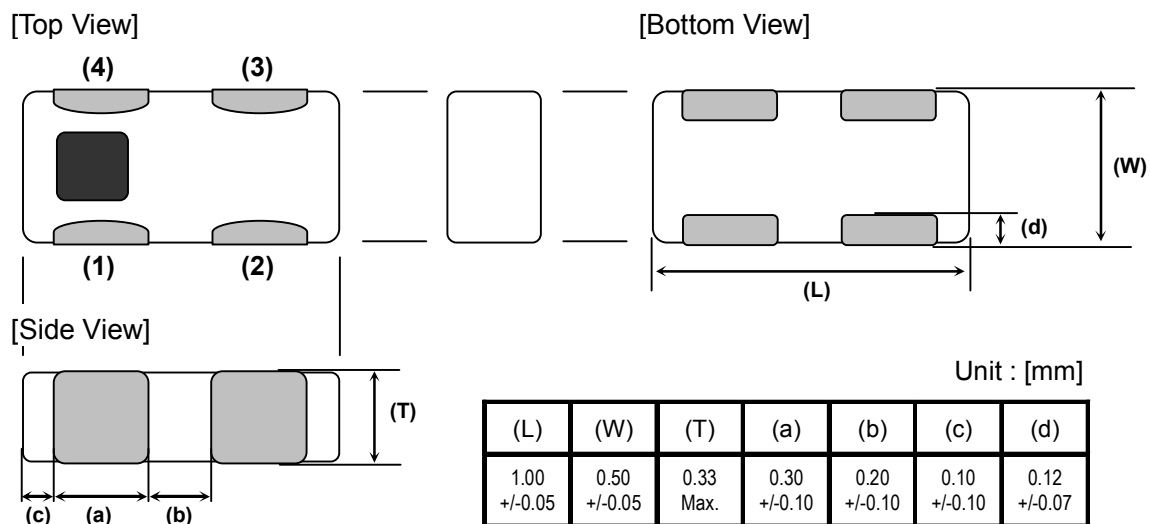


# 1005 TYPE MULTILAYER DIPLEXER

P/N: **DPX105950DT-6012A1**

## MECHANICAL DIMENSIONS



### [PIN FUNCTION]

(1)	(2)	(3)	(4)
Common(ANT)	GND	High-Band (5G)	Low-Band (2.4G)

## TEMPERATURE RANGE

Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

## ELECTRICAL CHARACTERISTICS

(Ta= +25 ± 5 °C)

### Low-Band

Parameter	Freq. (MHz)	Specification	Typical Data	Unit
Insertion Loss Ta=+25degC	2400-2500	0.50 max	0.37	dB
Insertion Loss Ta=-40~+85degC	2400-2500	0.60 max	-	dB
Attenuation	4800-6000	23 min	29	dB
	7200-7500	23 min	29	dB
Return Loss	2400-2500	10 min	22	dB

### High-Band

Parameter	Freq. (MHz)	Specification	Typical Data	Unit
Insertion Loss Ta=+25degC	4900-5950	0.80 max	0.56	dB
Insertion Loss Ta=-40~+85degC	4900-5950	1.00 max	-	dB
Attenuation	30 -2400	25 min	29	dB
	2400-2500	27 min	41	dB
	2500-2690	23 min	29	dB
	9800-11900	20 min	30	dB
Return Loss	4900-5950	10 min	15	dB

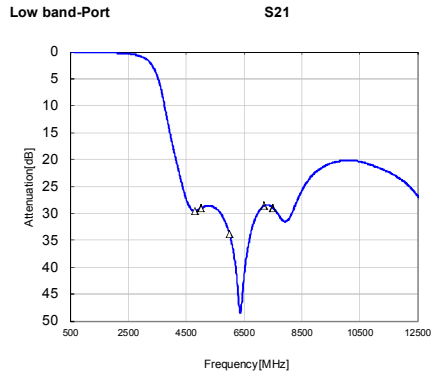
### Common Port

Parameter	Freq. (MHz)	Specification	Typical Data	Unit
Return Loss	2400-2500	10 min	22	dB
	4900-5950	10 min	15	dB

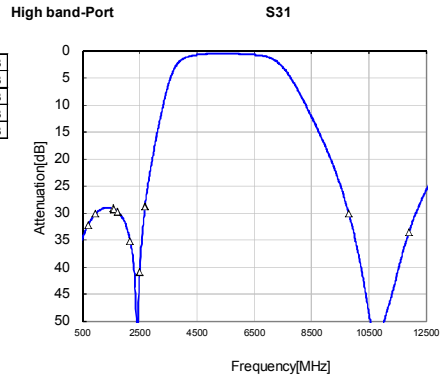
We recommend to terminate for all port with 50ohm at all times.

