

Datasheet of SAW Duplexer
1814 Band13+Band14 Unbalanced
NS07 Band Care

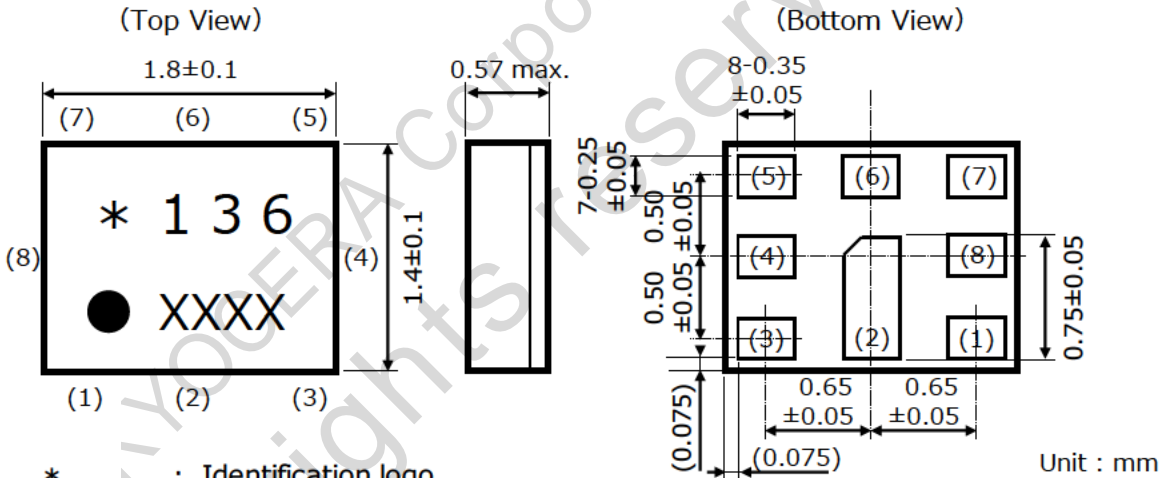
KYOCERA Part No. : SD18-0782T8UUA1

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Rating

Items	Rating	Unit	Note
Operating Temperature Range	-20 to +90	deg.C	
Storage Temperature Range	-40 to +90	deg.C	
Max Input Power	+31	dBm	@777.5 - 786.5MHz 5,000hours, Ta=50deg.C, DFT-s-OFDM-QPSK
	+30.5	dBm	
	+31	dBm	@788 - 798MHz 5,000hours, Ta=50deg.C, DFT-s-OFDM-QPSK
	+30.5	dBm	
Tx Port Nominal Impedance	50	ohm	Unbalance
Ant. Port Nominal Impedance	50//La=15nH	ohm	Unbalance
Rx Port Nominal Impedance	50//Lr=4.7nH	ohm	Unbalance

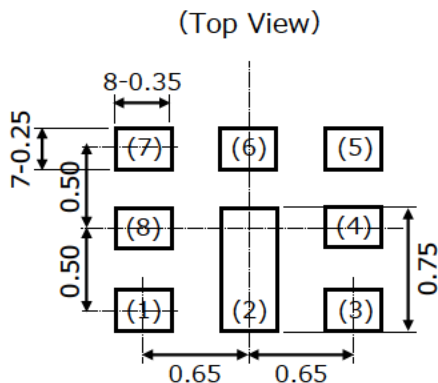
Dimensions



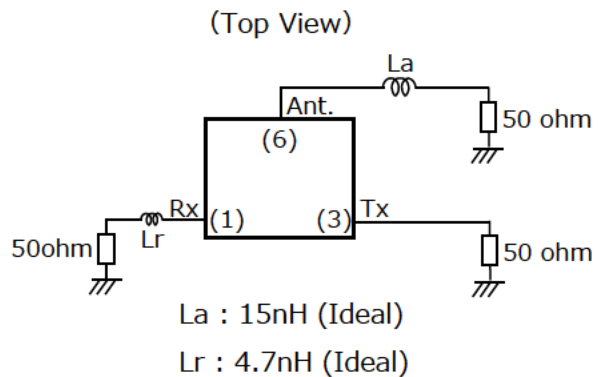
- * : Identification logo
- 136 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

