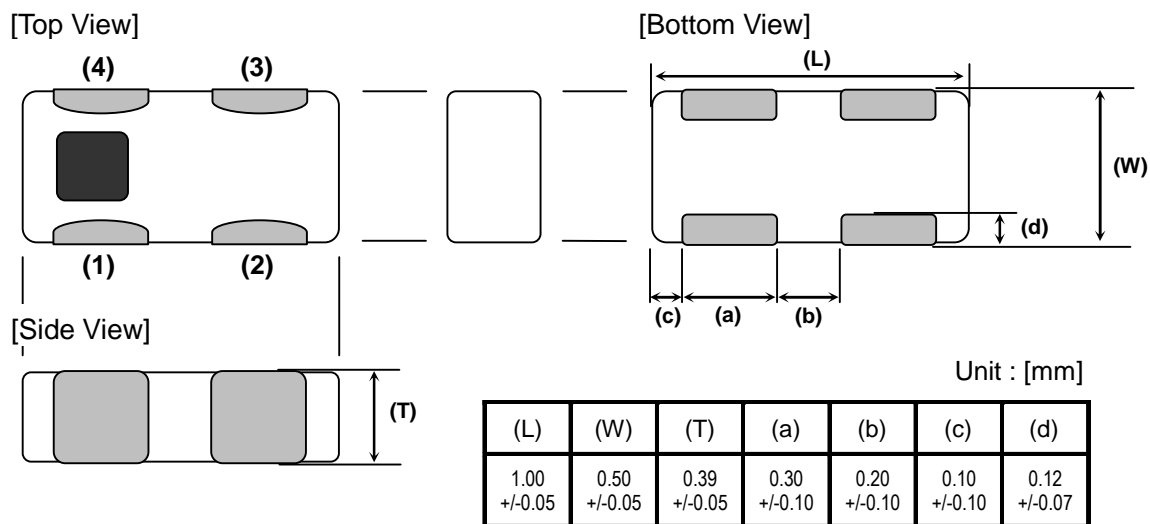


1005 TYPE MULTILAYER DIPLEXER

P/N: **DPX105850DT-6019A1**

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	Sample Typ.	Unit
Insertion Loss Ta=+25degC	2400-2500	0.50 max	0.30	dB
Attenuation	4800-6000	18 min	24	dB
	7200-7500	15 min	21	dB
Return Loss	2400-2500	10 min	18	dB

High-Band

Parameter	Freq. (MHz)	Specification	Sample Typ.	Unit
Insertion Loss	5150-5850	1.5 max	1.04	dB
Attenuation	700 -2025	27 min	37	dB
	2400-2690	35 min	40	dB
	3500-3700	10 min	14	dB
	7250-7800	11 min	15	dB
	10300-11700	20 min	28	dB
Return Loss	5150-5850	10 min	15	dB

Common Port

Parameter	Freq. (MHz)	Specification	Sample Typ.	Unit
Return Loss	2400-2500	10 min	19	dB
	5150-5850	10 min	14	dB

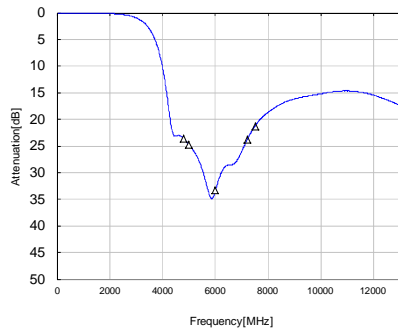
*We recommend to terminate for all port with 50ohm at all times.

