

The **AW-BPF-3100-3500-S** is a compact IP67-rated waterproof cavity band pass filter with a passband of **3100–3500 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

5G NR n77/n78 infrastructure; US 3.45 GHz band; private wireless networks.

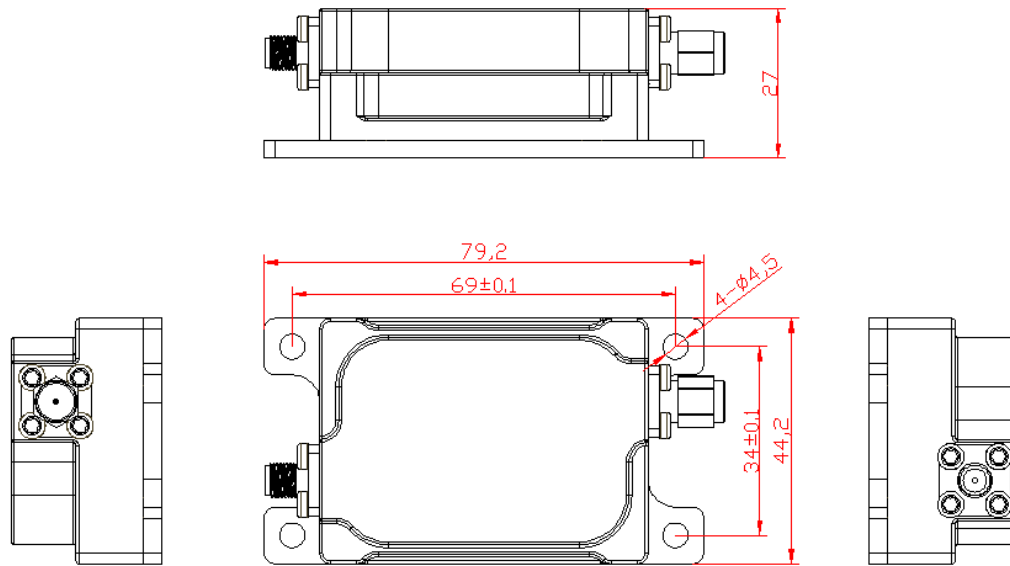
## Electrical Specifications

| Parameter               | Unit | Specification                                                                                                                          |
|-------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------|
| Pass Band               | MHz  | 3100 – 3500                                                                                                                            |
| Insertion Loss          | dB   | < 0.5 typical; < 0.7 max.                                                                                                              |
| VSWR                    | –    | < 1.3                                                                                                                                  |
| Impedance               | Ω    | 50                                                                                                                                     |
| Rejection (Attenuation) | dB   | >75 dB @ DC – 2750 MHz<br>>30 dB @ 2750 – 2900 MHz<br>>40 dB @ 3700 – 3750 MHz<br>>55 dB @ 3750 – 4000 MHz<br>>20 dB @ 4000 – 8500 MHz |
| Average Power           | W    | > 50                                                                                                                                   |
| Operating Temperature   | °C   | –40 to +85                                                                                                                             |

## Mechanical Specifications

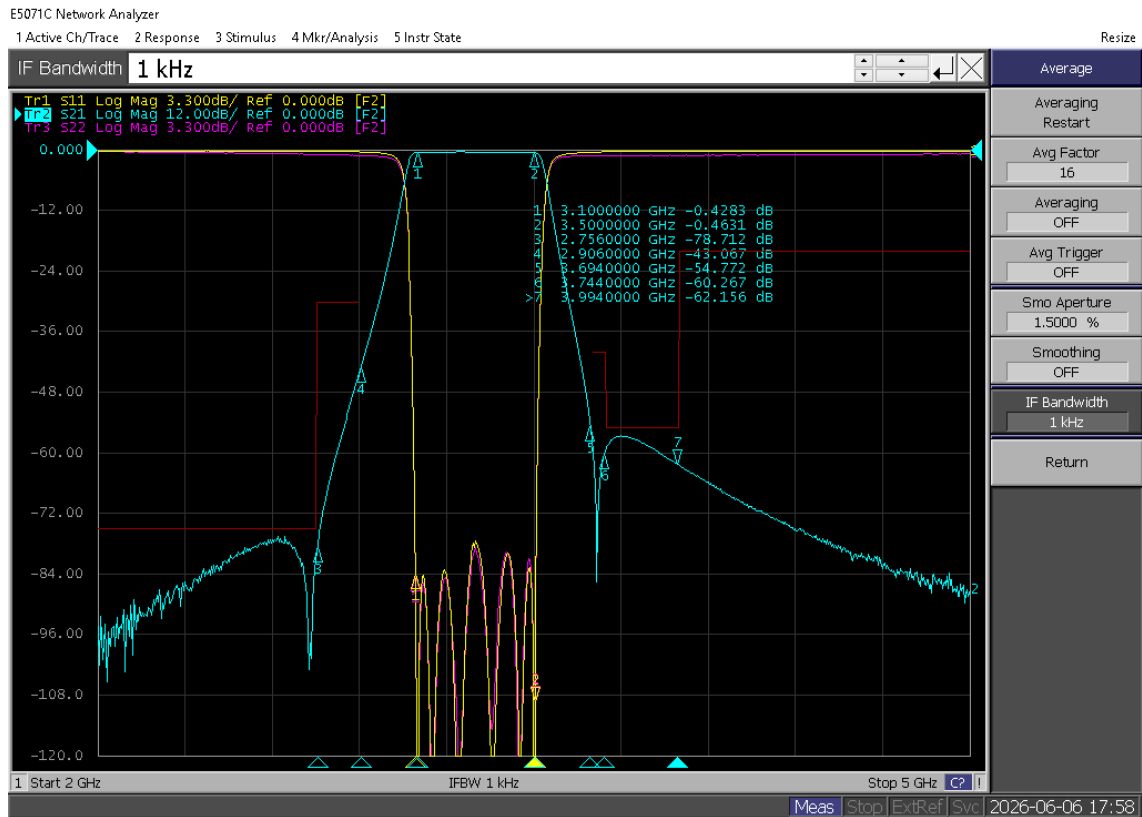
|                        |    |                                                        |
|------------------------|----|--------------------------------------------------------|
| Connectors             | –  | SMA Female / SMA Male (SMA-K / SMA-J)                  |
| Ingress Protection     | –  | IP67                                                   |
| 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.