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

Recommendable Land Pattern



Measurement Circuit



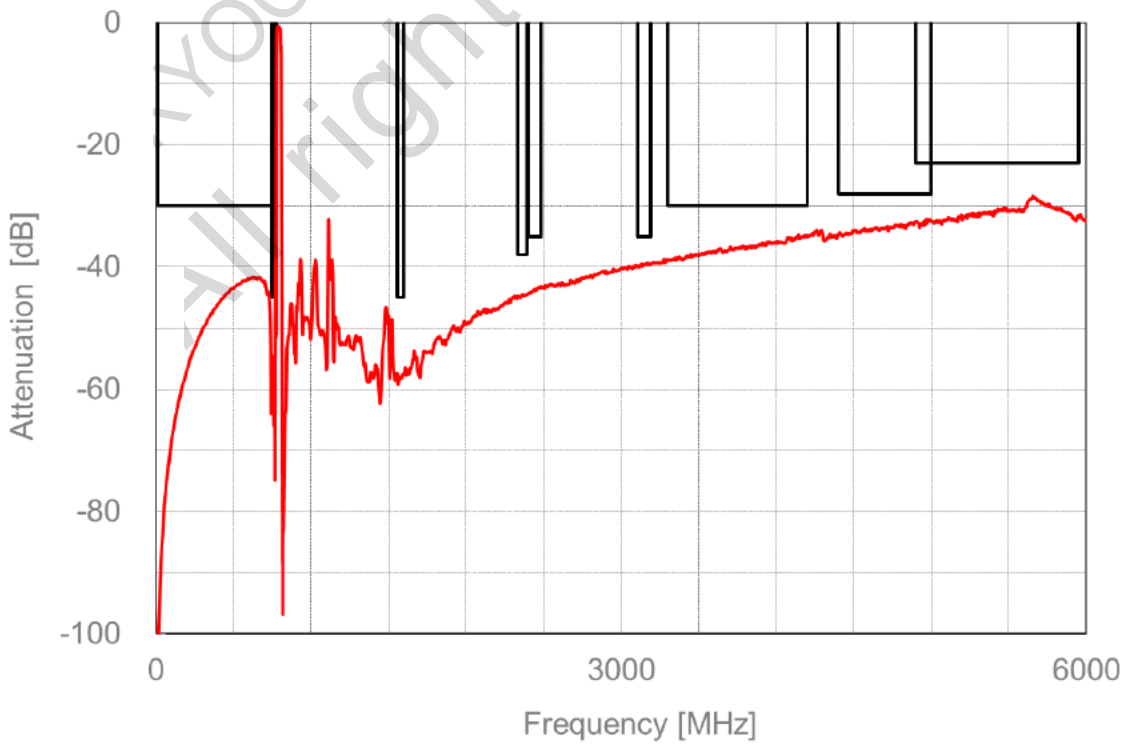
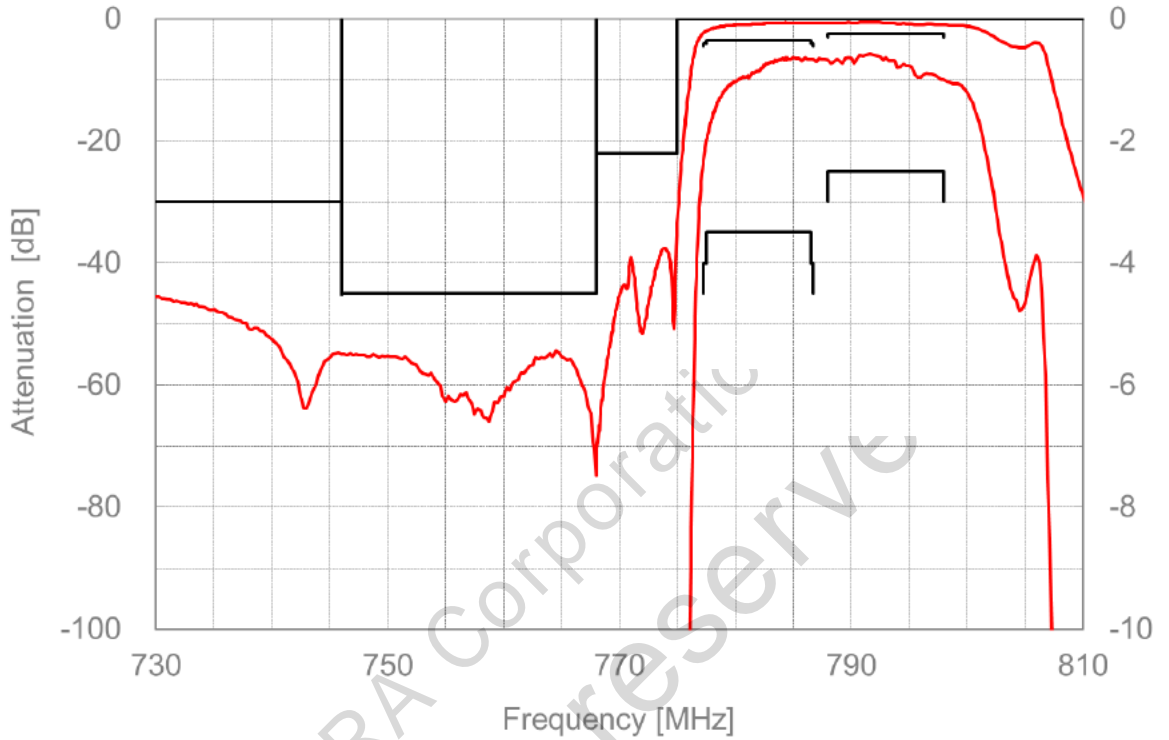
Electrical Characteristics

