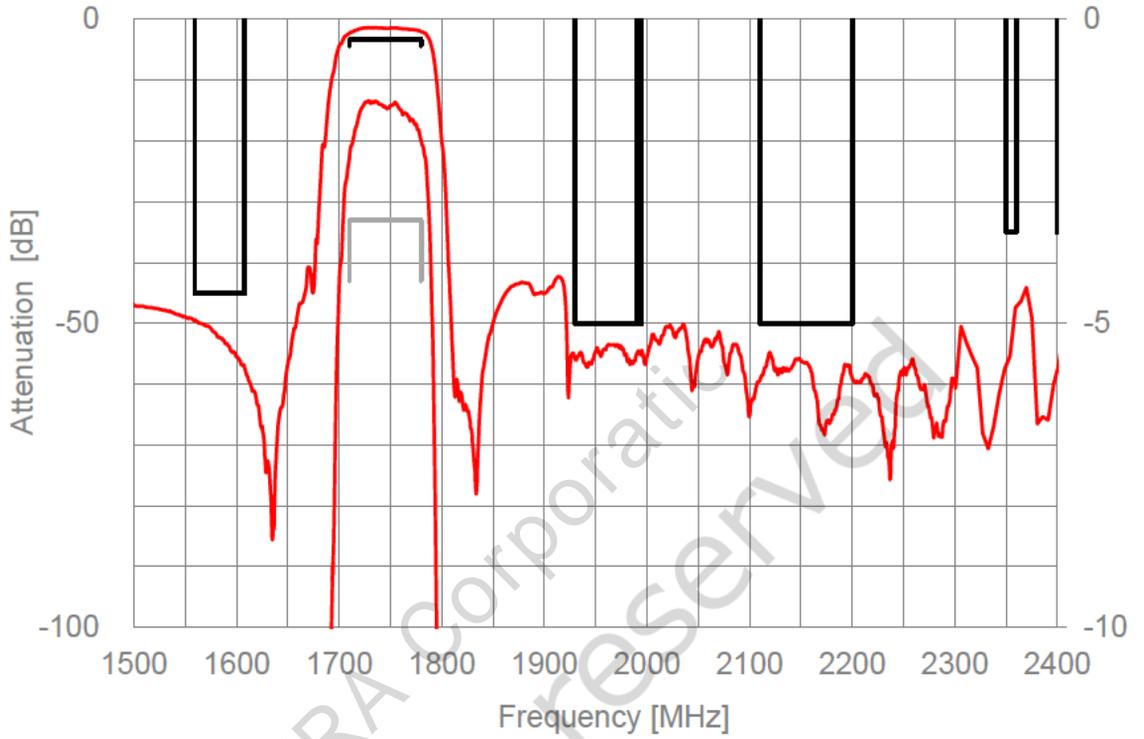
Electrical Characteristics

[Band25]



