

Wide Band Amplifiers

AOX Series

- 1-20GHz in Frequency Ranges
- Ultra Wide Temperature Range -269 to +100C
- 27dB Typical Gain
- Flat Response
- Low Voltage
- Low Cost
- UK Manufacture



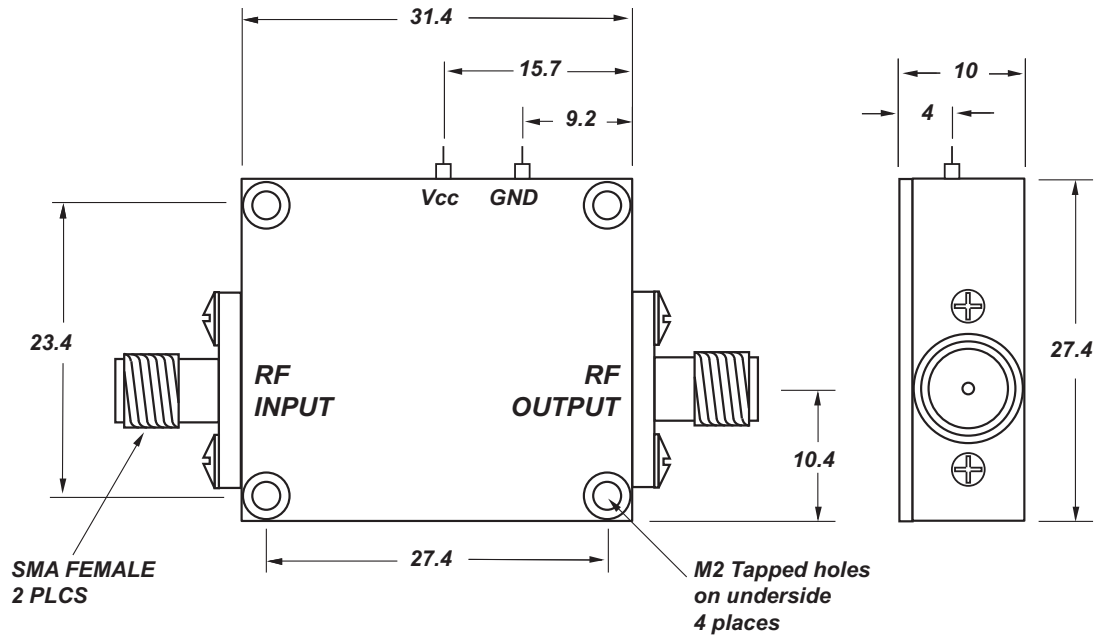
| General Specifications | |
|-------------------------------|--|
| Frequency Ranges Over | 1.0-20.0GHz |
| Operating Temperature Range:- | |
| Model AOX-XXXXXX | -20 +85C Ambient Conditions |
| Model AOX-XXXXXX-H | -55 +85C Ambient Conditions |
| Protected Environment | 4 - 358K |
| Short Term Maximum | +100C |
| DC Supply | +5V to +8V |
| Current @ +25C | 140mA typ. at +5V 150mA max. at +8V |
| RF Connector | SMA Female, Stainless Steel MIL-C-39012 |
| DC Connector | Filtercon & Ground Post |
| Housing | Aluminium Alloy |
| Finish | Alochrom 1200 |
| Dimensions | 31.5 x 27.5 x 10.0 mm (1.24 x 1.08 x 0.39 ins.) |

The AOX series are a range of miniature, versatile, small signal, low noise amplifier modules having a multi-octave bandwidth and a very wide operating temperature range. The MIC design utilises GaAs PHEMT distributed amplifier MMIC technology, together with proprietary matching circuits within a robust light-weight aluminium alloy housing fitted with SMA Female connectors. The amplifier modules are suitable for applications in telecommunications, satcoms, radar, countermeasures, EMC, test and measurement, radio astronomy and other highly demanding commercial and military systems.