# FREQUENCY CHARACTERISTICS

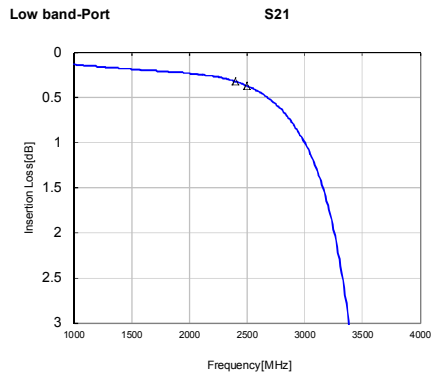
DPX105950DT-6012A1 Sample Typical



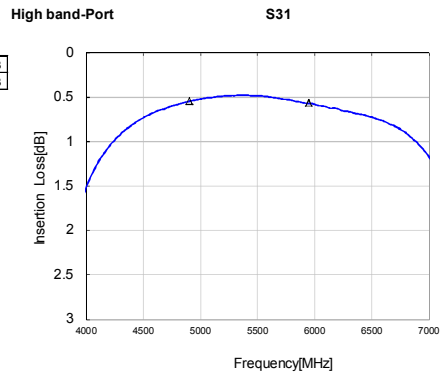
Attenuation	
4800 MHz	30 dB
5000 MHz	29 dB
6000 MHz	34 dB
7200 MHz	29 dB
7500 MHz	29 dB



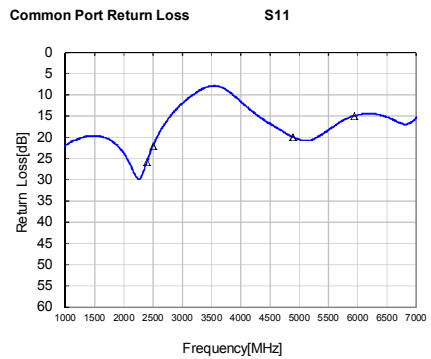
Attenuation	
700 MHz	32 dB
960 MHz	30 dB
1560 MHz	29 dB
1610 MHz	29 dB
1710 MHz	30 dB
2170 MHz	35 dB
2400 MHz	55 dB
2500 MHz	41 dB
2690 MHz	29 dB
9800 MHz	30 dB
11900 MHz	34 dB



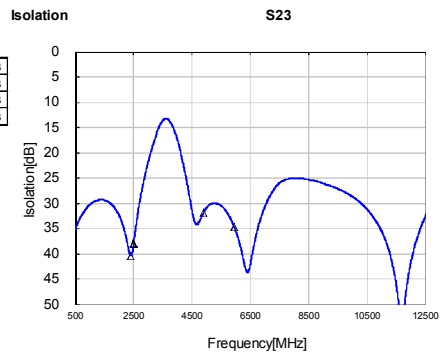
Insertion Loss	
2400 MHz	0.32 dB
2500 MHz	0.37 dB



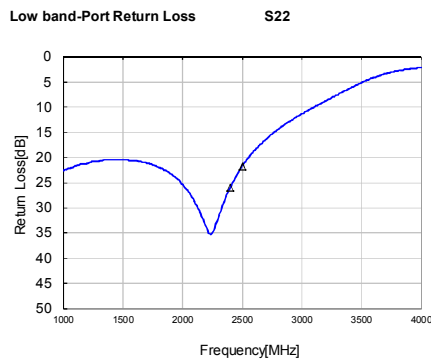
Insertion Loss	
4900 MHz	0.54 dB
5950 MHz	0.56 dB



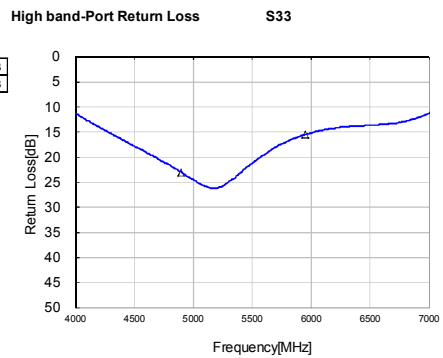
2400 MHz	26 dB
2500 MHz	22 dB
4900 MHz	20 dB
5950 MHz	15 dB



