

Datasheet of SAW Duplexer

1814 Band1 Unbalanced

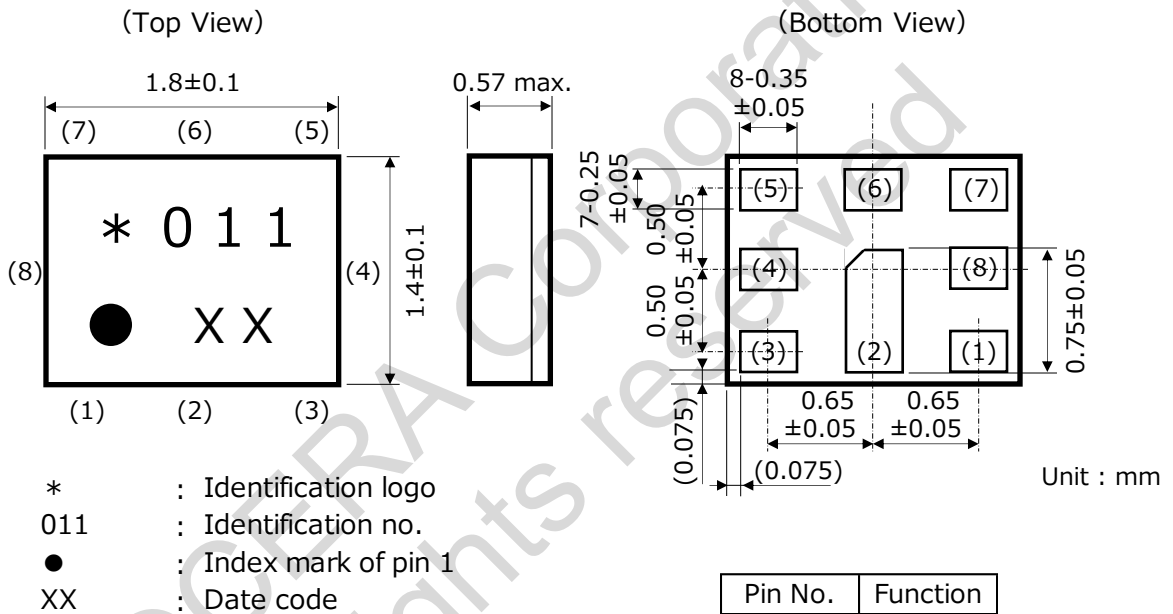
KYOCERA Part No. : SD18-1950R8UUQ1

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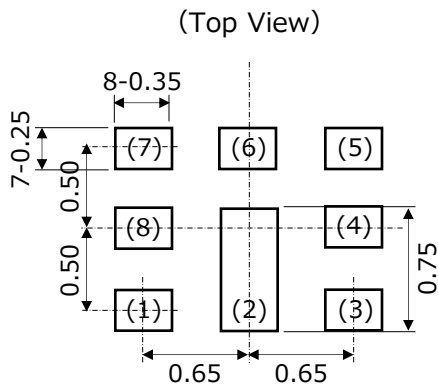
Rating

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)	+29	dBm	5,000hours, Ta=50deg.C, CW
Tx Port Nominal Impedance	50//7.5nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//3.3nH	ohm	Unbalance
Rx Port Nominal Impedance	50	ohm	Unbalance