Specifications over Operating Temperature Range -20 to +85C

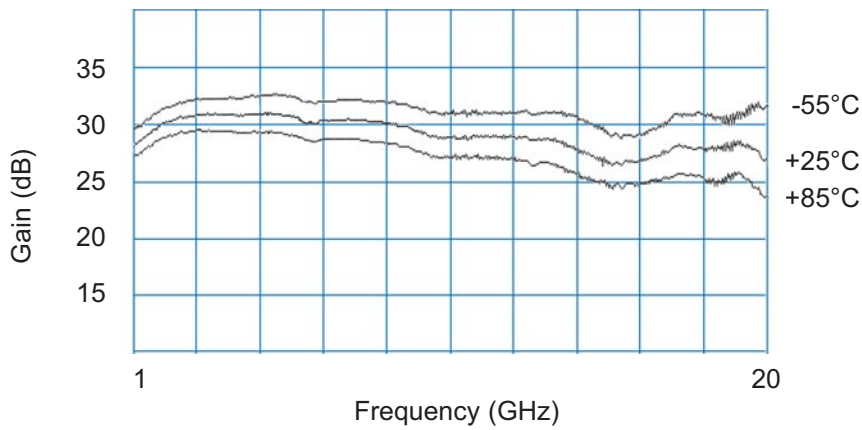
| Model No. | Frequency Range (GHz) | Small Signal Gain (dB) | | Gain Variation (+/-dB) typ. | Noise Figure (dB) typ. | Output Power at 1dB GCP (dBm) | | VSWR (:1) max. | |
|------------|-----------------------|------------------------|------|-----------------------------|------------------------|-------------------------------|------|----------------|-----|
| | | typ. | min. | | | typ. | min. | In | Out |
| AOX-010020 | 1.0-2.0 | 28.0 | 25.0 | 1.25 | 4.5 | 12.0 | 8.0 | 2.5 | 2.0 |
| AOX-010040 | 1.0-4.0 | 28.0 | 25.0 | 1.25 | 4.5 | 14.0 | 11.0 | 2.5 | 2.0 |
| AOX-010120 | 1.0-12.0 | 28.0 | 25.0 | 1.25 | 4.5 | 14.0 | 11.0 | 2.5 | 2.0 |
| AOX-010200 | 1.0-20.0 | 27.0 | 22.0 | 2.5 | 7.5 | 14.0 | 8.0 | 2.5 | 2.8 |
| AOX-020040 | 2.0-4.0 | 28.0 | 25.0 | 0.75 | 3.5 | 13.0 | 10.0 | 2.0 | 2.0 |
| AOX-020060 | 2.0-6.0 | 28.0 | 25.0 | 0.75 | 3.5 | 14.0 | 11.0 | 2.0 | 2.0 |
| AOX-020080 | 2.0-8.0 | 28.0 | 25.0 | 0.75 | 3.5 | 14.0 | 11.0 | 2.0 | 2.0 |
| AOX-020180 | 2.0-18.0 | 27.0 | 22.0 | 2.0 | 5.5 | 13.0 | 10.0 | 2.0 | 2.8 |
| AOX-030060 | 3.0-6.0 | 28.0 | 25.0 | 0.75 | 3.5 | 14.0 | 11.0 | 2.0 | 2.0 |
| AOX-030120 | 3.0-12.0 | 28.0 | 25.0 | 1.0 | 3.5 | 14.0 | 11.0 | 2.0 | 2.0 |
| AOX-030150 | 3.0-15.0 | 26.0 | 22.0 | 2.0 | 4.0 | 13.0 | 10.0 | 2.0 | 2.8 |
| AOX-040080 | 4.0-8.0 | 28.0 | 25.0 | 0.75 | 3.0 | 14.0 | 11.0 | 2.0 | 2.0 |
| AOX-040120 | 4.0-12.0 | 28.0 | 25.0 | 1.25 | 3.5 | 14.0 | 11.0 | 2.0 | 2.0 |
| AOX-040180 | 4.0-18.0 | 26.0 | 22.0 | 2.0 | 5.5 | 13.0 | 10.0 | 2.0 | 2.8 |
| AOX-060120 | 6.0-12.0 | 28.0 | 25.0 | 1.25 | 3.5 | 13.0 | 10.0 | 2.0 | 2.0 |
| AOX-060180 | 6.0-18.0 | 27.0 | 22.0 | 2.5 | 5.5 | 13.0 | 10.0 | 2.0 | 2.8 |
| AOX-060200 | 6.0-20.0 | 27.0 | 22.0 | 2.5 | 7.5 | 13.0 | 9.0 | 2.0 | 2.8 |
| AOX-080180 | 8.0-18.0 | 26.0 | 22.0 | 2.5 | 5.5 | 13.0 | 10.0 | 2.0 | 2.8 |
| AOX-120180 | 12.0-18.0 | 26.0 | 22.0 | 2.0 | 5.5 | 13.0 | 10.0 | 2.0 | 2.8 |
| AOX-120200 | 12.0-20.0 | 26.0 | 22.0 | 2.0 | 7.5 | 13.0 | 9.0 | 2.0 | 2.8 |
| AOX-150200 | 15.0-20.0 | 26.0 | 22.0 | 2.0 | 7.5 | 13.0 | 9.0 | 2.0 | 2.8 |

Active Components

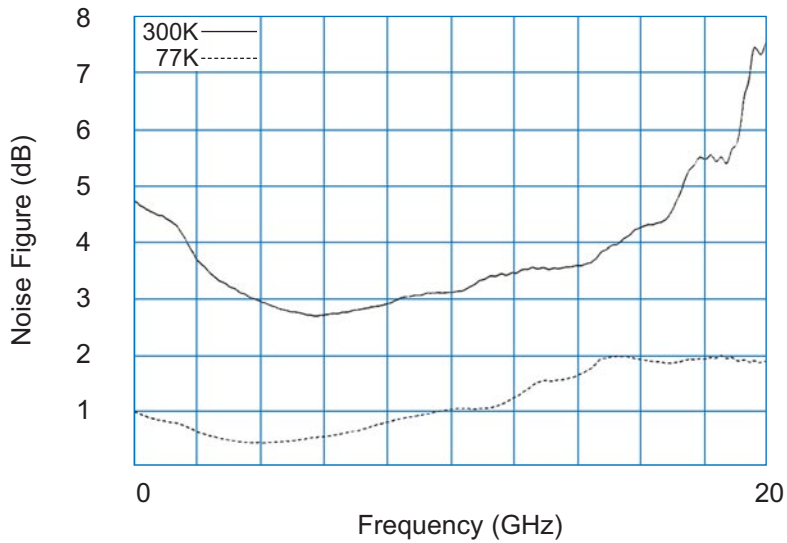


All dimensions in mm

Typical Gain Variation with Frequency
Model AOX-010200



Typical Noise Figure Variation with Frequency
Model AOX-010200



We reserve the right to change standard product specifications without notice but will be pleased to consider control drawings for quotation.

Active Components