

Datasheet of SAW Duplexer 1612 Band13 Unbalanced

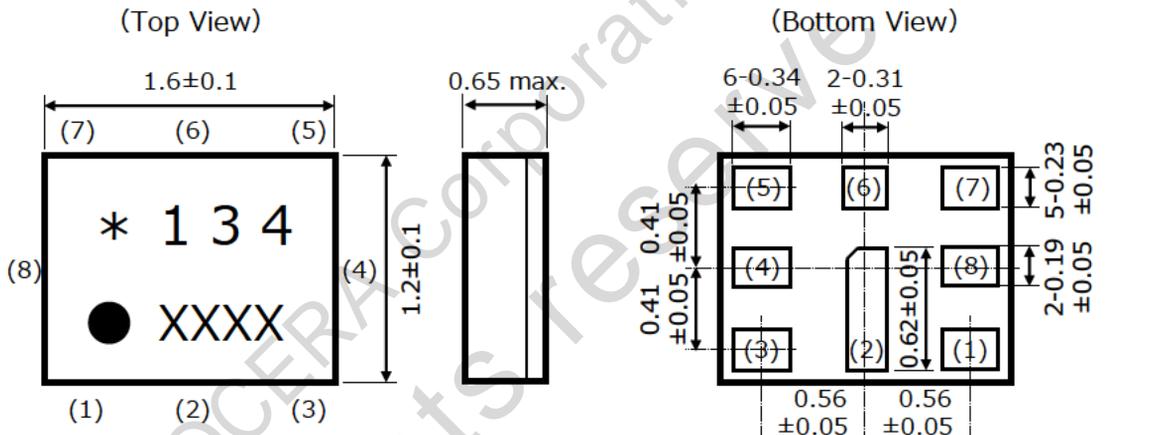
~ Public Safety Band(NS07) Compliance Type ~

KYOCERA Part No. : SD16-0782R8UUB1

Rating

Items	Rating	Unit	Note
Operating Temperature Range	-20 to +90	deg.C	
Storage Temperature Range	-40 to +90	deg.C	
Max Input Power (Tx port)	+31	dBm	5,000hours, Ta=50deg.C, CW
	+30	dBm	5,000hours, Ta=50deg.C, DFT-s-OFDM
	+28.5	dBm	5,000hours, Ta=50deg.C, CP-OFDM
Tx Port Nominal Impedance	50	ohm	Unbalance
Ant. Port Nominal Impedance	50+11nH//3.3pF	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

Dimensions

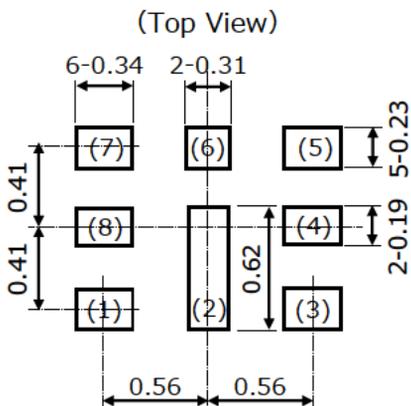


- * : Identification logo
- 134 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

