

# Datasheet of SAW Duplexer 1612 Band2 Unbalanced

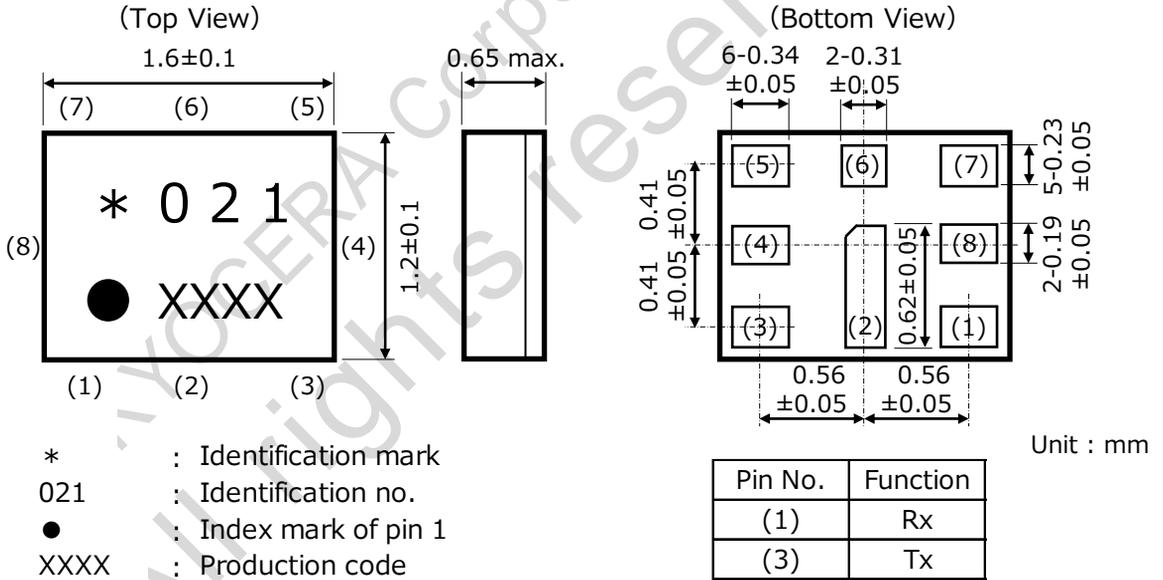
KYOCERA Part No. : SD16-1880R8UUA1

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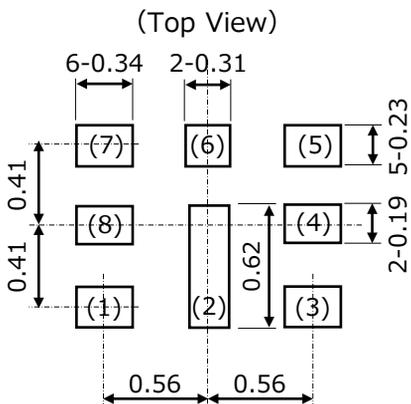
### Rating

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	+30	dBm 5,000Hours,CW,Ta=50deg.C
		+30	dBm 5,000Hours,QPSK,LTE,Ta=50deg.C
		+30	dBm 5,000Hours,DFT-s-OFDM-QPSK,Ta=50deg.C
		+28.5	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+1.6nH	ohm	Unbalance
Ant. Port Nominal Impedance	50//5.4nH	ohm	Unbalance
Rx Port Nominal Impedance	50//24nH	ohm	Unbalance

