

Datasheet of SAW Duplexer 1612 Band28B Unbalanced

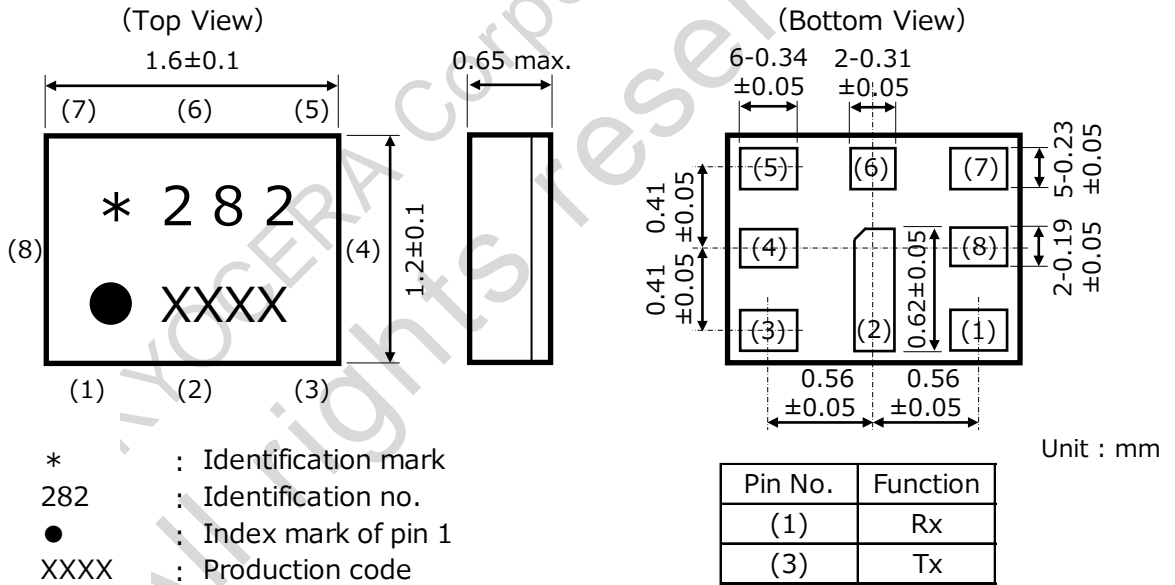
KYOCERA Part No. : SD16-0733R8UUA1

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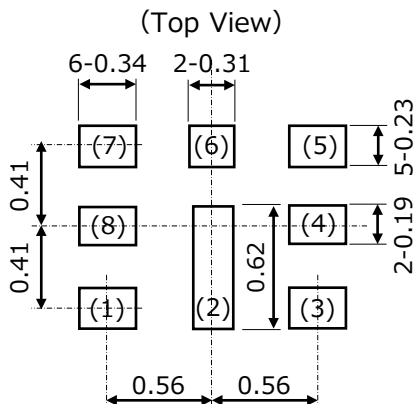
Rating

Items		Rating	Unit	Note
Operating Temperature Range		-30 to +85	deg.C	
Storage Temperature Range		-40 to +85	deg.C	
Max Input Power	Tx Band	31	dBm	5,000Hours,CW,Ta=50deg.C
		31	dBm	5,000Hours,QPSK,LTE,Ta=50deg.C
		31	dBm	5,000Hours,DFT-s-OFDM-QPSK,Ta=50deg.C
		29.5	dBm	5,000Hours,CP-OFDM-QPSK,Ta=50deg.C
ESD Level	Machine Model	50	Volt	Complied to JESD22-A115
Moisture Sensitivity Level		3		Complied to J-STD-033B.1
Tx Port Nominal Impedance		50+15nH(series)	ohm	Unbalance
Ant. Port Nominal Impedance		50//10nH(shunt)	ohm	Unbalance
Rx Port Nominal Impedance		50+3.6nH(series)	ohm	Unbalance

