

The **AW-BPF-5800-6100-S** is a compact IP67-rated waterproof cavity band pass filter with a passband of **5800–6100 MHz**. It combines low insertion loss (<0.5 dB typ.) with high out-of-band rejection in a rugged outdoor housing, making it ideal for tower-mount and outdoor deployments.

Features

- Low insertion loss: <0.5 dB typical (<0.7 dB max.)
- High selectivity cavity design with sharp roll-off
- IP67 waterproof housing for outdoor / tower-mount use
- Average power handling >50 W
- Wide operating temperature: –40 °C to +85 °C
- Compact footprint: 79.2 × 44.2 × 27 mm, flange mounting

Applications

5.8 GHz ISM / FPV video links; U-NII-3/4; UAV communication systems.

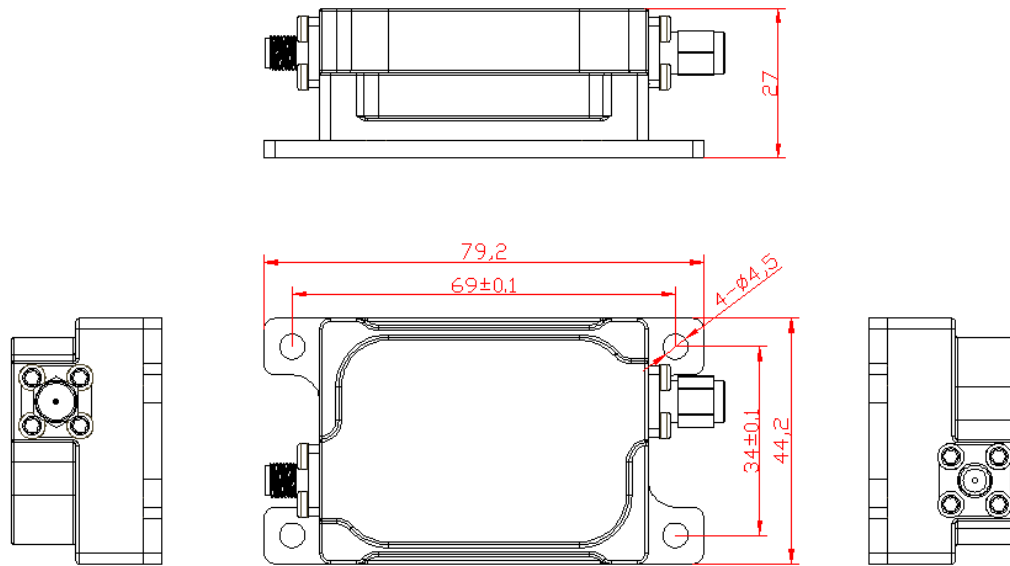
Electrical Specifications

Parameter	Unit	Specification
Pass Band	MHz	5800 – 6100
Insertion Loss	dB	< 0.5 typical; < 0.7 max.
VSWR	–	< 1.3
Impedance	Ω	50
Rejection (Attenuation)	dB	>57 dB @ DC – 5550 MHz >15 dB @ 5550 – 5700 MHz >15 dB @ 6200 – 6300 MHz >40 dB @ 6300 – 6400 MHz >60 dB @ 6400 MHz – 10 GHz
Average Power	W	> 50
Operating Temperature	°C	–40 to +85

Mechanical Specifications

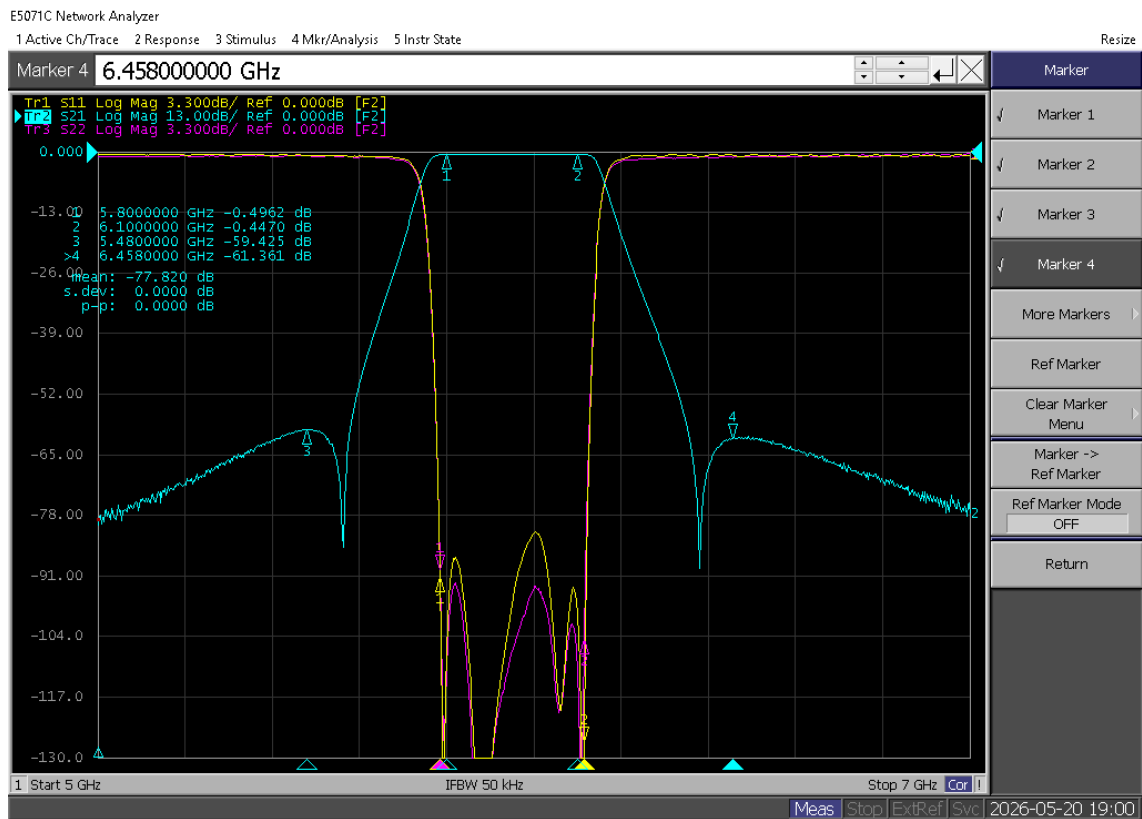
Connectors	–	SMA Female / SMA Male (SMA-K / SMA-J)
Ingress Protection	–	IP67
Dimensions (L × W × H)	mm	79.2 × 44.2 × 27 (mounting holes 4 × Ø4.5, 69 × 34 mm)
Color / Finish	–	Gray

Outline Drawing



Unit: mm. Tolerances unless otherwise specified: ±0.2 mm.

Typical Measured Response (S21 / S11)



Measured on vector network analyzer; typical unit shown.