

PRODUCT SPECIFICATION FOR INFORMATION

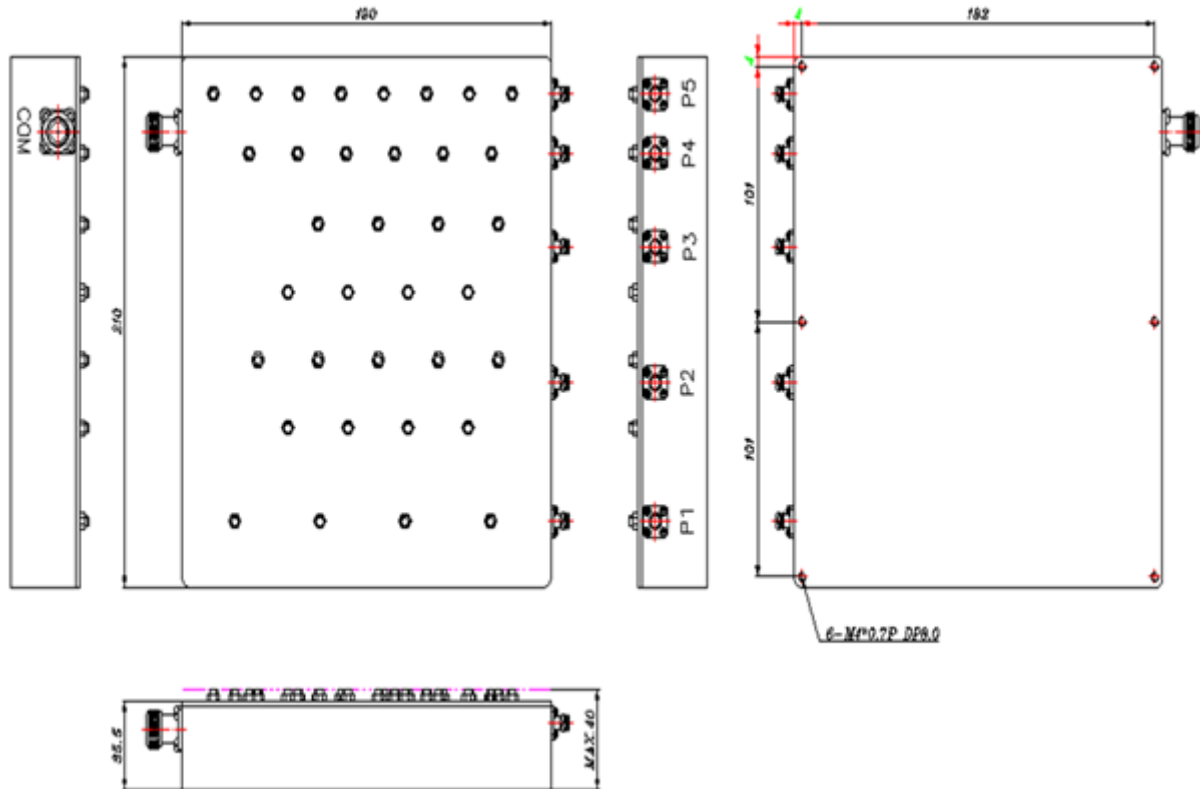
PRELIMINARY SPECIFICATION

Product Name : Multiplexer

Part No : MMP-5COM_430-5900MN-B-R1

	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2023.06.21	Jeffrey Chung	Michael Jeon
2	R1	Changing specification	2023.06.27	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Parameter		Specification	Remark
1. Pass Band Frequency	P1	430MHz~470MHz	
	P2	860MHz~1100MHz	
	P3	1200MHz~1650MHz	
	P4	2300MHz~2700MHz	
	P5	5700MHz~5900MHz	
2. Isolation (min)	P1	60dB @ 860~1100MHz	
		60dB @ 1200~1650MHz	
		60dB @ 2300~2700MHz	
		60dB @ 5700~5900MHz	
	P2	50dB @ 430~470MHz	
		30dB.@ 1200~1650MHz	
		60dB.@ 2300~2700MHz	
		60dB.@ 5700~5900MHz	
	P3	60dB.@ 430~470MHz	
		30dB.@ 860~1100MHz	
		60dB.@ 2300~2700MHz	
		60dB.@ 5700~5900MHz	
	P4	60dB.@ 430~470MHz	
		50dB.@ 860~1100MHz	
		50dB.@ 1200~1650MHz	
		60dB.@ 5700~5900MHz	
	P5	60dB.@ 430~470MHz	
		60dB.@ 860~1100MHz	
		60dB @ 1200~1650MHz	
		60dB @ 2300~2700MHz	
3. Insertion Loss	P1	0.9dB Max.	
	P2	1.2dB Max.	
	P3	1.2dB Max.	
	P4	0.9dB Max.	
	P5	0.8dB Max.	
4. Input Power	P1	100W	
	P2	200W	
	P3	50W	
	P4	120W	
	P5	70W	
5. Return Loss		15dB Min.	
6. Impedance		50Ω	
7. Operating temp		-20 ~ +75 °C	
8. Dimension		210.0 x 190.0 x 40.0 mm	Included T/Screw
9. Connector		Com Port : N(F), Input Port : SMA(F)	
10. Finish		Black painting	

Remarks: This is a preliminary datasheet for reference. The final performance is subject to the sample.

