

Specification

- Part No. : **BPF.24.01**
- Product Name : Airvu 2.4GHz Band Pass Filter
for UAV/Drone Antennas
- Features : RP SMA(M) Plug to RP SMA(F) Jack
Frequency Range:2400-2500 MHz
Pass band Width: 100 MHz
Insertion Loss: <1.3 dB
Material : Brass
Finish: Black Nickel Plated
Total Length: 35 mm



1. Introduction

The Airvu BPF.24 2.4GHz Band Pass Filter is placed on the end of the antenna port to help eliminate or reduce radio interference problems on UAVs and thus optimize radio system performance. It does this in two ways

1. It reduces out of band noise entering the receiver causing effects such as reduction of control range
2. It reduces the antenna transmissions of out of band noise affecting other circuitry on your UAV (such as disrupting the GPS receiver leading to loss of fix, or a live video stream at 2.4 GHz)

The ceramic filter technology inside the BPF.24 has superior insertion loss and stop band performance than competing LTCC or lumped element filters, while also having good rejection at band edges. It uses a standard RP SMA(M) Plug to RP SMA(F) Jack interface, as most antennas at 2.4GHz have a RP SMA(M) connector. This filter is designed to be easily screwed onto this standard antenna SMA connector.

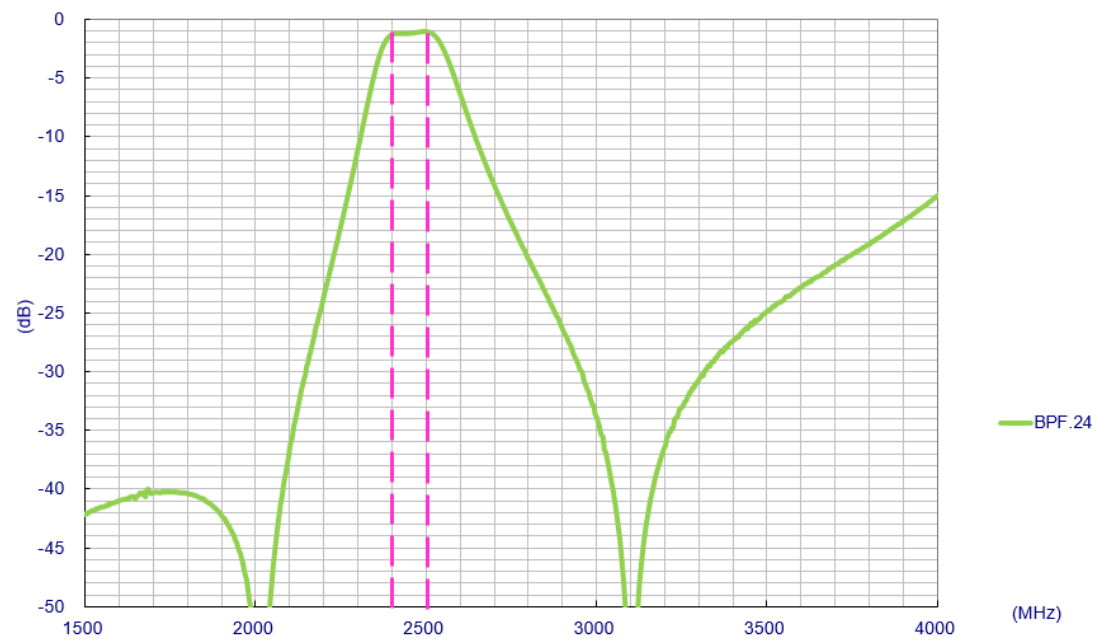
2. Specification Table

Electrical		
Pass Band Frequency	2400 MHz - 2500 MHz	
Pass band Width	100 MHz	
Input / Output Impedance	50 Ohm	
Max. Input Power	10W	
Pass Band Insertion Loss	1.3 dB max	
Pass Band Ripple	0.8 dB max	
Pass Band Return Loss	9.6 dB min	
Stop-Band Attenuation	at 2033~2098 MHz	30 dB min
	at 2100 MHz	25 dB min
	at 2786 MHz	15 dB min
	at 4900~6000 MHz	15 dB min
Mechanical		
Connector type	RP-SMA(M) to RP-SMA(F)	
Weight	8.815g	
Dimensions	35*10mm	
Environmental		
Operating Temperature	-40°C to 85°C	