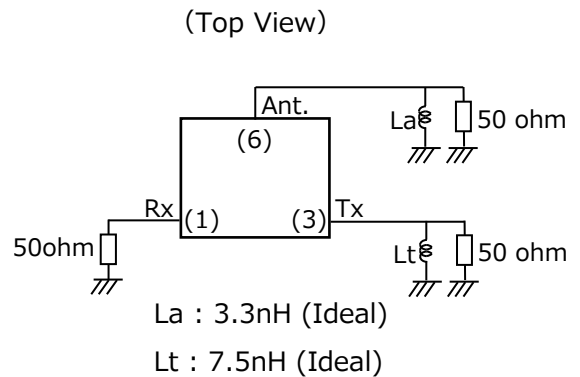
Dimensions



Recommendable Land Pattern



Measurement Circuit

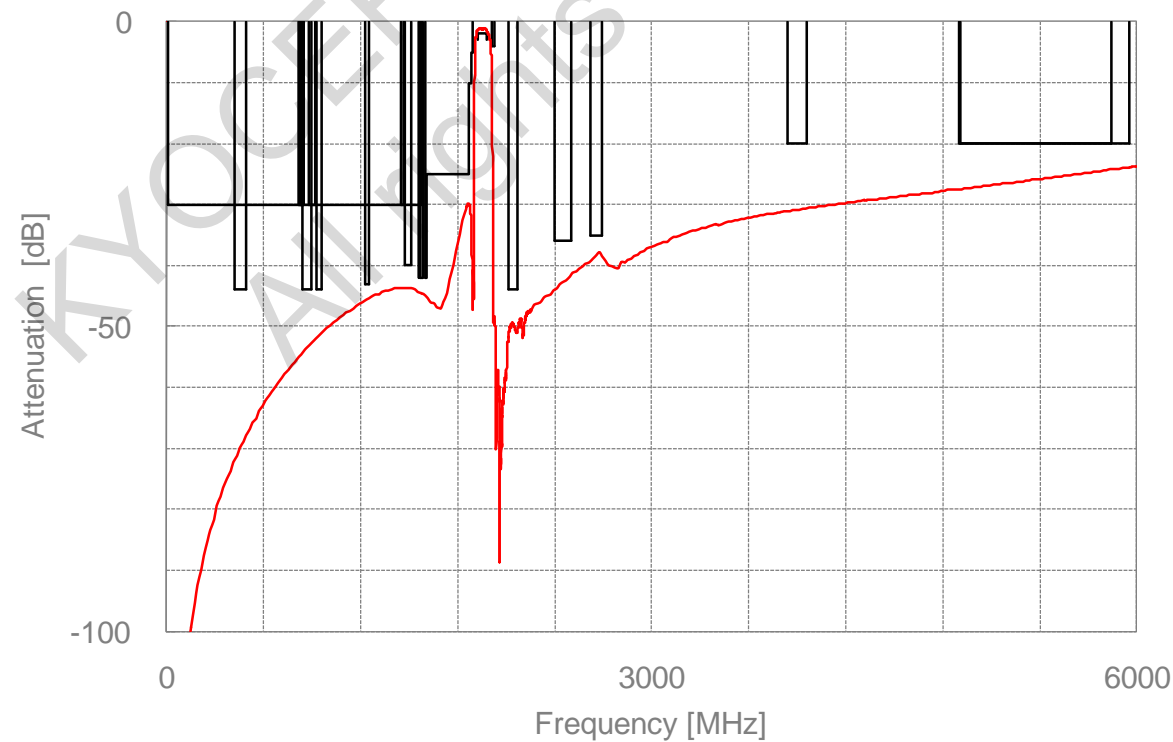
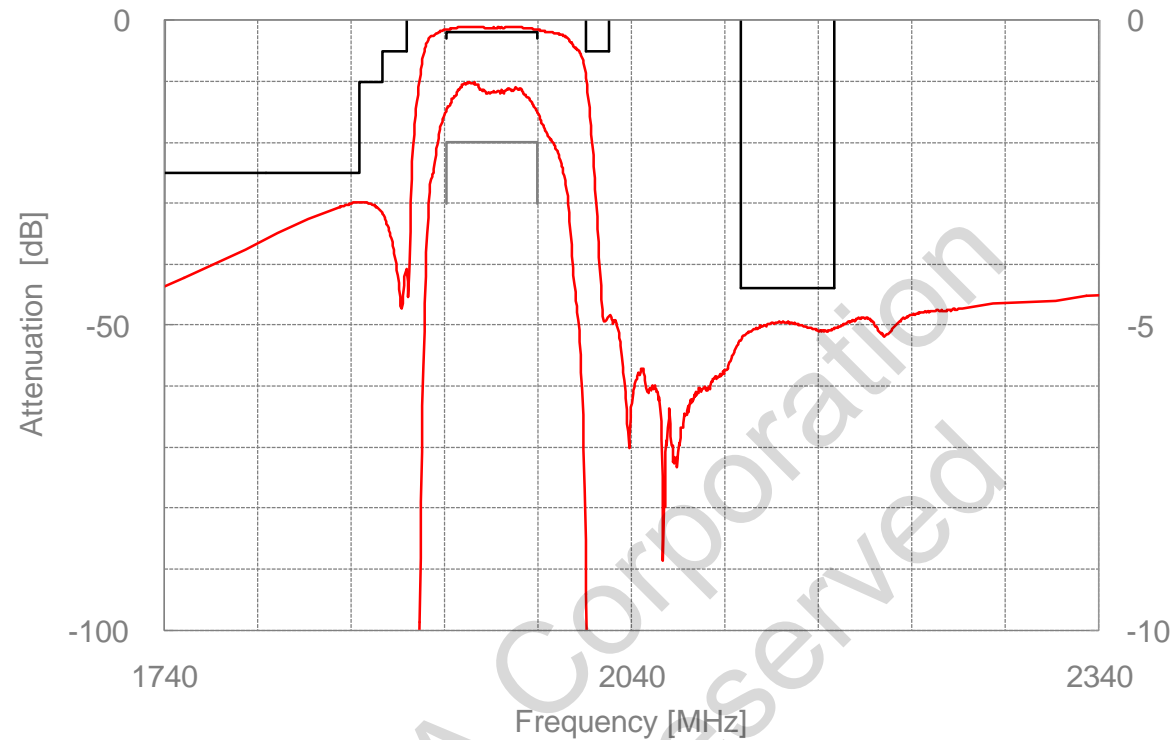


