

# Datasheet of SAW Duplexer 1612 Band13 Unbalanced

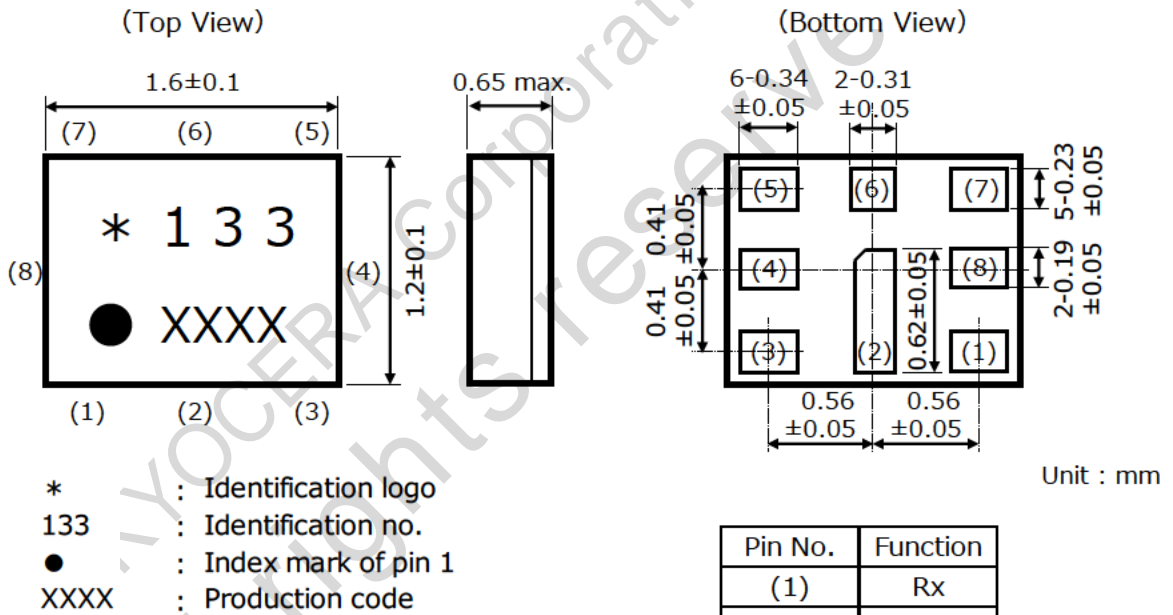
KYOCERA Part No. : SD16-0782R8UUA1

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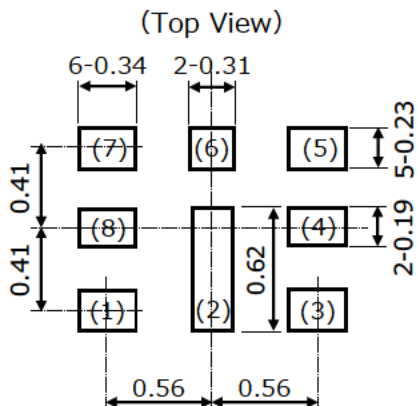
## Rating

Items	Rating	Unit	Note
Operating Temperature Range	-30 to +85	deg.C	
Storage Temperature Range	-40 to +85	deg.C	
Max Input Power (Tx port)	+31	dBm	5,000hours, Ta=50deg.C, CW
	+31	dBm	5,000hours, Ta=50deg.C, DFT-s-OFDM
	+29.5	dBm	5,000hours, Ta=50deg.C, CP-OFDM
Tx Port Nominal Impedance	50	ohm	Unbalance
Ant. Port Nominal Impedance	50+10nH//2.0pF	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

