

PRODUCT SPECIFICATION FOR INFORMATION

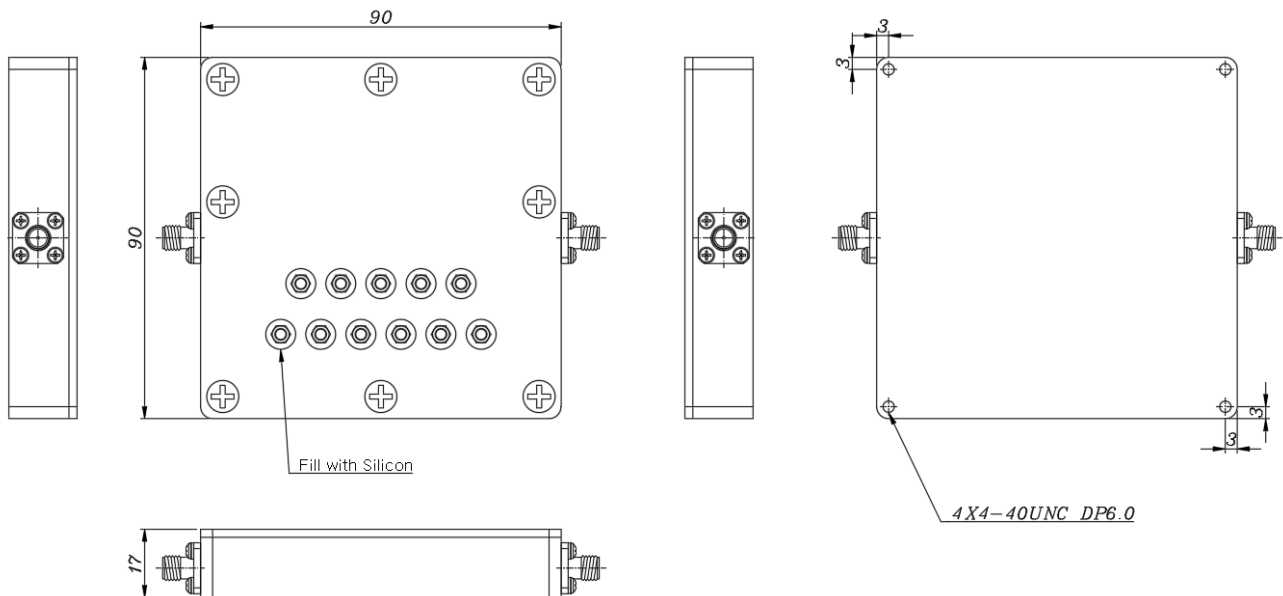
PRELIMINARY SPECIFICATION

Product Name : Cavity _Band Pass Filter

Part No : MBP-C898.5_7MS-A-R0

	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2024.02.06	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Parameter	Specification	Remark
1. Center Frequency	898.5MHz	OK
2. Bandwidth [BW]	$F_c \pm 3.5\text{MHz}$ [895~902MHz]	OK
3. Insertion Loss in BW	4.0dB Max.	Proposal
4. Return Loss	15.6dB Min. (VSWR 1:1.4)	OK
5. Rejections	40dB Min @ 10~883MHz	OK
	85dB Min @ 930~2600MHz	Proposal
6. Impedance	50Ohm	OK
7. Operating Temperature	-10°C ~ +70°C	OK
8. Power Handling	CW 2W	OK
9. Size (W × D × H)	90.0 x 90.0 x 17.0 mm	Proposal
10. Connector	SMA (F)	OK
11. Waterproof	IP66	OK
12. Finish	Black Epoxy coating	OK
13. Relative Humidity	10% ~ 95%	OK
14. Random Vibration	MIL-STD-810 F Method 514.5 procedure C1	OK
15. Dust	MIL-STD-810 F Method 510.4 procedure 3	OK

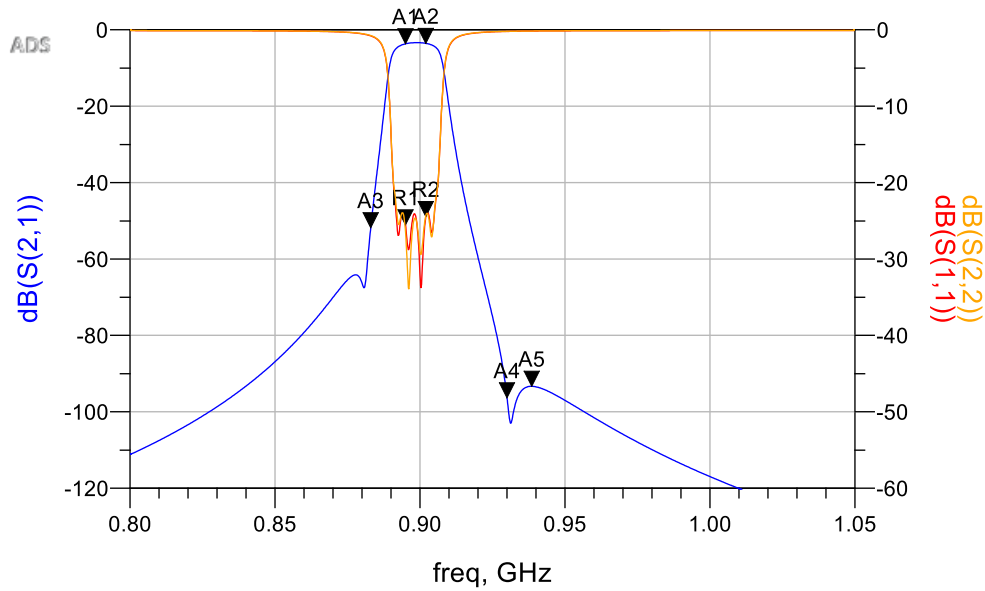
Remarks: This is a preliminary datasheet for reference.

■ Simulation Data

Insertion loss

A1
freq=895.00MHz
dB(S(2,1))=-3.6875

A2
freq=902.00MHz
dB(S(2,1))=-3.5730



Rejection

A3
freq=883.00MHz
dB(S(2,1))=-51.8378

A4
freq=930.00MHz
dB(S(2,1))=-96.3533

A5
freq=938.50MHz
dB(S(2,1))=-93.3319

Return loss

R1
freq=895.00MHz
dB(S(1,1))=-25.5367

R2
freq=902.00MHz
dB(S(1,1))=-24.4448