Electrical Characteristics

Items		Frequency (MHz)		Characteristics			Unit	Note
				min.	typ.	max.		
Tx to Ant	Nominal Center Frequency	-		1950			MHz	
	Insertion loss	1920.48	to 1979.52	-	1.5	2.0	dB	
	Ripple (any 5MHz)	1920.48	to 1979.52	-	0.2	0.5	dB	
	VSWR	Tx	1920.48 to 1979.52	-	1.6	2.0	-	
			1920.48 to 1979.52	-	1.5	2.0	-	
	Absolute attenuation	10	to 1574	30	44	-	dB	
		420	to 494	44	67	-	dB	
		815	to 830	30	54	-	dB	
		824	to 849	30	53	-	dB	
		830	to 845	30	54	-	dB	
		843	to 894	44	52	-	dB	
		880	to 915	30	52	-	dB	
		925	to 960	44	51	-	dB	
		1226	to 1250	43	45	-	dB	
		1447.9	to 1462.9	30	44	-	dB	
		1475	to 1496	40	44	-	dB	
		1496	to 1511	40	44	-	dB	
		1559	to 1563	42	44	-	dB	
		1565.42	to 1573.374	42	45	-	dB	
		1573.374	to 1577.466	42	45	-	dB	
		1577.466	to 1585.42	42	45	-	dB	
		1597.5515	to 1605.886	42	45	-	dB	
		1605.886	to 1805	25	36	-	dB	
		1805	to 1865	25	30	-	dB	
		1865	to 1880	10	30	-	dB	
		1880	to 1895	5	32	-	dB	
		2010	to 2025	5	8	-	dB	+15 to +85deg.C
		2110	to 2170	44	49	-	dB	
		2400	to 2500	36	42	-	dB	
		2620	to 2690	35	38	-	dB	
		3840	to 3960	20	31	-	dB	
		4900	to 5950	20	24	-	dB	
		4905	to 5845	20	24	-	dB	
Ant to Rx	Nominal Center Frequency	-		2140			MHz	
	Insertion loss	2110.48	to 2169.52	-	2.0	2.5	dB	
	Ripple (any 5MHz)	2110.48	to 2169.52	-	0.2	1.0	dB	
	VSWR	Rx	2110.48 to 2169.52	-	1.6	2.0	-	
			2110.48 to 2169.52	-	1.6	2.0	-	
	Absolute attenuation	1	to 1920	40	45	-	dB	
		190		50	81	-	dB	
		718	to 748	40	57	-	dB	
		814	to 849	40	55	-	dB	
		880	to 915	40	54	-	dB	
		1427	to 1447	40	47	-	dB	
		1447	to 1463	40	46	-	dB	
		1730	to 1790	40	45	-	dB	
		1710	to 1785	40	45	-	dB	
		1920	to 1980	45	59	-	dB	
		1980	to 2015	15	50	-	dB	
		2015	to 2050	30	36	-	dB	
		2050	to 2075	20	38	-	dB	
		2255	to 6000	40	45	-	dB	
		2400	to 2500	40	44	-	dB	
		2500	to 2570	40	44	-	dB	
		4030	to 4150	40	51	-	dB	
		4220	to 4340	40	50	-	dB	
		4340	to 6000	15	47	-	dB	
		4900	to 5950	40	47	-	dB	
		5950	to 6000	40	48	-	dB	
Tx to Rx	Isolation	1574	to 1577	40	76	-	dB	
		1920.48	to 1979.52	55	58	-	dB	
		2112.4	to 2167.6	54	57	-	dB	
		2111.25	to 2168.75	54	57	-	dB	
		3830	to 3970	20	57	-	dB	
		5750	to 5950	20	58	-	dB	

