

Key Features

- 1 ~ 500 MHz, 50 Ohm impedance
- 1.0 dB noise figure
- 20 dB gain
- 1.5:1 VSWR
- 10 dBm P_{1dB}
- Precision machined housing
- RoHS compliant

Applications

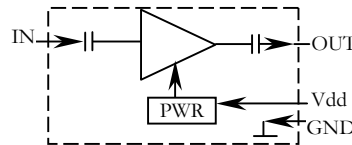
- VHF & UHF
- Receiver amplifiers
- RF bench tests
- Fixed wireless applications



Absolute Maximum Ratings

| | |
|-------------------------------------|----------------|
| Input CW RF Power | 10 dBm |
| Maximum DC Voltage, V _{dd} | -0.5, +32 V |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -40°C to +85°C |

Functional Block Diagram



Ordering Information

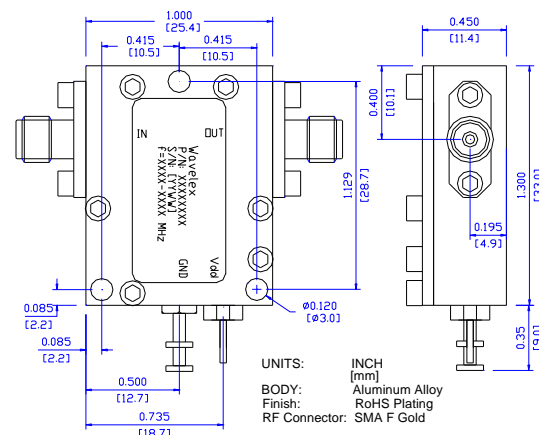
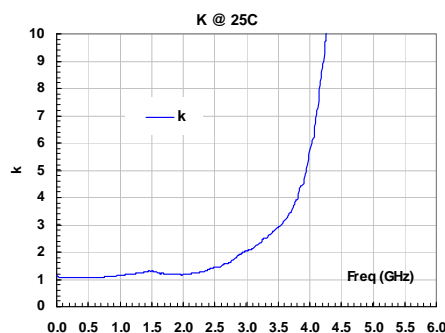
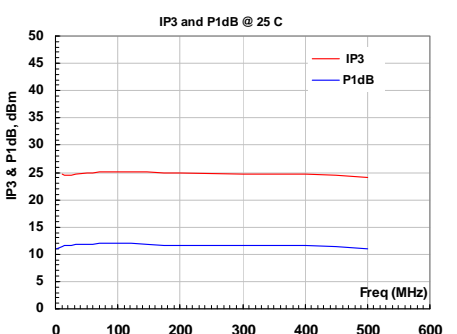
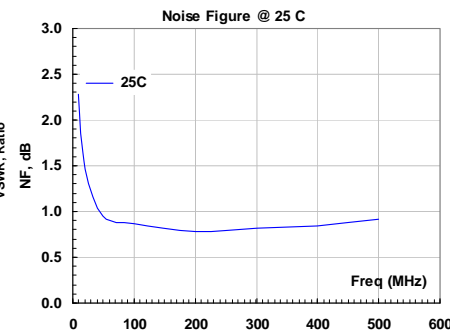
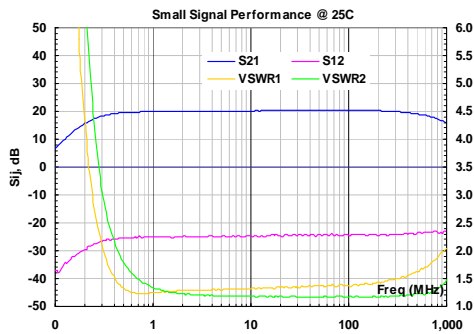
| Model | Connectors |
|----------|------------|
| WLA0005B | SMA Female |

Marking: WLA0005B

Specifications (Tested at +25°C)

| tem | Symbol | Test Constraints | Min | Nom | Max | Unit |
|---------------------------------------|-------------------|---|-----|---------|-------|-------|
| Frequency Range | BW | 50 Ohm Impedance | 1 | | 500 | MHz |
| Gain | S ₂₁ | 1 – 500 MHz | 18 | 20 | 22 | dB |
| Noise Figure | NF | 50 – 500 MHz | | 1.0 | 1.4 | dB |
| VSWR | SWR _i | 1 – 500 MHz, all RF ports | | 1.5:1 | 1.8:1 | Ratio |
| Gain Flatness | ΔG | 1 – 500 MHz | | +/- 0.5 | | dB |
| Reverse Isolation | S ₁₂ | 1 – 500 MHz | 15 | 20 | | dB |
| Output Power 1dB Compression Point | P _{1dB} | 1 – 500 MHz | 8 | 10 | | dBm |
| Output-Third-Order Interception point | IP ₃ | Two-Tone, P _{out} = 0 dBm each, 1 MHz separation | 18 | 20 | | dBm |
| Current Consumption | I _{dd} | V _{dd} = +12.0 V | | 25 | | mA |
| Power Supply Operating Voltage | V _{dd} | | +8 | +12 | +16 | V |
| Operating Temperature | T _o | | -40 | | +85 | °C |
| Thermal Resistance | R _{th,c} | Junction to case | | | 215 | °C/W |

Typical Performance



Outline, IP-3