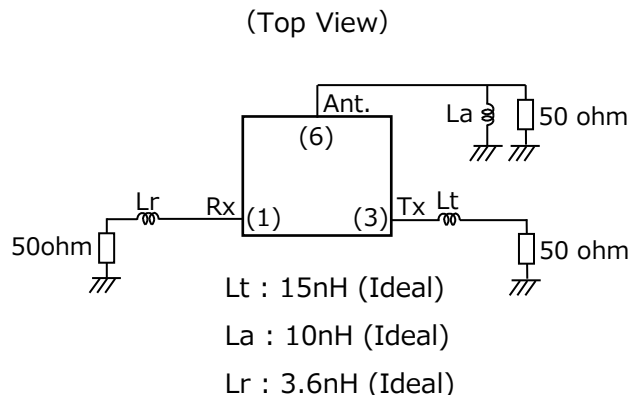
Dimensions



Recommendable Land Pattern



Measurement Circuit

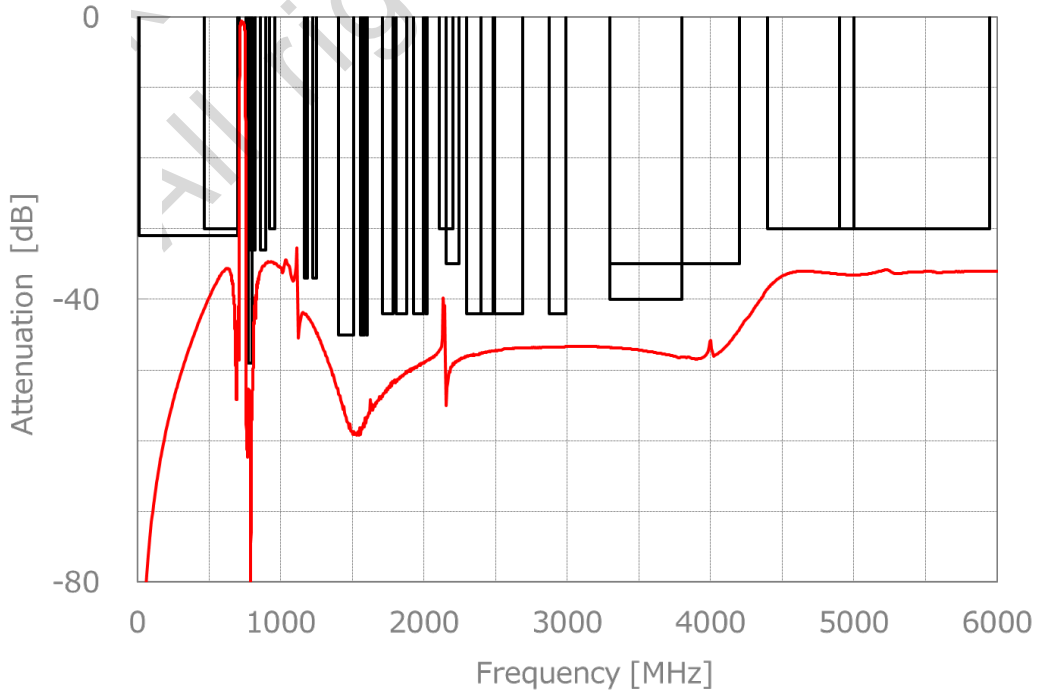
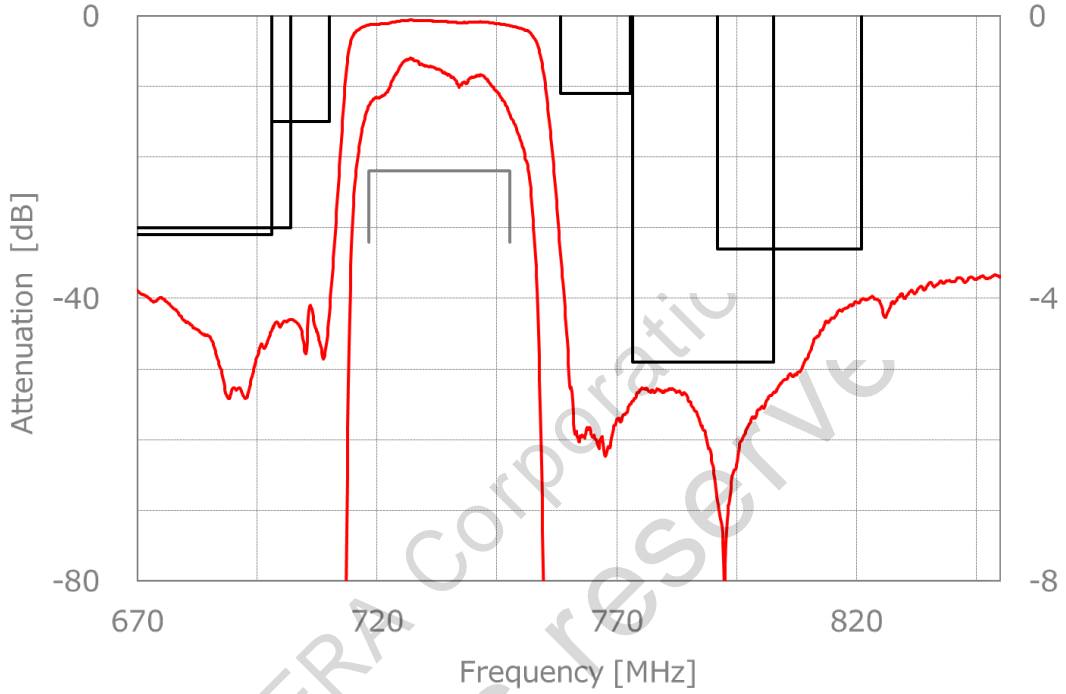