ITEMS		Frequency Range [MHz]	Characteristics			Unit	Notes	
			min.	typ.	max.			
Tx to Ant	Insertion loss	777.5 to 786.5	-	2.0	3.5	dB	Band13	
		788 to 798	-	1.0	2.5	dB	Band14	
		777.25 to 786.75	-	2.3	4.0	dB		
	VSWR	Tx	777.5 to 798	-	1.4	2.1	-	
		Ant	777.5 to 798	-	1.4	2.1	-	
	Absolute attenuation	10 to 746	30	41	-	dB		
		746 to 768	45	54	-	dB	Rx	
		768 to 775	22 *	32 *	-	dB	NS07 Relative to IL(dBint*)	
		1554 to 1596	43	57	-	dB	2fTx	
		2331 to 2394	38	45	-	dB	3fTx	
		2400 to 2484	35	43	-	dB	ISM	
		3108 to 3192	35	40	-	dB	4fTx	
		3300 to 4200	30	36	-	dB	n77	
4400 to 5000	28	34	-	dB	n79			
4900 to 5950	23	30	-	dB	ISM 5G			
Ant to Rx	Insertion loss	746 to 756	-	1.3	2.9	dB	Band13	
		758 to 768	-	1.6	2.9	dB	Band14	
	VSWR	Rx	746 to 756	-	1.8	2.2	-	
		Ant	746 to 756	-	1.7	2.1	-	
	Absolute attenuation	777 to 787	30	54	-	dB	Tx	
		2400 to 2500	40	58	-	dB	ISM 2.4G	
		3300 to 4200	35	44	-	dB	n77	
4400 to 5000		30	43	-	dB	n79		
4900 to 5950	20	34	-	dB	ISM 5G			
Tx to Rx Isolation	Isolation	746 to 768	53	56	-	dB		
		777 to 798	52	55	-	dB		