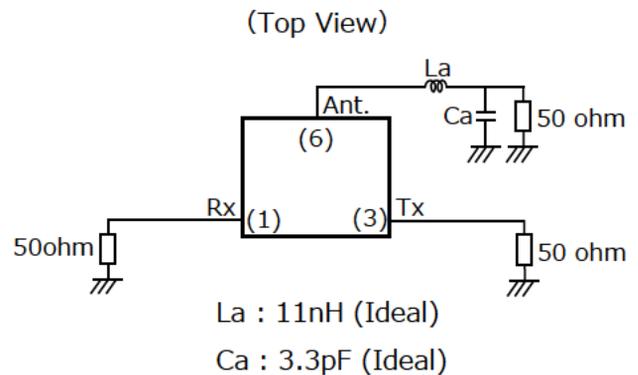
Unit : mm

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

Recommendable Land Pattern



Measurement Circuit



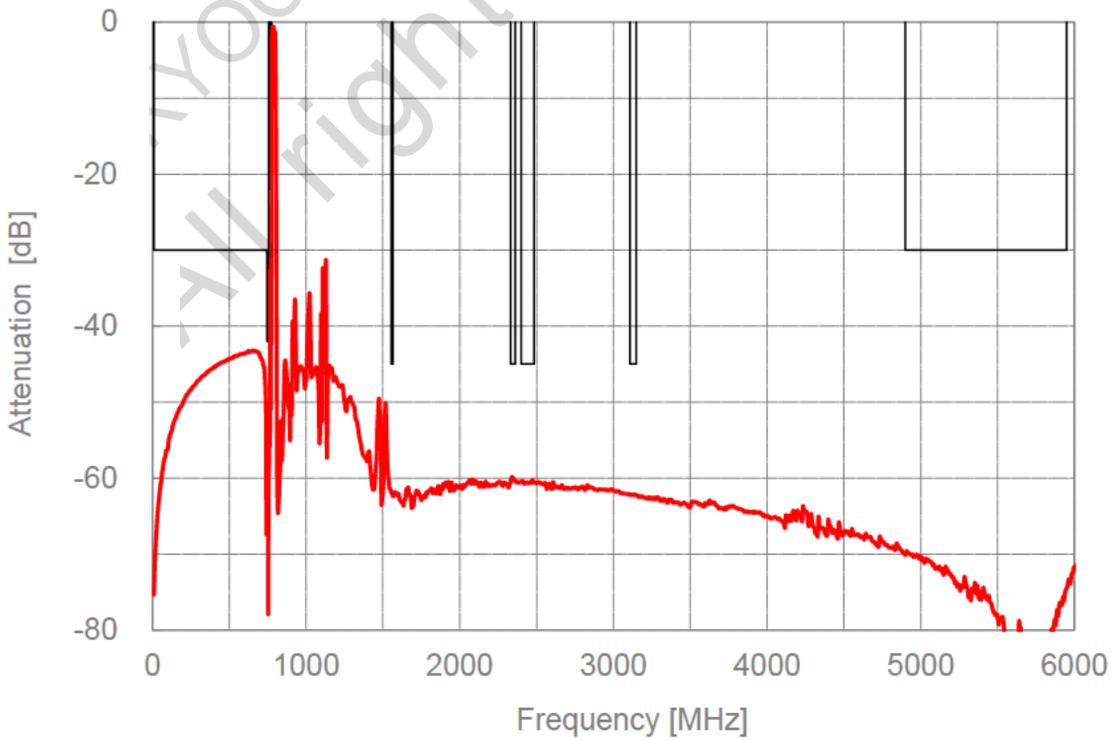
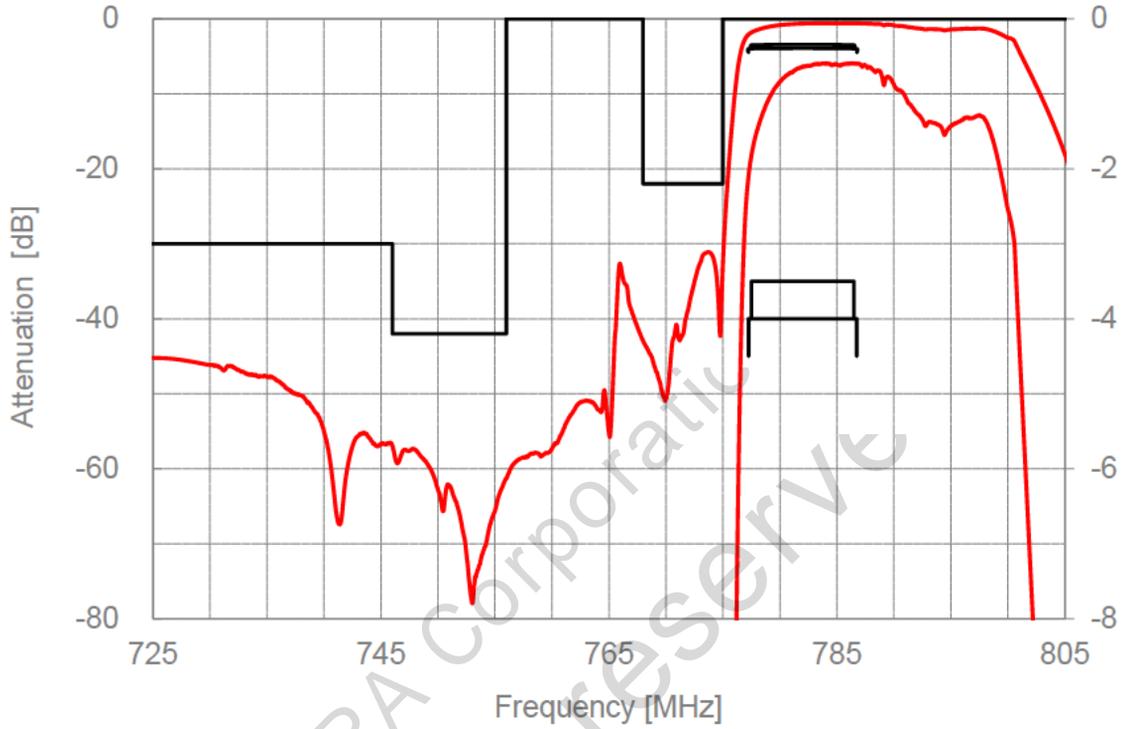
Electrical Characteristics

