

PRODUCT SPECIFICATION FOR INFORMATION

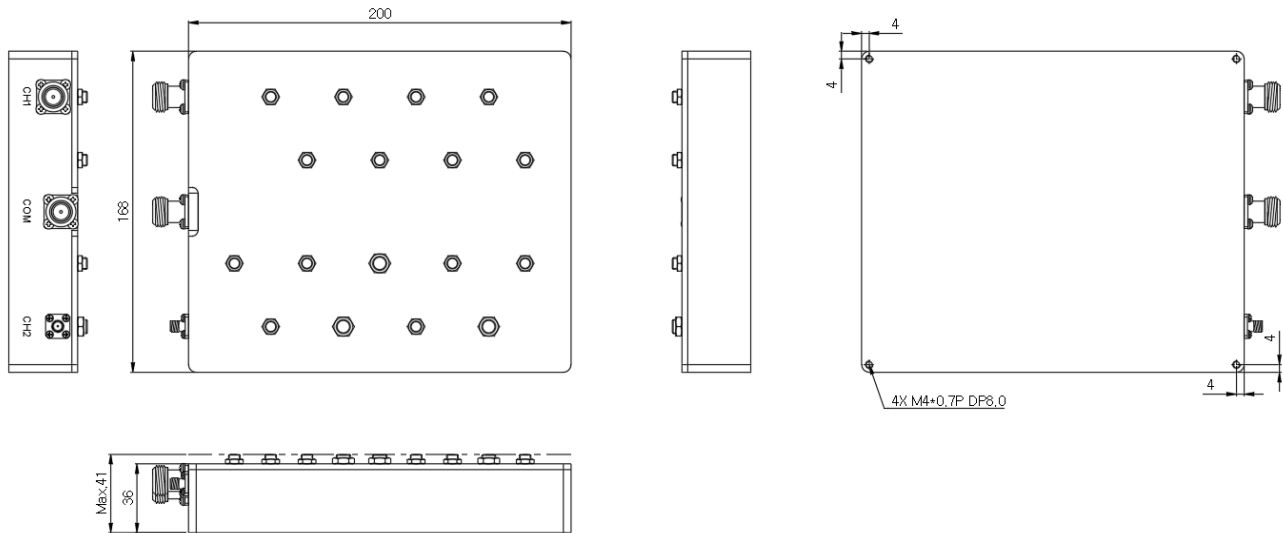
PRELIMINARY SPECIFICATION

Product Name : Diplexer

Part No : MDI-C2072.5-C2247.5_95M-95MN-A-R0

.	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2024.10.10	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Item	Specification		Remark
	CH 1	CH 2	
1. Center Frequency	2072.5 MHz	2247.5 MHz	OK
2. Pass Band Frequency	$f_0 \pm 47.5 [2025 \sim 2120] \text{ MHz}$	$f_0 \pm 47.5 [2200 \sim 2295] \text{ MHz}$	OK
3. Insertion Loss	0.6 dB Max.	0.75 dB Max.	Proposal
4. Return Loss	16dB Min.		Proposal
5. Attenuation	40dB min. @2168MHz		OK
	40dB min. @2306MHz		OK
	90dB min. @3000~6000MHz		OK
6. In/Out Impedance	50 Ω		OK
7. Power	CW 400 W Max.	CW 2 W Max.	OK
8. Isolation between channel	100dB min.		
9. Dimension [WxDxH]	200.0x168.0x36.0 [mm]		Proposal
10. Connector	Input & CH1-N(F), CH2- SMA(F)		OK
11. Finish	Black		TBD

■ Simulation Data

Insertion loss

A1
freq=2.0250GHz
dB(S(2,1))=-0.3910

A2
freq=2.0567GHz
dB(S(2,1))=-0.3112
Max

A3
freq=2.1200GHz
dB(S(2,1))=-0.4379

B1
freq=2.2000GHz
dB(S(3,1))=-0.4918

B2
freq=2.2535GHz
dB(S(3,1))=-0.3139
Max

B3
freq=2.2950GHz
dB(S(3,1))=-0.5837

Attenuation

A4
freq=2.1680GHz
dB(S(2,1))=-62.0869

A5
freq=2.2000GHz
dB(S(2,1))=-128.0324

A6
freq=2.2135GHz
dB(S(2,1))=-117.5198

B4
freq=2.1200GHz
dB(S(3,1))=-109.8916

B5
freq=2.1680GHz
dB(S(3,1))=-45.2348

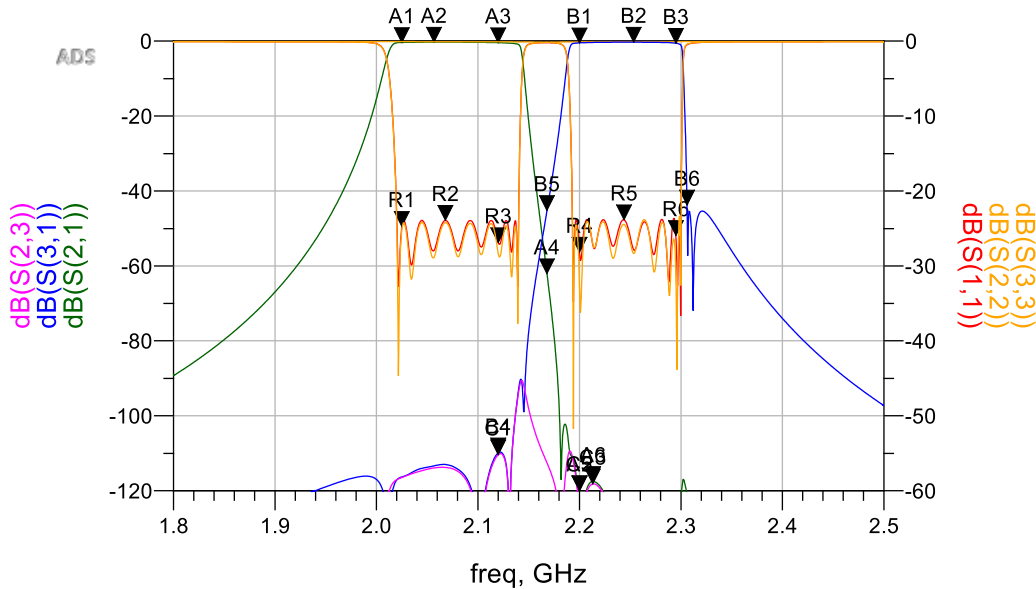
B6
freq=2.3060GHz
dB(S(3,1))=-43.7470

Isolation

C1
freq=2.1199GHz
dB(S(2,3))=-110.4181

C2
freq=2.2000GHz
dB(S(2,3))=-128.7068

C3
freq=2.2131GHz
dB(S(2,3))=-118.1831



Return loss

R1
freq=2.0250GHz
dB(S(1,1))=-24.7401

R2
freq=2.0679GHz
dB(S(1,1))=-23.9353

R3
freq=2.1200GHz
dB(S(1,1))=-26.8951

R4
freq=2.2000GHz
dB(S(1,1))=-28.1693

R5
freq=2.2438GHz
dB(S(1,1))=-23.8545

R6
freq=2.2950GHz
dB(S(1,1))=-25.9456