

PRODUCT SPECIFICATION FOR INFORMATION

PRELIMINARY SPECIFICATION

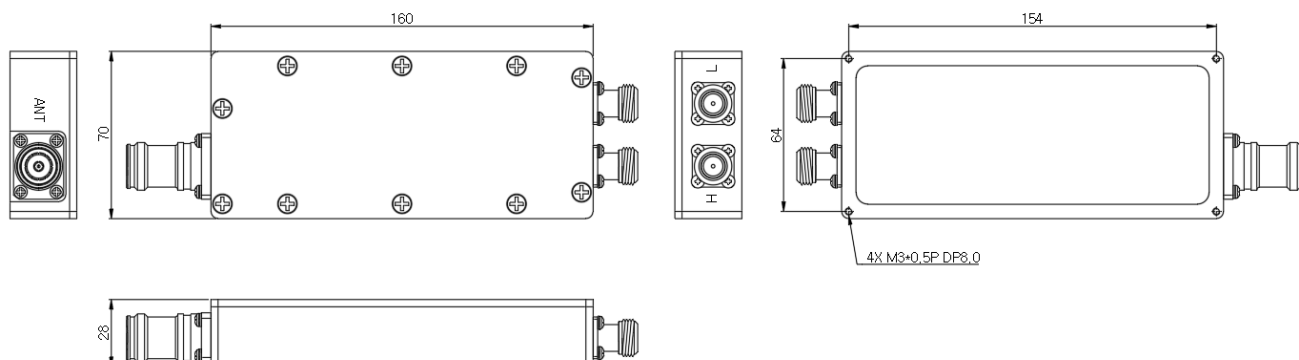
Product Name :Combiner 4_Diplexer

Part No : MDI-C1560-C4650_2280M-2500MN-A-R0

■ History List

No.	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2025.04.14	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



NOTE

Input Connector : N-Type(F)

Output Connector : 4.3-10(F)

Finish : Black painting

■ Electrical Specification

Item	Specification		Remark
	Band 1~6	Band 7~8	
1. Center Frequency	1560 MHz	4650 MHz	OK
2. Pass Band Frequency	$F_c \pm 1140 [420 \sim 2700] \text{MHz}$	$F_c \pm 1250 [3400 \sim 5900] \text{MHz}$	OK
3. Insertion Loss	0.7dB Max.	0.7dB Max.	OK
4. Return Loss In/Out	15dB Min.	14dB Min.	Proposal
5. Isolation	50 dB		OK
6. In/Out Impedance	50 Ω		OK
7. Input Power	240W	40W	OK
8. Operation Temperature Range	-20℃ to +65℃		OK
9. Application	Outdoor IP67		OK
10. Connector	N(F) / 4.3-10(F)		OK
11. Size	160 x 70 x 28mm		Proposal
12. Finish	Black		OK

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

■ Simulation Curve

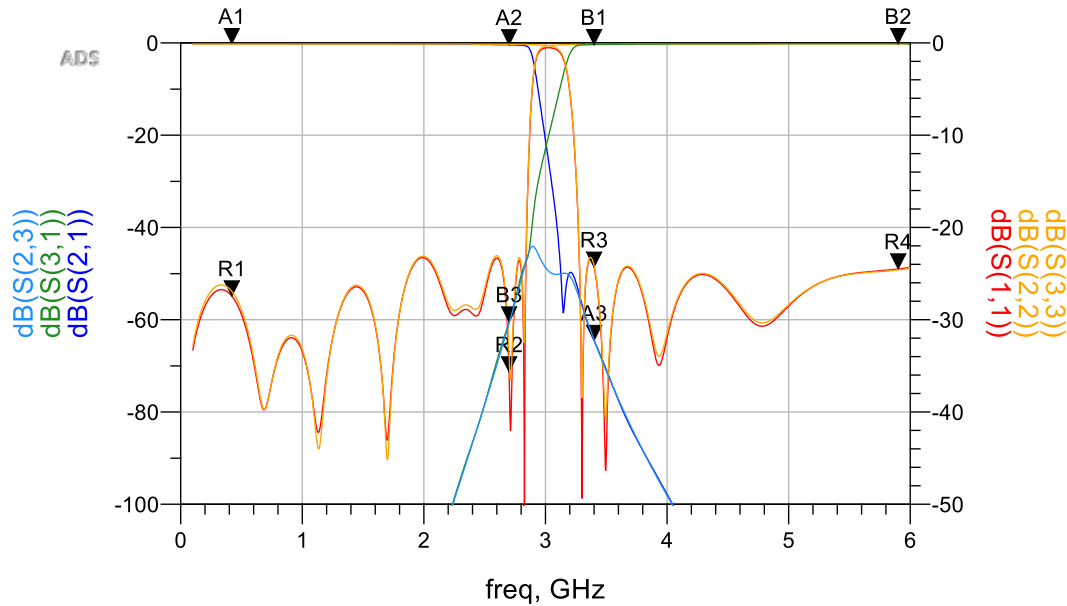
Insertion loss
[dB]

A1
freq=420.00MHz
dB(S(2,1))=-0.1825

A2
freq=2.7000GHz
dB(S(2,1))=-0.4057

B1
freq=3.4000GHz
dB(S(3,1))=-0.3701

B2
freq=5.9000GHz
dB(S(3,1))=-0.1727



Rejection Isolation

A3
freq=3.4000GHz
dB(S(2,1))=-64.4956

B3
freq=2.7000GHz
dB(S(3,1))=-60.5107

Return loss
[dB]

R1
freq=420.00MHz
dB(S(1,1))=-27.4360

R2
freq=2.7000GHz
dB(S(1,1))=-35.6577

R3
freq=3.4000GHz
dB(S(1,1))=-24.3254

R4
freq=5.9000GHz
dB(S(1,1))=-24.5044