Items	Frequency Range (MHz)	Characteristics			Unit	Notes		
		min.	typ.	max.				
Tx to Ant	Insertion loss	777.5 - 786.5	-	1.8	3.5	dB		
		777.25 - 786.75	-	2.1	4.0	dB		
	VSWR	Tx	777.5 - 786.5	-	1.2	2.1	-	
		Ant	777.5 - 786.5	-	1.3	2.1	-	
	Attenuation	10 - 746	30	43	-	dB		
		746 - 756	42	57	-	dB	Rx	
		768 - 775	22 *	31 *	-	dB	NS07 Relative to IL(dBint*)	
		1554 - 1565	45	62	-	dB	2fTx	
		2331 - 2361	45	60	-	dB	3fTx	
		2400 - 2484	45	60	-	dB	ISM	
3108 - 3148		45	62	-	dB	4fTx		
4900 - 5950	30	69	-	dB	ISM 5G			
Ant to Rx	Insertion loss	746 - 756	-	1.0	1.7	dB		
	VSWR	Rx	746 - 756	-	1.4	2.1	-	
		Ant	746 - 756	-	1.5	2.1	-	
	Attenuation	777 - 787	50	64	-	dB	Tx	
		2400 - 2500	40	64	-	dB	ISM 2.4G	
4900 - 5950		40	59	-	dB	ISM 5G		
Tx to Rx	Isolation	746 - 756	52	57	-	dB		
		777 - 787	58	64	-	dB		

*dBint : Integrated to LTE Modulation (4.5MHz)

