

PRODUCT SPECIFICATION FOR INFORMATION

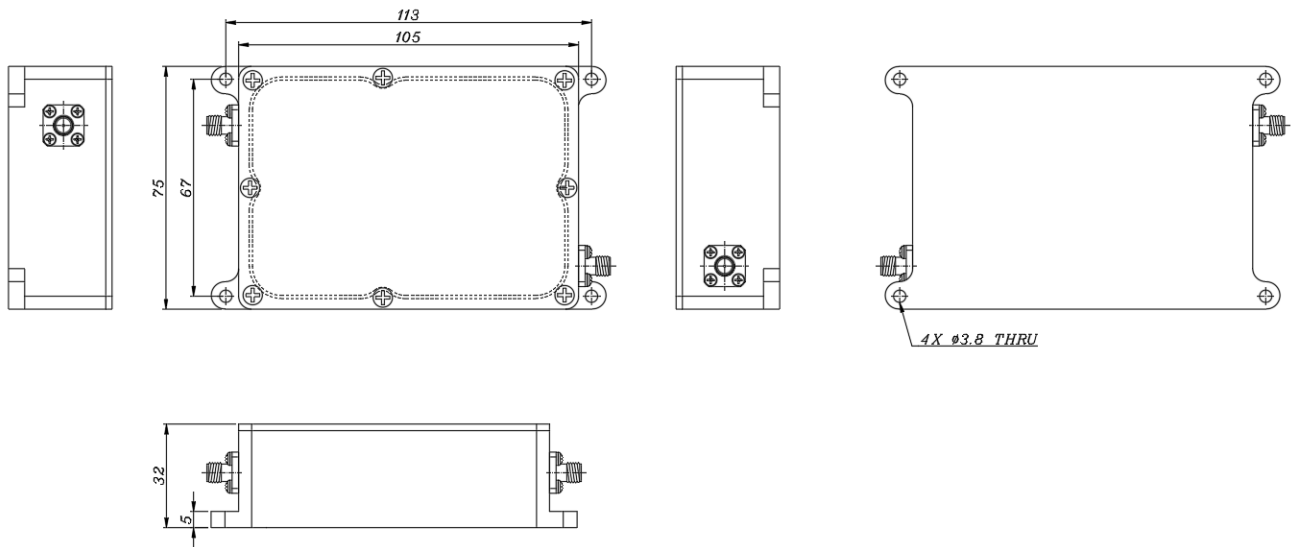
PRELIMINARY SPECIFICATION

Product Name : Cavity _Band Pass Filter

Part No : MBP-C2810_240MS-A-R2

	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2024.09.06	Jeffrey Chung	Michael Jeon
2	R1	Change Mounting Holes	2024.10.02	Jeffrey Chung	Michael Jeon
3	R2	Change Size & Spec	2024.10.14	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Parameter	Specification	Remark
1. Center Frequency	2810MHz	OK
2. Bandwidth [BW]	Fc ±120MHz[2690~2930MHz]	OK
3. Insertion Loss in BW	1.2dB Max.	Proposal
4. Return Loss	18dB Min.	Proposal
5. Rejections	40dBc Min @ DC~0.03GHz	OK
	50dBc Min @ 0.05~2.645GHz	OK
	25dBc Min @ 2.645~2.675GHz	OK
	25dBc Min @ 2.945~3.08GHz	OK
	50dBc Min @ 3.08~12GHz	OK
	20dBc Min @ 12~20GHz	OK
	15dBc Min @ 29~30GHz	OK
6. Impedance	50Ohm	OK
7. Operating Temperature	-40°C ~ +85°C	OK
8. Storage Temperature	-50°C ~ +125°C	OK
9. Power Handling	CW 40W	OK
10. Size (W × D × H)	105.0 x 75.0 x 32.0 mm	Proposal
11. Weight	0.5Kg Max.	OK
12. Connector	SMA (F)	OK
13. Waterproof	IP67	OK
14. Finish	Black	OK
15. Humidity	95% Max.	OK
16. Vibration & Shock	Vibration 6.06g RMS	OK
17. Operating Altitude	20,000 Feet	OK

Remarks: This is a preliminary datasheet for reference.

Simulation Data

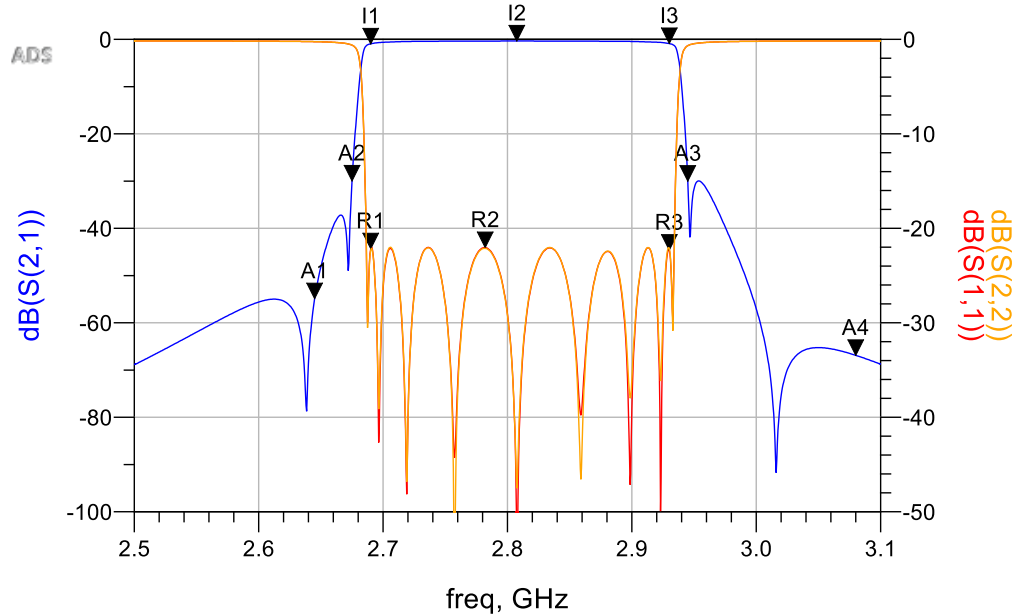
Insertion loss
[dB]

I1
freq=2.69000GHz
dB(S(2,1))=-0.94974

I2
freq=2.8075GHz
dB(S(2,1))=-0.3419
Max

I3
freq=2.93000GHz
dB(S(2,1))=-0.89615

IL_max	IL_Ripple
-0.95	-0.61



Rejection [dB]

A1
freq=2.64500GHz
dB(S(2,1))=-54.90583

A2
freq=2.67500GHz
dB(S(2,1))=-29.98780

A3
freq=2.94500GHz
dB(S(2,1))=-30.02892

A4
freq=3.08000GHz
dB(S(2,1))=-66.89158

Return loss
[dB]

R1
freq=2.6900GHz
dB(S(1,1))=-22.1738

R2
freq=2.7820GHz
dB(S(1,1))=-22.0393

R3
freq=2.9300GHz
dB(S(1,1))=-22.3223