*dBint : Integrated to LTE Modulation (4.5MHz)

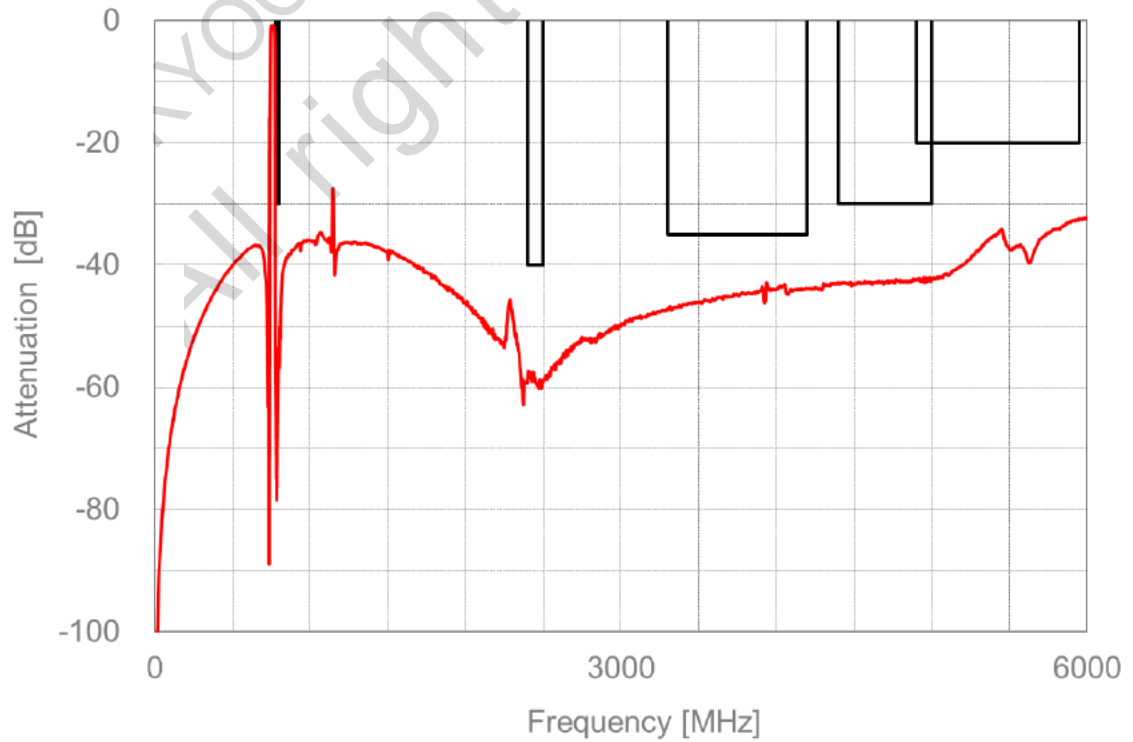