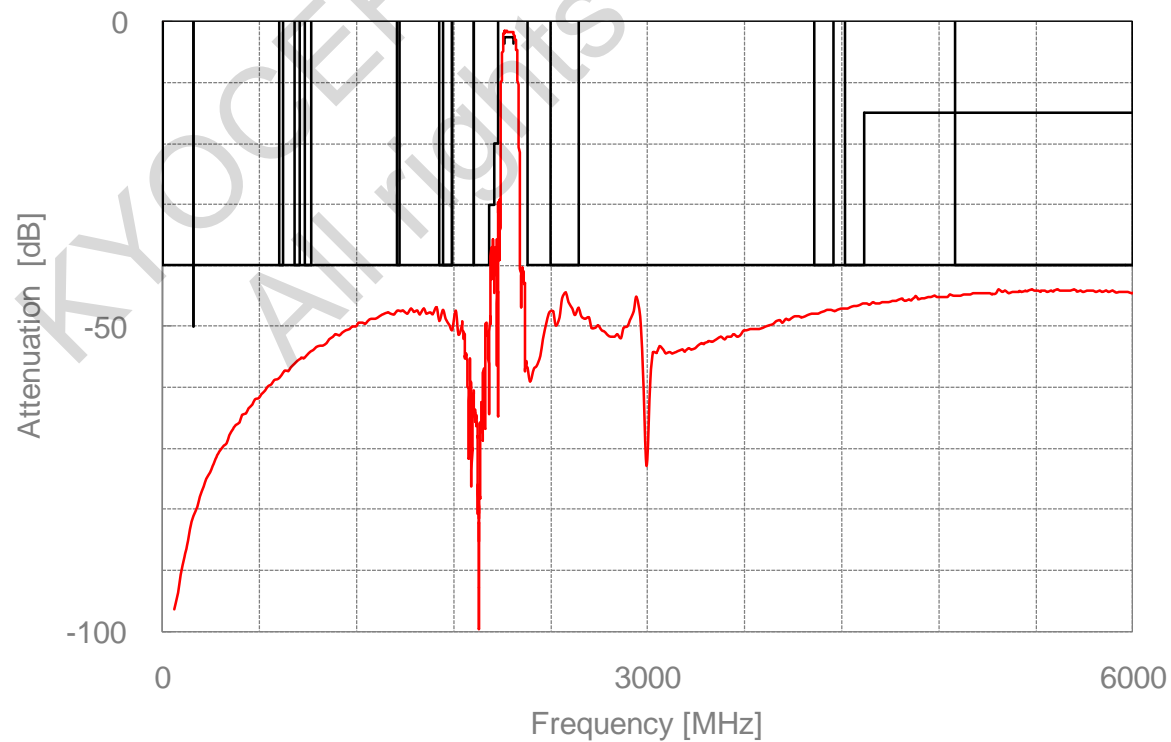
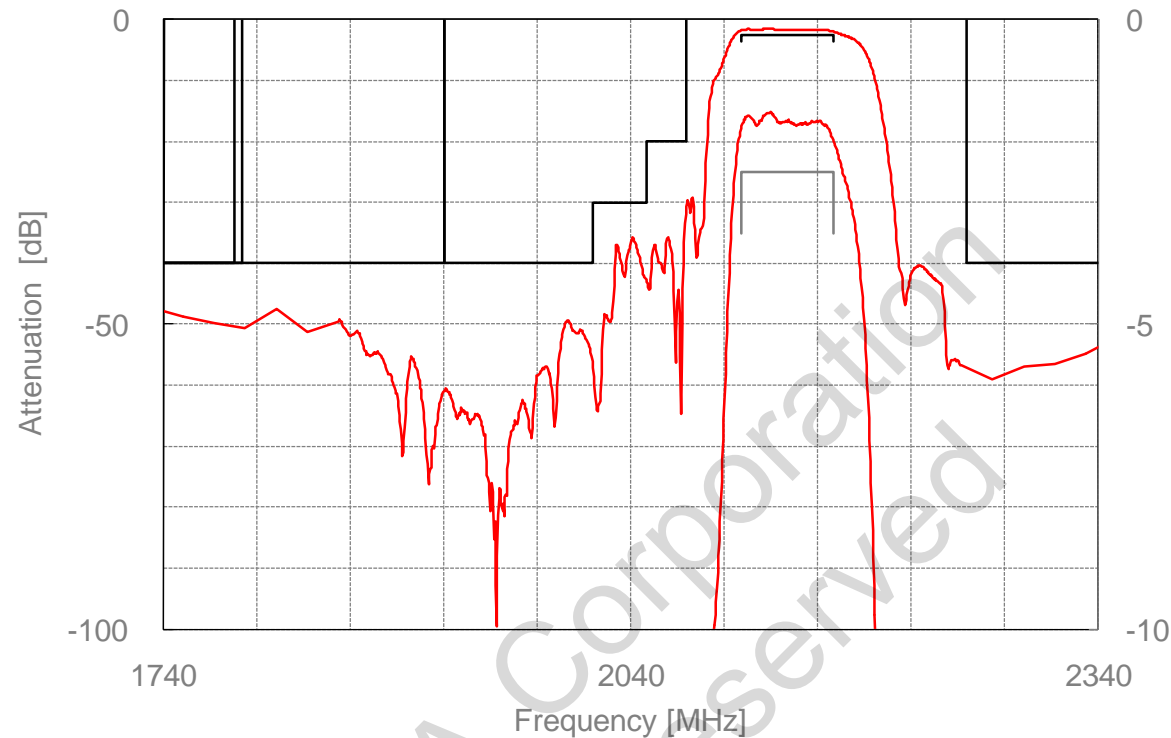
Electrical Characteristics

