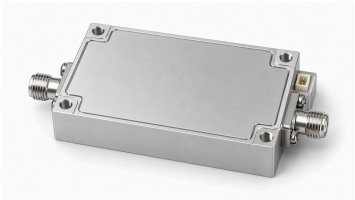
20–18000 MHz Broadband Low-Noise Amplifier



LCLNA-20-18000-35 covers 20–18000 MHz with at least 35 dB gain and an output 1 dB compression point of at least +10 dBm. It serves broadband receiver front ends, signal monitoring and RF test chains; typical spurious suppression is 60 dBc.

The module uses a 5 V normal operating supply and draws 170 mA typically. SMA female RF input and output connectors flank a 50 × 30 × 14 mm aluminium-alloy body weighing less than 100 g. Four Ø2.8 mm mounting holes have a 45 × 25 mm centre pattern.

Electrical specifications

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	BW	20	-	18000	MHz
Gain	G	35	-	-	dB
Output 1 dB compression point	OP1dB	+10	-	-	dBm
Spurious suppression	Spur	-	60	-	dBc
Operating current	IDD	-	170	-	mA

RF interfaces

Interface	Specification
RF input connector	SMA, female
RF output connector	SMA, female

Normal operating conditions

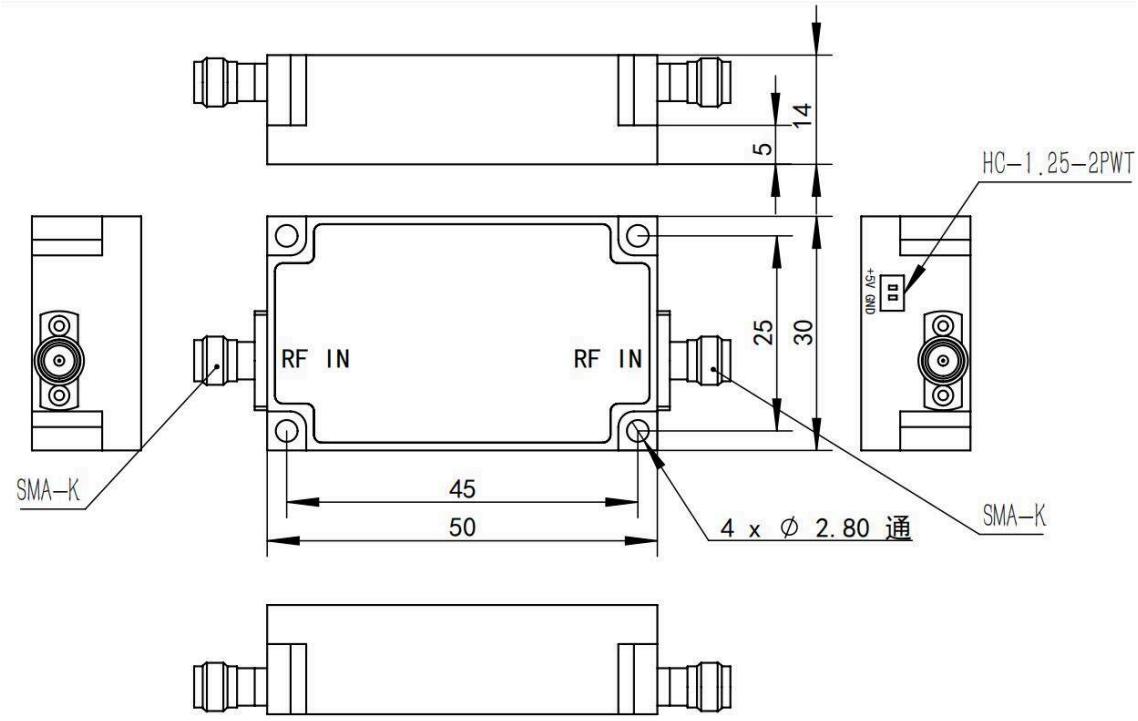
Parameter	Value	Unit
Operating voltage	+5	V
Operating temperature	–40–+65	°C
Storage temperature	–40–+70	°C

Absolute operating limits

Parameter	Value	Unit
Absolute supply-voltage limit	+5.5	V
Absolute operating-temperature limits	–40–+70	°C
Absolute storage-temperature limits	–40–+85	°C

Mechanical specifications

Parameter	Value	Unit
Enclosure material	Aluminum alloy	-
Weight	< 100	g
Body dimensions	50 × 30 × 14 (Body only; connector and supply-pin protrusions excluded.)	mm
Mounting holes	4 × Ø2.8	mm
Mounting-hole pitch	45 × 25	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.