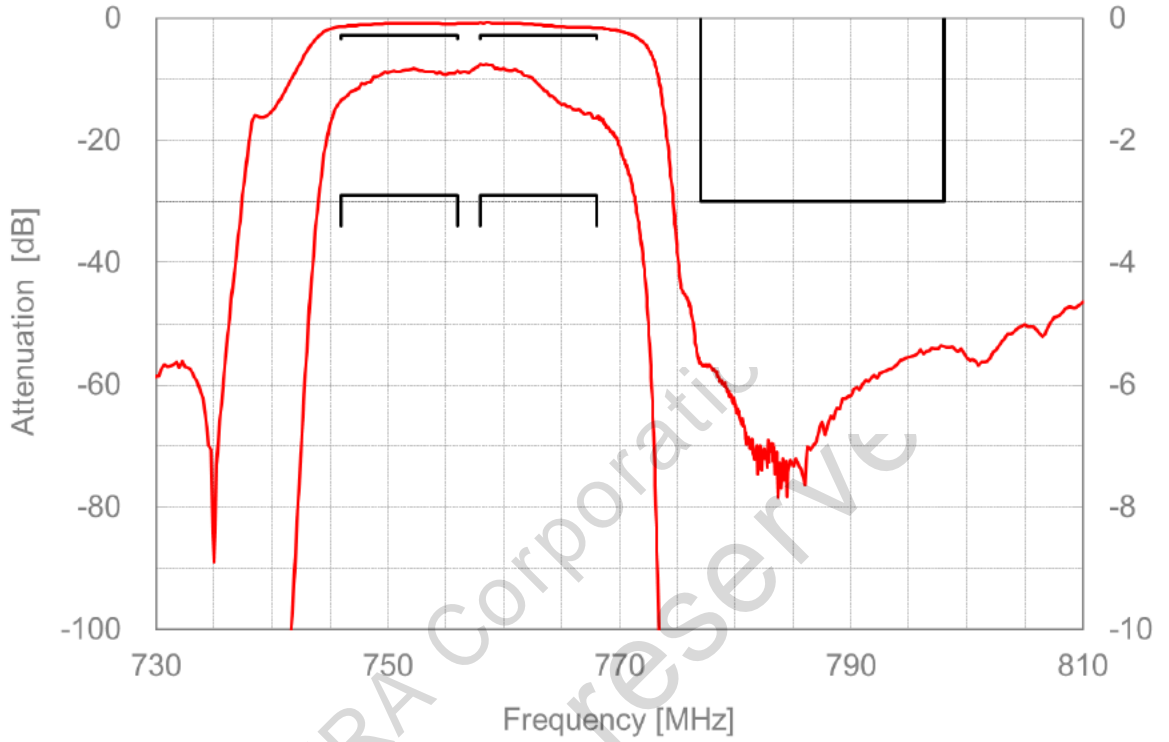
Electrical Characteristics

