

# Datasheet of SAW Duplexer

## 1814 Band3 Unbalanced

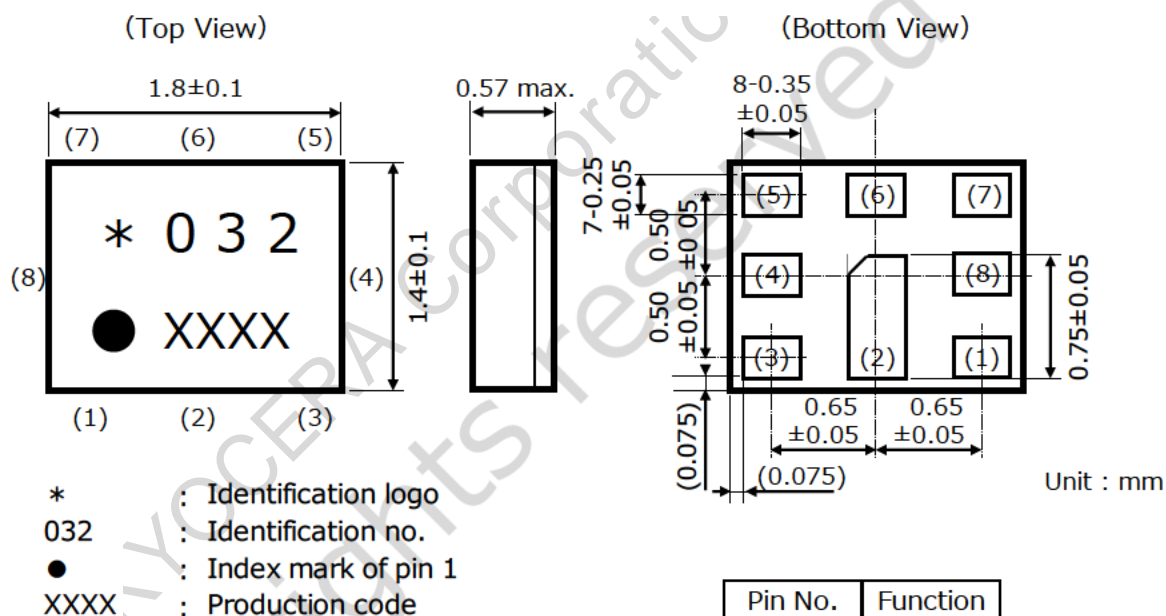
KYOCERA Part No. : SD18 1747R8UUC1

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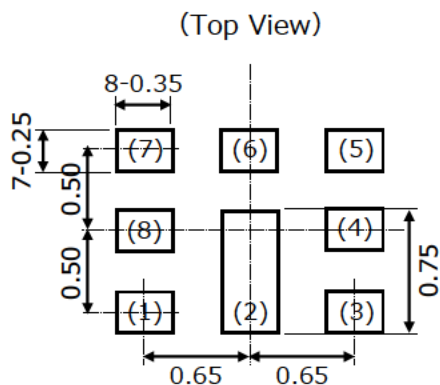
## Rating

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 Nominal Impedance	50+2.7nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//3.6nH	ohm	Unbalance
Rx Port Nominal Impedance	50//5.1nH	ohm	Unbalance