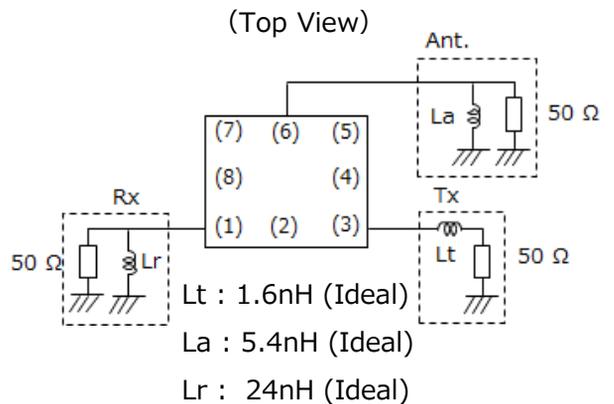
### Dimensions



### Recommendable Land Pattern



### Measurement Circuit

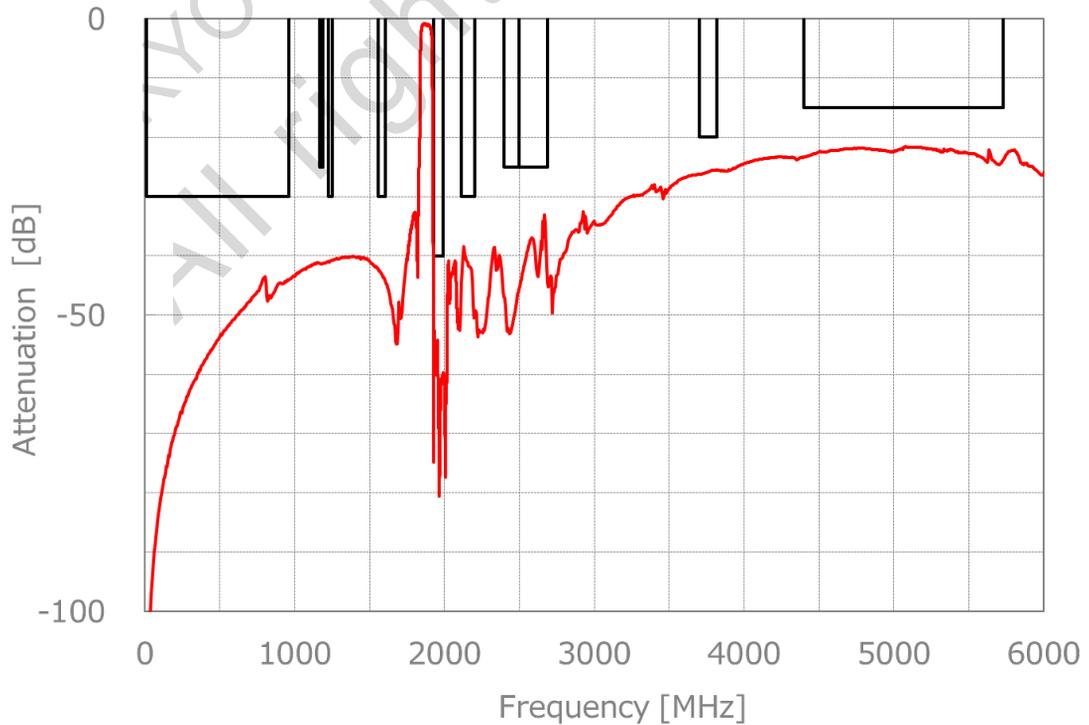
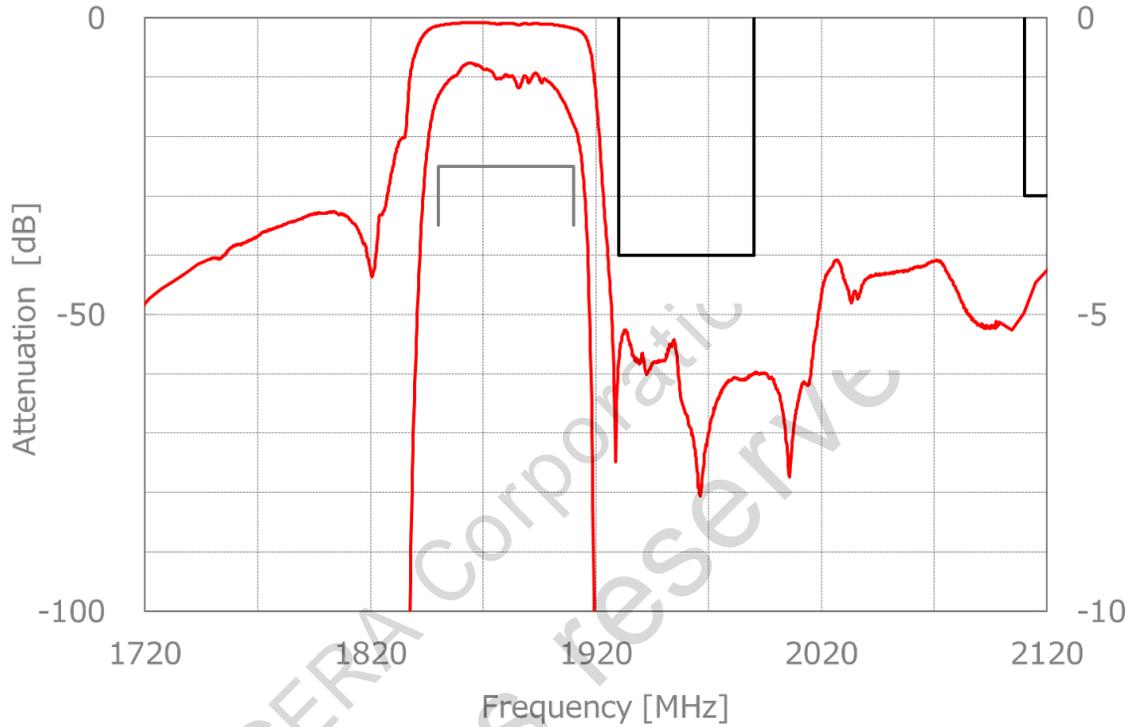