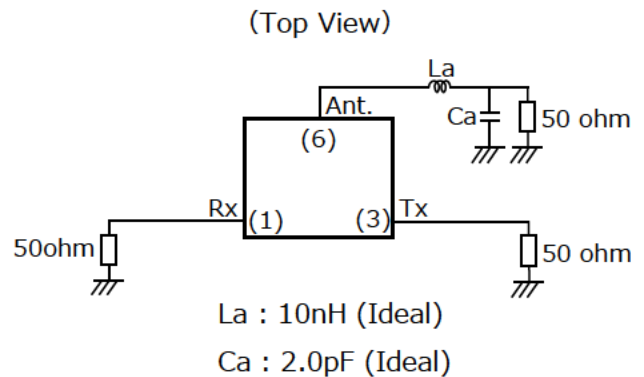
## Dimensions



## Recommendable Land Pattern



## Measurement Circuit

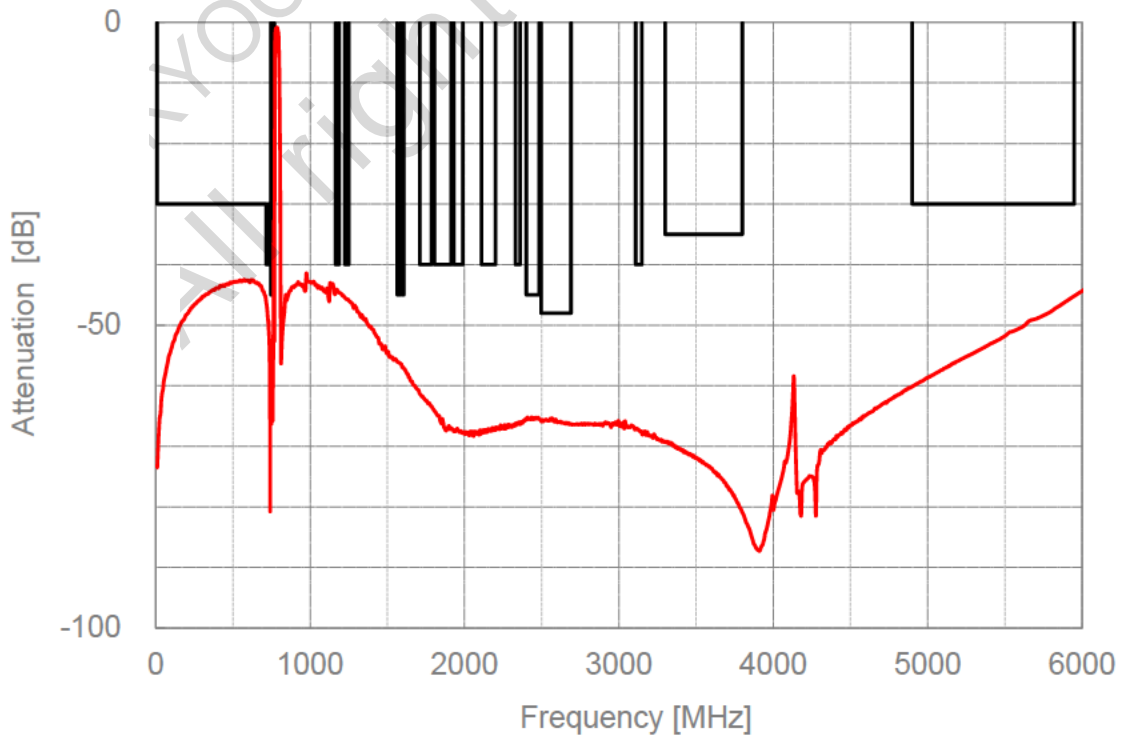
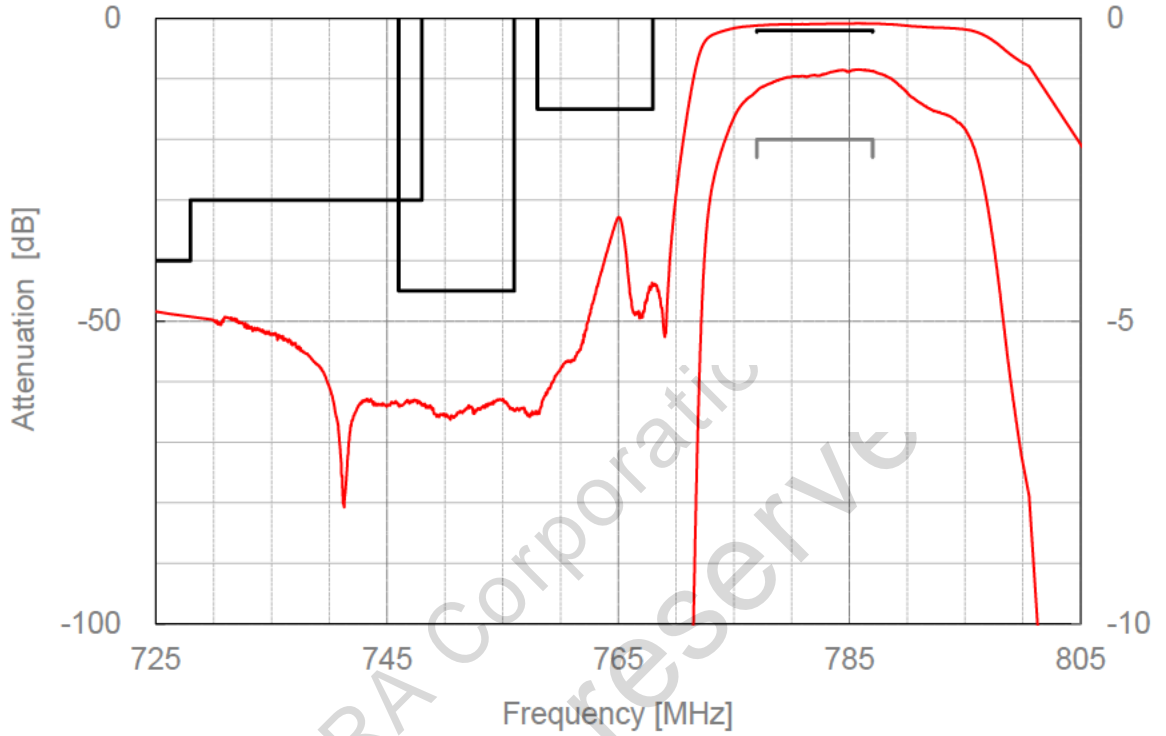


