

PRODUCT SPECIFICATION FOR INFORMATION

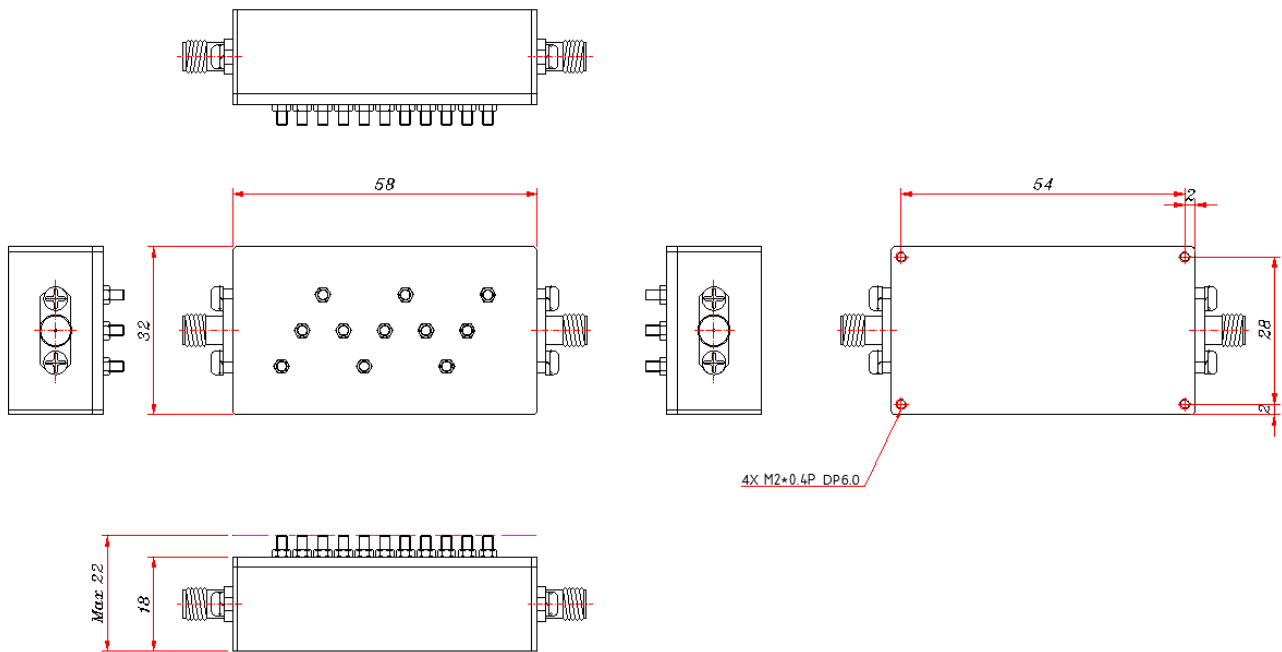
PRELIMINARY SPECIFICATION

Product Name : TX_Band Pass Filter

Part No : MBP-C2245_90MS-A-R0

	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2025.03.04	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Parameter	Specification	Remark
1. Center Frequency	2245MHz	OK
2. Bandwidth [BW]	Fc ±45MHz[2200~2290MHz]	OK
3. Insertion Loss in BW	1.1dB Max.	OK
4. Ripple	0.4dB Max. within full BW	Proposal
	0.2dB Max. @ any 8MHz slice	OK
5. Return Loss	18.0dB min	OK
6. Rejections	60dB Min @ DC~1200MHz	OK
	70dB Min @ 1277.6±5MHz	OK
	70dB Min @ 1575±5MHz	OK
	65dB Min @ 2025~2110MHz	OK
	6.0dB Min @ 2180MHz	OK
	3.0dB Min @ 2310MHz	OK
	40dB Min @ 2500~4400MHz	OK
	50dB Min @ 4400~4580MHz	OK
	30dB Min @ 4580~6600MHz	OK
	40dB Min @ 6600~6870MHz	OK
	20dB Min @ 6870~11000MHz	OK
7. Group Delay Variation	3.5nS	Proposal
8. Impedance	50Ohm	OK
9. Operating Temperature	-40°C ~ +85°C	OK
10. Power Handling	AVG 5W / Peak 10W Max.	OK
11. Size (W × D × H)	58.0 x 32.0 x 18.0(22.0) mm	Proposal
12. Connector	SMA (F)	OK
13. Random Vibration	7.7Grms, 10-2,000Hz	OK
14. Mechanical Shock	Half Sine 25g peak, 11mSec, all direction	OK
15. Acceleration	70g, all direction	OK
16. Weight	About 60g	OK
17. Finish	Ag Plating	TBD