## Electrical Characteristics

ITEMS		Frequency [MHz]	Unit	Specification			Notes	
				min.	typ.	max.		
Tx to Ant	Insertion Loss	1850 - 1910	dB	-	1.8	2.5	B2 TX	
	Amplitude Ripple	1850 - 1910	dB	-	1.0	2.2	B2 TX	
	VSWR	Ant	1850 - 1910	-	-	1.3	2.0	B2 TX
		Tx	1850 - 1910	-	-	1.4	2.0	B2 TX
	Attenuation		10 - 960	dB	30	44	-	
			1166 - 1187	dB	25	41	-	GPS L5
			1225 - 1250	dB	30	41	-	GPS L2
			1559 - 1606	dB	30	42	-	GNSS
			1930 - 1990	dB	40	53	-	B2 RX
			2110 - 2200	dB	30	39	-	B66 RX
			2400 - 2500	dB	25	45	-	Bluetooth
			2496 - 2690	dB	25	33	-	B41
			3700 - 3820	dB	20	26	-	2H
		4400 - 5730	dB	15	22	-	5G	
Ant to Rx	Insertion Loss	1930 - 1990	dB	-	2.1	3.0	B2 RX	
	Amplitude Ripple	1930 - 1990	dB	-	1.3	2.8	B2 RX	
	VSWR	Ant	1930 - 1990	-	-	1.5	2.0	B2 RX
		Rx	1930 - 1990	-	-	1.4	2.0	B2 RX
	Attenuation		10 - 960	dB	40	45	-	
			1710 - 1830	dB	40	43	-	B66 TX
			1850 - 1910	dB	40	50	-	B25 TX
			2300 - 2400	dB	25	42	-	B2 TX
			2400 - 2500	dB	25	39	-	Bluetooth
			2496 - 2690	dB	25	41	-	B41
			3780 - 3900	dB	40	53	-	2H
			4400 - 5950	dB	20	50	-	5G
	Tx to Rx	Isolation	1850 - 1910	dB	55	60	-	
1930 - 1990			dB	53	57	-	@-20 to +85deg.C	
1930 - 1990			dB	51	57	-		