**Electrical Characteristics**

Items		Frequency (MHz)		Characteristics			Unit	Notes
				Min.	Typ.	Max.		
Tx to Ant	Insertion Loss		777 - 787	-	1.2	2.0	dB	
	Ripple		777 - 787	-	1.2	1.5	dB	
	VSWR	Tx	777 - 787	-	1.2	2.0	-	
		Ant	777 - 787	-	1.3	2.0	-	
	Attenuation		10 - 716	30	43	-	dB	
			716 - 728	40	46	-	dB	
			728 - 748	30	49	-	dB	
			746 - 756	45	63	-	dB	
			758 - 768	15	33	-	dB	
			1166 - 1187	40	44	-	dB	
			1226 - 1250	40	46	-	dB	
			1565 - 1585	45	56	-	dB	
			1597 - 1607	45	57	-	dB	
			1710 - 1785	40	61	-	dB	
			1805 - 1880	40	64	-	dB	
			1850 - 1915	40	66	-	dB	
			1930 - 1990	40	67	-	dB	
			2110 - 2200	40	68	-	dB	
			2331 - 2361	40	67	-	dB	
			2400 - 2484	45	66	-	dB	
2496 - 2690	48	66	-	dB				
3108 - 3148	40	68	-	dB				
3300 - 3800	35	71	-	dB				
4900 - 5950	30	44	-	dB				
Ant to Rx	Insertion Loss		746 - 756	-	1.2	1.7	dB	
	Ripple		746 - 756	-	0.7	1.1	dB	
	VSWR	Rx	746 - 756	-	1.5	2.0	-	
		Ant	746 - 756	-	1.6	2.0	-	
	Attenuation		1 - 686	35	39	-	dB	
			1 - 31	50	66	-	dB	
			686 - 728	30	40	-	dB	
			771 - 772	30	54	-	dB	
			777 - 787	50	61	-	dB	
			1523 - 1543	38	42	-	dB	
			1710 - 1780	40	46	-	dB	
			1850 - 1915	40	49	-	dB	
2238 - 2268			40	56	-	dB		
2400 - 2500			40	58	-	dB		
2496 - 2690	40	60	-	dB				
3300 - 3800	35	67	-	dB				
4900 - 5950	38	45	-	dB				
Tx to Rx	Isolation		746 - 756	54	59	-	dB	
			777 - 787	56	61	-	dB	

