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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





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:2400-2500MHz Pass band Width: 100MHz Insertion Loss: <1.3 dB Material : Brass Finish: Black Nickel Plated Total Length: 35mm







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
- 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.

Contact your regional Taoglas office for support



2. Specification Table

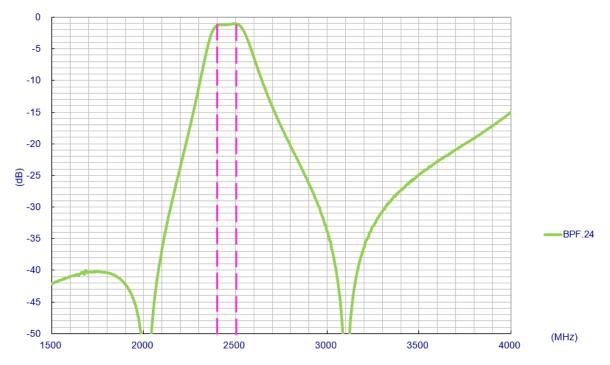
| ELECTRICAL | | | | | | |
|--------------------------|-----------------|------------------------|--|--|--|--|
| Pass Band Frequency | | 2400-2500MHz | | | | |
| Pass band Width | | 100MHz | | | | |
| Input / Output Impedance | | 50 Ohm | | | | |
| Max. Input Power | | 10W | | | | |
| Pass Band Insertion Loss | | 1.3dB max | | | | |
| Pass Band Ripple | | 0.8dB max | | | | |
| Pass Band Return Loss | | 9.6dB min | | | | |
| | at 2033~2098MHz | 30dB min | | | | |
| Stop-Band | at 2100MHz | 25dB min | | | | |
| Attenuation | at 2786MHz | 15dB min | | | | |
| | at 4900~6000MHz | 15dB 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 | | | | |



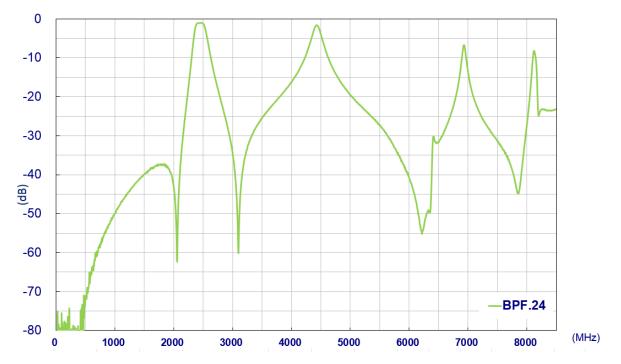
3. Electrical Specifications

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In Band View





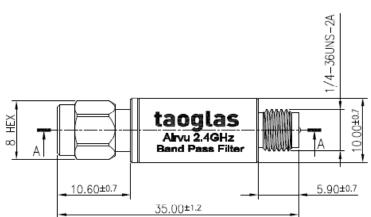


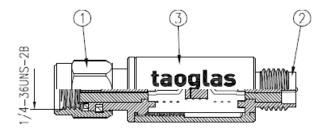
Wide Band View



4. Mechanical Drawing (unit: mm)







| | | Name | Material | Finish | QTY |
|---|---|-----------|----------|-----------------|-----|
| | 1 | RP-SMA(M) | Brass | Ni Plated | 1 |
| 1 | 2 | RP-SMA(F) | Brass | Ni Plated | 1 |
| | 3 | Shell | Brass | Block—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 Long to the second seco

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