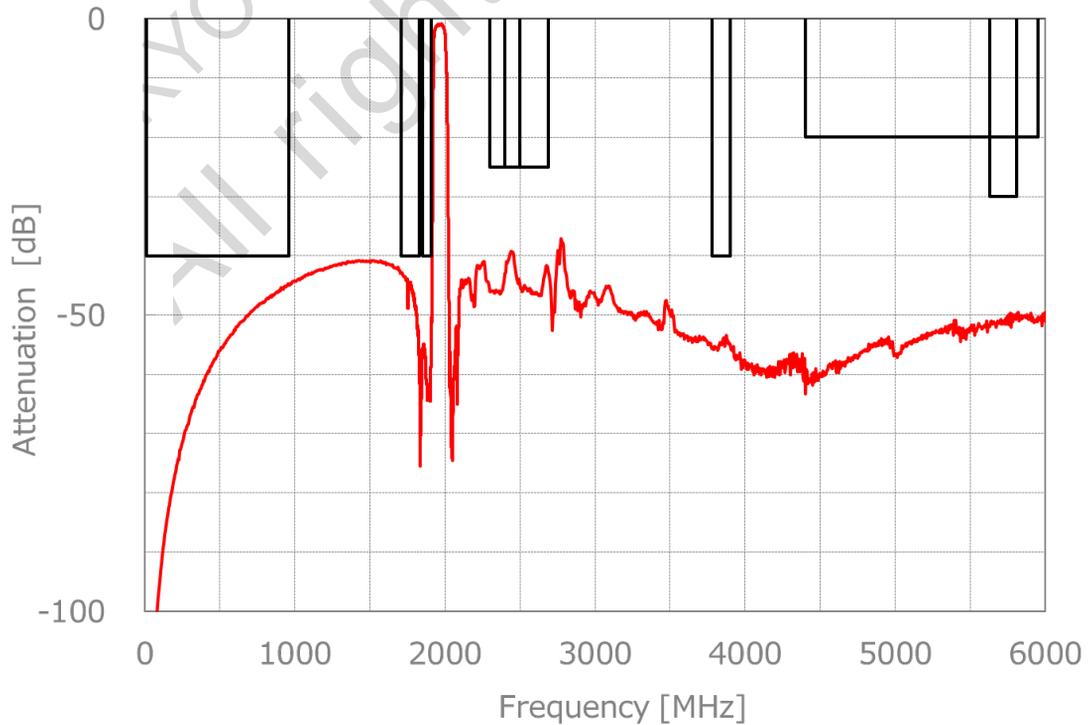
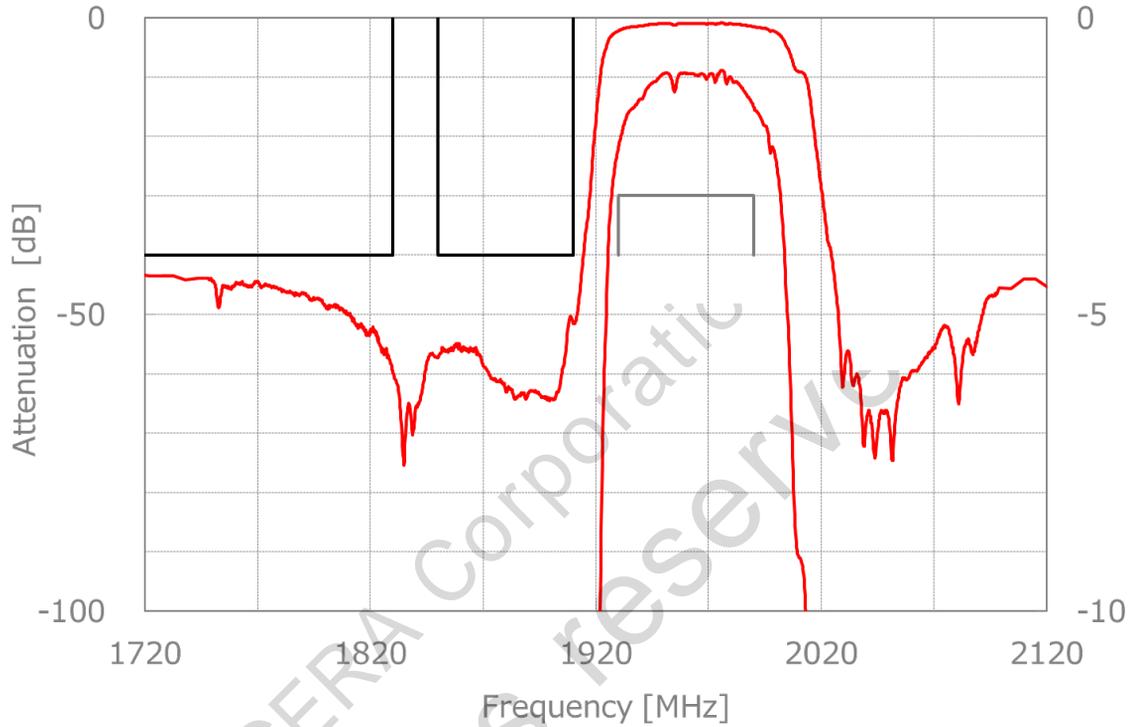
### Electrical Characteristics

[Tx to Ant]