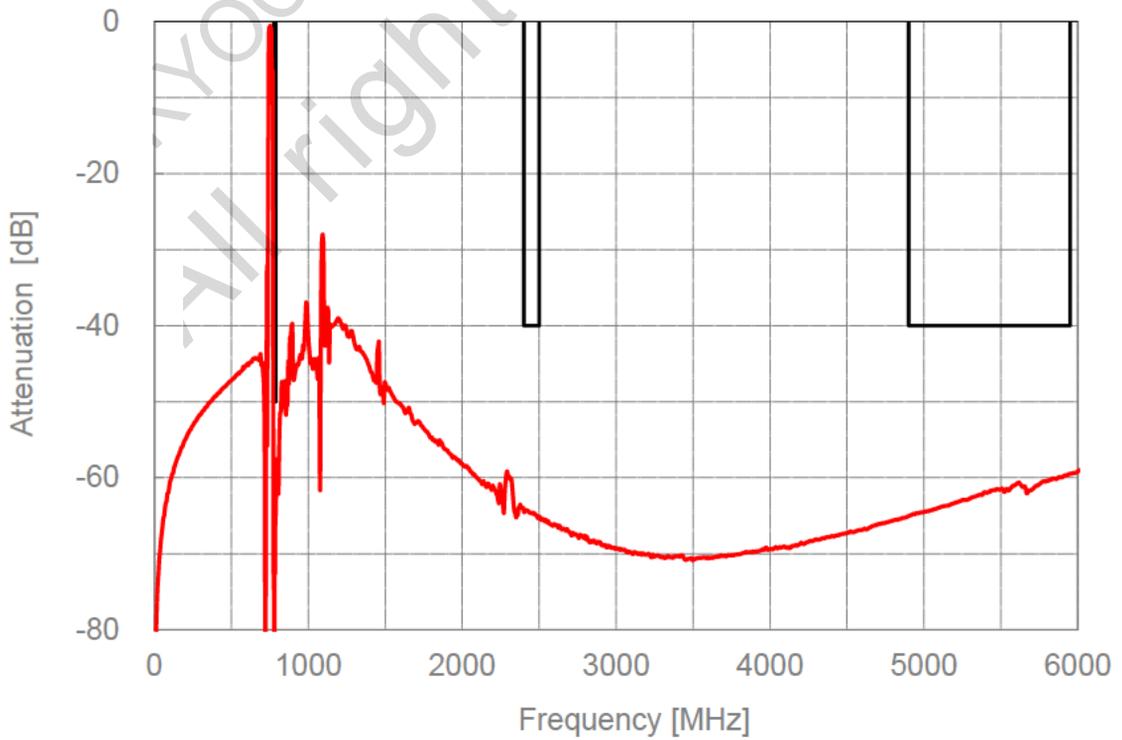
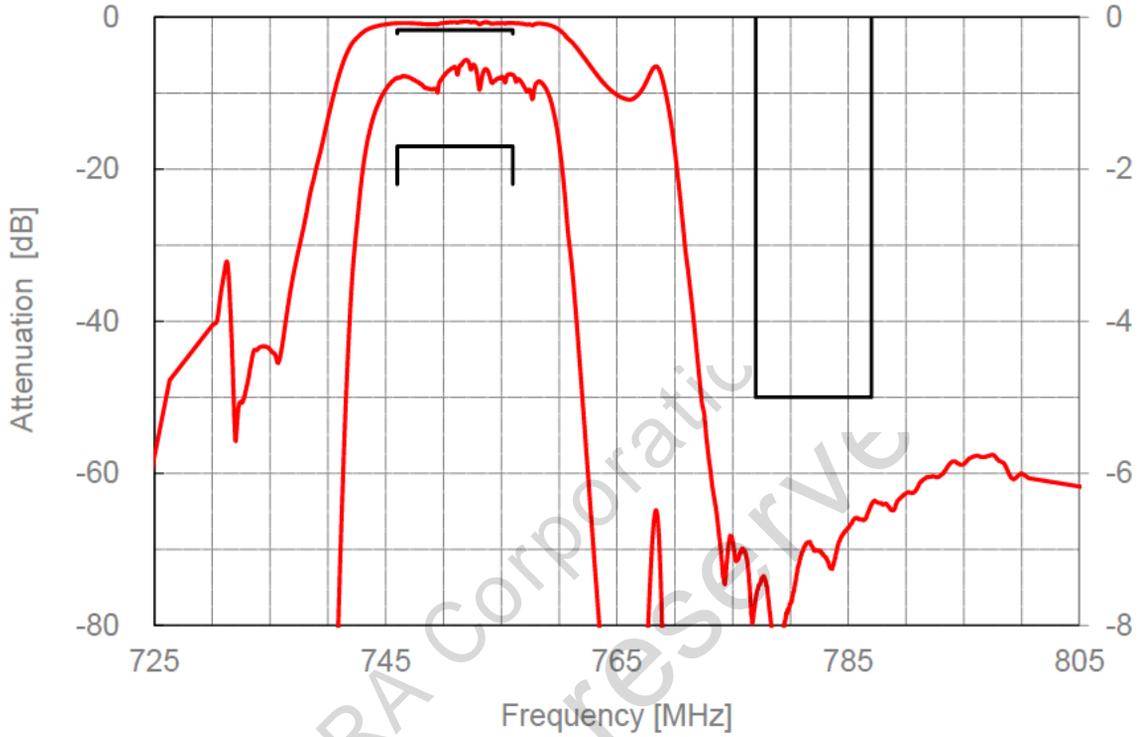
Electrical Characteristics

[Tx to Ant]



