

Key Features

- 470 ~ 960 MHz, 50 Ohm impedance
- 29 dBm P_{1dB}
- 14 dB gain
- 1.8:1 VSWR
- 43 dBm IP₃
- Precision machined housing
- RoHS compliant

Applications

- VHF & UHF
- PA driver amplifiers
- RF bench tests
- Fixed wireless communication

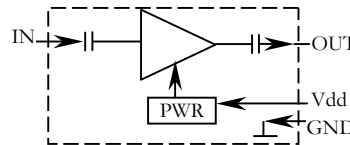
Additional heat sink is required for continuous operation!



Absolute Maximum Ratings

| | |
|-----------------------------|----------------|
| Input CW RF Power | 24 dBm |
| DC Voltage, V _{dd} | -0.5, +16V |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -40°C to +85°C |

Functional Block Diagram



Ordering Information

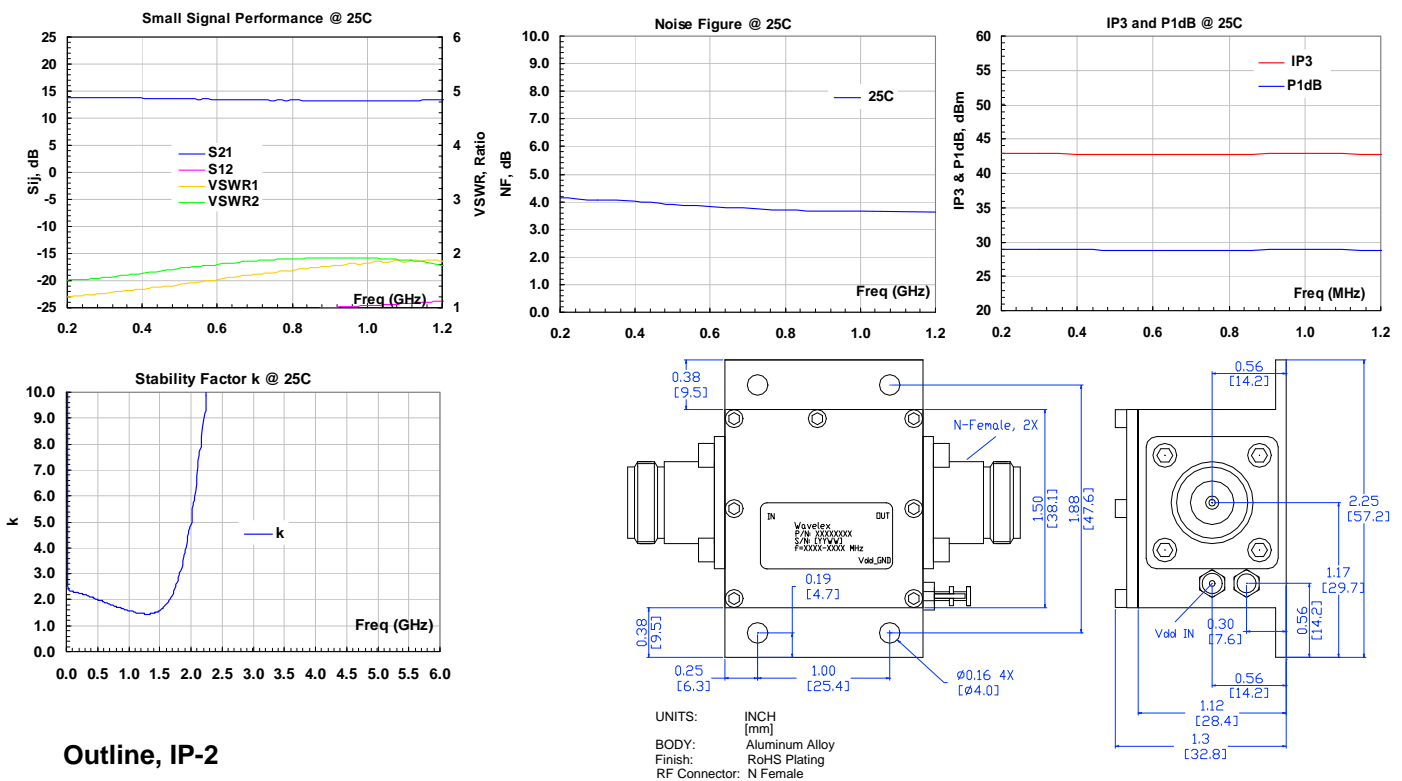
| Model | Connectors |
|----------|------------|
| WPA0409N | N Female |

Marking: WPA0409N

Specifications (Tested at +25°C)

| tem | Symbol | Test Constraints | Min | Nom | Max | Unit |
|---------------------------------------|-------------------|--|-----|---------|-----|-------|
| Frequency Range | BW | 50 Ohm Impedance | 470 | | 960 | MHz |
| Gain | S ₂₁ | 470 – 960 MHz | 12 | 14 | 16 | dB |
| Noise Figure | NF | 470 – 960 MHz | | 3.7 | | dB |
| VSWR | SWR _i | 470 – 960 MHz | | 1.8:1 | 2:1 | Ratio |
| Gain Flatness | ΔG | 470 – 960 MHz | | +/- 0.5 | | dB |
| Reverse Isolation | S ₁₂ | 470 – 960 MHz | | 25 | | dB |
| Output Power 1dB Compression Point | P _{1dB} | 470 – 960 MHz | 27 | 29 | | dBm |
| Output-Third-Order Interception point | IP ₃ | Two-Tone, P _{out} = 10 dBm each, 1 MHz separation | 40 | 43 | | dBm |
| Current Consumption | I _{dd} | V _{dd} = +12.0 V | | 220 | | mA |
| Power Supply Operating Voltage | V _{dd} | | +12 | | +16 | V |
| Operating Temperature | T _o | | -40 | | +85 | °C |
| Thermal Resistance | R _{th,c} | Junction to case | | | 32 | °C/W |

Typical Performance



Outline, IP-2