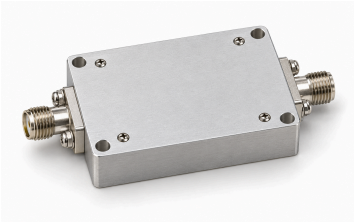
# 400–6000 MHz LNA with RF-Output DC Feed

This LNA covers 400–6000 MHz with 30 dB typical gain. Noise figure is 1.2 dB maximum, and saturated output 10 dBm typical. Typical supply current is 100 mA.

DC +5 V enters through the SMA-K female RF output, as the original OUT/+5V drawing confirms. The input is SMA-K female. Dimensions are 36.2 × 24 × 10 mm; absolute supply limit is 7 V.



## Electrical specifications

| Parameter | Value | Unit |
|---|---|---|
| Operating frequency | 400–6000 | MHz |
| Gain | 30 (Typical) | dB |
| Noise figure | ≤1.2 | dB |
| Saturated output power (Psat) [1] | 10 (Typical) | dBm |
| Input S11 (signed source value) [2] | −10 (Typical) | dB |
| Supply voltage | 5 (Typical) | VDC |
| Dynamic current | 100 (Typical) | mA |

[1] Saturated output (Psat), not P1dB or guaranteed linear output.

[2] Negative S11 convention retained from source; not recast as positive return loss.

## Absolute maximum ratings

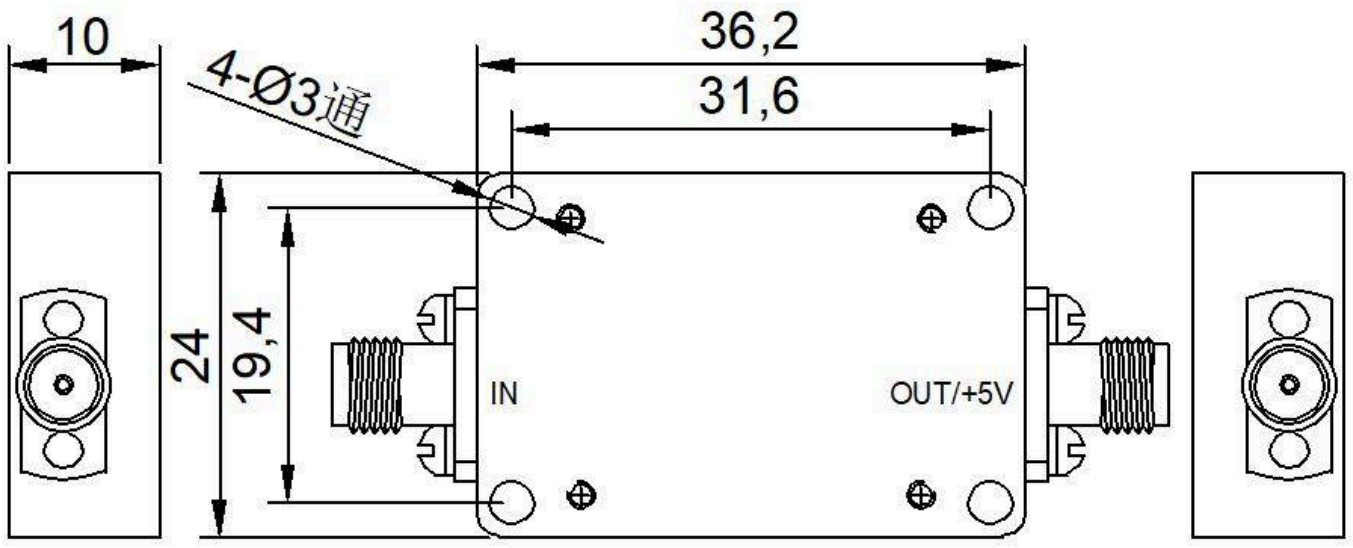
| Parameter | Value | Unit |
|---|---|---|
| Absolute maximum supply voltage | ≤7 (Absolute maximum rating; continuous operation or performance at this limit is not established. Maximum: 7 VDC.) | VDC |
| Absolute maximum input power | ≤12 (Absolute maximum rating; continuous operation or performance at this limit is not established. Maximum: 12 dBm.) | dBm |
| Operating temperature | −40–+70 | °C |
| Storage temperature | −40–+85 | °C |

## Interfaces and contacts

| Interface | Specification |
|---|---|
| RF input connector | SMA-K female |
| RF output connector | SMA-K female |
| RF port carrying DC supply | OUT / +5 V (DC +5 V supplied through the RF output; source drawing labels OUT/+5V.) |

## Mechanical specifications

| Parameter | Value | Unit |
|---|---|---|
| Body dimensions | 36.2 × 24 × 10 | mm |
| Mounting-hole center spacing | 31.6 × 19.4 | mm |
| Mounting holes | 4 × Φ3 (Four through holes.) | mm |




**Document notice**

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.