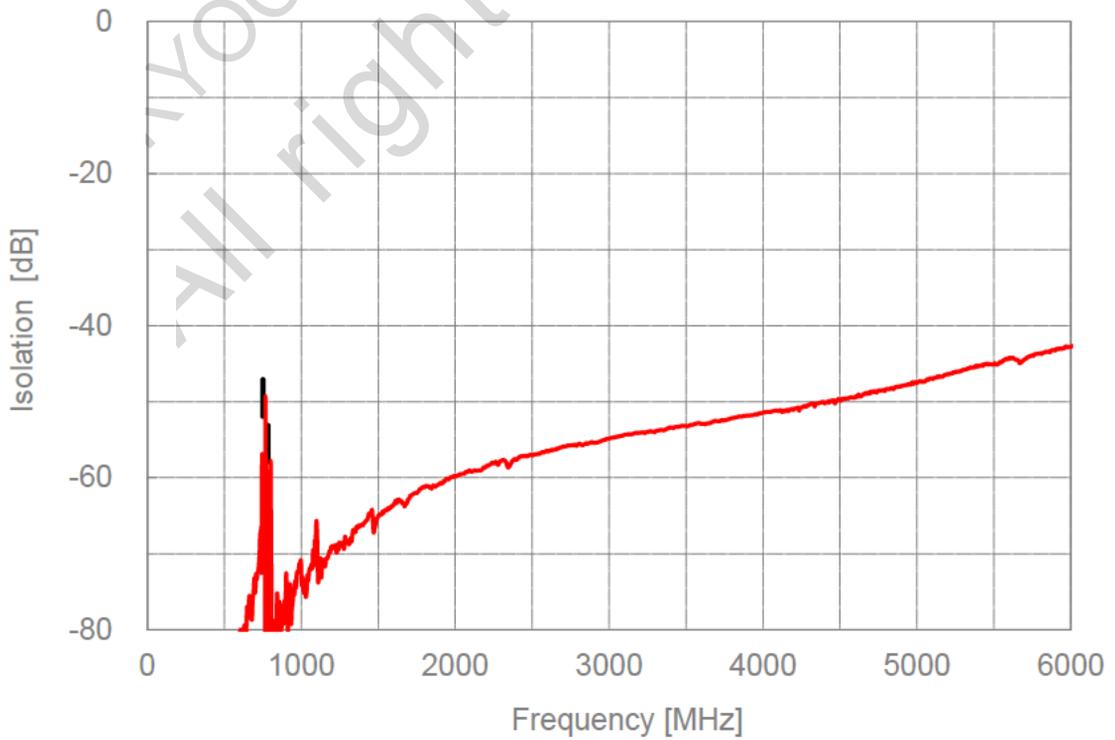
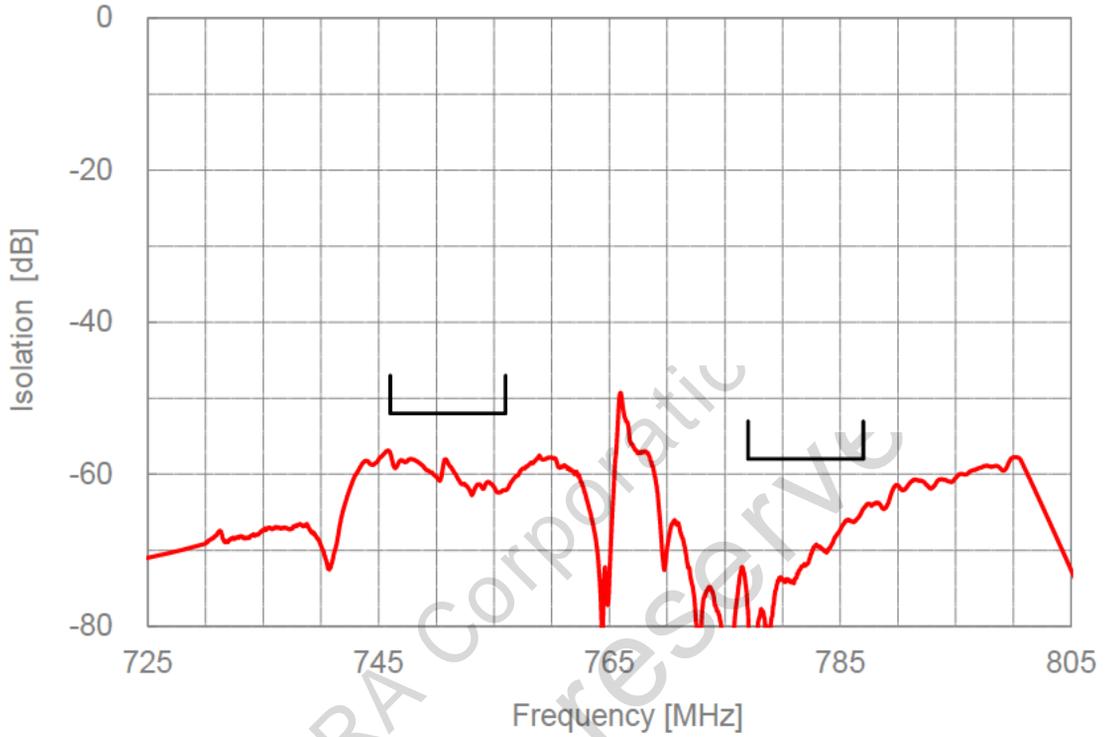
Electrical Characteristics