Electrical Characteristics

Items		Frequency Range (MHz)	Unit	Spec. min.	typ.	max.	Notes	
TX to ANT	Insertion Loss	718.24 - 747.76	dB	-	1.4	2.2		
	Ripple	718.24 - 747.76	dB	-	0.8	1.8		
	VSWR	Tx	718 - 748	-	-	1.7	2.2	
		Ant	718 - 748	-	-	1.7	2.2	
	Attenuation		470 - 702	dB	30	36	-	Average over any 6MHz
			10 - 698	dB	31	36	-	
			698 - 710	dB	15	41	-	
			758.24 - 772.76	dB	11	33	-	
			773.24 - 802.76	dB	49	53	-	
			791 - 821	dB	33	40	-	
			859 - 894	dB	33	35	-	
			925 - 960	dB	30	35	-	
			1166 - 1187	dB	37	42	-	
			1226 - 1250	dB	37	43	-	
			1406 - 1510.9	dB	45	53	-	
			1559 - 1563	dB	45	58	-	
			1565.42 - 1573.37	dB	45	58	-	
			1573.37 - 1577.47	dB	45	57	-	
			1577.47 - 1585.42	dB	45	57	-	
			1597.55 - 1605.89	dB	45	56	-	
			1710 - 1785	dB	42	51	-	
			1805 - 1880	dB	42	50	-	
			1930 - 1995	dB	42	49	-	
			2010 - 2025	dB	42	48	-	
			2110 - 2200	dB	30	41	-	
			2154 - 2244	dB	35	48	-	
			2300 - 2400	dB	42	48	-	
			2400 - 2484	dB	42	47	-	
			2496 - 2690	dB	42	47	-	
			2872 - 2991	dB	42	47	-	
	3300 - 3800	dB	40	47	-			
	3300 - 4200	dB	35	45	-			
	4400 - 5000	dB	30	36	-			
	4900 - 5950	dB	30	36	-			
ANT to RX	Insertion Loss	773.24 - 802.76	dB	-	1.7	2.2		
	Ripple	773.24 - 802.76	dB	-	0.5	1.5		
	VSWR	Ant	773 - 803	-	-	1.6	2.0	
		Rx	773 - 803	-	-	1.6	2.0	
	Attenuation		10 - 699	dB	45	50	-	
			45 - 65	dB	60	87	-	
			703.24 - 732.76	dB	50	57	-	
			718.24 - 747.76	dB	35	57	-	
			814 - 835	dB	7	12	-	
			835 - 870	dB	30	41	-	
		870 - 2400	dB	40	45	-		
		2400 - 2483	dB	40	47	-		
		2496 - 2690	dB	40	47	-		
		3300 - 3800	dB	38	46	-		
	3300 - 4200	dB	38	46	-			
	4400 - 5000	dB	38	45	-			
	4900 - 5950	dB	38	44	-			
TX to RX	Isolation	718.24 - 747.76	dB	56	60	-		
		773 - 803	dB	54	56	-	Integrated calculation, 4.5MHz of LTE5MHz	