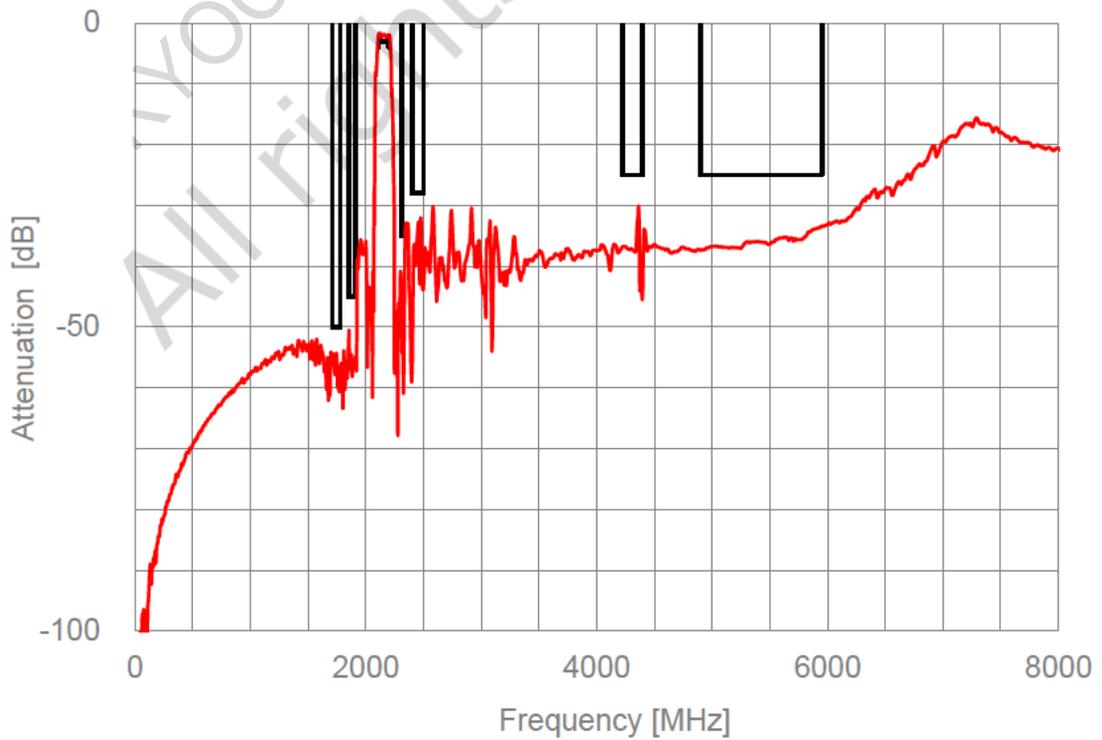
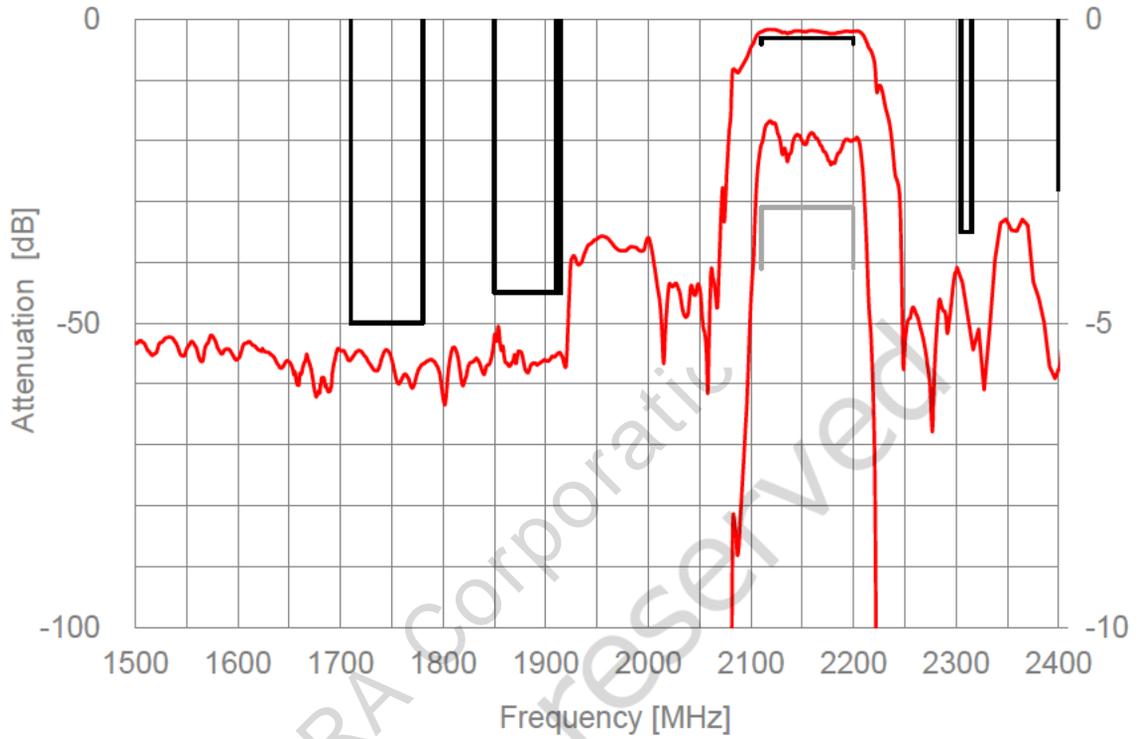
Electrical Characteristics