[Ant to Rx]

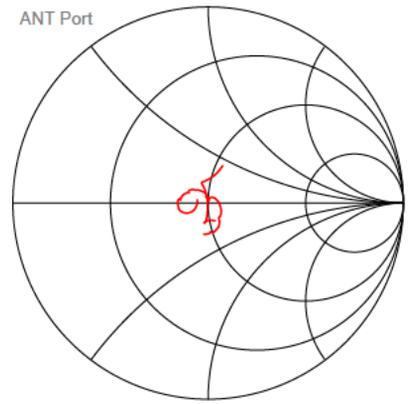
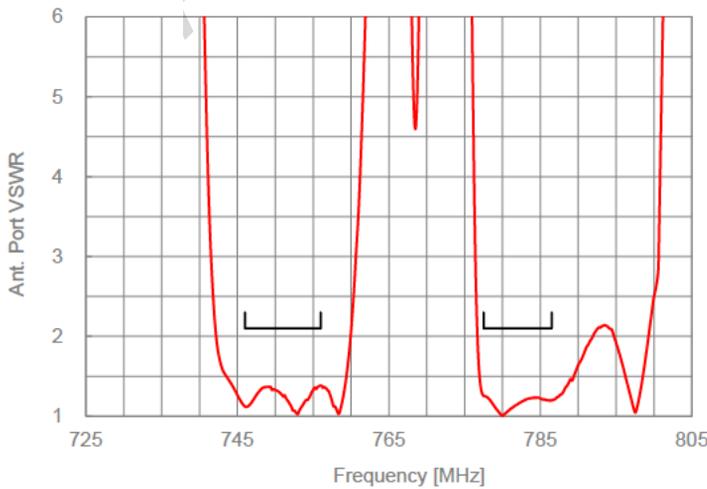
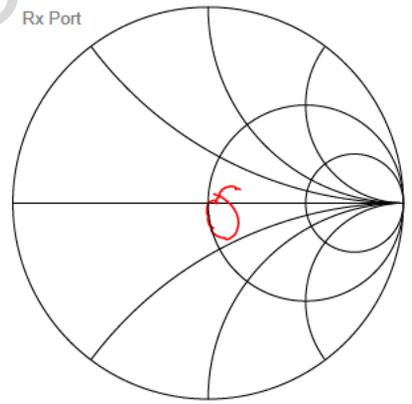
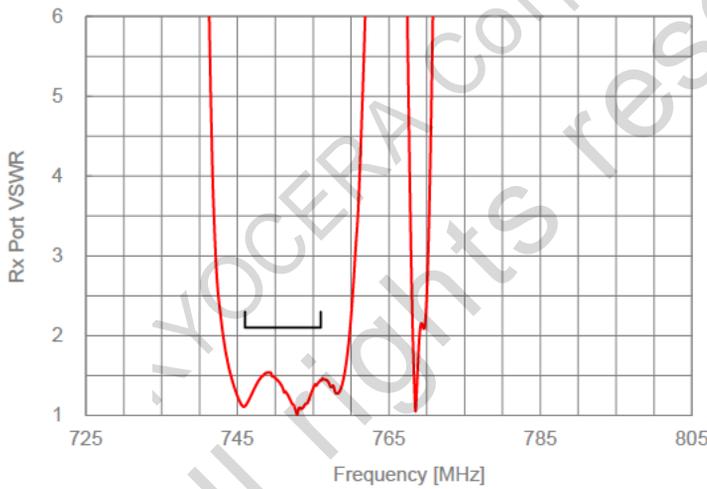
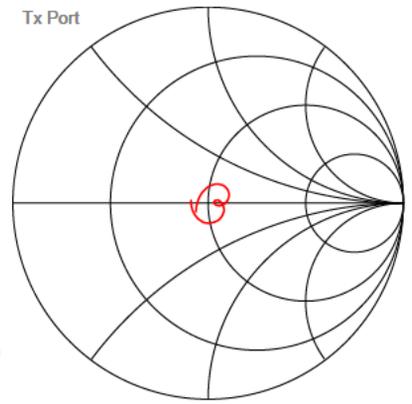
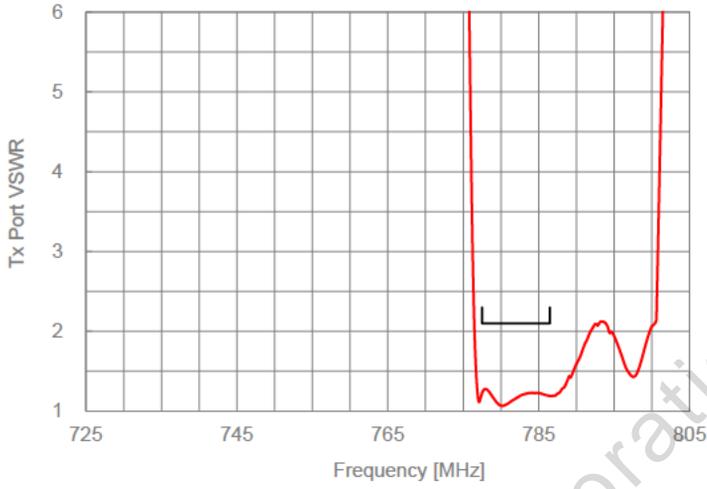