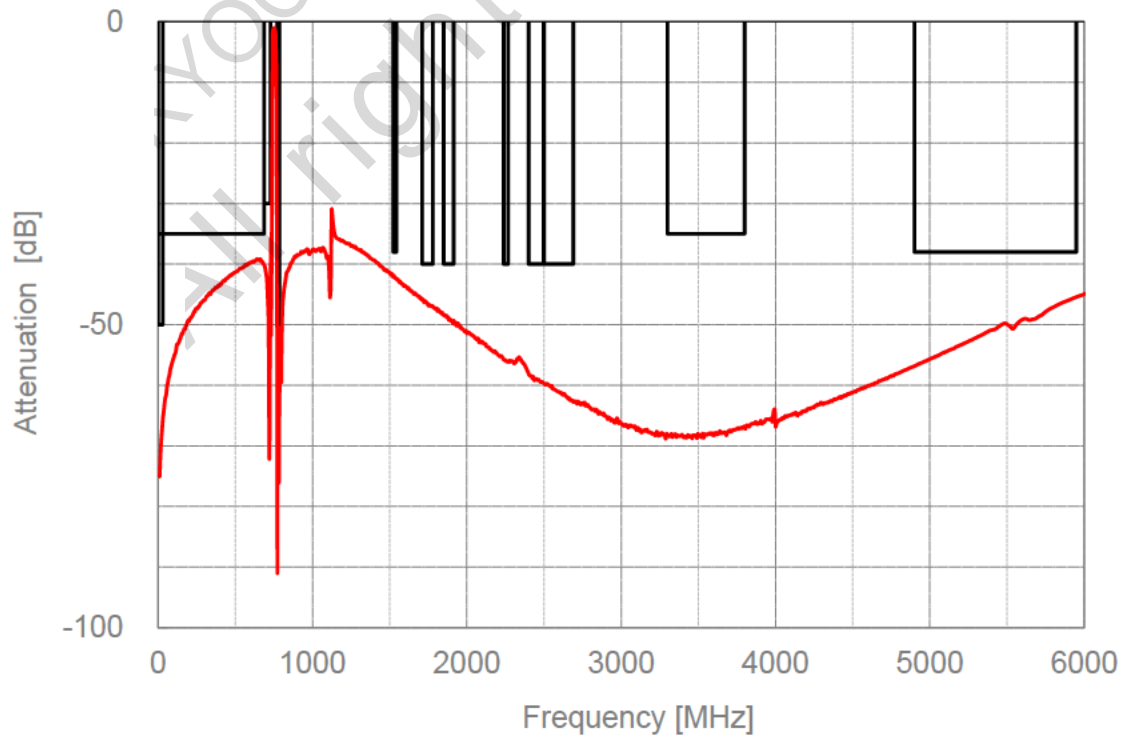
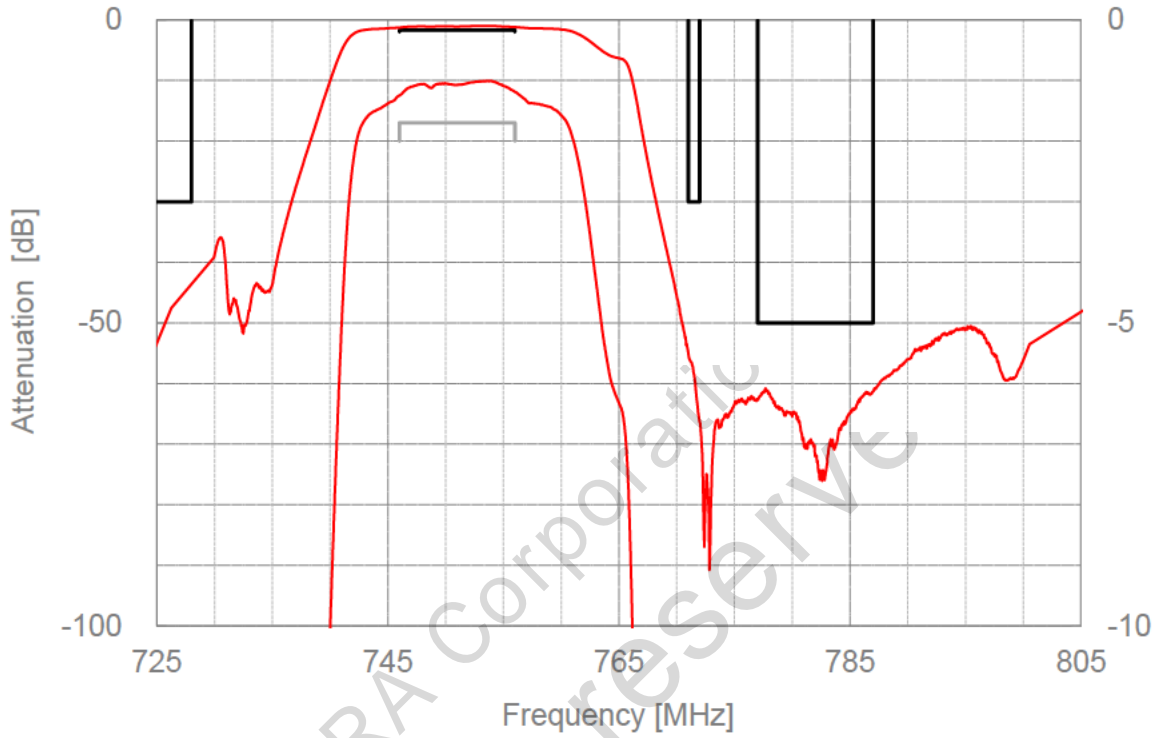
**Electrical Characteristics**