[Tx to Ant]



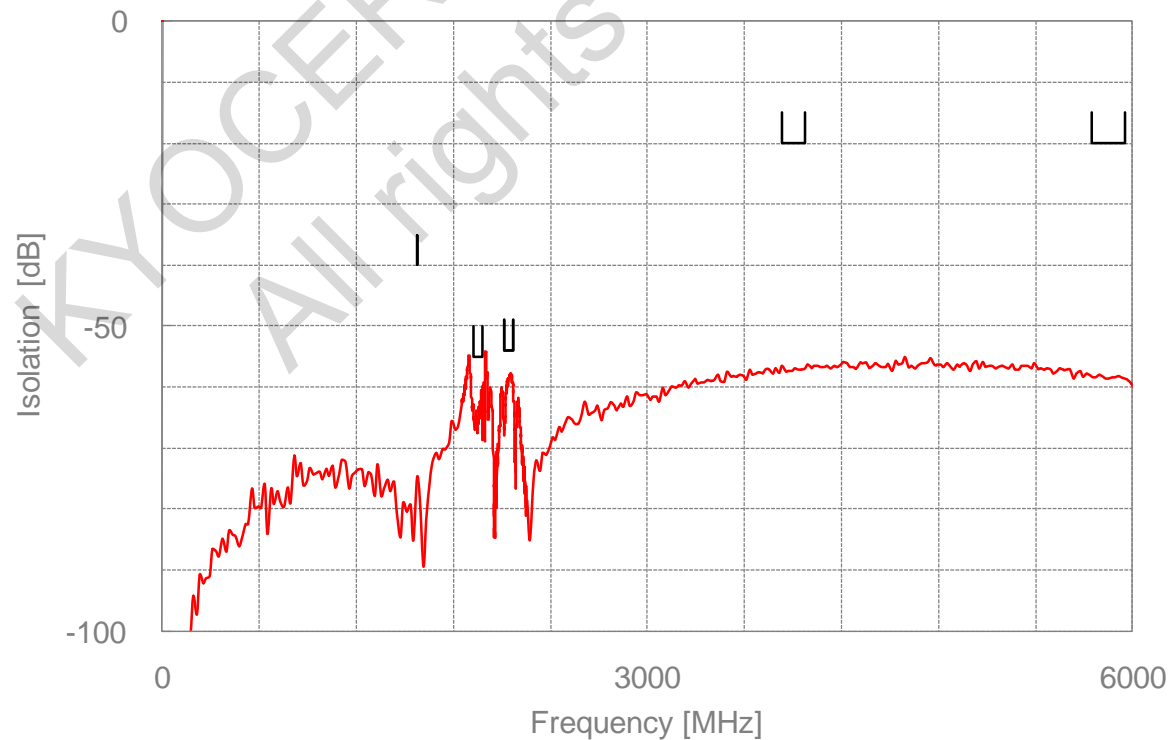
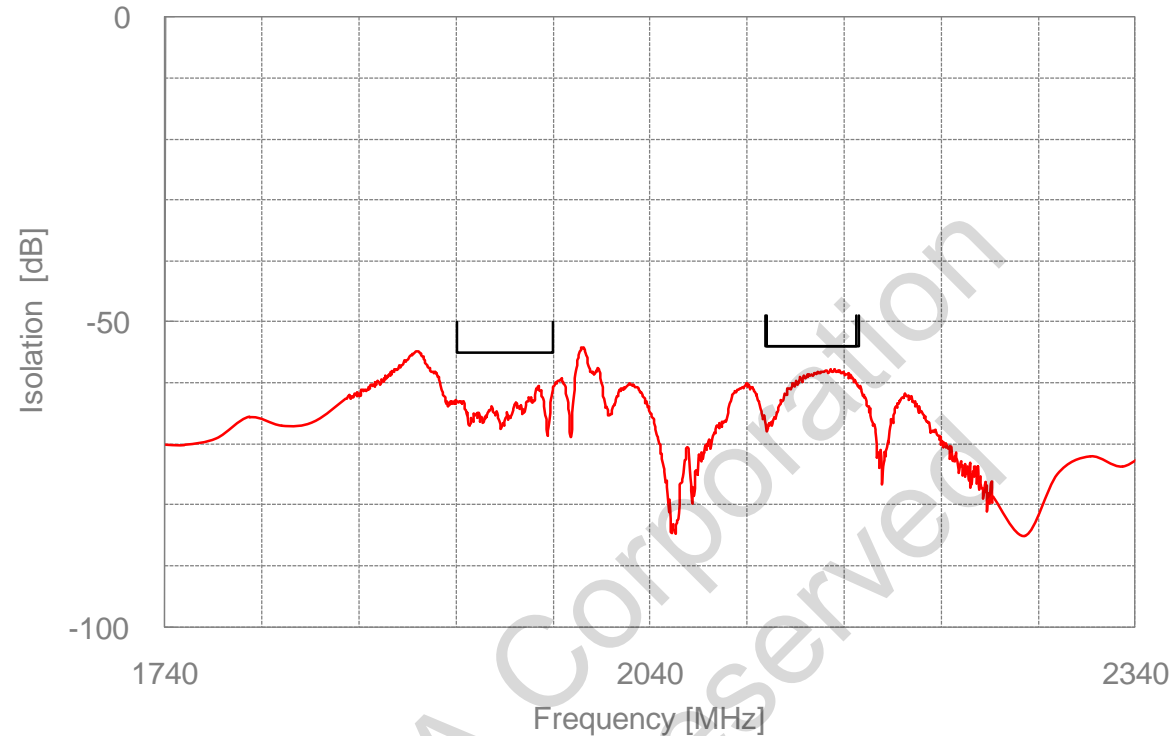
Electrical Characteristics