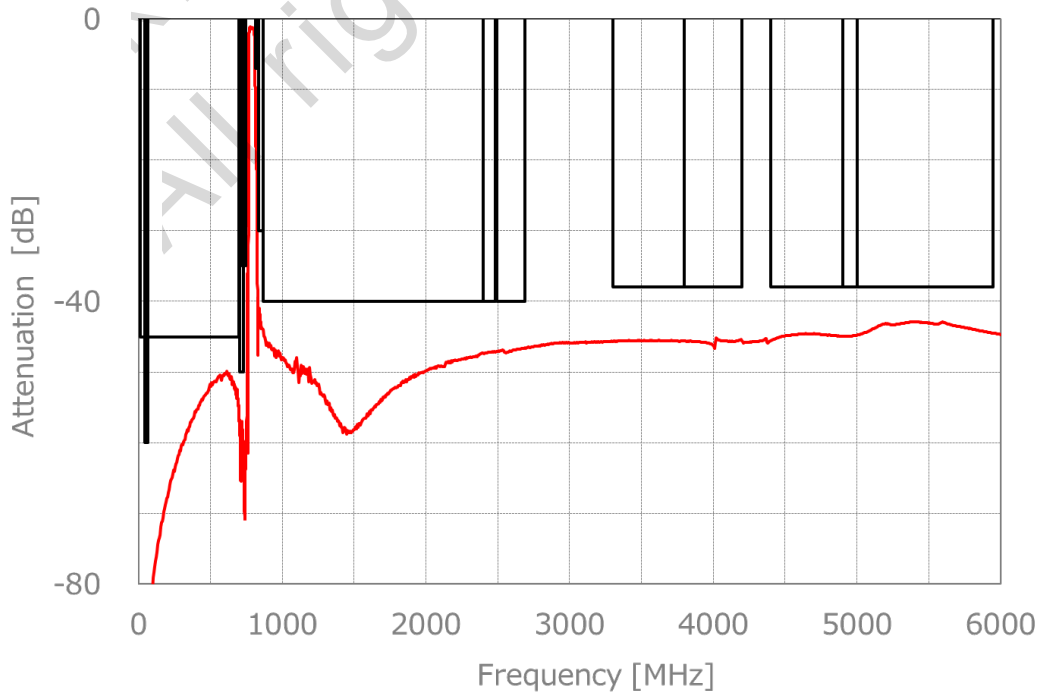
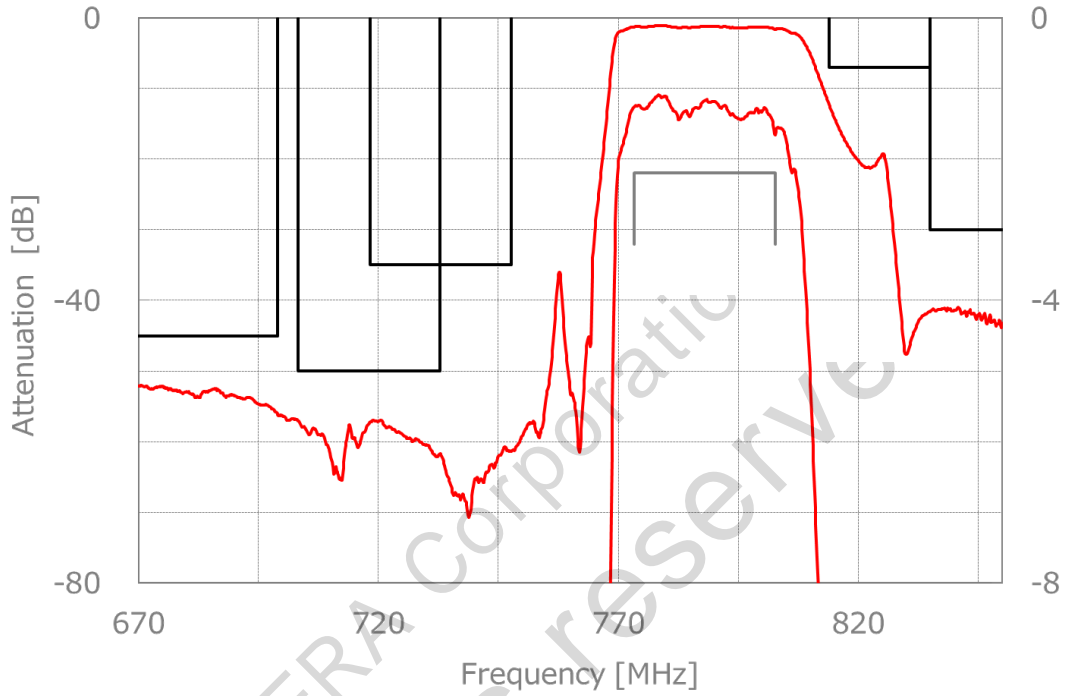
Electrical Characteristics