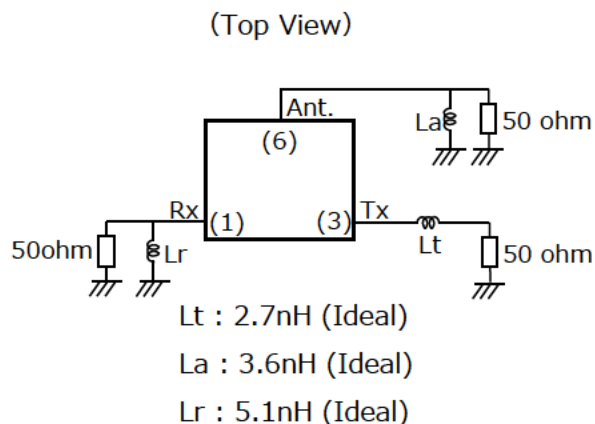
## Dimensions



## Recommendable Land Pattern



## Measurement Circuit

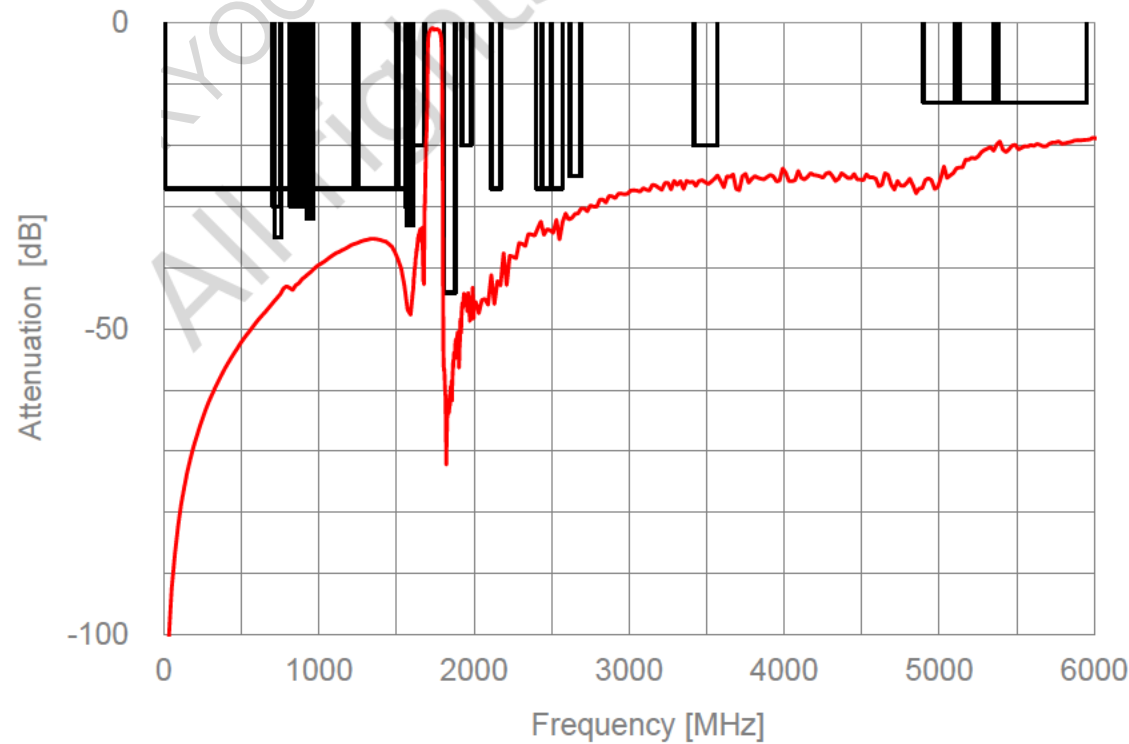
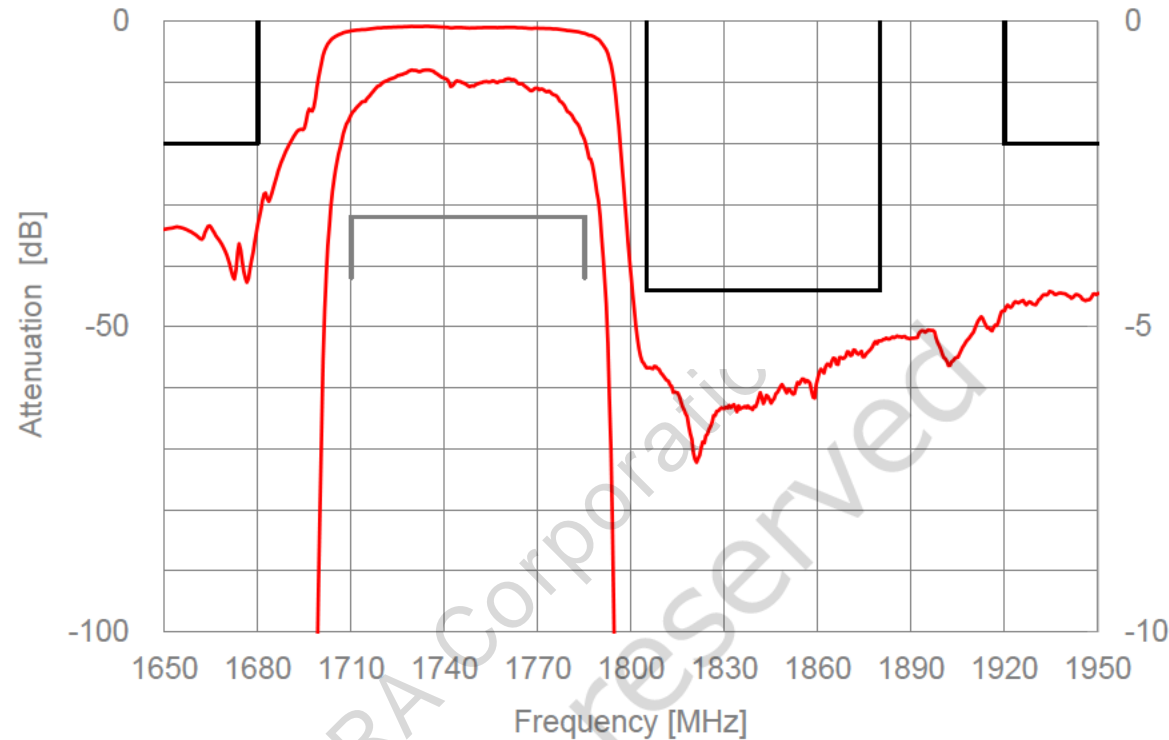