Remarks: This is a preliminary datasheet for reference.

Simulation Data

Insertion loss & Ripple [dB]

IL_max	IL_Ripple_FB	IL_Ripple_8MHz
-0.87	-0.27	-0.11

Insertion loss [dB]

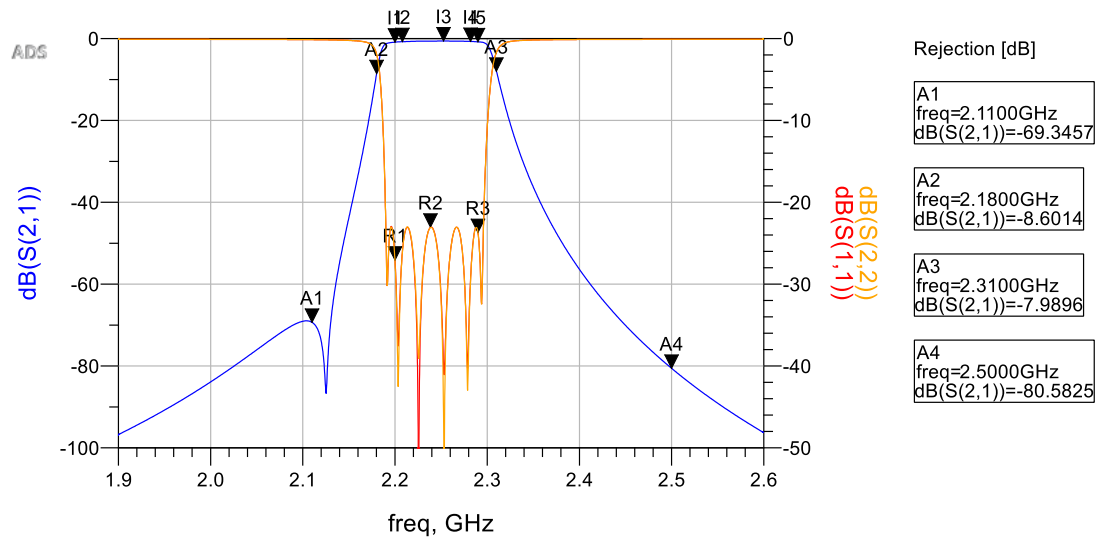
I1
freq=2.2000GHz
dB(S(2,1))=-0.8669

I2
freq=2.2080GHz
dB(S(2,1))=-0.7589

I3
freq=2.2526GHz
dB(S(2,1))=-0.5985
Max

I4
freq=2.2820GHz
dB(S(2,1))=-0.6948

I5
freq=2.2900GHz
dB(S(2,1))=-0.7970



Return loss [dB]

R1
freq=2.2000GHz
dB(S(1,1))=-27.0662

R2
freq=2.2385GHz
dB(S(1,1))=-23.0446

R3
freq=2.2900GHz
dB(S(1,1))=-23.6971

Group delay & Variation [ns]

GD_max	GD_Variation_10MHz
17.5 n	2.90 n

Group delay [ns]

G1
freq=2.2000GHz
delay(2,1)=17.481n

G2
freq=2.2100GHz
delay(2,1)=14.585n

G3
freq=2.2500GHz
delay(2,1)=11.751n

G4
freq=2.2800GHz
delay(2,1)=13.461n

G5
freq=2.2900GHz
delay(2,1)=15.662n