[Tx to Ant]



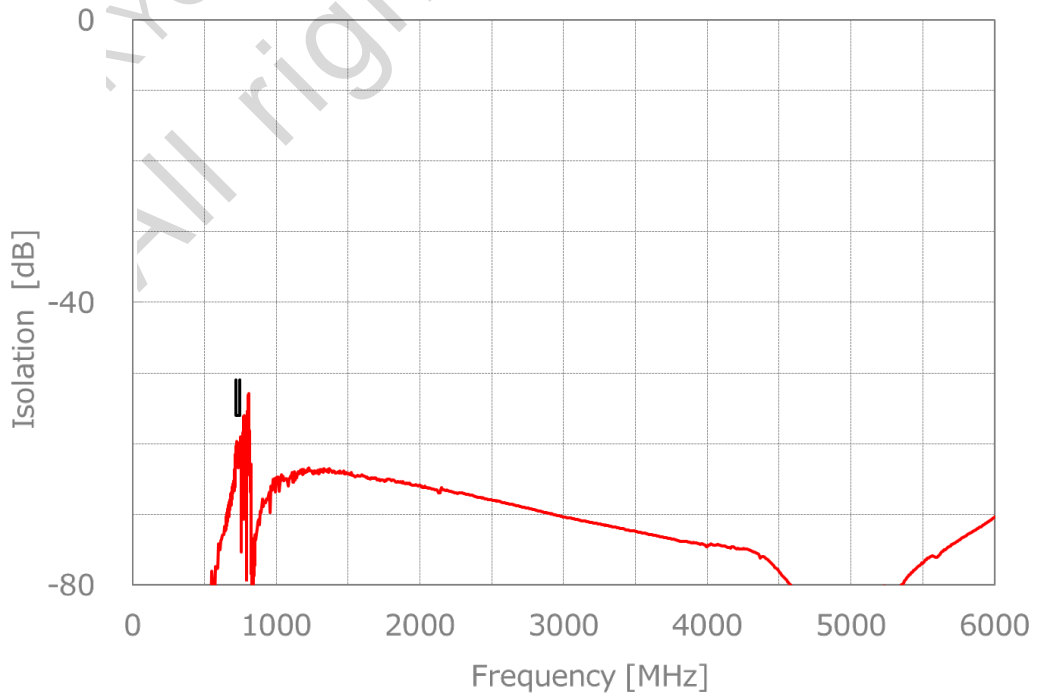
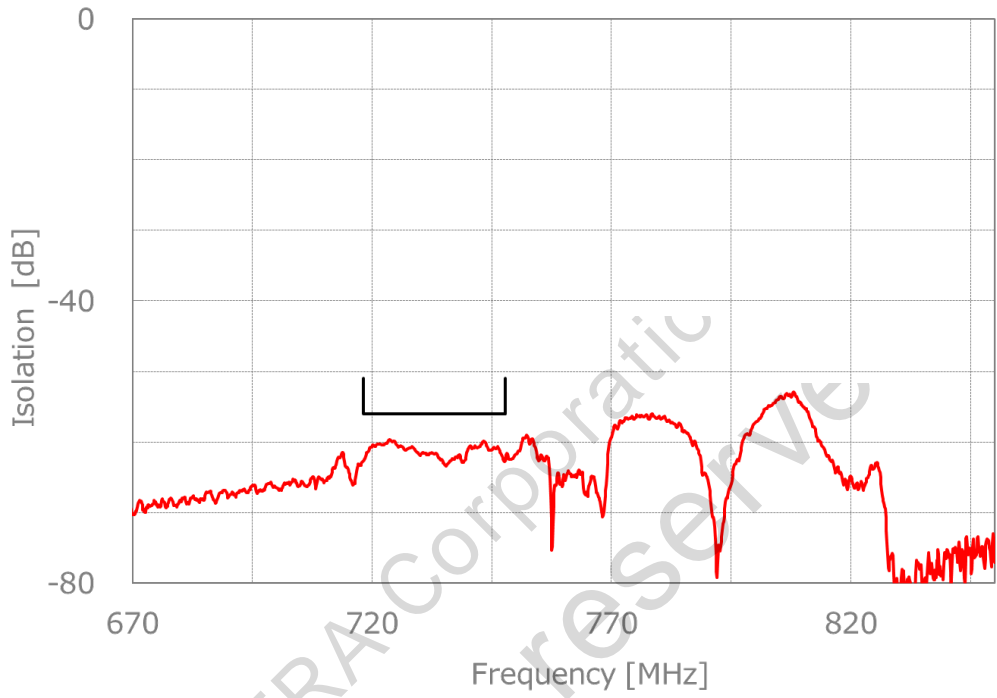
Electrical Characteristics

