

PRELIMINARY SPECIFICATION

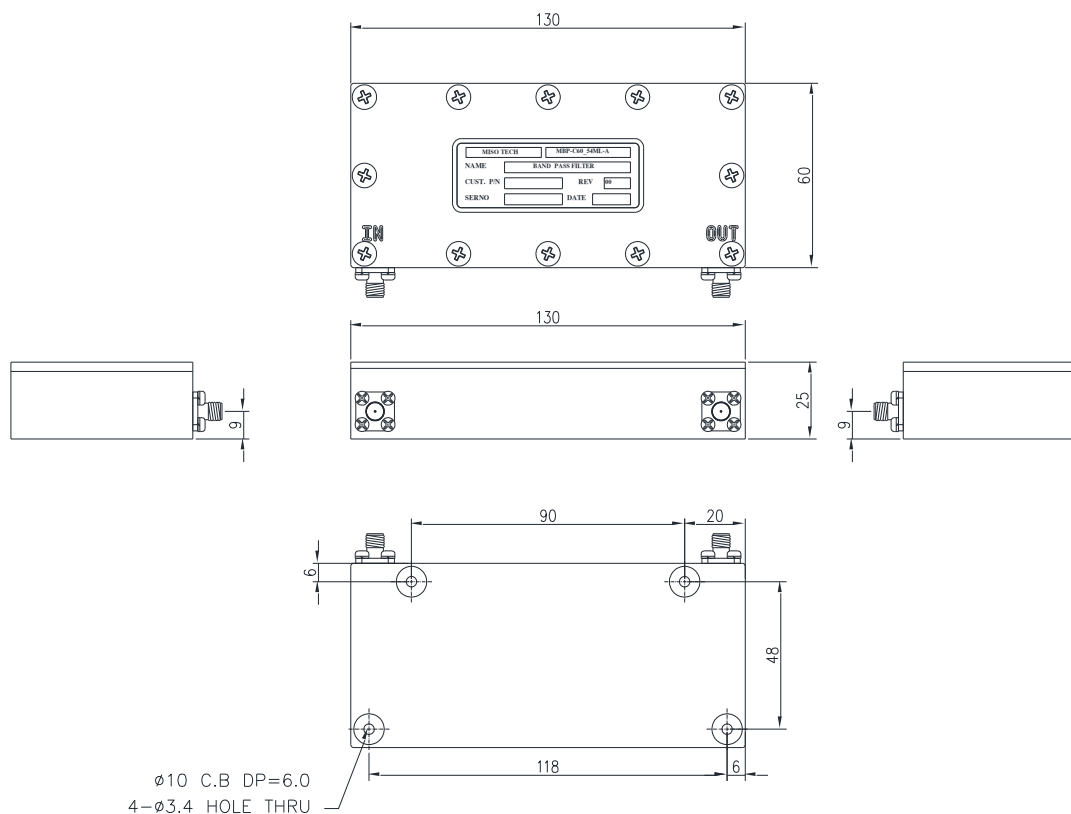
Product Name :LC Band Pass Filter

Part No : MBP-C60_54ML-A-V1

.	Rev. No.	Description	Date	Author	Final Approver
1	A	First	2020.06.12	Bryan Jeon	Michael Jeon
		Added -3.0dB inflection Point	2020.06.18	Bryan Jeon	Michael Jeon