[Band66 Tx to Ant]



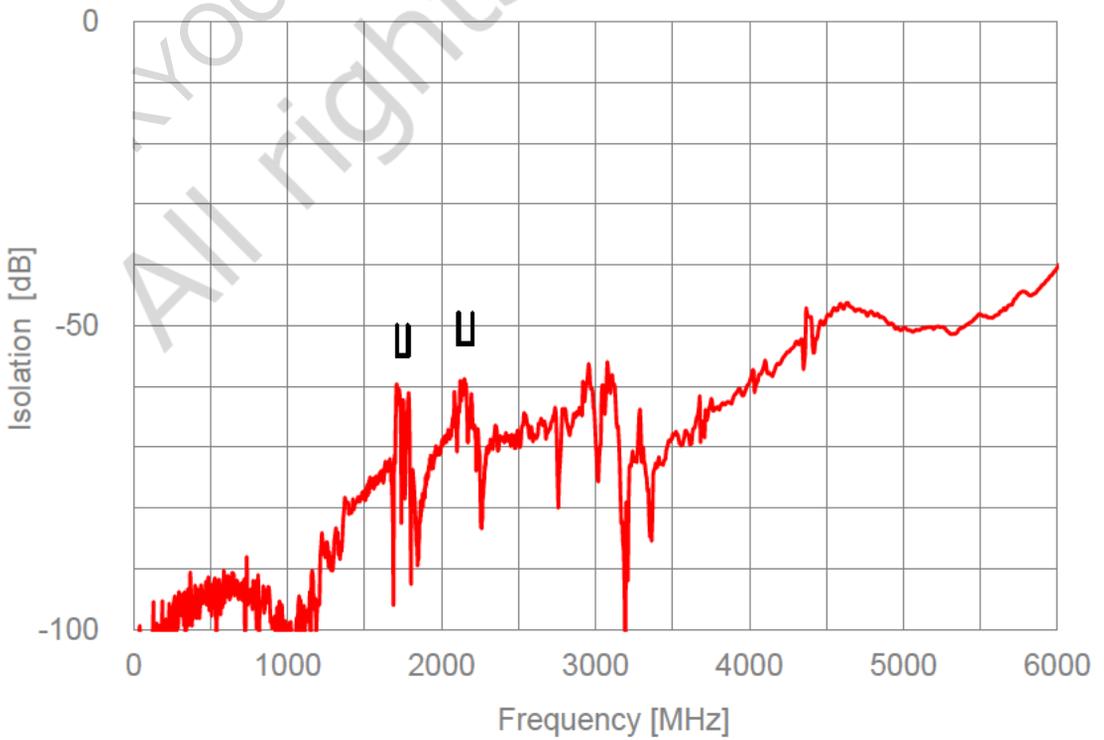
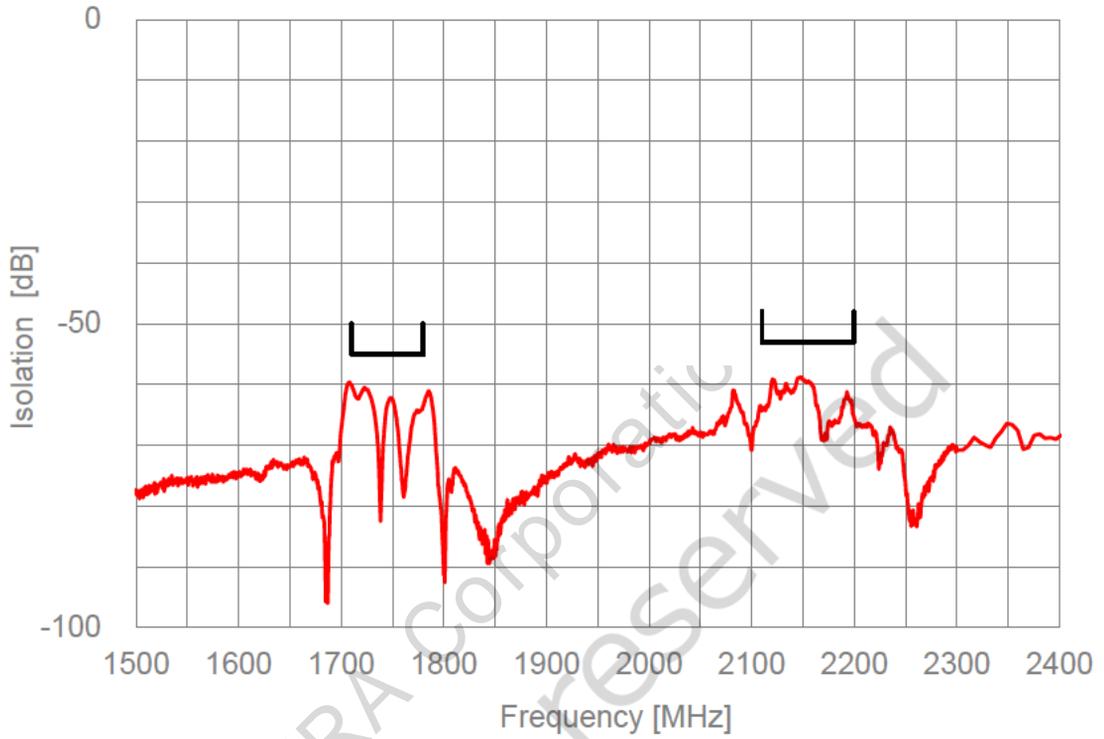
Electrical Characteristics