[Ant to Rx]

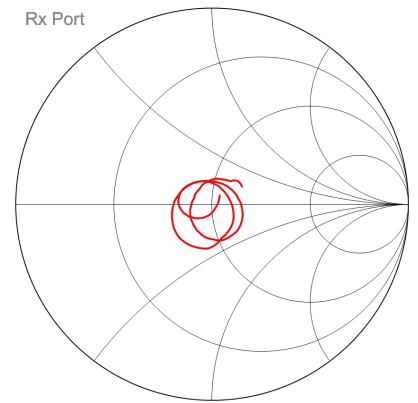
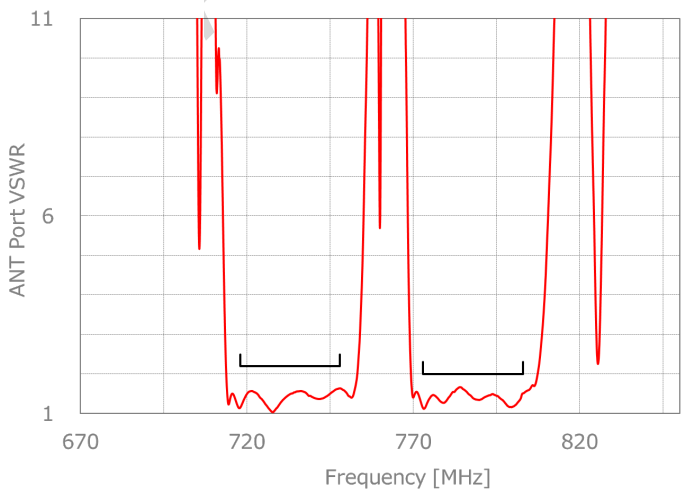
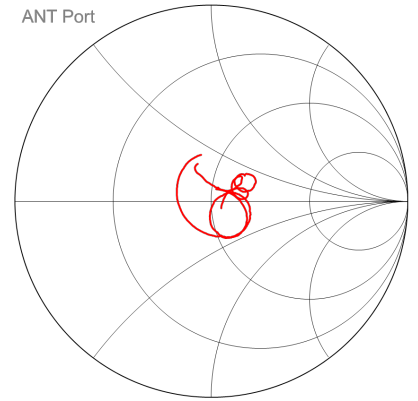
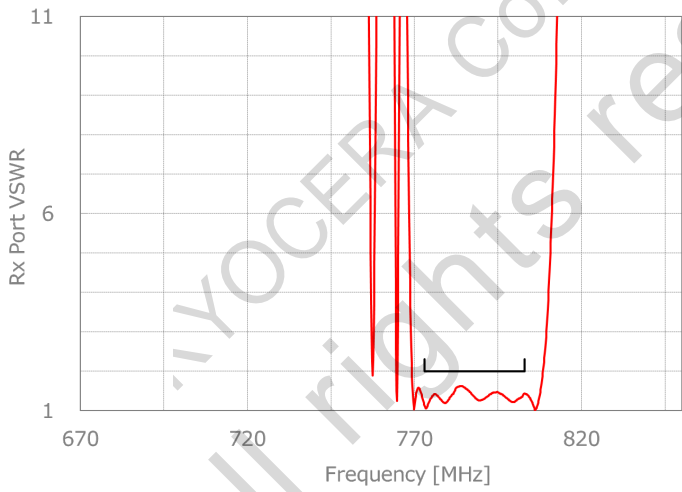
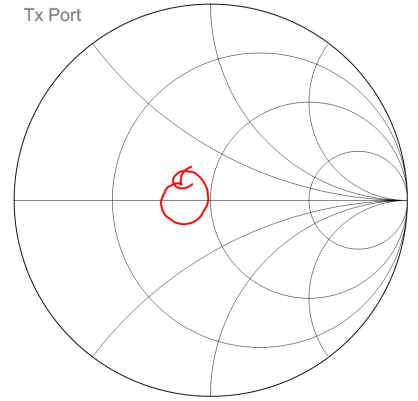
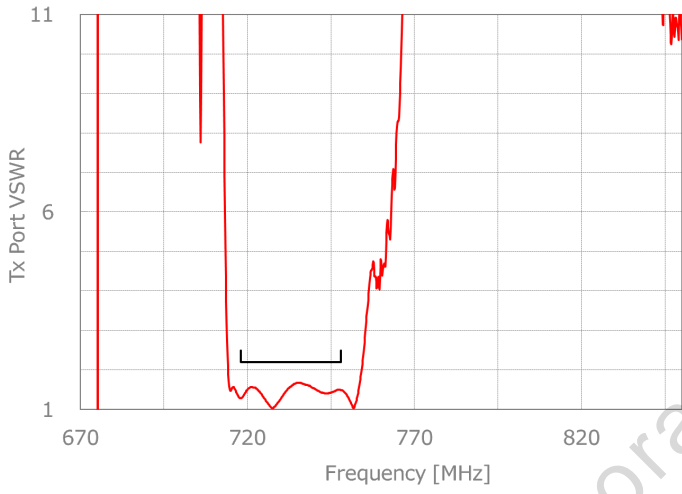