[Ant to Rx]

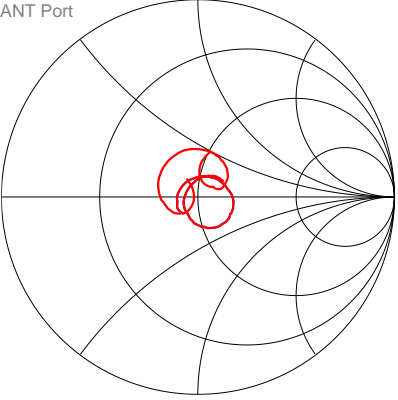
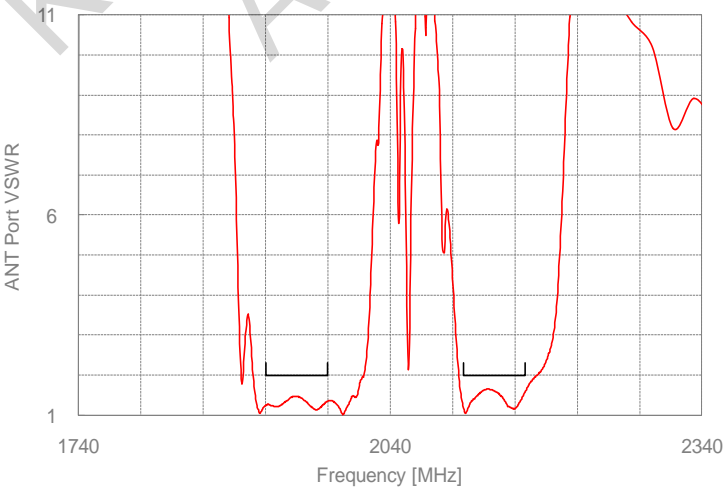
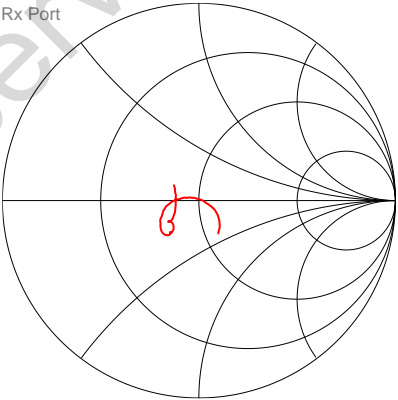
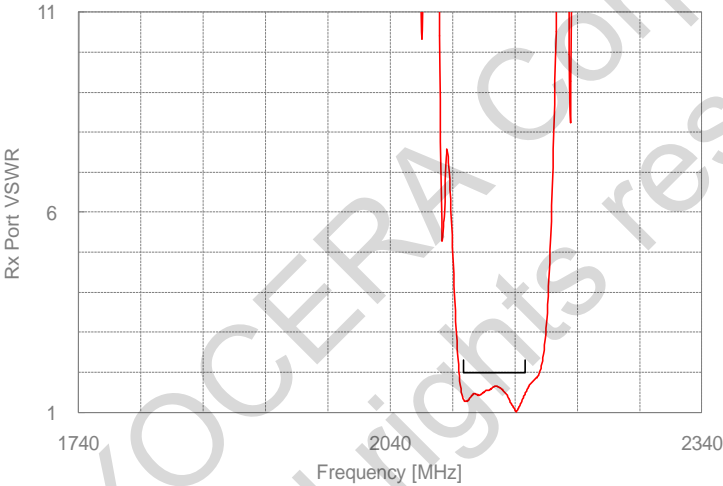
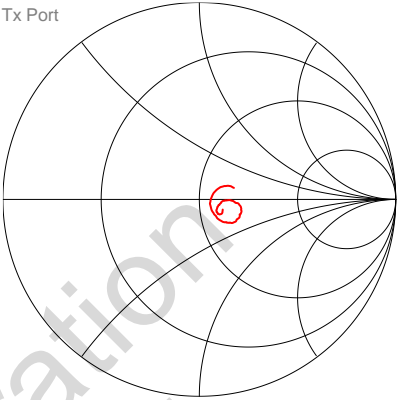
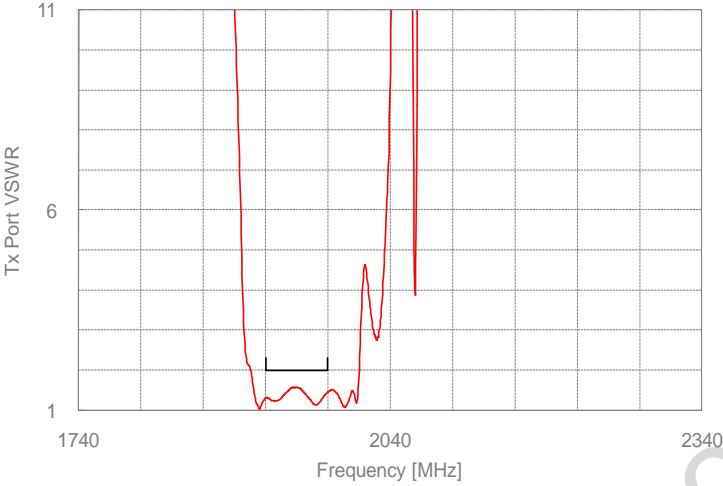