FREQUENCY CHARACTERISTICS

DPX105850DT-6019A1 Measurement Result

Low band-Port

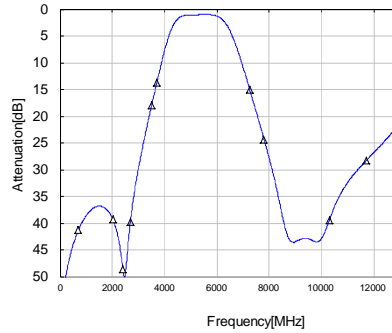
S21



Attenuation	Frequency
23.6 dB	4800 MHz
24.7 dB	5000 MHz
33.4 dB	6000 MHz
23.8 dB	7200 MHz
21.2 dB	7500 MHz

High band-Port

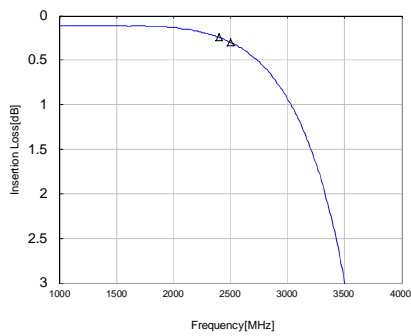
S31



Attenuation	Frequency
41.3 dB	700 MHz
39.3 dB	2025 MHz
48.6 dB	2400 MHz
39.8 dB	2690 MHz
18.0 dB	3500 MHz
13.7 dB	3700 MHz
14.9 dB	7250 MHz
24.3 dB	7800 MHz
39.5 dB	10300 MHz
28.3 dB	11700 MHz