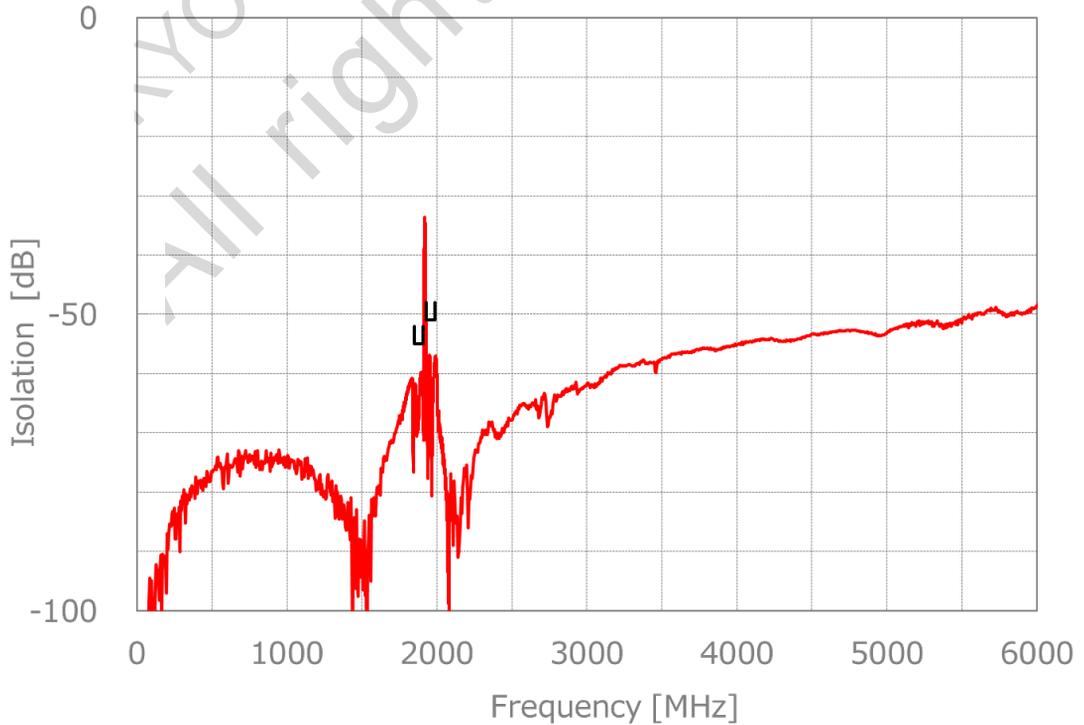
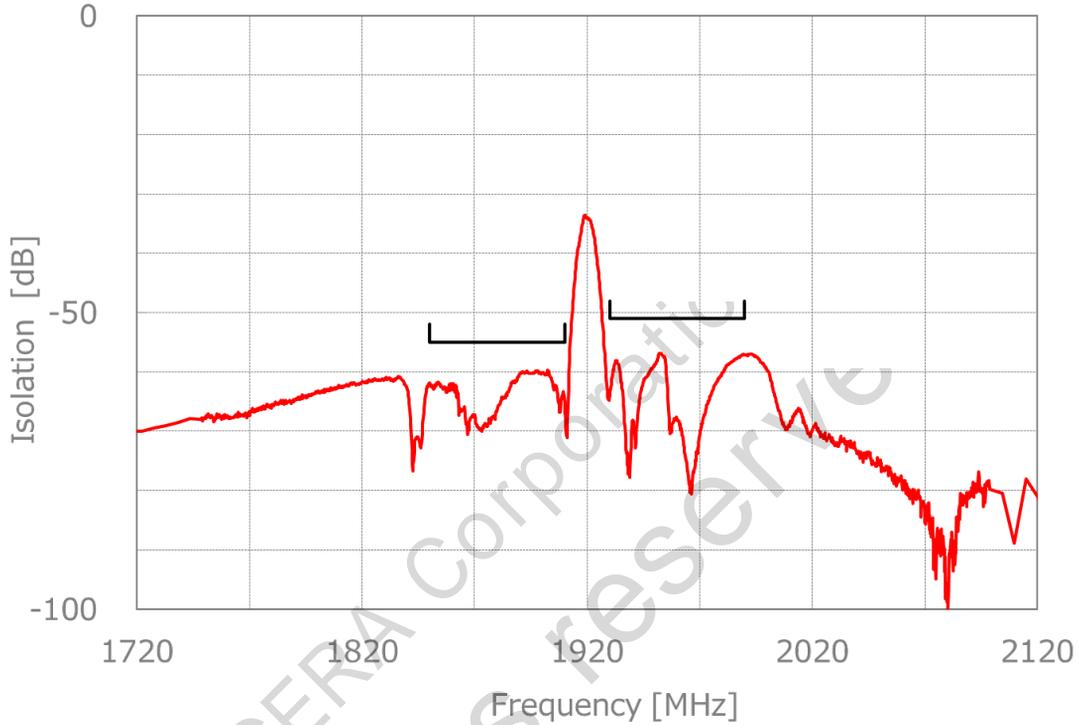
### Electrical Characteristics