## Electrical Characteristics

Items	Frequency (MHz)	Characteristics			Unit	Notes
		Min.	Typ.	Max.		
TX to ANT	Insertion Loss	1710 - 1785	-	1.9	3.2	dB
	Ripple(any 5MHz)	1710 - 1785	-	0.4	2.0	dB
	VSWR  Tx	1710 - 1785	-	1.5	2.0	
	Ant	1710 - 1785	-	1.4	2.0	
	Attenuation	10 - 1565.42	27	35	-	dB
		703 - 748	30	44	-	dB B28 Tx CA
		716 - 756	35	44	-	dB B28 Rx
		814 - 849	30	43	-	dB B26 Tx CA
		824 - 849	30	43	-	dB B5 Tx CA
		830 - 845	30	43	-	dB B19 Tx CA
		832 - 862	30	43	-	dB B20 Tx CA
		880 - 915	30	41	-	dB B8 Tx CA
		925 - 960	32	40	-	dB
		1226 - 1250	27	36	-	dB GPS L2
		1496 - 1511	27	38	-	dB B21 Rx
		1559 - 1563	30	44	-	dB Compass
		1565.42 - 1573.374	33	46	-	dB Wideband GPS lower side
		1573.374 - 1577.466	33	47	-	dB Regular GPS main
		1577.466 - 1585.42	33	47	-	dB Wideband GPS upper side
		1597.5515 - 1605.886	33	44	-	dB GLONASS
		1605.886 - 1680	20	33	-	dB
		1805 - 1880	44	52	-	dB B3 Rx
		1920 - 1980	20	44	-	dB B1 Tx
		2110 - 2170	27	41	-	dB B1 Rx
		2400 - 2500	27	32	-	dB ISM Band
		2440 - 2494	2	33	-	dB WLAN Coexistence
		2500 - 2570	27	32	-	dB B7 Tx CA
		2620 - 2690	25	30	-	dB B7 Rx CA
		3420 - 3570	20	25	-	dB 2f0
		4900 - 5950	13	19	-	dB
		5100 - 5385	13	19	-	dB WLAN Coexistence
		5130 - 5355	13	20	-	dB 3f0
ANT to RX	Insertion Loss	1805 - 1880	-	2.5	3.5	dB
	Ripple(any 5MHz)	1805 - 1880	-	0.8	1.8	dB
	VSWR  Rx	1805 - 1880	-	1.5	2.1	
	Ant	1805 - 1880	-	1.5	2.1	
	Attenuation	10 - 1710	30	37		dB
		95 - 748	50	106		dB Rx-Tx
		718 - 748	37	49		dB B28-B Tx CA
		814 - 849	37	45		dB B26 Tx CA
		832 - 862	37	44		dB B20 Tx CA
		880 - 915	37	42		dB B8 Tx CA
		1447 - 1463	30	37		dB B21 Tx CA
		1615 - 1690	37	43		dB 2Tx-Rx
		1710 - 1785	45	55		dB B3 Tx
		2400 - 2500	40	48		dB ISM Band
		2500 - 2570	40	49		dB B7 Tx CA
		2570 - 3515	35	48		dB
		3515 - 3665	47	58		dB IP2(Rx+Tx)
		3665 - 3760	40	56		dB Upper 2xLO
		4900 - 5950	40	49		dB ISM Band
		5205 - 5660	40	50		dB WLAN
TX to RX	Isolation	1710 - 1785	53	56		dB
		1805 - 1880	50	57		dB

