# WLA2026A

## 2.0 – 2.6 GHz, Low Noise Amplifier

**August 2016, REV C**

### Key Features

- 2.0 ~ 2.6 GHz, 50 Ohm impedance
- 0.65 dB noise figure
- 26 dB gain
- 1.3:1 VSWR
- 12 dBm $P_{1dB}$
- Precision machined housing
- RoHS compliant

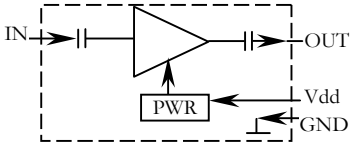
### Applications

- PCS, 3G
- WiMAX
- Fixed wireless
- Measurement
- Mobile Infrastructures


### Absolute Maximum Ratings

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

### Functional Block Diagram




### Ordering Information

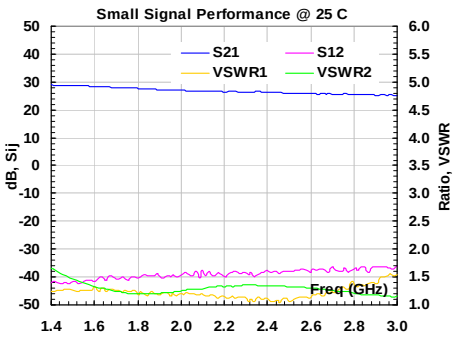
| Model | Connectors |
|---|---|
| **WLA2026A** | SMA Female |

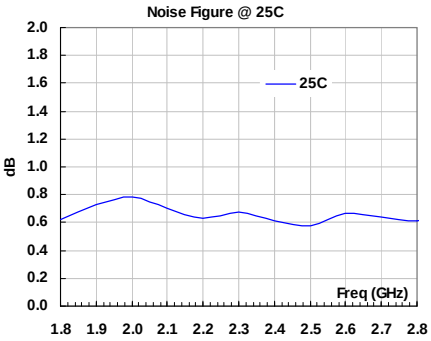
**Marking:** **WLA2026A**

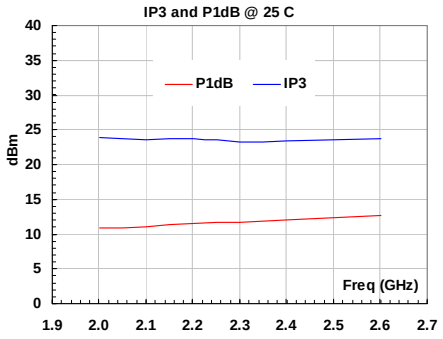
### Specifications (Tested at +25°C)

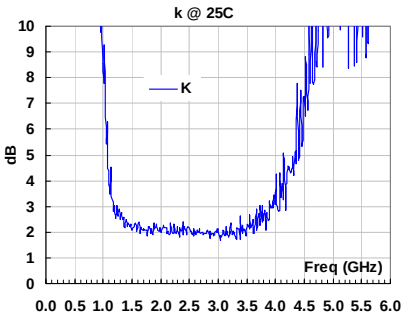
| tem | Symbol | Test Constraints | Min | Nom | Max | Unit |
|---|---|---|---|---|---|---|
| Frequency Range | BW | 50 Ohm Impedance | 2.0 | | 2.6 | GHz |
| Gain | $S_{21}$ | 2.0 – 2.6 GHz | 24 | 26 | 28 | dB |
| Noise Figure | NF | 2.0 – 2.6 GHz | | 0.65 | 0.9 | dB |
| VSWR | $SWR_i$ | 2.0 – 2.6 GHz, all RF ports | | 1.3:1 | 1.5:1 | Ratio |
| Gain Flatness | ΔG | 2.0 – 2.6 GHz | | +/- 0.8 | | dB |
| Reverse Isolation | $S_{12}$ | 2.0 – 2.6 GHz | | 37 | | dB |
| Output Power 1dB Compression Point | $P_{1dB}$ | 2.0 – 2.6 GHz | 8.0 | 12 | | dBm |
| Output-Third-Order Interception point | $IP_3$ | Two-Tone, $P_{out}$ = 0 dBm each, 1 MHz separation | 20 | 23 | | dBm |
| Current Consumption | $I_{dd}$ | $V_{dd}$= +12.0 V | | 55 | | mA |
| Power Supply Operating Voltage | $V_{dd}$ | | +7 | +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