

PRODUCT SPECIFICATION FOR INFORMATION

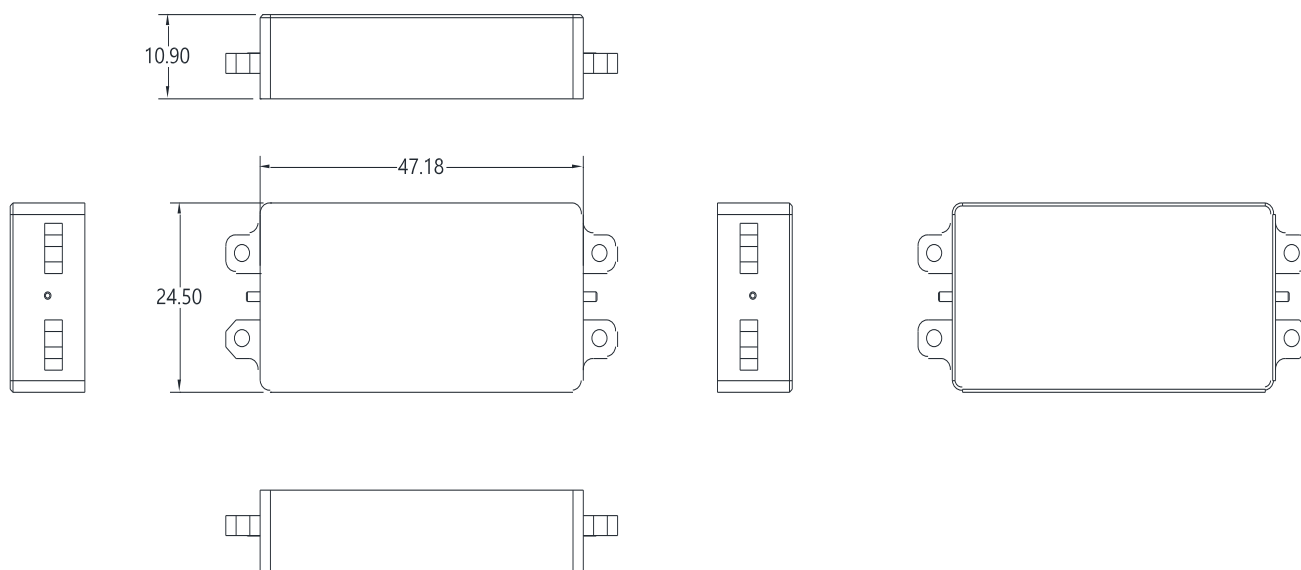
PRELIMINARY SPECIFICATION

Product Name : Band Pass Filter

Part No : MBP-C1065_70ML-A-R0

	Rev. No.	Description	Date	Author	Final Approver
1	R0	Draft	2024.02.02	Jeffrey Chung	Michael Jeon

■ Mechanical Drawing



■ Electrical Specification

Parameter	Specification	Remark
1. Center Frequency	1065 MHz	OK
2. Bandwidth [BW]	$F_c \pm 35\text{MHz}$ [1030~1100MHz]	OK
3. Insertion Loss in BW	2.0dB Max.	Proposed
4. Ripple (pass band)	$\pm 0.2\text{dB}$	OK
5. Return Loss	14dBr Min.	OK
6. Rejections	55dBc Min.@ 820 & 1240MHz	OK
	65dBc Min.@ 1410MHz	Proposed
	70dBc Min.@ DC-650MHz	OK
	65dBc Min.@ 1500~3000 MHz	Proposed
	50dBc Min.@ 3000~5000 MHz	Proposed
7. In/Out Impedance	50 Ohm	OK
8. Power Handling	300Watt peak Max	OK
9. Dimension [WxDxH]	24.5x47.18x10.9 mm	OK
10. Weight	120gr. Max.	OK
11. Interface	PIN Type	OK
12. Finish	White Chromate	TBD

Remarks: This is a preliminary datasheet for reference.

■ Environmental Specification

Parameter	Specification	Remark
1. Operation Temperature Range	-20 ~ +71°C	OK
2. Storage Temperature range	-55 ~ +100°C	OK
3. Altitude	45000 feet max.	OK
4. Rapid Decompression (for SOF)	The Filter will be able to withstand the effect of sudden decompression from sea level to 45,000 feet within 15 seconds. The equipment shall not suffer any physical damage when and after being exposed to rapid decompression test IAW RTCA/DO160C paragraph 4.6.2	OK
5. Humidity	The Filter will not suffer any physical damage, will continue to operate, and will achieve full performance when and after being exposed to relative humidity (RH) of at least 95% at 65 °C, including inside and outside condensation, at operating and non-operating temperatures.	OK
6. Vibration	The Filter shall not suffer any physical damage or any degradation of its performance criteria when and after being exposed to random vibration conditions of operational environment as defined in Table 1.	OK
7. Operational Shock	The Filter will not suffer any physical damage nor any degradation in performance when and after being subjected to 6 shocks, 1 in each opposite direction along each of three orthogonal axes. Each shock impulse shall have time duration of 11 msec, half sine pulse, and acceleration peak value of 6g.	OK
8. Crash Safety Shock (Impulse)	The Filter shall be tested when subjected to 6 shocks, 1 in each opposite direction along each of three orthogonal axes. Each shock impulse shall have time duration of 11 msec, half sine pulse, and acceleration peak value of 20g.	OK

Table 1: Vibration versus Location

Equipment	RTCA/DO-160C Categories	Random Vibration [grams]		Remarks
		Operating	Non-Operating	
Filter	C'	6.08	6.08	

■ Simulation Curve