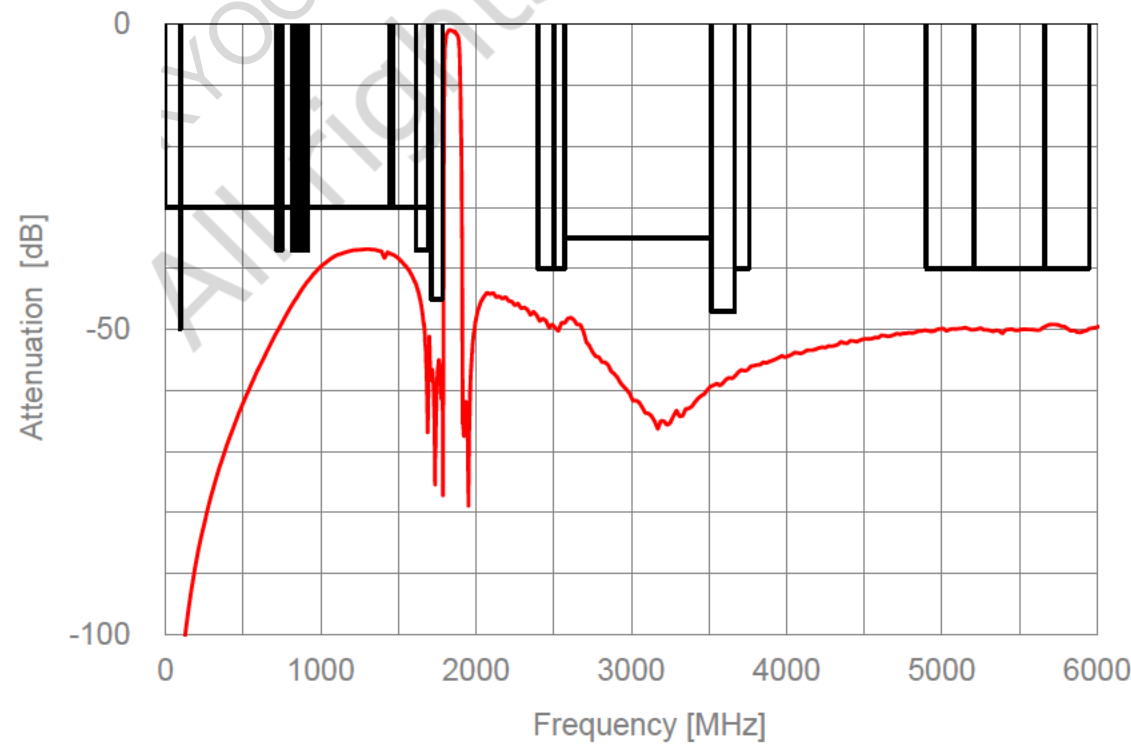
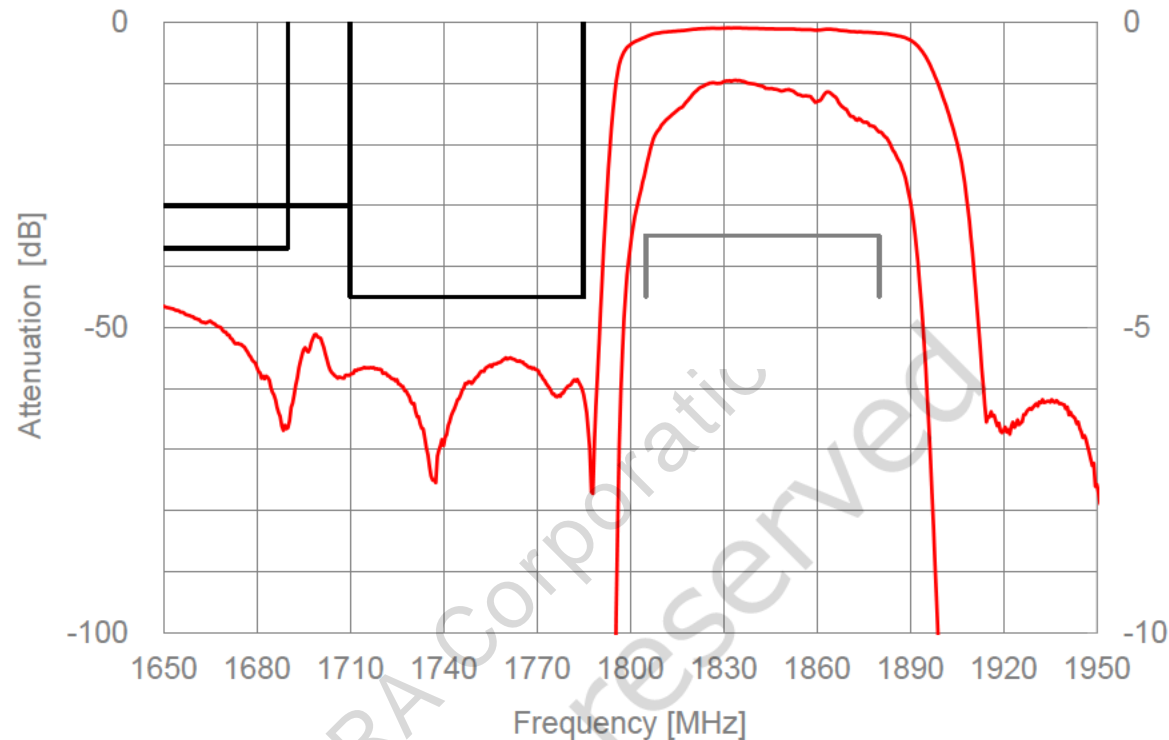
**Electrical Characteristics**