[Tx to Ant]



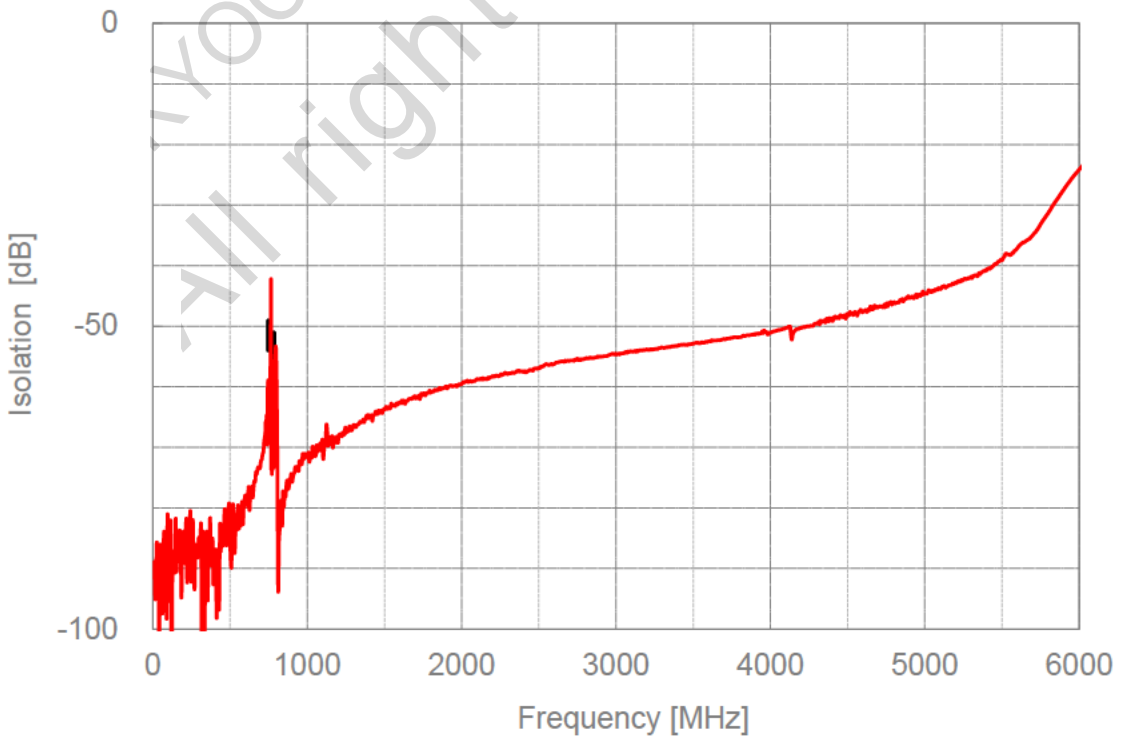
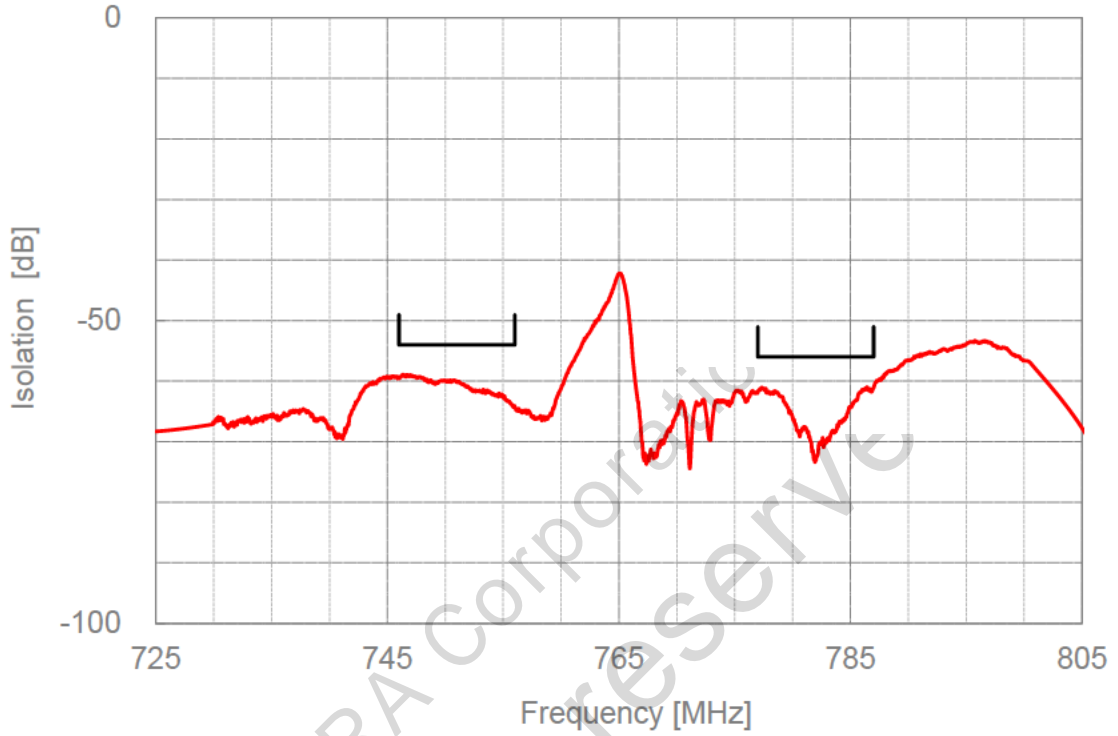
**Electrical Characteristics**

[Ant to Rx]

