

# **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





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### 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

- 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.

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## 2. Specification Table

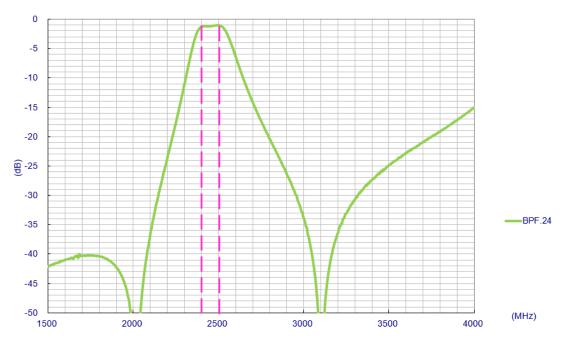
Electrical					
Pass Band Frequency		2400 MHz - 2500 MHz			
Pass band Width		100 MHz			
Input / Output Impedance		50 Ohm			
Max. Input Power		10W			
Pass Band Insertion Loss		1.3 dB max			
Pass Band Ripple		0.8 dB max			
Pass Band Return Loss		9.6 dB min			
Stop-Band Attenuation	at 2033~2098 MHz	30 dB 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			



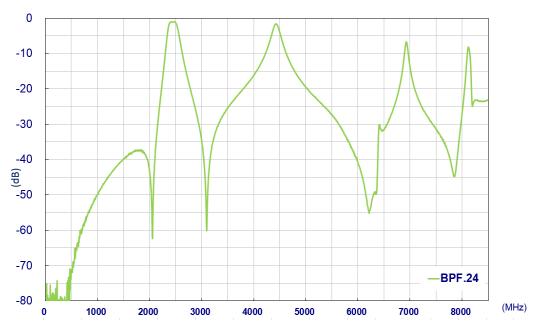
## 3. Electrical Specifications

#### 3.1 S21

#### **In Band View**



#### **Wide Band View**



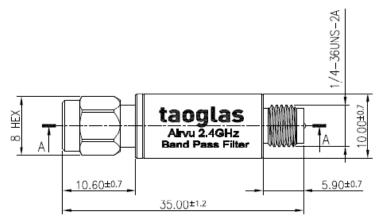
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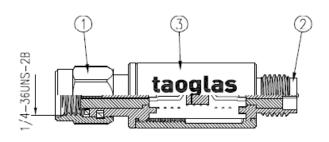
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## 4. Mechanical Drawing (unit: mm)







	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

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### 5. Packaging

#### BPF.24.01

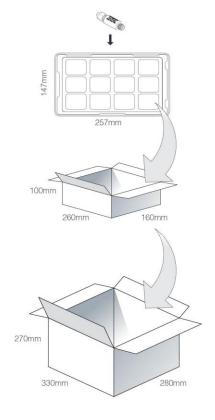
#### **Packaging Specifications**

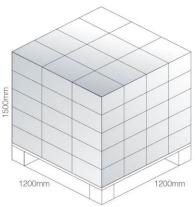
36 pcs BPF.24.01 per tray (3 pcs per section) Tray Dimensions - 257\*147\*17mm Total Weight - 375g

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



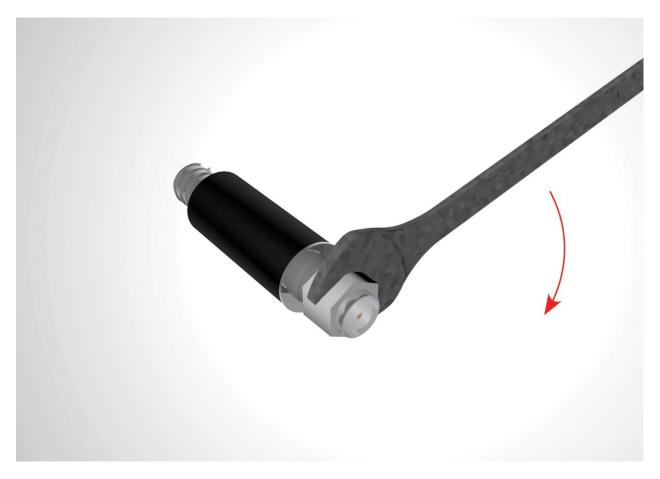


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### **6. Installation Instructions**



**Torque Wrench 0.56N.m** 



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