Simulation Curve

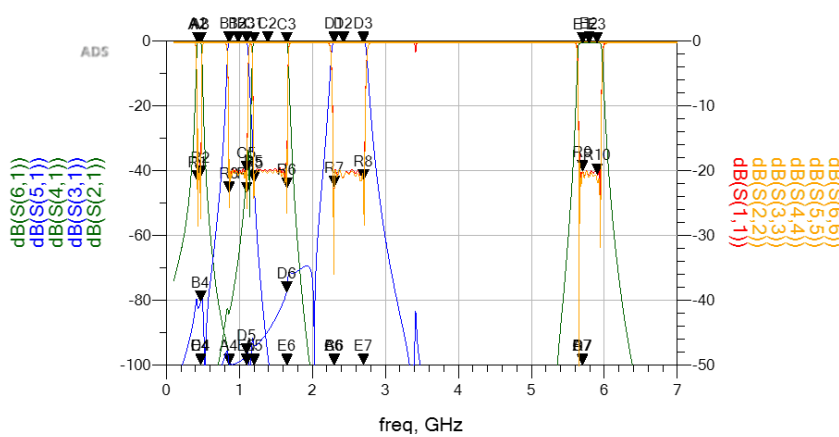
S-parameter

Insertion loss

A1 freq=430.00MHz dB(S(2,1))=-0.5990	A2 freq=444.50MHz dB(S(2,1))=-0.5646 Max	A3 freq=470.00MHz dB(S(2,1))=-0.6283
B1 freq=860.00MHz dB(S(3,1))=-0.4391	B2 freq=981.50MHz dB(S(3,1))=-0.3776 Max	B3 freq=1.1000GHz dB(S(3,1))=-0.4569
C1 freq=1.2000GHz dB(S(4,1))=-0.5472	C2 freq=1.3865GHz dB(S(4,1))=-0.3975 Max	C3 freq=1.6500GHz dB(S(4,1))=-0.5901
D1 freq=2.3000GHz dB(S(5,1))=-0.4906	D2 freq=2.4255GHz dB(S(5,1))=-0.3849 Max	D3 freq=2.7000GHz dB(S(5,1))=-0.5076
E1 freq=5.7000GHz dB(S(6,1))=-0.5881	E2 freq=5.7900GHz dB(S(6,1))=-0.5111 Max	E3 freq=5.9000GHz dB(S(6,1))=-0.5702

Rejection

A4 freq=860.00MHz dB(S(2,1))=-102.3099	A5 freq=1.2000GHz dB(S(2,1))=-135.4160	A6 freq=2.3000GHz dB(S(2,1))=-190.7789	A7 freq=5.7000GHz dB(S(2,1))=-263.2625
B4 freq=470.00MHz dB(S(3,1))=-80.4809	B5 freq=1.2000GHz dB(S(3,1))=-43.1774	B6 freq=2.3000GHz dB(S(3,1))=-194.8317	B7 freq=5.7000GHz dB(S(3,1))=-324.1038
C4 freq=470.00MHz dB(S(4,1))=-114.8980	C5 freq=1.1000GHz dB(S(4,1))=-40.3763	C6 freq=2.3000GHz dB(S(4,1))=-146.1138	C7 freq=5.7000GHz dB(S(4,1))=-340.6186
D4 freq=470.00MHz dB(S(5,1))=-104.9417	D5 freq=1.1000GHz dB(S(5,1))=-96.7340	D6 freq=1.6500GHz dB(S(5,1))=-77.5512	D7 freq=5.7000GHz dB(S(5,1))=-191.7411
E4 freq=470.00MHz dB(S(6,1))=-241.8352	E5 freq=1.1000GHz dB(S(6,1))=-226.2924	E6 freq=1.6500GHz dB(S(6,1))=-216.6887	E7 freq=2.7000GHz dB(S(6,1))=-200.5230



Return loss

R1 freq=430.00MHz dB(S(1,1))=-21.6703	R2 freq=470.00MHz dB(S(1,1))=-20.9269
R3 freq=860.00MHz dB(S(1,1))=-23.3998	R4 freq=1.1000GHz dB(S(1,1))=-23.4361
R5 freq=1.2000GHz dB(S(1,1))=-21.8161	R6 freq=1.6500GHz dB(S(1,1))=-22.7317
R7 freq=2.3000GHz dB(S(1,1))=-22.4531	R8 freq=2.7000GHz dB(S(1,1))=-21.4798
R9 freq=5.7000GHz dB(S(1,1))=-20.0239	R10 freq=5.9000GHz dB(S(1,1))=-20.5779

Isolation

Isolation

F1 freq=470.00MHz dB(S(2,3))=-80.1246	F2 freq=860.00MHz dB(S(2,3))=-102.9667	F3 freq=1.1000GHz dB(S(3,4))=-40.0818	F4 freq=1.2000GHz dB(S(3,4))=-43.3477
F5 freq=1.6500GHz dB(S(4,5))=-78.3215	F6 freq=2.3000GHz dB(S(4,5))=-146.0377	F7 freq=2.7000GHz dB(S(5,6))=-200.9162	F8 freq=5.7000GHz dB(S(5,6))=-191.4999