[Ant to Rx]

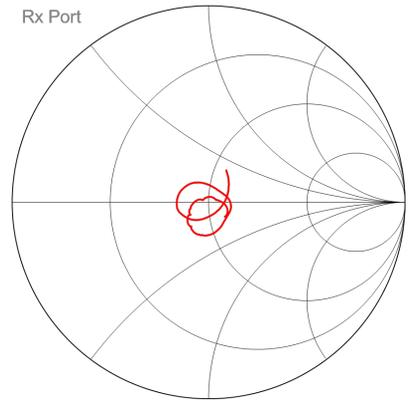
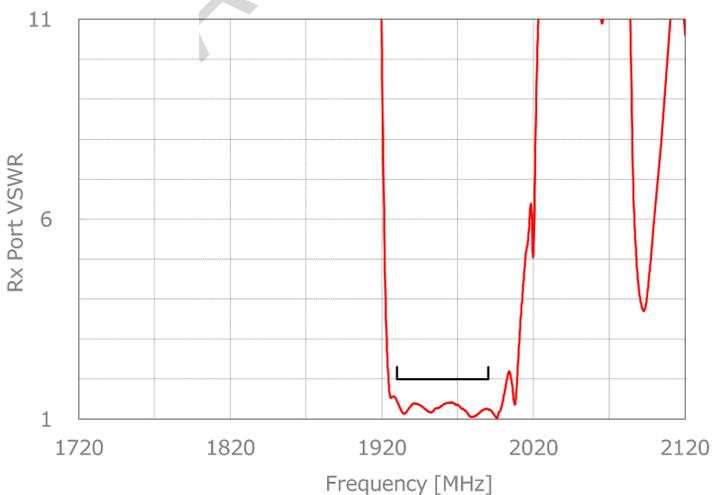
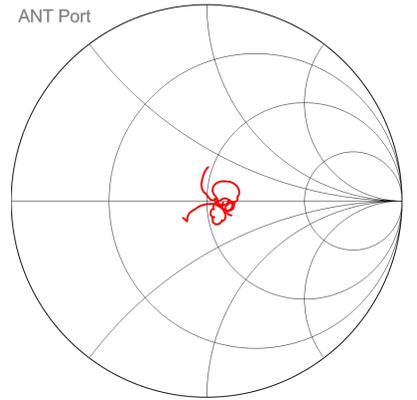
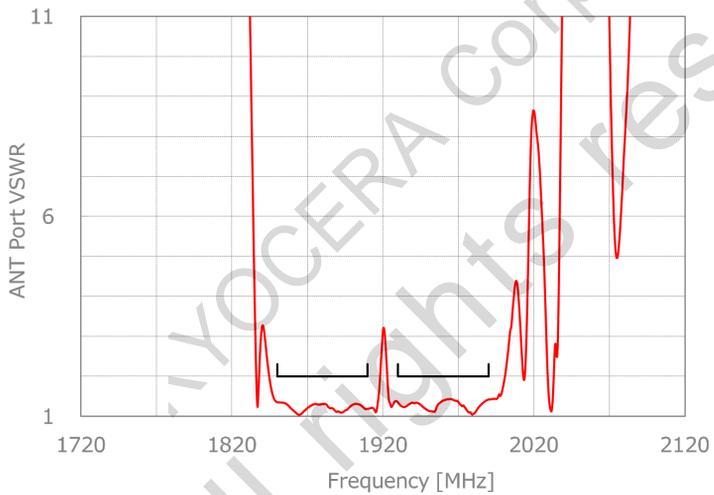
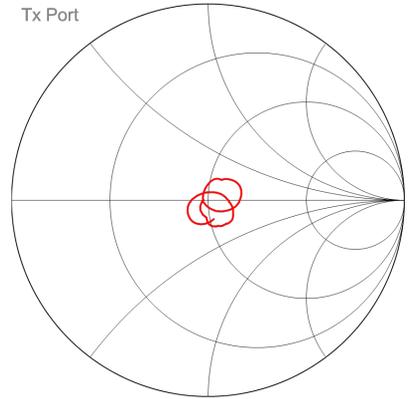
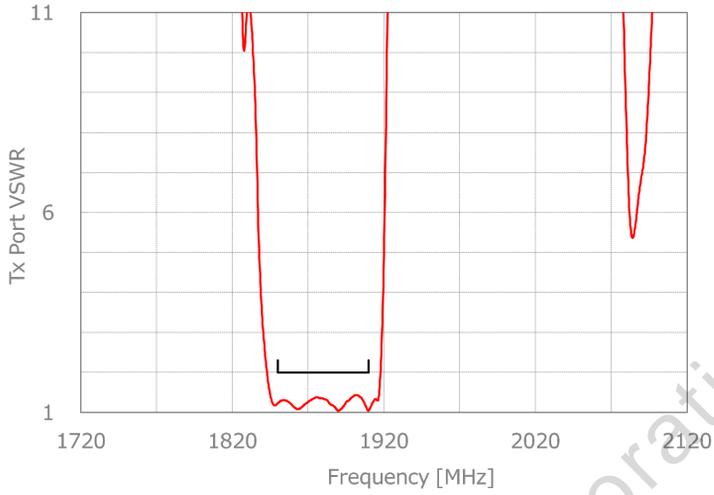