**[Tx to Ant]**



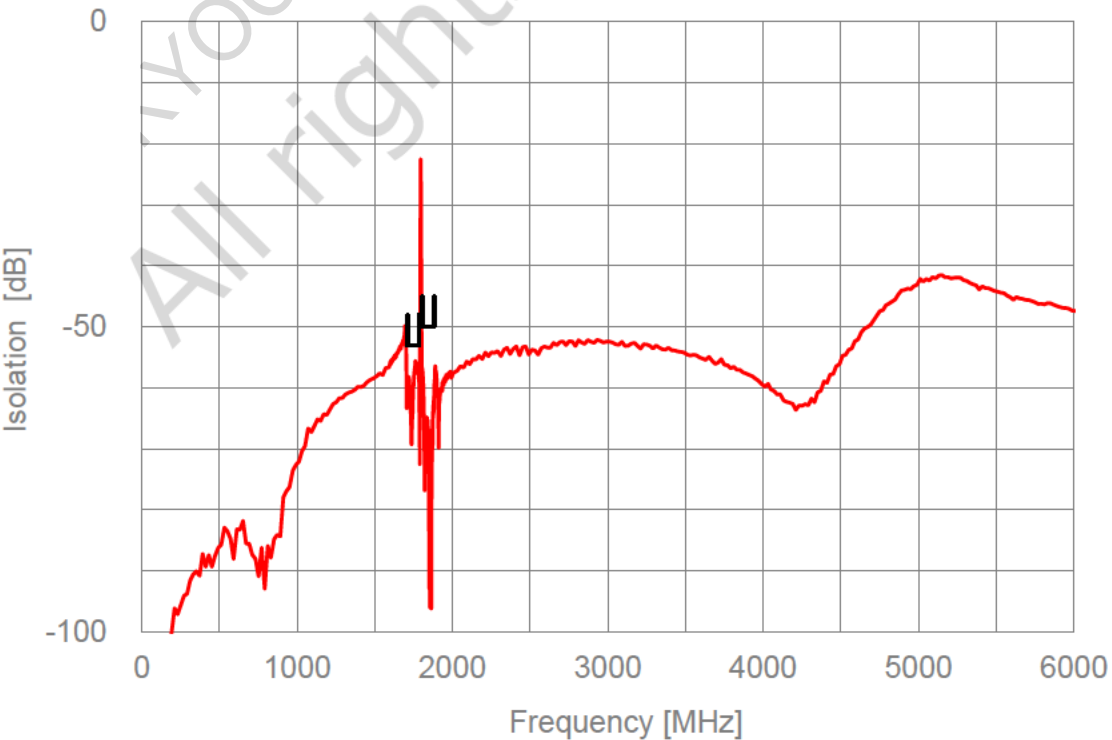
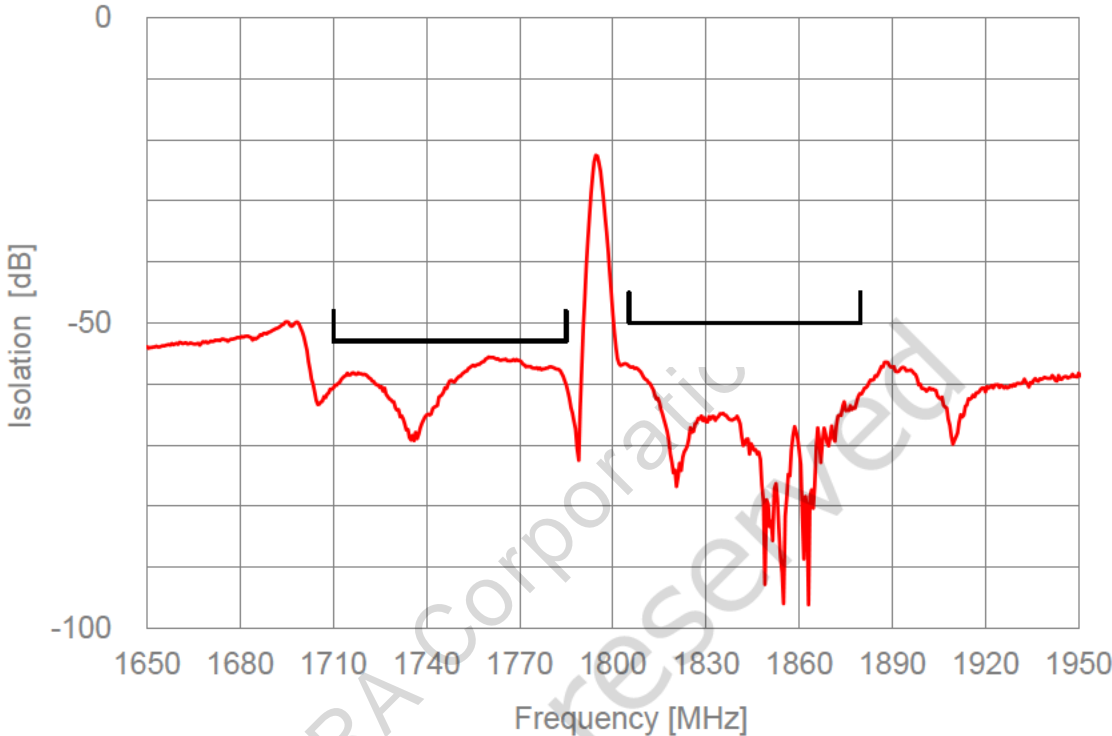
**Electrical Characteristics**