Electrical Characteristics

[Tx to Rx]

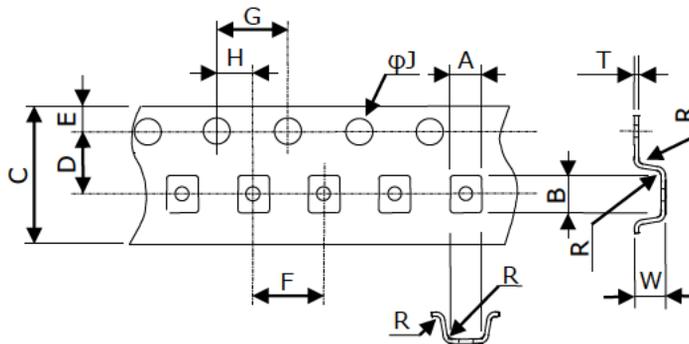


Electrical Characteristics



Tape & Reel Specification

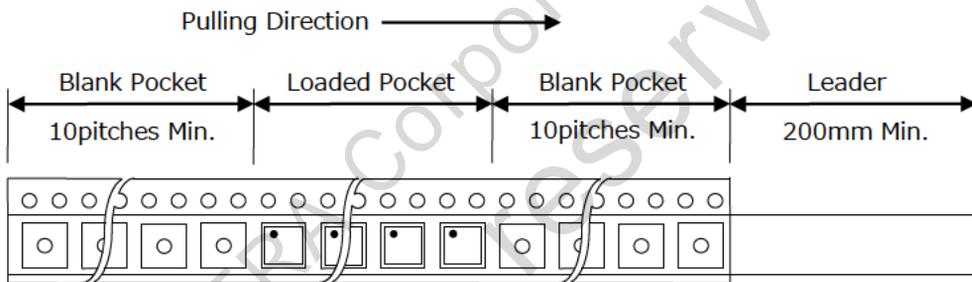
[Tape]



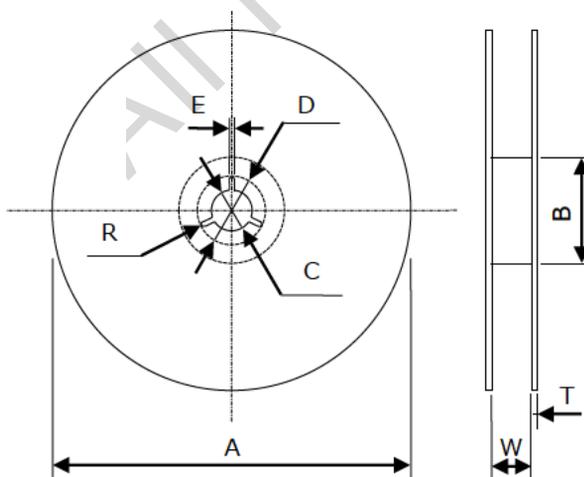
Unit : mm

Part	Dimension
A	1.37±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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