[Tx to Ant]



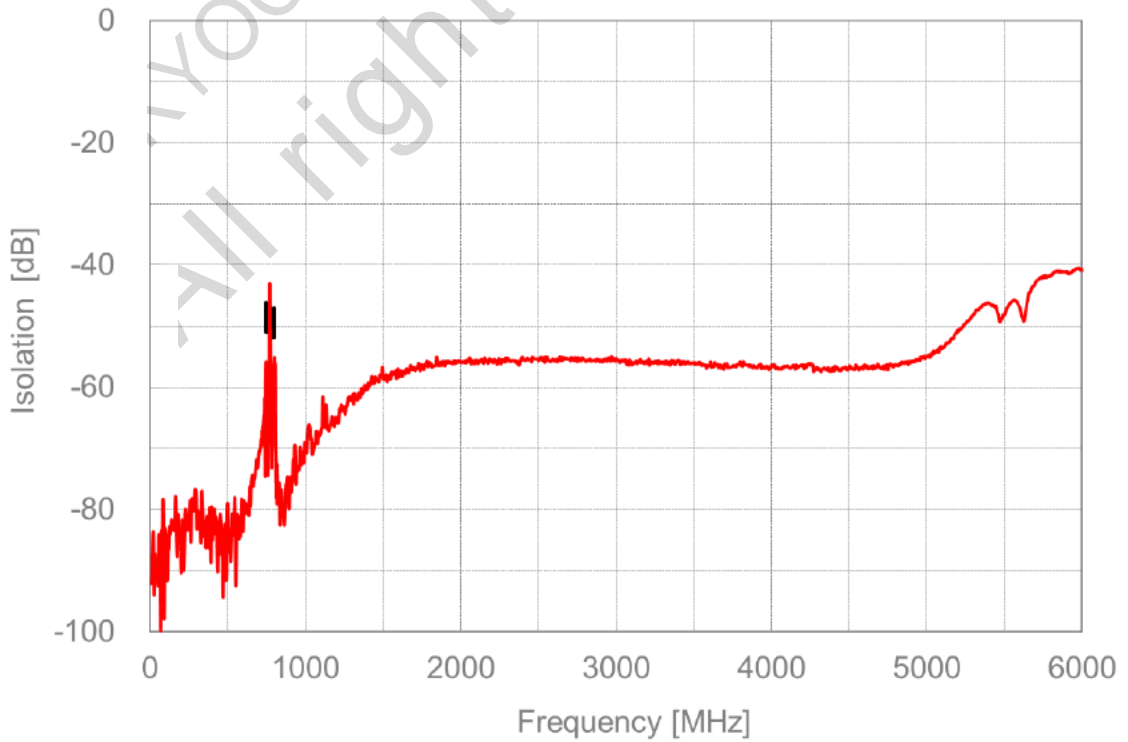
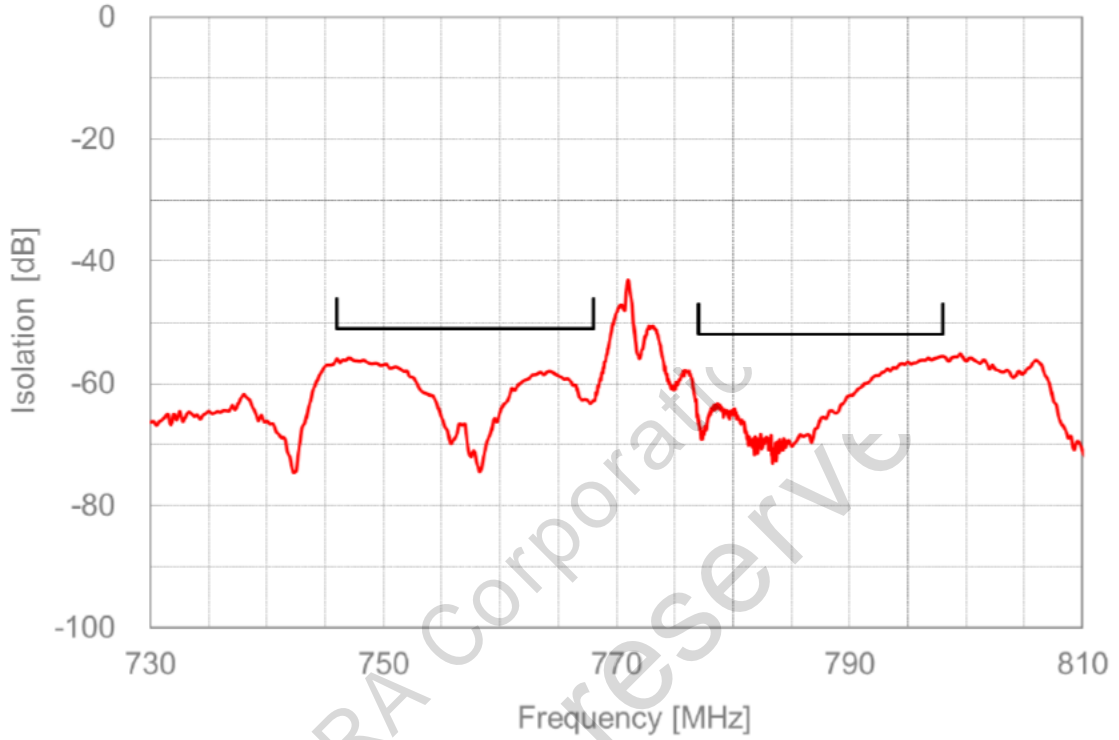
Electrical Characteristics

[Ant to Rx]