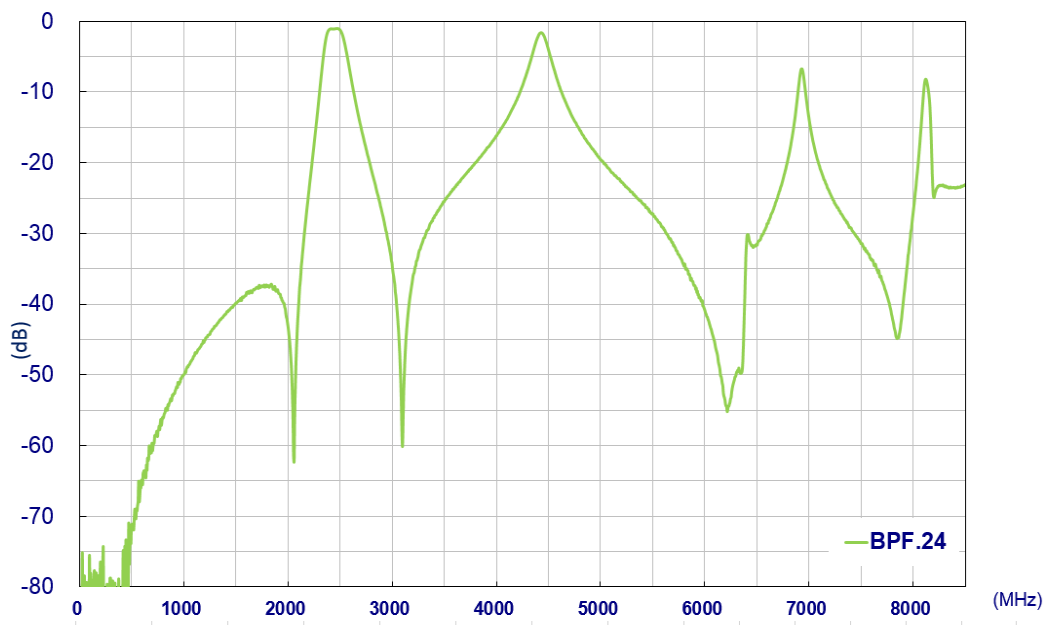
3. Electrical Specifications

3.1 S21

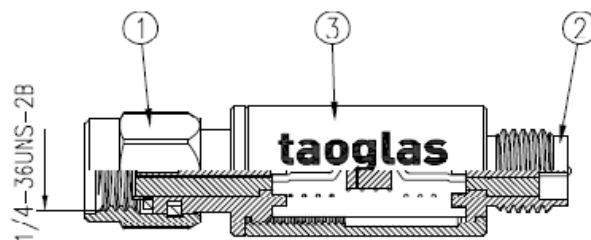
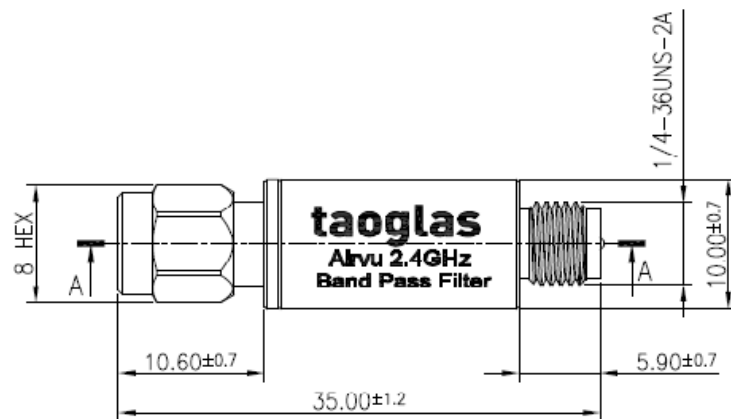
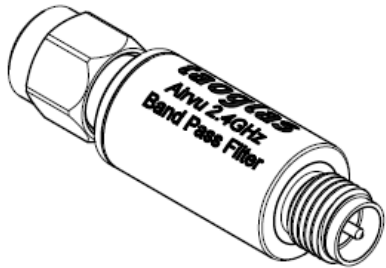
In Band View



Wide Band View



4. Mechanical Drawing (unit: mm)



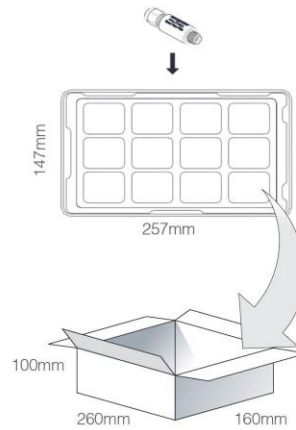
	Name	Material	Finish	QTY
1	RP-SMA(M)	Brass	Ni Plated	1
2	RP-SMA(F)	Brass	Ni Plated	1
3	Shell	Brass	Black-Ni Plated	1

5. Packaging

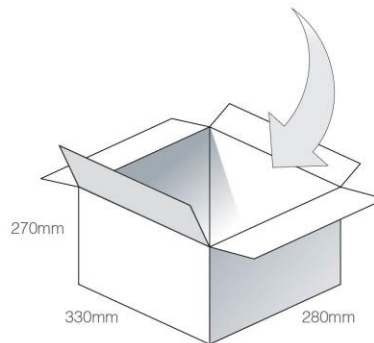
BPF.24.01

Packaging Specifications

36 pcs BPF.24.01 per tray
 (3 pcs per section)
 Tray Dimensions - 257*147*17mm
 Total Weight - 375g

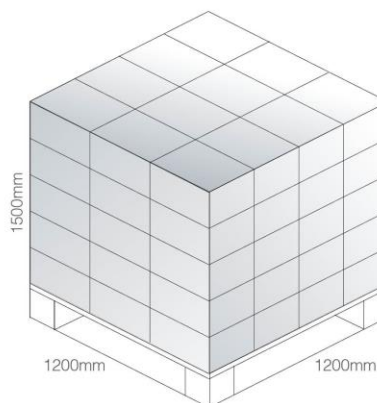


9 trays / 324 pcs per box
 Box Dimensions - 260*160*100mm
 Weight - 3.4Kg



4 boxes / 1296 pcs per per carton
 Carton Dimensions - 330*280*270mm
 Weight - 14Kg

Pallet Dimensions 1100*1100*1530mm
 60 Cartons per pallet
 12 Cartons per layer
 5 Layers



6. Installation Instructions



Torque Wrench 0.56N.m