

PRODUCT SPECIFICATION FOR INFORMATION

PRELIMINARY SPECIFICATION

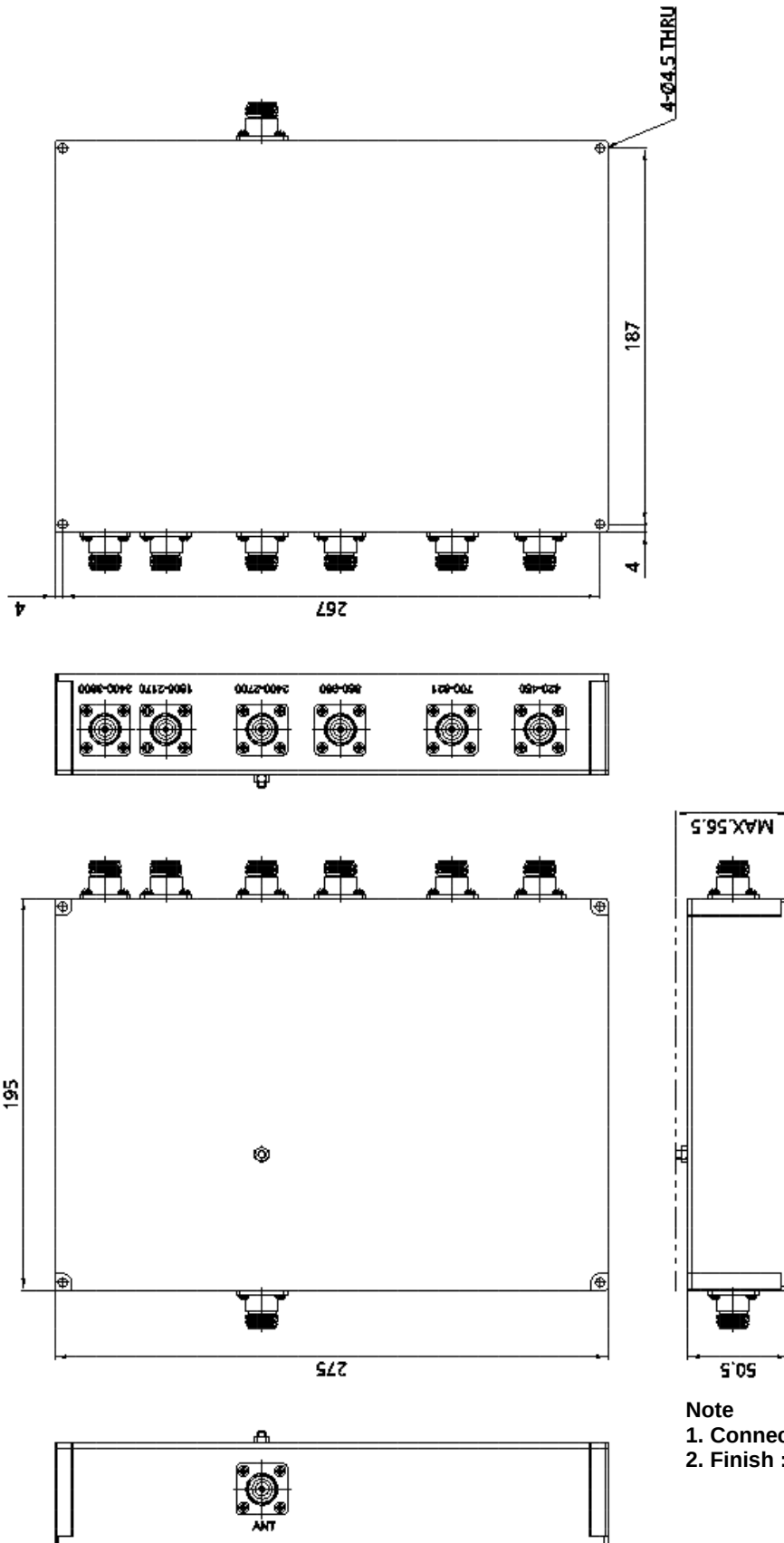
Product Name: MULTIPORT COMBINER

Part No: MMP-6COM_420-3800MM-A-R0

■ History List

No.	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2023.11.30	Jeffrey Jeong	Michael Jeon

■ Mechanical Drawing



Note

1. Connector : N- Type (Female)
2. Finish : Black

■ Electrical Specification

Parameter		Specification	Remark
1. Pass Band Frequency	BAND 1	420MHz ~ 450MHz	
	BAND 2	700MHz ~ 821MHz	
	BAND 3	860Hz ~ 960MHz	
	BAND 5	2400MHz ~ 2700MHz	
	BAND 6	1805MHz ~ 2170MHz	
	BAND 7	3400MHz ~ 3800MHz	
2. Insertion Loss	BAND 1	0.4dB Max.	
	BAND 2	0.4dB Max.	
	BAND 3	0.4dB Max.	
	BAND 5	0.4dB Max.	
	BAND 6	0.4dB Max.	
	BAND 7	0.4dB Max.	
3. Return Loss	BAND 1	14dB Min.	Proposal
	BAND 2	14dB Min.	Proposal
	BAND 3	14dB Min.	Proposal
	BAND 5	14dB Min.	Proposal
	BAND 6	14dB Min.	Proposal
	BAND 7	14dB Min.	Proposal
4. Isolation		50dB Min.	Port – Port All Filters
5. Output Power	BAND 1	20W Max.	
	BAND 2	20W Max.	
	BAND 3	50W Max.	
	BAND 5	50W Max.	
	BAND 6	50W Max.	
	BAND 7	20W Max.	
6. Impedance		50Ω	
7. Operating temp		-32°C ~ +50 °C	
8. Application		IP54	
9. Connector		N-Type(Female)	
10. Color		Black	
11. Dimension		275.0x195.0x56.5	Without Connector

