

Specification

Part No. : **BPF.58.01**

Product Name : Airvu 5.8 GHz Band Pass Filter

For UAV/Drone Antennas

Features : RP SMA(M) to RP SMA(F)

Frequency Range: 5480 - 5850 MHz

Insertion Loss: <2.1 dB

Material: Brass

Finish: Black Nickel Plated

Total Length: 35 mm







1. Introduction

The Airvu BPF.58 5.8GHz Band Pass Filter is placed on the end of the antenna port to eliminate or reduce radio interference problems on UAVs. It does this in two ways

- 1. It reduces out of band noise entering the receiver and 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 the control signal at 2.4GHz)

The ceramic filter inside the BPF.58 has better 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 5.8GHz have a RP SMA(M) connector as standard. This filter is designed to be easily screwed onto this standard antenna SMA connector.

Contact your regional Taoglas office for support

Note

There can still be noise issues that a filter cannot solve. Such as noise that can be radiated directly from the transmitter board and any wiring. Also no filter can protect from in-band noise within the assigned operating frequency of the receiver. Always try to place noisy components as far away from a receiver and antenna as possible.



2. Specification Table

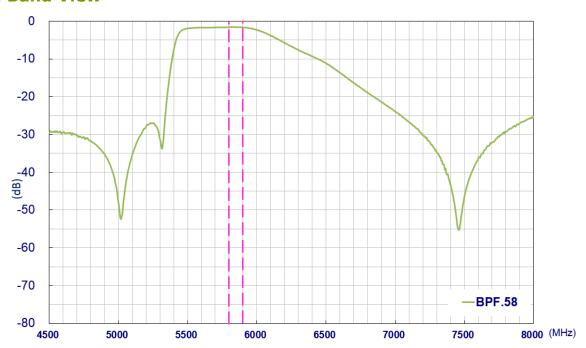
Electrical					
Pass Band Frequency		5480-5850 MHz			
Pass Band Width		70 MHz			
Input / Output Impedance		50 Ohm			
Max. Input Power		10W			
Pass Band Insertion Loss (0°C~70 °C)		2.1 dB or less			
Pass Band Ripple		1.5 dB or less			
Pass Band Return Loss		10 dB or more			
Stop-Band	at 5150~5340 MHz	17 dB or more			
Attenuation	at 7500~7700 MHz	25 dB or more			
Mechanical					
Connector type		RP-SMA(M) & RP-SMA(F)			
Weight		8.865g			
Dimensions		35*10mm			
Environmental					
Operating Temperature		-40°C to 85°C			



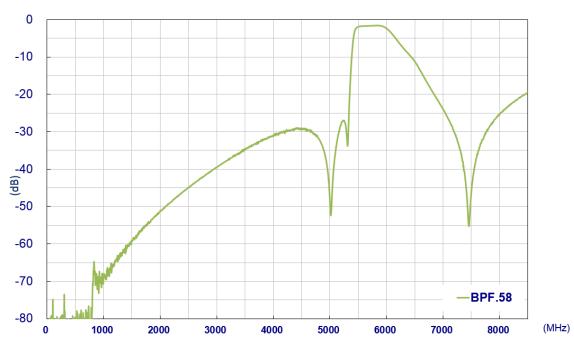
3. Electrical Specifications

3.1 S21

In Band View



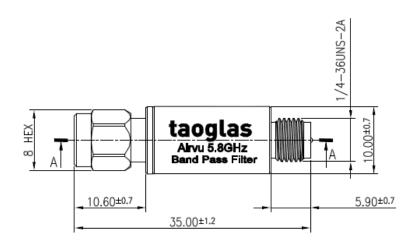
Wide Band View

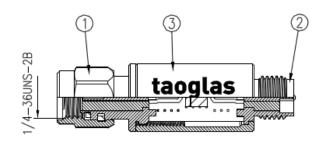




4. Mechanical Drawing (unit: mm)







	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.58.01

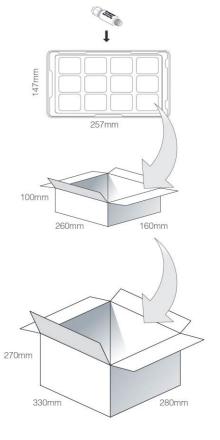
Packaging Specifications

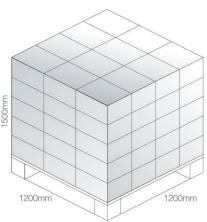
36 pcs BPF.58.01 per tray (3 pcs per section) Tray Dimensions - 257*147*17mm Total Weight - 374g

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



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