**[Ant to Rx]**

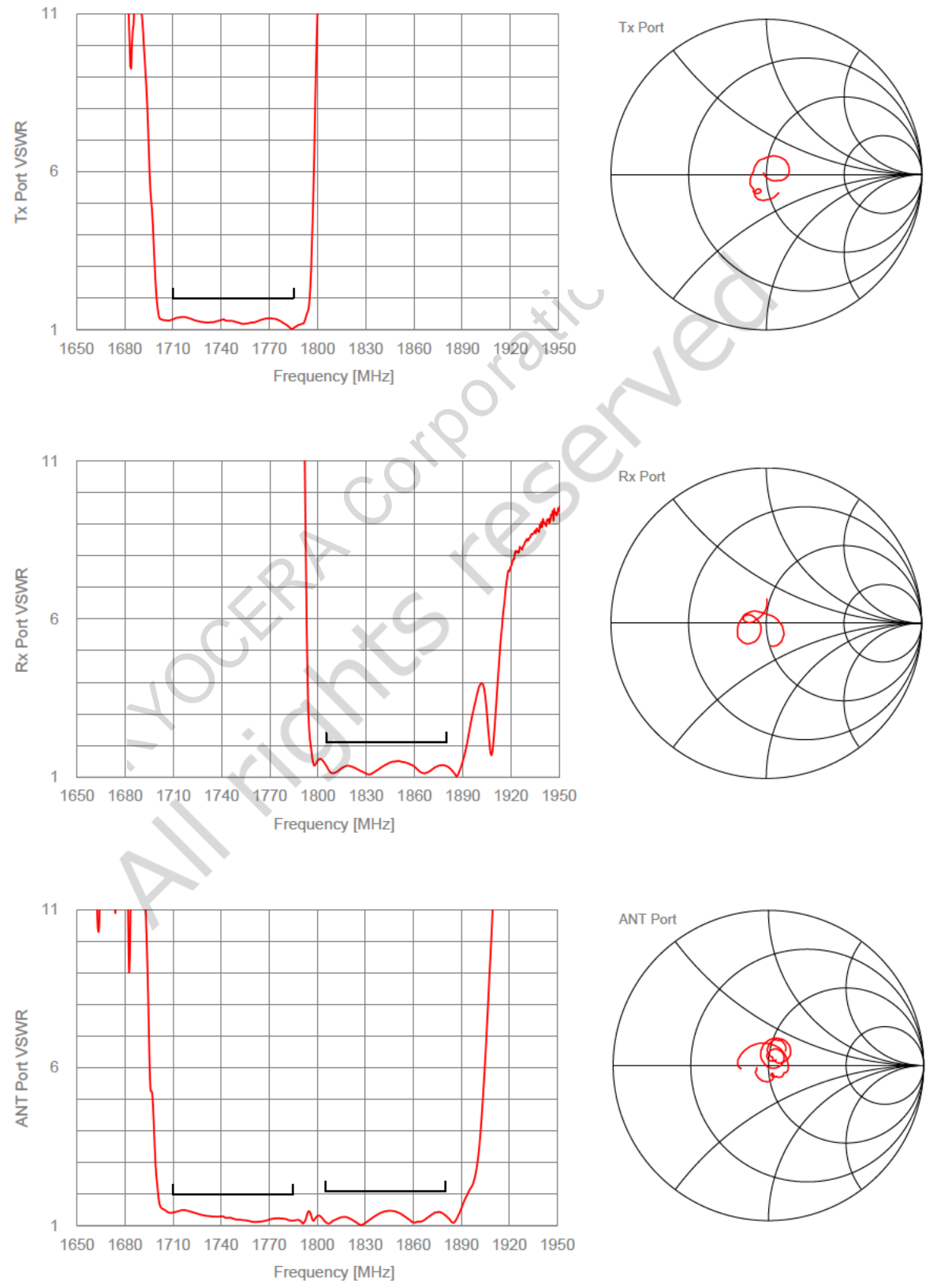


**Electrical Characteristics**

**[Tx to Rx]**

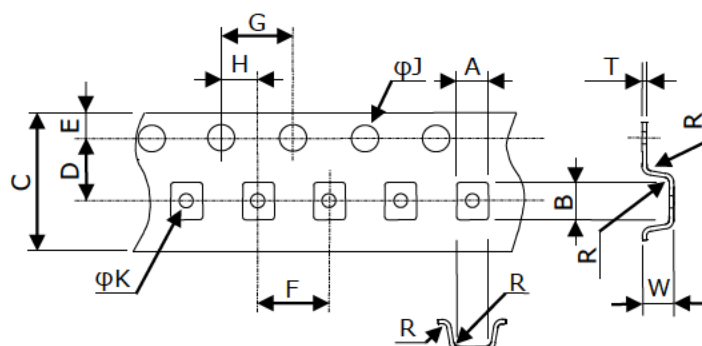


**Electrical Characteristics**



# Tape & Reel Specification

