

Features:

- Wide bandwidth, specification from 1000~2000MHz
- Low noise figure, high gain with good gain flatness
- Low VSWR, unconditional stable
- Small size, low cost
- SMA female connector I/O
- Single DC power supply
- Operating temperature -40~+75°C, storage temperature -55~+125°C

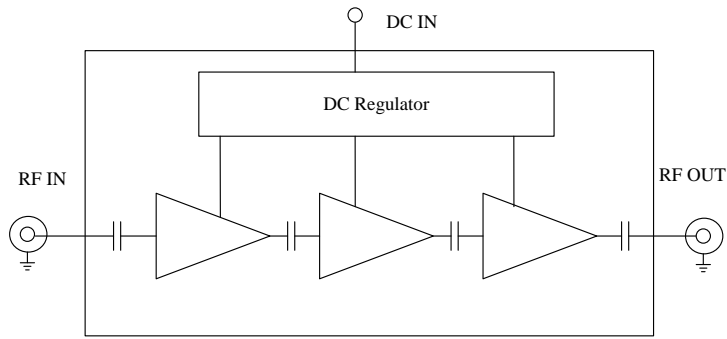
General Description

ABP0200-50-4028 is a three stage GaAs MESFET linear power amplifier module operating in the frequency of 1.0GHz to 2.0 GHz. The amplifier provides 40dB of small signal gain, +28dBm of typical output power at 1dB gain compression. The amplifier requires only a positive DC power supply, its built-in DC voltage regulator allow the amplifier module to operate over a wide range of DC supply voltage without affecting the RF performances with proper heat dissipation.

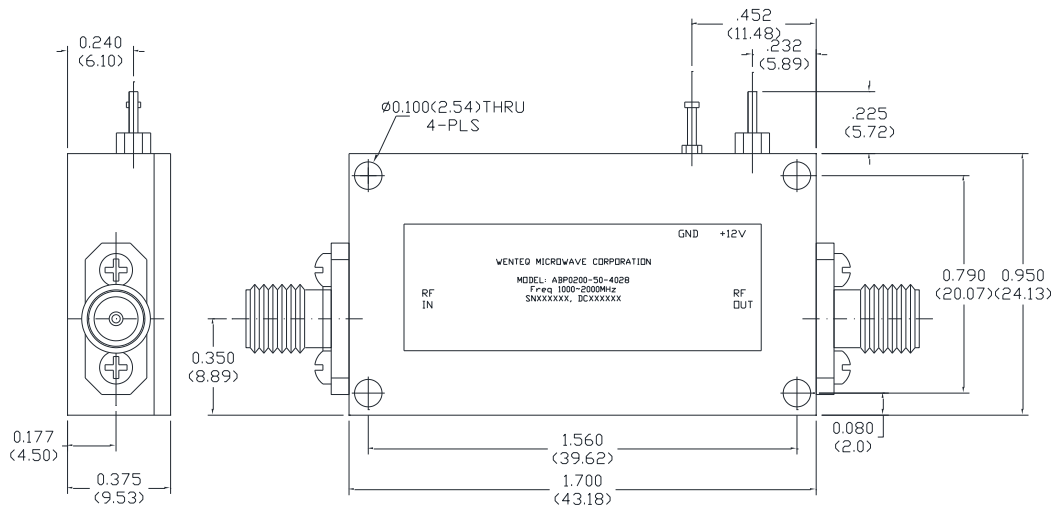
Electrical Specifications

| Parameters | Units | Specifications | | |
|-------------------------|-------|----------------------|---------|---------|
| | | Minimum | Typical | Maximum |
| Frequency Range | MHz | 1000 | | 2000 |
| P-1dB Compression Point | dBm | +27.0 | +28.0 | |
| Output IP3 | dBm | +40.0 | +45.0 | |
| Nominal SS Gain @25°C | dB | 37.0 | 40.0 | 43.0 |
| Gain flatness | dB | | +/-1.0 | +/-1.25 |
| Gain Variation | dB | | +/-1.5 | |
| Noise Figure | dB | | 1.5 | 2.0 |
| Input VSWR | - | | 1.5:1 | 1.8:1 |
| Output VSWR | - | | 1.5:1 | 1.8:1 |
| Reverse Isolation | dB | 50.0 | | |
| Spurious | dBc | | | -60.0 |
| Operating Temperature | °C | -40.0 | | +75.0 |
| Survival Temperature | °C | -55.0 | | +85.0 |
| DC Voltage | V | +11.5 | +12.0 | +16.0 |
| DC Supply Current | mA | 350 | 500 | 600 |
| In/Out connectors | | SMA female | | |
| Size | | 1.7''x0.95''x0.375'' | | |

Functional Diagram



Mechanical Structure:



Note: All units in inches (mm).

Housing Material and Surface Finish:

- Body and cover material: aluminum
- Surface finish: nickel plated
- Connector material: Copper
- Connector surface finish: gold plated

Absolute Maximum Ratings

| | |
|-----------------------|-----------|
| DC Voltage | +16V |
| RF Input Power | +15dBm |
| Storage Temperature | -55~+85°C |
| Operating Temperature | -40~+75°C |