[Band66 Ant to Rx]



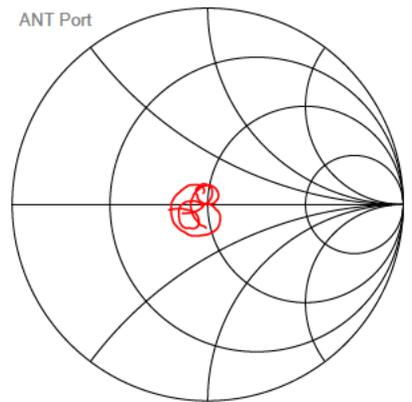
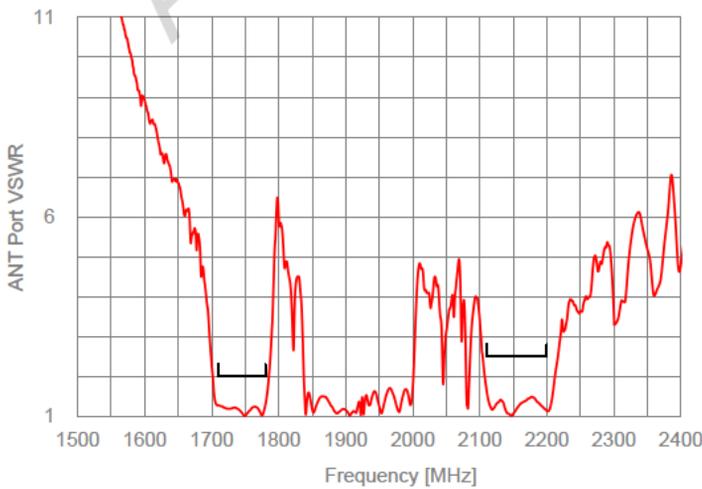
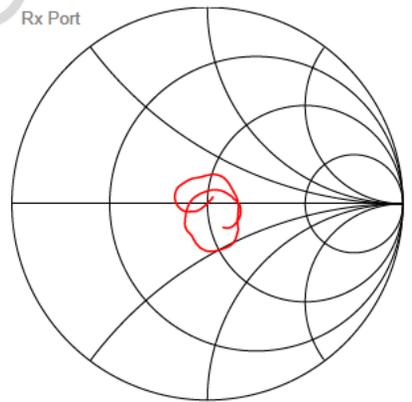
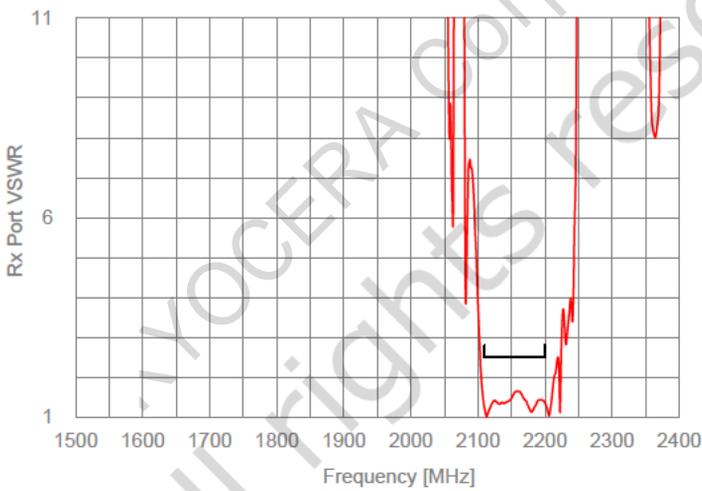
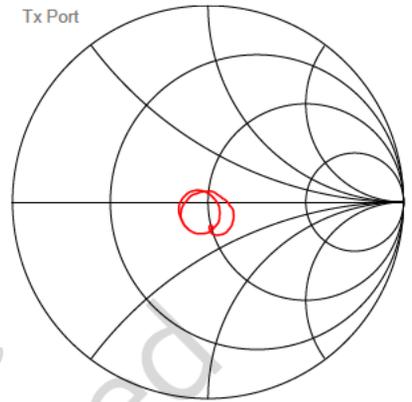
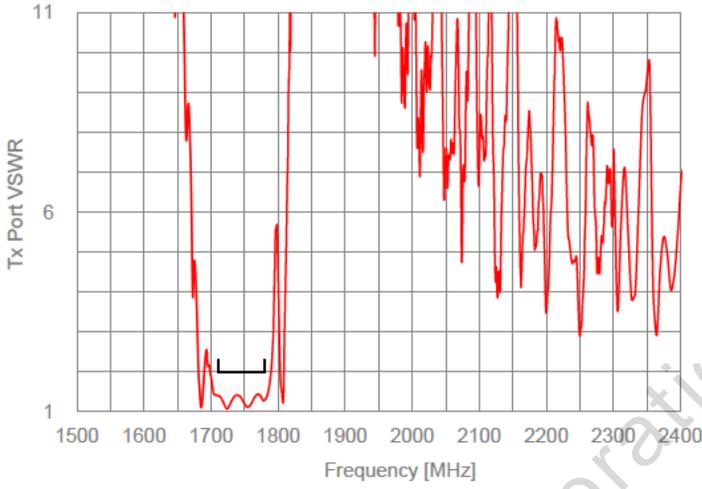
Electrical Characteristics

[Band66 Tx to Rx]