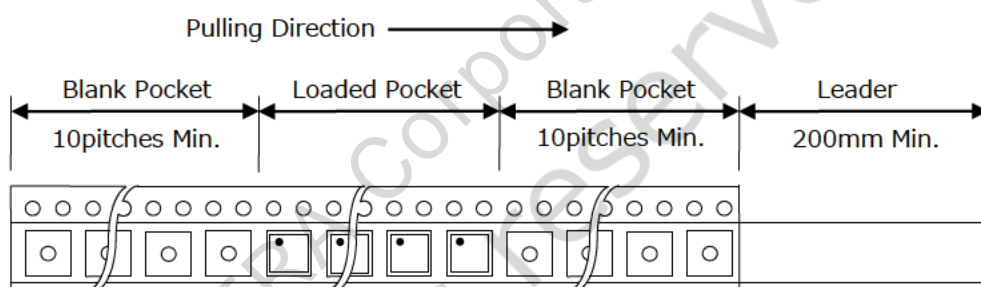
## [Tape]



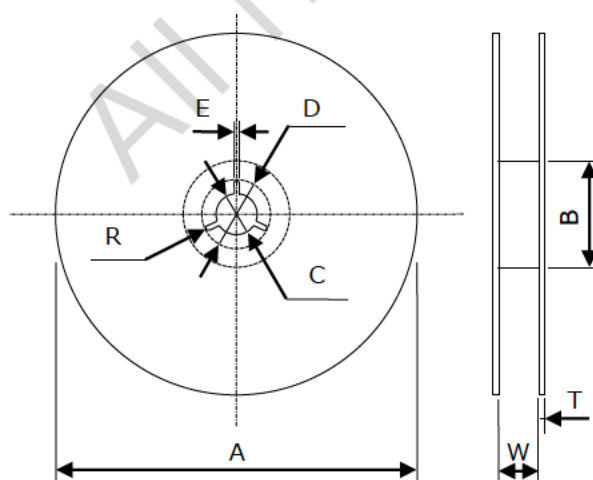
Unit : mm

Part	Dimension
A	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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