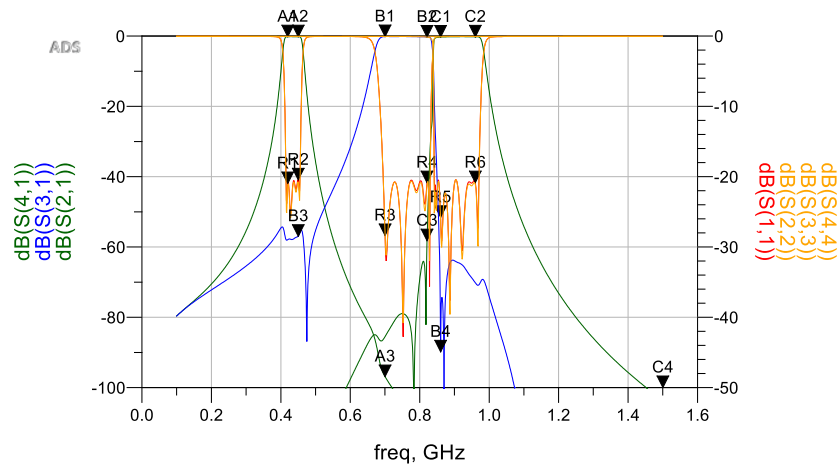
Simulation Curve

Insertion loss

A1 freq=420.000MHz dB(S(2,1))=-0.21263	A2 freq=450.000MHz dB(S(2,1))=-0.22103
B1 freq=700.000MHz dB(S(3,1))=-0.14942	B2 freq=821.000MHz dB(S(3,1))=-0.28786
C1 freq=860.000MHz dB(S(4,1))=-0.28509	C2 freq=960.000MHz dB(S(4,1))=-0.23412

Attenuation

A3 freq=700.000MHz dB(S(2,1))=-96.87142	B3 freq=450.000MHz dB(S(3,1))=-56.94972	B4 freq=860.000MHz dB(S(3,1))=-89.85302
C3 freq=821.000MHz dB(S(4,1))=-58.23426	C4 freq=1.50000GHz dB(S(4,1))=-103.58297	



Return loss

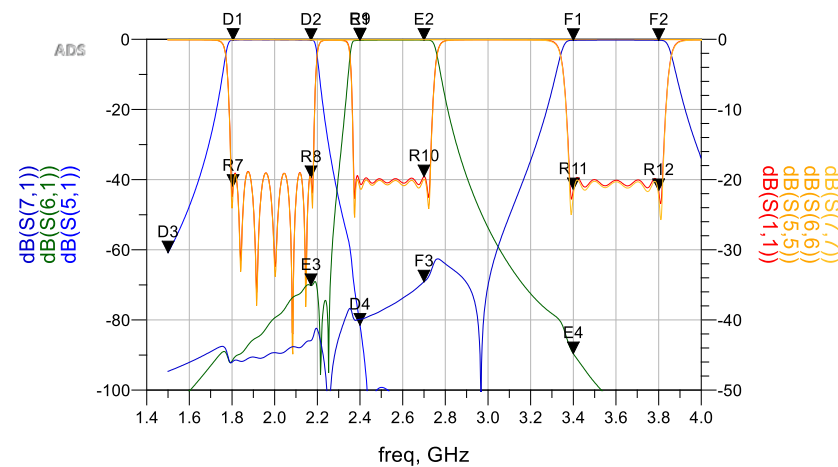
R1 freq=420.00MHz dB(S(1,1))=-20.9791	R3 freq=700.00MHz dB(S(1,1))=-28.3810	R5 freq=860.00MHz dB(S(1,1))=-25.7882
R2 freq=450.00MHz dB(S(1,1))=-20.4616	R4 freq=821.00MHz dB(S(1,1))=-20.8667	R6 freq=960.00MHz dB(S(1,1))=-20.8708

Insertion loss

D1 freq=1.80500GHz dB(S(5,1))=-0.24282	D2 freq=2.17000GHz dB(S(5,1))=-0.30043
E1 freq=2.40000GHz dB(S(6,1))=-0.29870	E2 freq=2.70000GHz dB(S(6,1))=-0.25558
F1 freq=3.4000GHz dB(S(7,1))=-0.2768	F2 freq=3.8000GHz dB(S(7,1))=-0.2820

Attenuation

D3 freq=1.50000GHz dB(S(5,1))=-60.83146	D4 freq=2.40000GHz dB(S(5,1))=-81.47273
E3 freq=2.17000GHz dB(S(6,1))=-70.19458	E4 freq=3.40000GHz dB(S(6,1))=-89.60996
F3 freq=2.70000GHz dB(S(7,1))=-69.1555	



Return loss

R7 freq=1.8050GHz dB(S(1,1))=-20.9518	R9 freq=2.4000GHz dB(S(7,7))=-0.0545	R11 freq=3.4000GHz dB(S(1,1))=-21.4394
R8 freq=2.1700GHz dB(S(1,1))=-19.7106	R10 freq=2.7000GHz dB(S(1,1))=-19.5735	R12 freq=3.8000GHz dB(S(1,1))=-21.5642