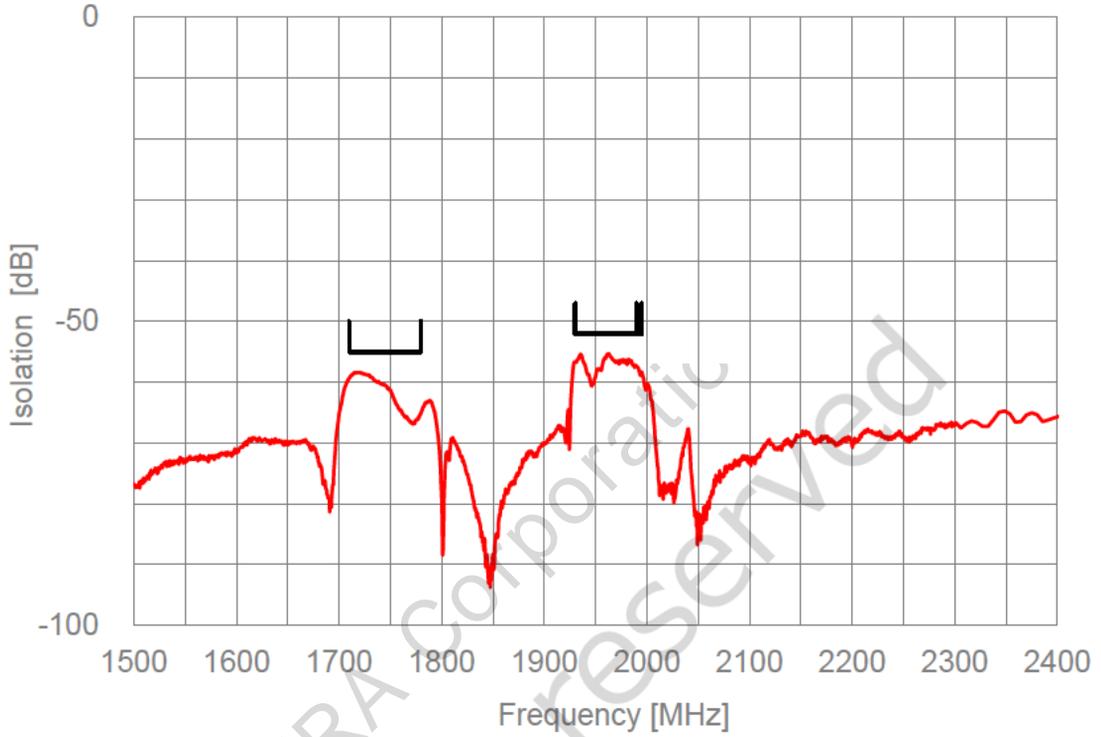
Electrical Characteristics

[Band66]