PRODUCT SPECIFICATION FOR INFORMATION

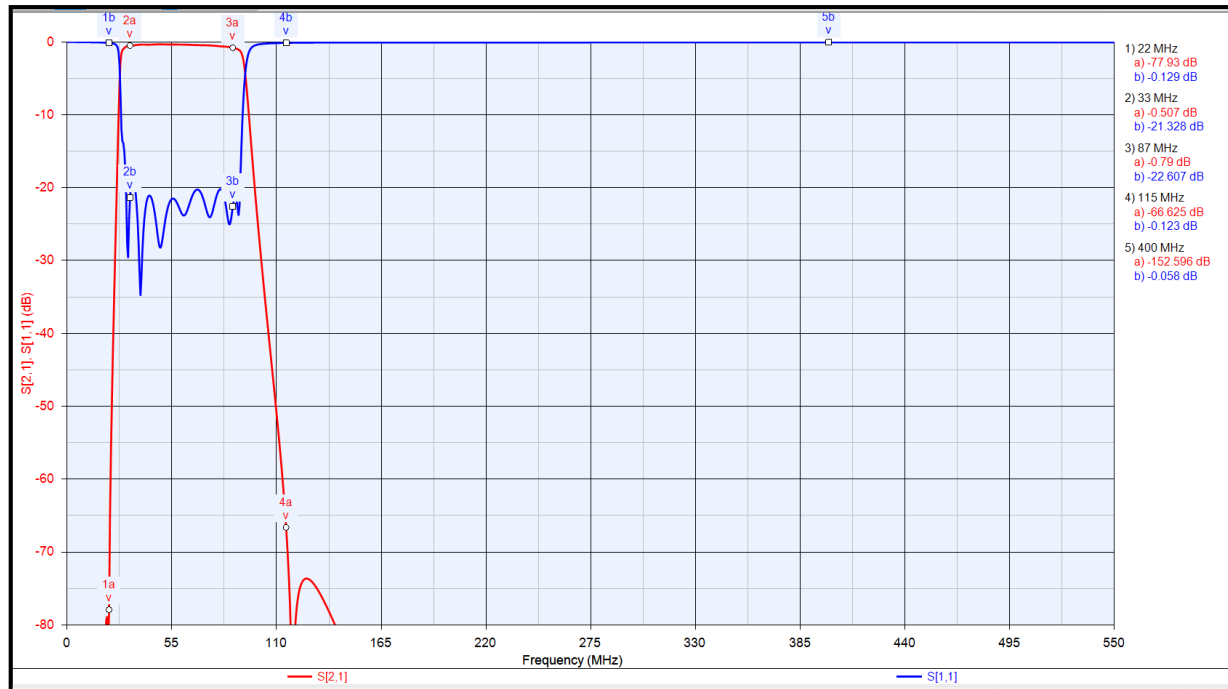
■ Mechanical Drawing



■ Electrical Specification

Band-Pass (33MHz to 87MHz) Filter		
Parameter	Requirement	Remark
Pass Band Frequencies	33MHz to 87MHz	
Pass Band Loss	0.9dB typical, 1.2dB maximum	
Pass Band Ripple	0.6dB typical, 0.8dB maximum	
Pass Band Return Loss	≤ -15 dB	
1 st -3.0dB inflection	31.5MHz, -3.15MHz maximum	
2 nd -3.0dB inflection	89.3MHz, +8.93MHz maximum	
Stop Band1 Attenuation	≥ 55 dB @ 1MHz to 22MHz	
Stop Band2 Attenuation	≥ 55 dB @ 115MHz to 400MHz	
Stop Band3 Attenuation	≥ 45 dB @ 401MHz to 520MHz	
Input Power	25W RMS max	
Input / Output Connectors	SMA Female	

■ Simulation Curve



■ Environmental specification.

Parameter	Requirement	Remark
Load Conditions	The RF Output Filter shall be capable of operating at the rated output power into any load VSWR, including open and short circuit conditions at any phase angle, without damage for a minimum of 5-minutes	C
Environment Temperature	Operating: +10deg C to +55deg C Storage: -40deg C to +85deg C	C
Environment Vibration/Shock	Transport (Wheeled Vehicle) When packaged in transit case the unit shall survive and function after transportation by wheeled vehicle. The unit shall comply with the requirements of DEF STAN 00-35 Apart 3 Chapter 2-01 Annex A, On-Road Operational on Surface Ship The unit shall operate to specification when tested to DEF STAN 00-35 Apart 3 Chapter 2-01 M1 Annex A A3.3 Deployed or Installed In Surface Ships Bench Servicing Handling Shock The unit shall be for servicing Def Stan 00-35 Part 3 Chapter 2-03 M3 Classical and Sine Waveform Table 1	C
Size	Size as small as possible. Please advice on achievable dimensions	N.C (W x D x H : 100 x 60 x 25 mm) (W x D x H : 130 x 123 x 30 mm)
Fixings	The RF Output Filter shall have through holes (preferably metric M3) for mounting to the equipment heat sink.	C
Environment Safety	Where practicable, all materials and parts within the RF Output Filter shall be self- extinguishing to UL94 V-0 or equivalent. Suitable markings shall be provided on the RF Output Filter to indicate the presence of hazardous materials such as Beryllium, and other potential hazards including high temperatures.	C
Component Selection	The components and construction of the RF Output Filter shall be lead-free The components and processes used in the construction of the RF Output Filter shall not employ any of the following materials: Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls, Polybrominated diphenyl ether.	C
Export Limitations	Components and materials within the RF Output Filter shall not be restricted by ITAR regulations.	C