### Electrical Characteristics

[Tx to Rx]

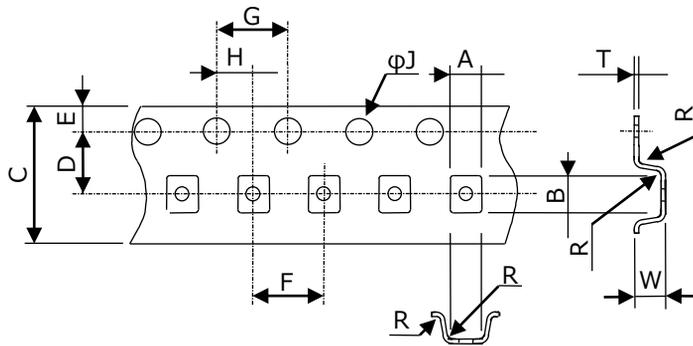


### Electrical Characteristics



### Tape & Reel Specification

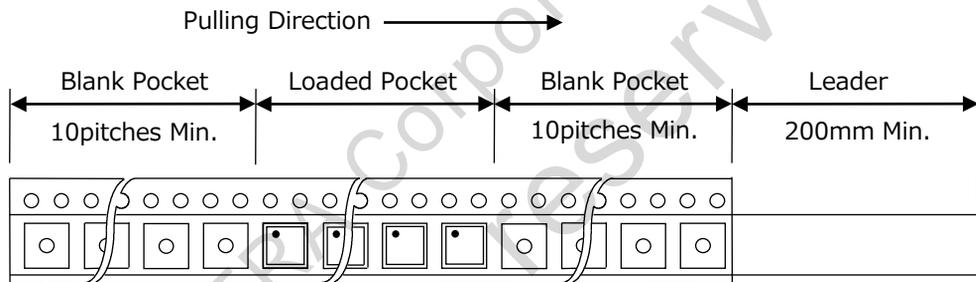
#### [Tape]



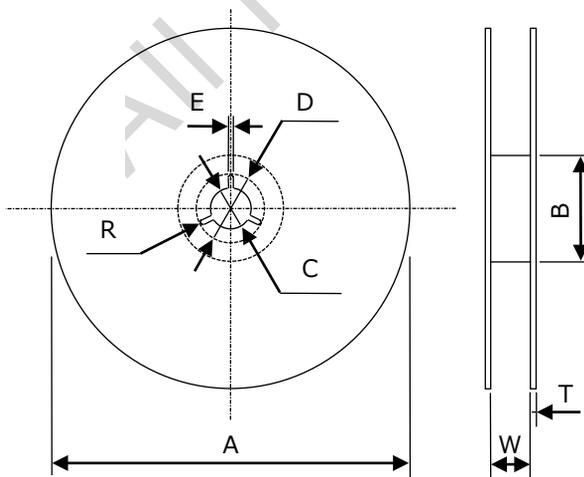
Unit : mm

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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