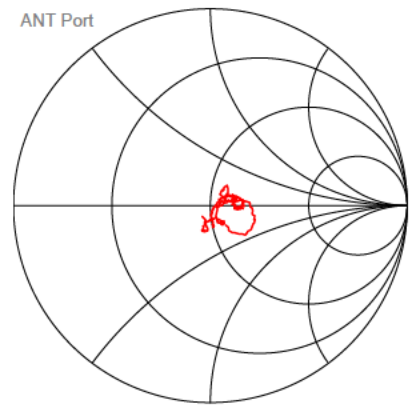
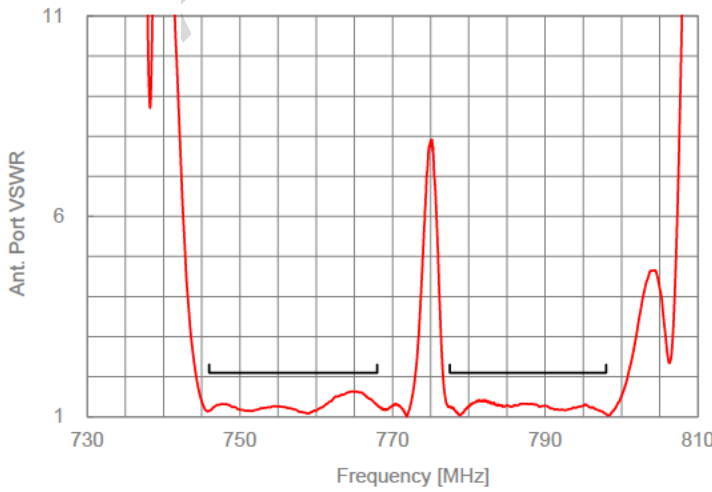
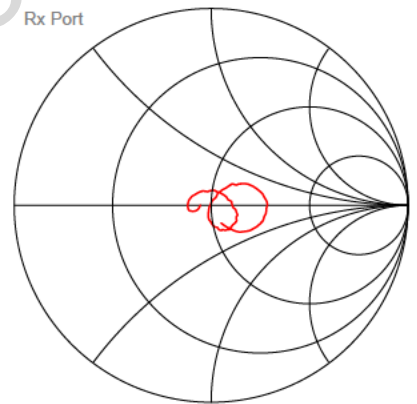
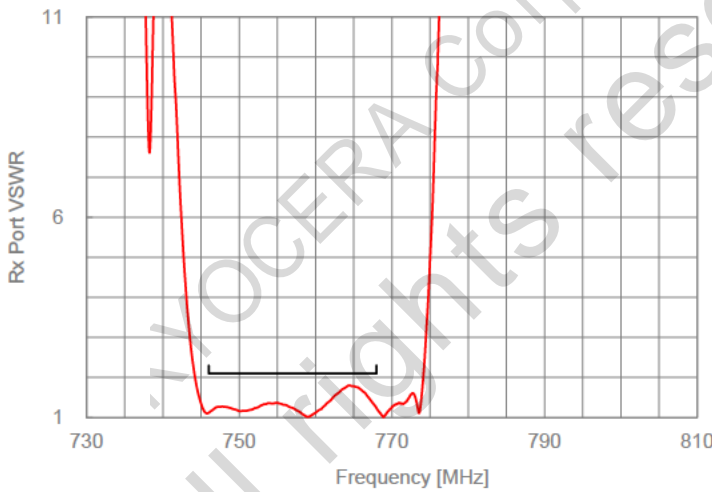
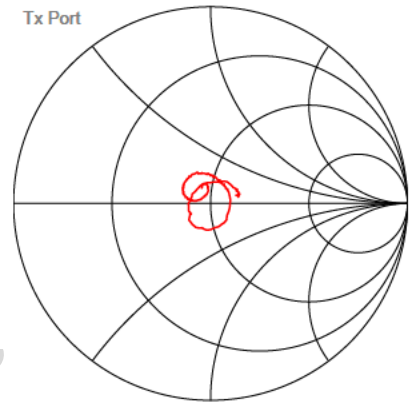
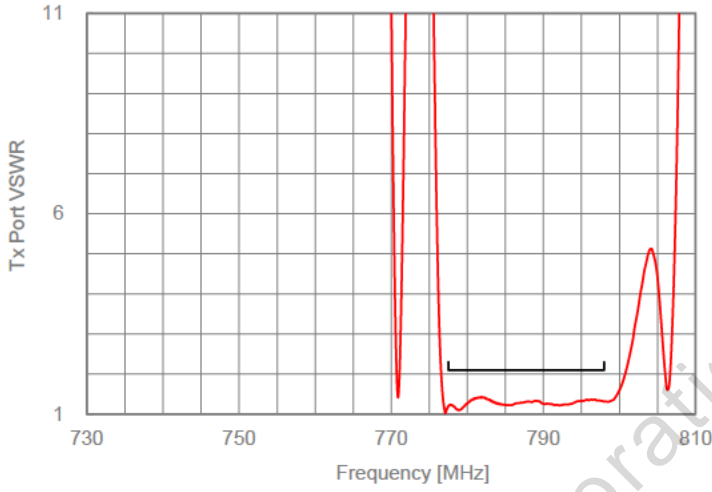