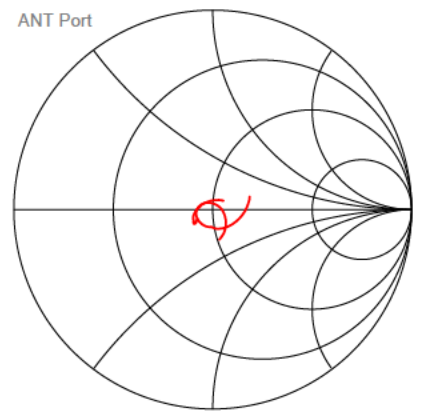
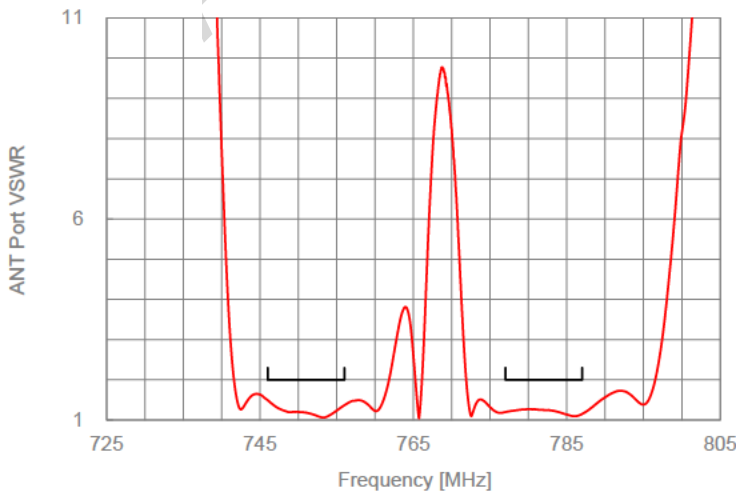
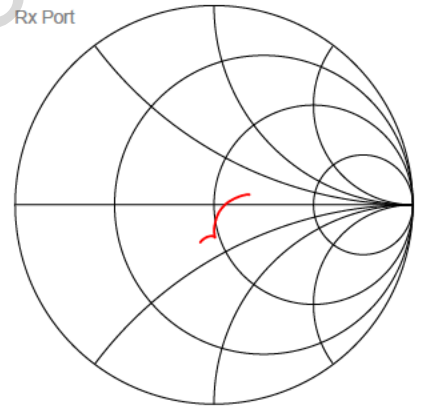
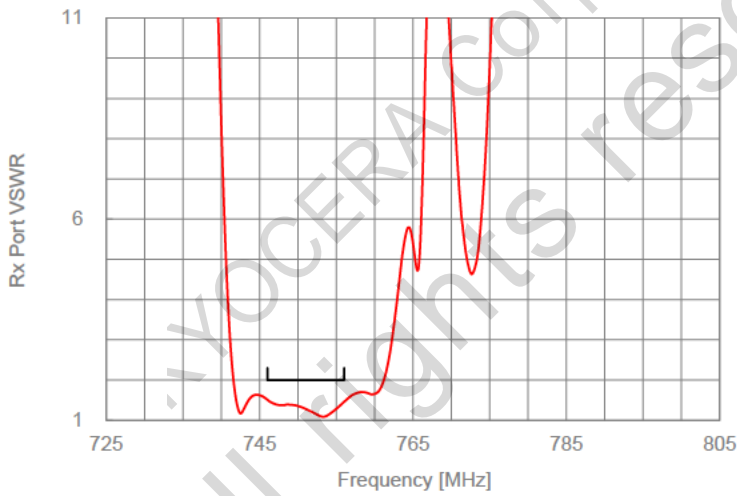
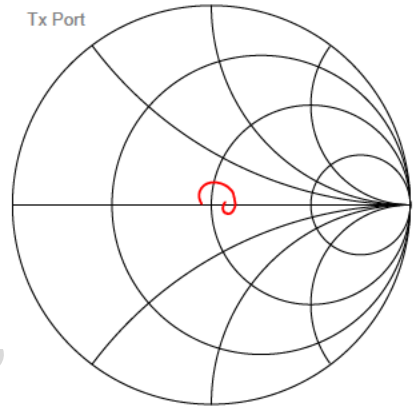
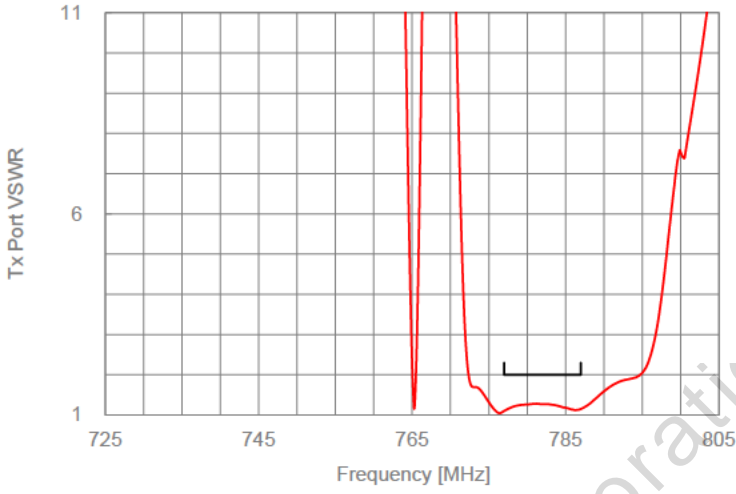