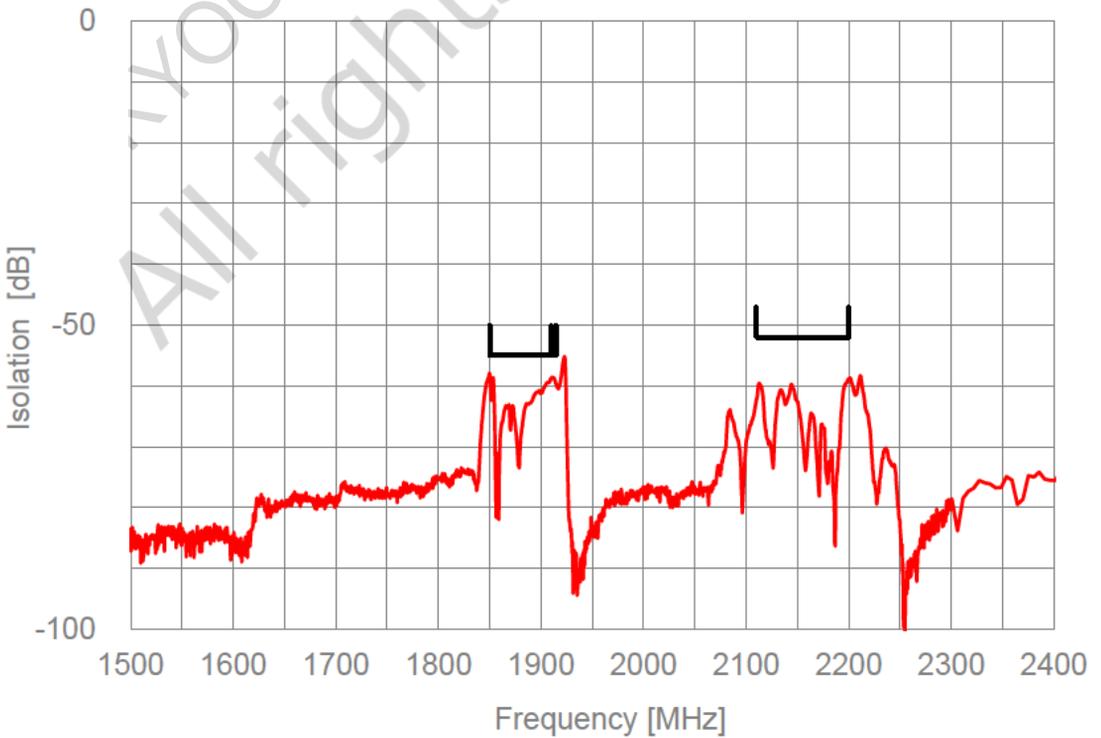


Electrical Characteristics

[Band66 Tx to Band25 Rx]

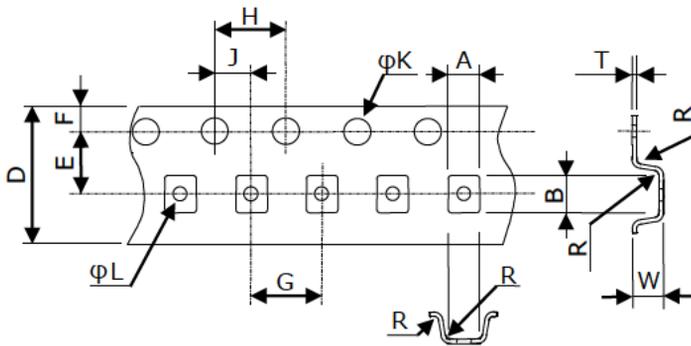


[Band25 Tx to Band66 Rx]



Tape & Reel Specification