2400 MHz	40 dB
2500 MHz	38 dB
4900 MHz	32 dB
5950 MHz	35 dB



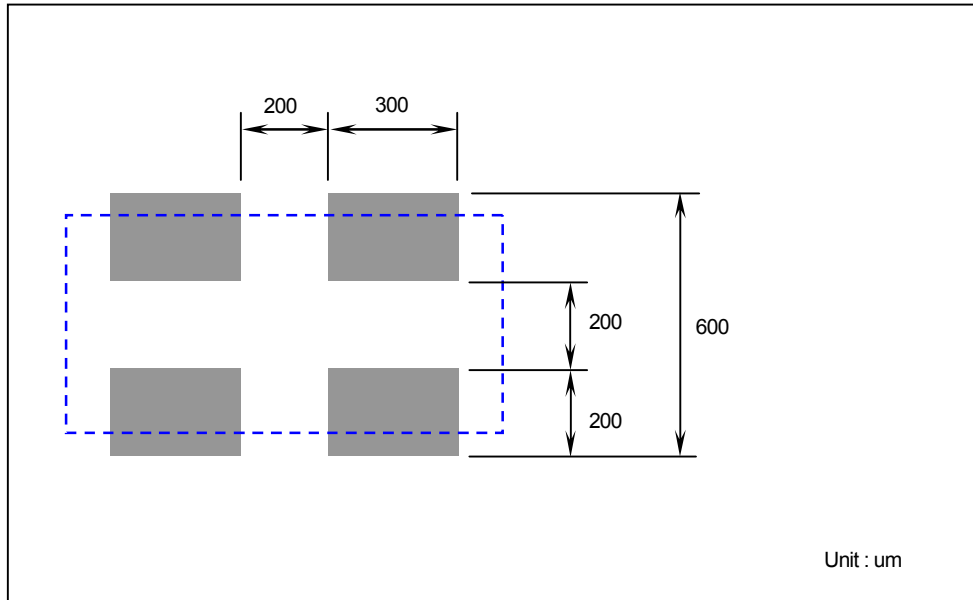
2400 MHz	26 dB
2500 MHz	22 dB



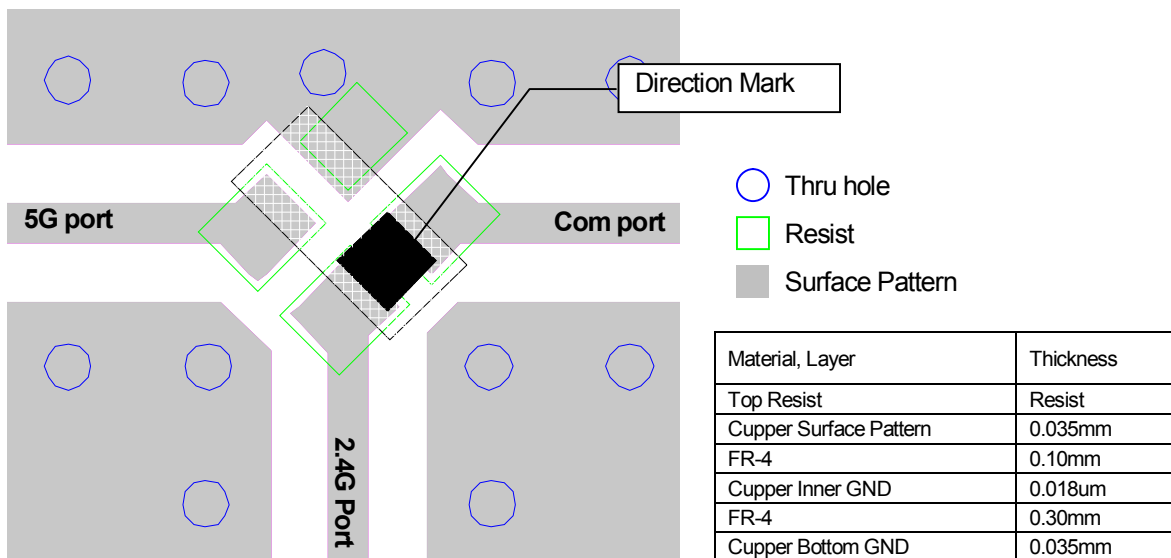
4900 MHz	23 dB
5950 MHz	15 dB

Note: All specifications are subject to change and are not guaranteed.

## LAND PATTERN



## EVALUATION BORD



\* Line width should be designed to mach 50 ohm characteristic impedance depending on PCB material and thickness.