

LNA specifications©

March 2021

Maximum ratings:

| Parameter | Maximum rating | Units |
|-----------------------------|----------------|-------|
| Supply voltage | 5.5 | Volts |
| Supply current | 100 | mA |
| RF input power | 25 | dBm |
| Dissipated power | 350 | mW |
| Operating temperature range | -40 to 85 | Deg C |
| Storage temperature | -65 to 160 | Deg C |
| MSL | 1 | |

Operating parameters:

| Parameter | Conditions | Min | Typ | Max | Units |
|----------------|---|-----|----------------------|-----|-------|
| Supply voltage | DC operating voltage | 3.0 | | 5.0 | Volts |
| Supply current | VCC=5.0V, TA=25 Deg C | | 46 | | mA |
| | VCC = 3.0V, TA=25 Deg C | | 25 | | mA |
| Noise Figure | VCC=5.0V, TA=25 Deg C, 50 Ohm I/O impedance, 100 Mhz, 900 Mhz, 2.5 Ghz | | 0.65 0.74 0.96 | | dB |

| | | | | | |
|-----------------------|--|--|----------------------|--|----|
| | VCC=3.0V, TA=25 Deg C, 50 Ohm I/O impedance | | | | |
| | 100 Mhz, 900 Mhz, 2.5 Ghz | | 0.6 0.73 0.93 | | |
| Small signal gain | VCC=5.0V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C | | 22.0 18.0 10.0 | | dB |
| | VCC=3.3V. 100 Mhz, 900 Mhz, 2.5 Ghz, TA=25 Deg C | | 21.8 17.0 10.0 | | |
| Input return loss | VCC=5.0V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C | | 12.0 14.8 15.8 | | dB |
| | VCC=3.3V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C | | 10.0 13.7 13.8 | | |
| Output return loss | VCC = 5.0V, 100 Mhz, 900 Mhz, 2.5 Ghz, TA=25 Deg C | | 21.7 19.7 15.9 | | dB |
| | VCC = 3.3V, 100 Mhz, 900 Mhz, 2.5 Ghz, | | 20.0 27.9 21.9 | | |

| | | | | | |
|--------------------|--|--|--|--|-----|
| | TA=25 Deg C | | | | |
| P1dB | VCC=5.0V, 100 Mhz, 900 Mhz 2.5 Ghz, TA=2.5 Deg C VCC=3.3V, 100 Mhz, 900 Mhz, 2.5 Ghz, TA=25 Deg C | | 20.4 21.8 22.0 18.0 19.0 19.8 | | dBm |
| OIP3 | VCC=5.0V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C. VCC=3.3V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C | | 29.7 31.6 35.2 28.0 18.8 20.0 | | dBm |
| Input return loss | VCC=5.0V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C. VCC=3.3V, 100 Mhz, 900 Mhz, 2.5 Ghz, TA=25 Deg C | | 13.0 14.8 15.2 9.8 13.7 14.0 | | dB |
| Output return loss | VCC=5.0, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C | | 21.0 19.0 15.4 | | dB |

| | | | | | |
|---------------|---|--|--|--|----|
| | VCC=3.3V, 100 Mhz, 900 Mhz, 2.5 Ghz TA=25 Deg C | | 20.0, 27.4 21.7 | | |
| MSL | | | 1 | | |
| Length | | | 41.16 | | mm |
| Width | | | 20.66 | | |
| Height | | | 10.00 | | |
| Weight | | | < 1 | | oz |
| RF connectors | | | SMA right angle launch, female | | |

Image: Top view.