**Electrical Characteristics**

[Tx to Rx]

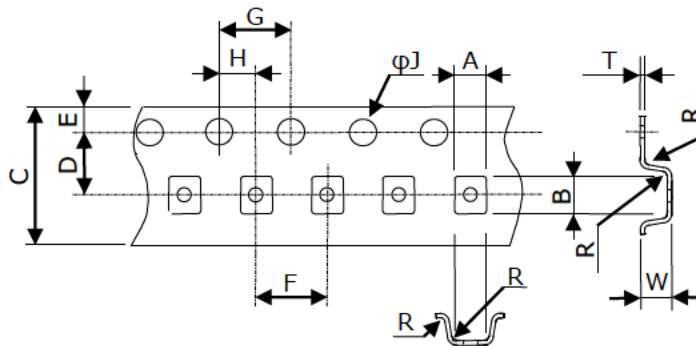


### Electrical Characteristics



## Tape & Reel Specification

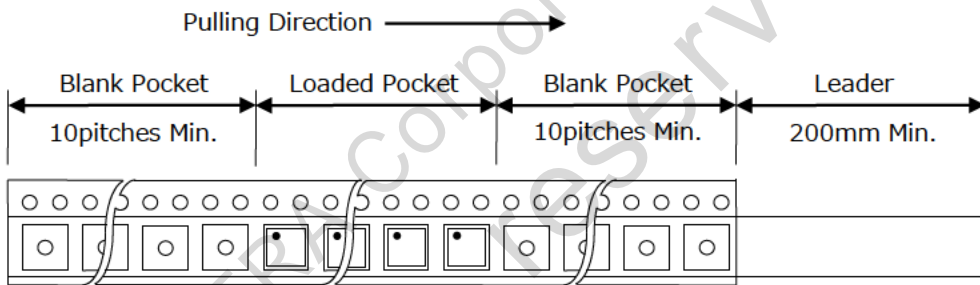
### [Tape]



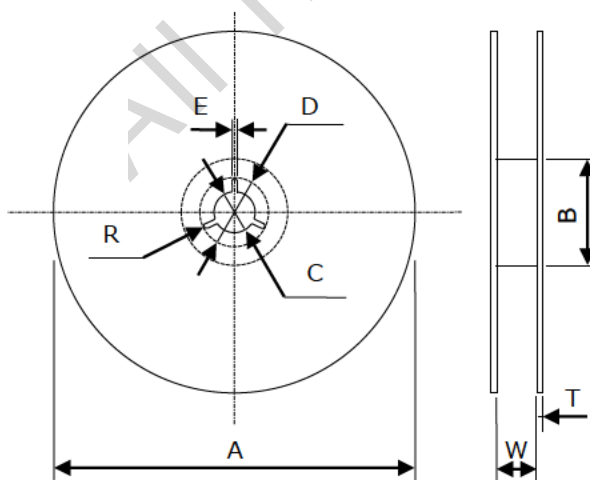
Unit : mm

Part	Dimension
A	1.37±0.10
B	1.80±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
R	0.2 Max
W	0.8±0.2
T	0.20±0.05

W : Dimension is depth of pockets.



### [Reel]



Unit : mm

Part	Dimension
A	330 ± 2
B	100 ± 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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