Electrical Characteristics

[Tx to Rx]

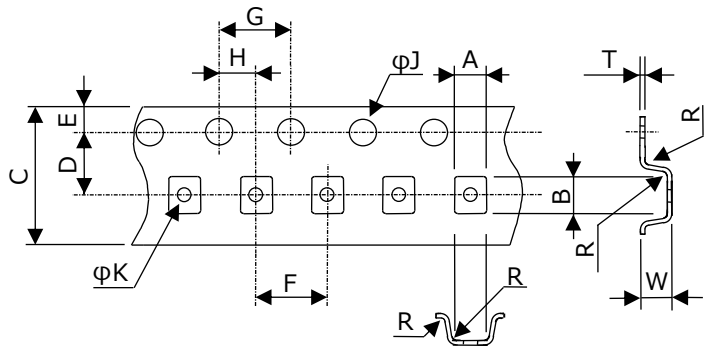


Electrical Characteristics



Tape & Reel Specification

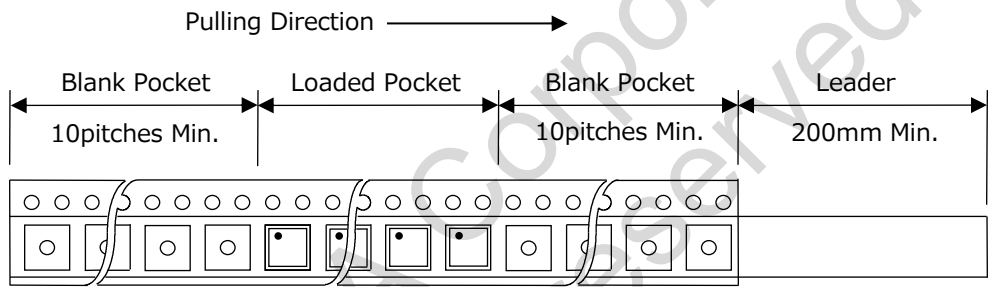
[Tape]



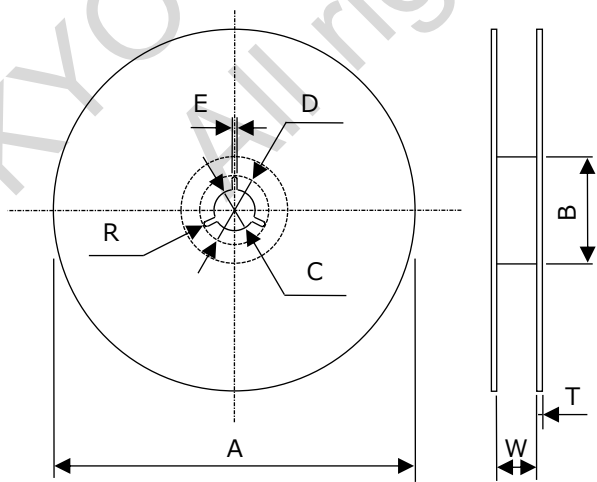
Unit : mm

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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