

PRODUCT SPECIFICATION FOR INFORMATION

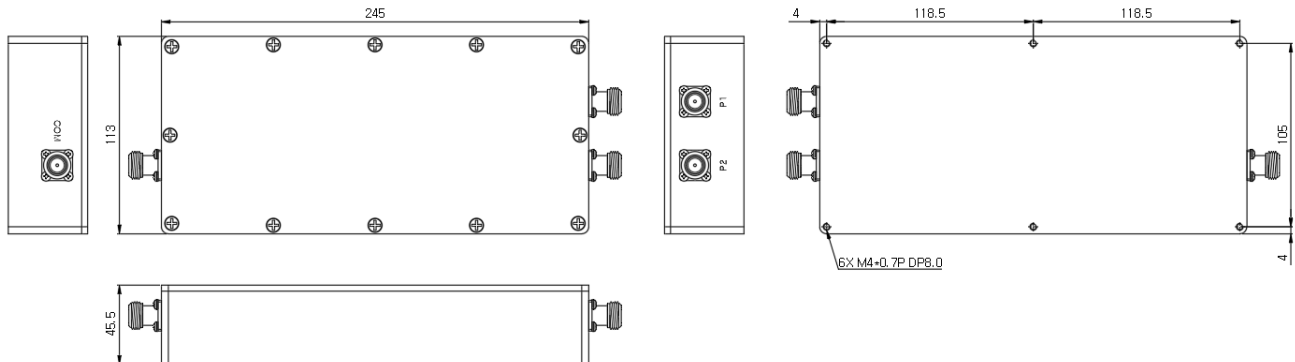
PRELIMINARY SPECIFICATION

Product Name : Diplexer

Part No : MDI-C460-C1700_120M-2000MN-A-R0

No	Rev. No.	Description	Date	Author	Final Approver
1	R0	First Draft	2024.12.04	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Item	Specification		Remark
	Port 1	Port 2	
1. Center Frequency	460 MHz	1700 MHz	OK
2. Pass Band Frequency	$f_{o\pm 60}[400\sim 520]\text{MHz}$	$f_{o\pm 1000}[700\sim 2700]\text{MHz}$	OK
3. Insertion Loss	0.5 dB Max.	0.8 dB Max.	Proposal
4. Return Loss	15dB Min.		Proposal
5. Isolation Between Bands	50dB min.		OK
6. In/Out Impedance	50 Ω		OK
7. Power	200W	150W	OK
8. Operating Temperature	$-32^{\circ}\text{C} \sim +49^{\circ}\text{C}$		OK
9. Storage Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$		OK
10. Dimension [WxDxH]	163.5 x 239.5 x 35.5 [mm]		Proposal
11. Connector	N(F)		OK
12. Application	Outdoor (IP67)		OK
13. Finish	Black Paint		OK

※ It is subjected to change its spec with prior notice

■ Simulation Data

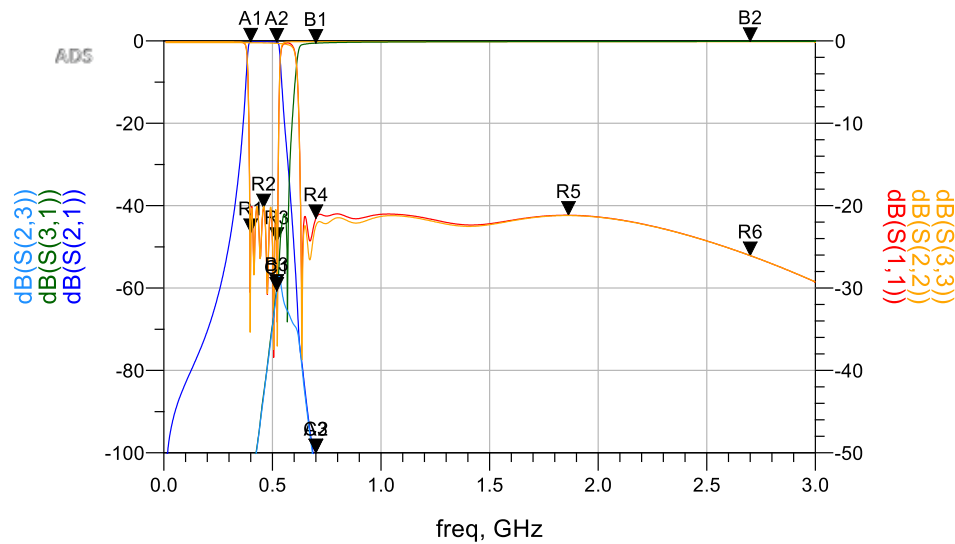
Insertion loss
[dB]

A1
freq=400.0MHz
dB(S(2,1))=-0.268

A2
freq=520.0MHz
dB(S(2,1))=-0.290

B1
freq=700.0MHz
dB(S(3,1))=-0.552

B2
freq=2.700GHz
dB(S(3,1))=-0.136



Isolation [dB]

A3
freq=700.0MHz
dB(S(2,1))=-104.702

B3
freq=520.0MHz
dB(S(3,1))=-60.050

C1
freq=520.0MHz
dB(S(2,3))=-60.757

C2
freq=700.0MHz
dB(S(2,3))=-105.811

Return loss
[dB]

R1
freq=400.0MHz
dB(S(1,1))=-23.273

R2
freq=459.5MHz
dB(S(1,1))=-20.262

R3
freq=520.0MHz
dB(S(1,1))=-24.341

R4
freq=700.0MHz
dB(S(1,1))=-21.550

R5
freq=1.863GHz
dB(S(1,1))=-21.168

R6
freq=2.700GHz
dB(S(1,1))=-26.067