Low band-Port

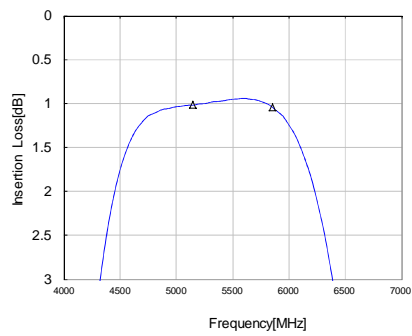
S21



Insertion Loss	Frequency
0.24 dB	2400 MHz
0.30 dB	2500 MHz

High band-Port

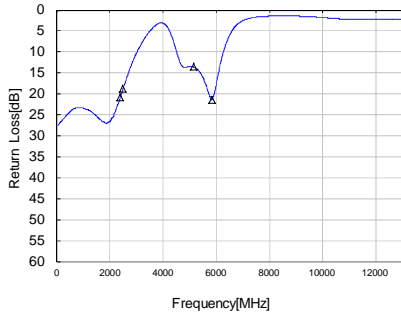
S31



Insertion Loss	Frequency
1.01 dB	5150 MHz
1.04 dB	5850 MHz

Common Port Return Loss

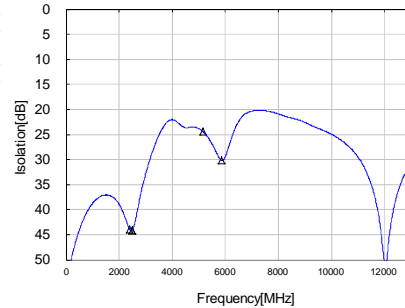
S11



20.7 dB	2400 MHz
18.7 dB	2500 MHz
13.6 dB	5150 MHz
21.4 dB	5850 MHz

Isolation

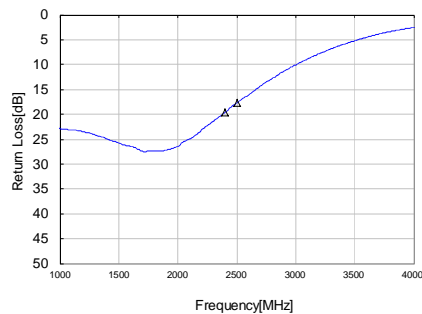
S23



44.0 dB	2400 MHz
44.1 dB	2500 MHz
24.4 dB	5150 MHz
30.1 dB	5850 MHz

Low band-Port Return Loss

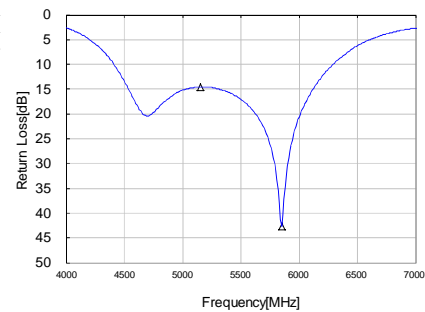
S22



19.6 dB	2400 MHz
17.7 dB	2500 MHz

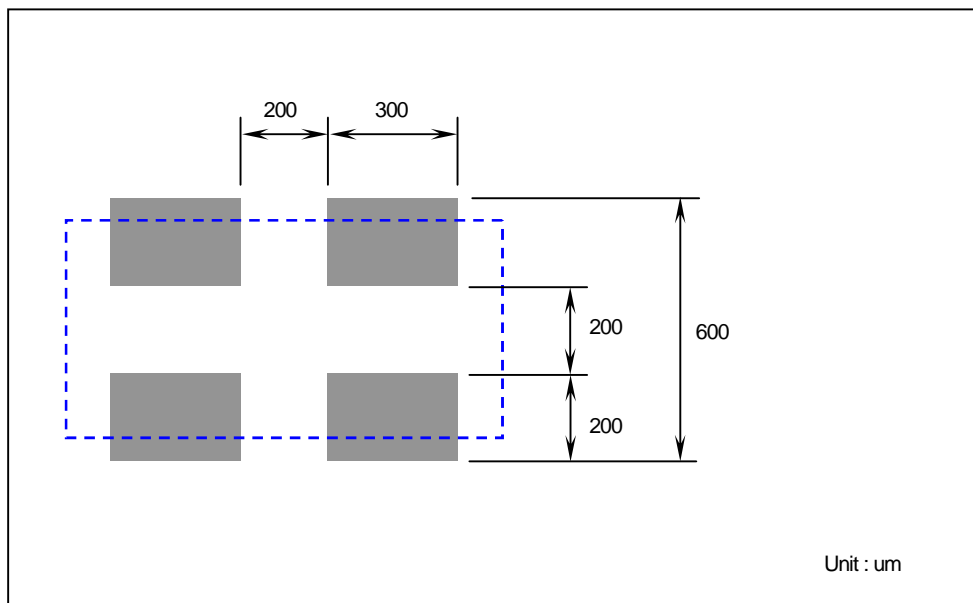
High band-Port Return Loss

S33

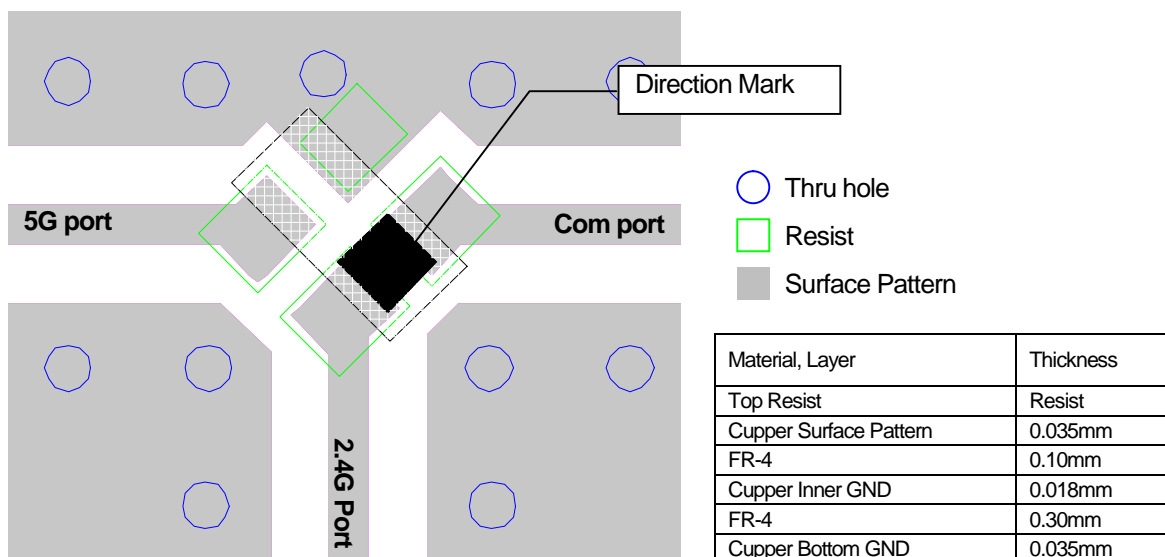


14.5 dB	5150 MHz
42.6 dB	5850 MHz

LAND PATTERN



EVALUATION BORD



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

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TDK:

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