Electrical Characteristics

[Tx to Rx]

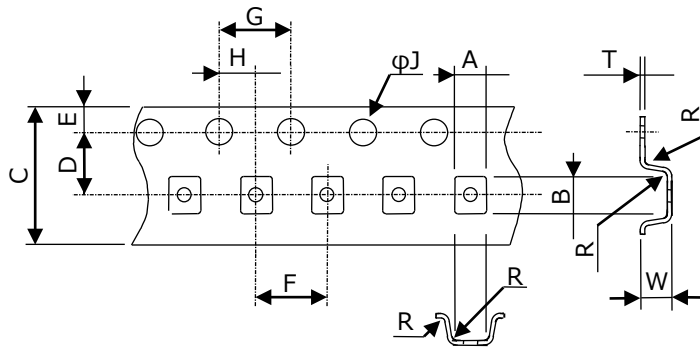


Electrical Characteristics



Tape & Reel Specification

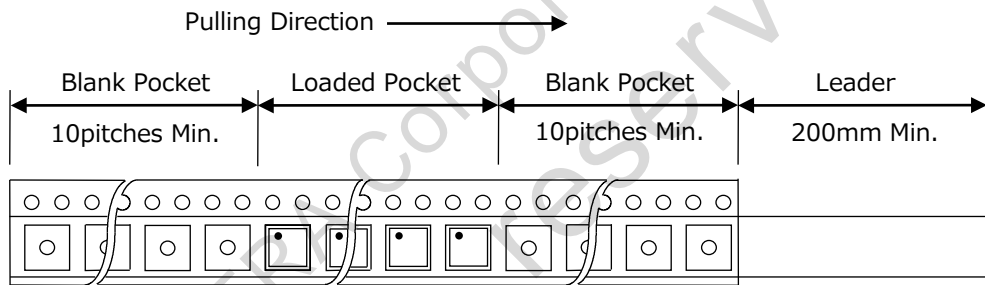
[Tape]



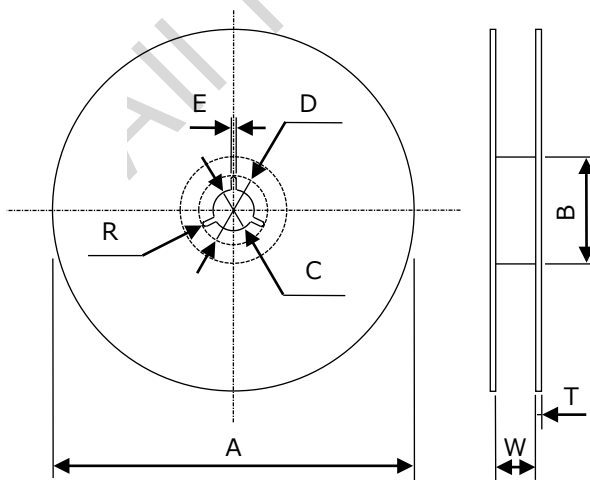
Unit : mm

Part	Dimension
A	1.35±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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