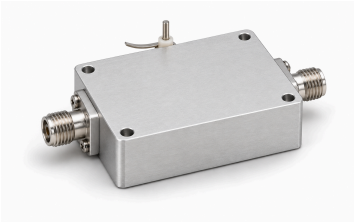
30–6000 MHz 30 dB Low-Noise Amplifier



The 30 MHz lower band edge supports wideband receive chains through 6000 MHz. Typical gain is 30 dB and typical noise figure 1.2 dB. The table lists saturated output as 10 dBm maximum.

Supply is 5 V typical, with 85 mA typical current. SMA-K female ports, feed-through DC and the 36.2 × 24 × 10 mm housing define integration. Maximum input 12 dBm is an absolute rating.

Electrical specifications

Parameter	Value	Unit
Operating frequency	30–6000	MHz
Gain	30 (Typical)	dB
Noise figure	1.2 (Typical)	dB
Saturated output power (Psat) [1]	≤10	dBm
Input S11 (signed source value) [2]	−10 (Typical)	dB
Supply voltage	5 (Typical)	VDC
Dynamic current	85 (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

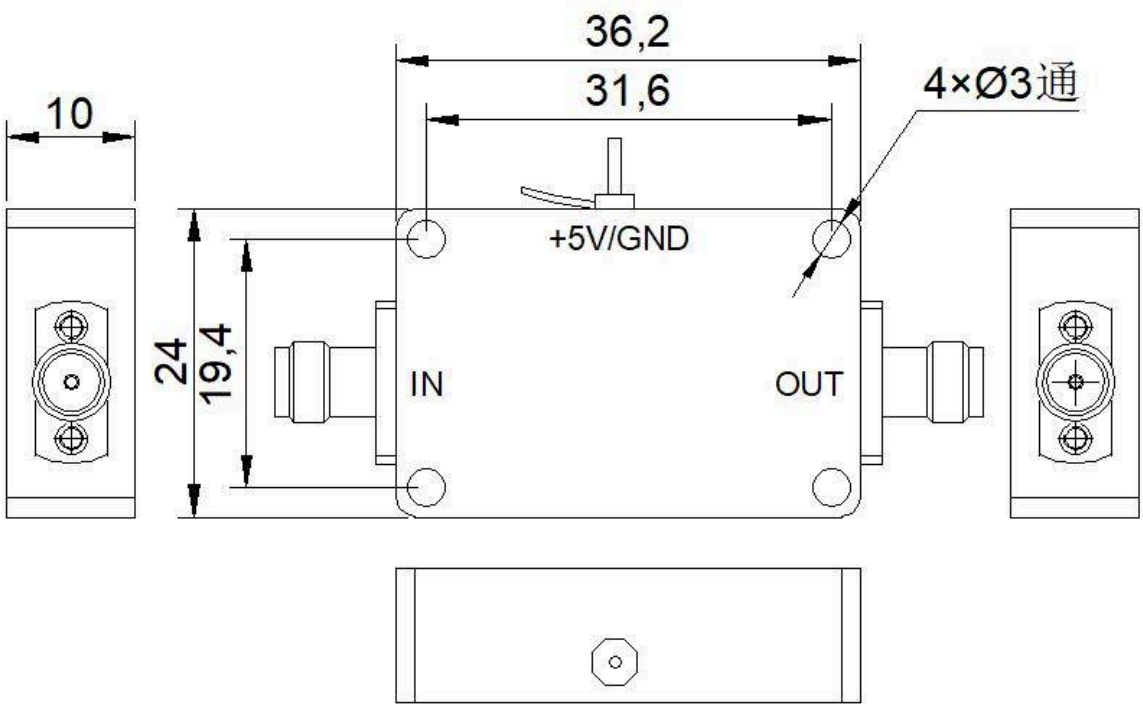
Parameter	Value	Unit
Absolute maximum supply voltage	≤7 (Absolute maximum rating; continuous operation or performance at this limit is not established. Maximum: 7 VDC.)	VDC
Absolute maximum input power	≤12 (Absolute maximum rating; continuous operation or performance at this limit is not established. 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
DC supply interface	Feed-through capacitor
Ground interface	Grounding metal sheet

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.