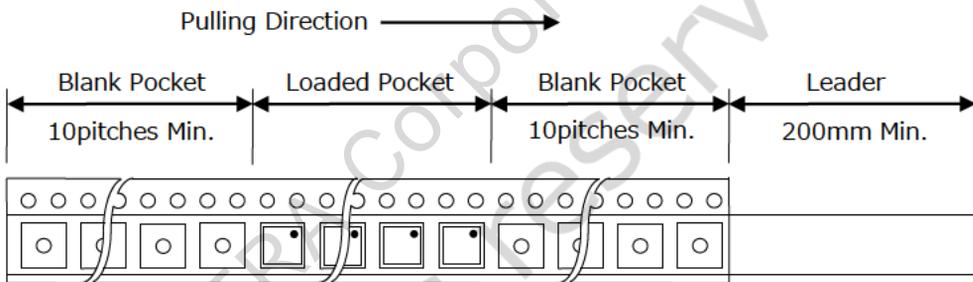
[Tape]



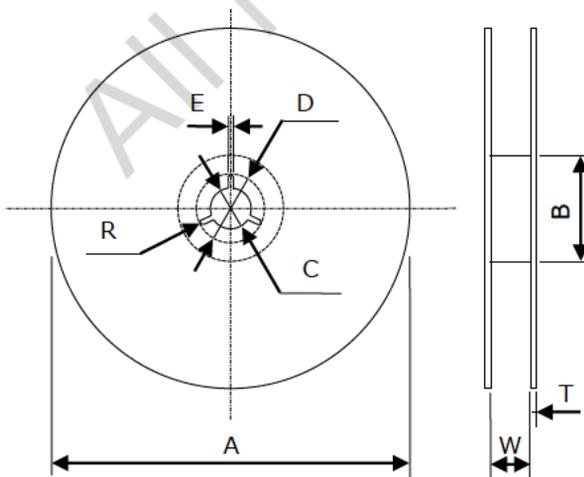
Unit : mm

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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