Electrical Characteristics

[Tx to Rx]

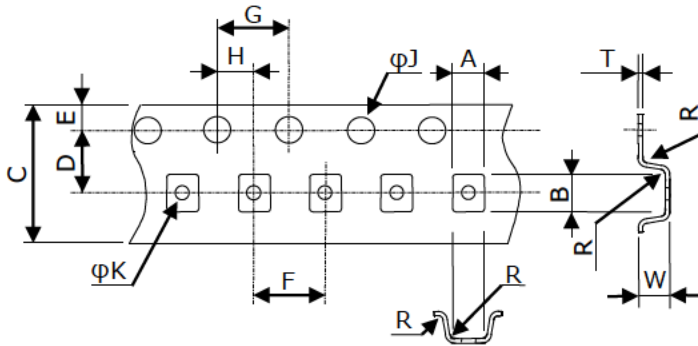


Electrical Characteristics



Tape & Reel Specification

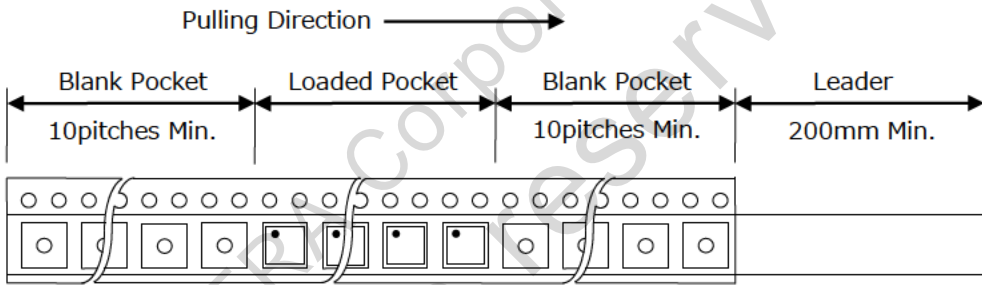
[Tape]



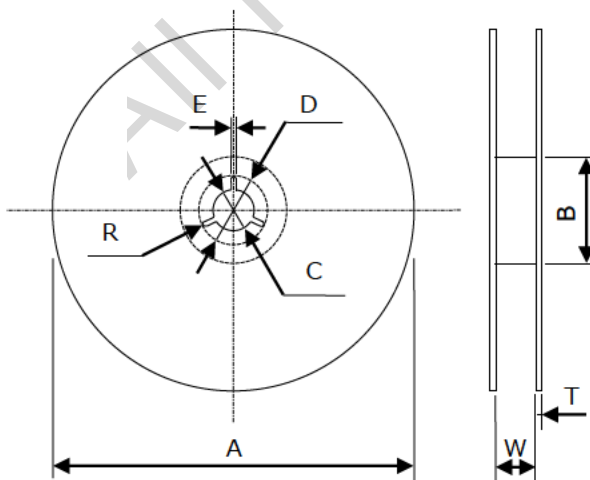
Unit : mm

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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