2000–18000 MHz RF Amplifier Module, 10 W Typical Saturated Output

Typical saturated output power is 10 W. The table specifies 40 dB typical gain and 0.2 µs typical PTT switching at the stated 28 V DC, 25°C, 50Ω and 0 dBm input conditions. Current is 2 A typical at Pout = 10 W. The separate load-VSWR absolute limit is 5:1 at Pout = 5 W. The drawing gives an 80×60×12 mm body.



Electrical specifications

+28.0 V DC; 25°C; 50Ω; input power = 0 dBm

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	BW	2000	-	18000	MHz
Saturated RF output power	Psat	-	10	-	W
Power gain	Gp	-	40	-	dB
Power-gain flatness	Gp	-	±1	-	dB
Harmonics @10 W	H	-	-10	-	dBc
PTT switching time	Spur	-	0.2	-	µs
Input/output impedance	Impedance	-	50	-	Ω
Operating voltage	VDC	24	28	-	V
Power-added efficiency	Eff	-	20	-	%
Current consumption @Pout = 10 W	IDD	-	2	-	A

Absolute maximum ratings

Parameter	Value	Unit
RF input drive without damage [1]	+5	dBm
Load VSWR tolerance @Pout = 5 W [2]	5:1	-
Thermal-overload shutdown [3]	85	°C

[1] Max

[2] All load phases; the source specifies continuous amplitude.

[3] Amplifier shutdown.

Environmental specifications — design to meet

Parameter	Minimum	Typical	Maximum	Unit
Operating temperature	-20	-	50	°C
Storage temperature	-25	-	65	°C

RF and power/control connectors

Interface	Specification
RF input connector	SMA, female
RF output connector	SMA, female
DC interface connector	Feedthrough capacitor

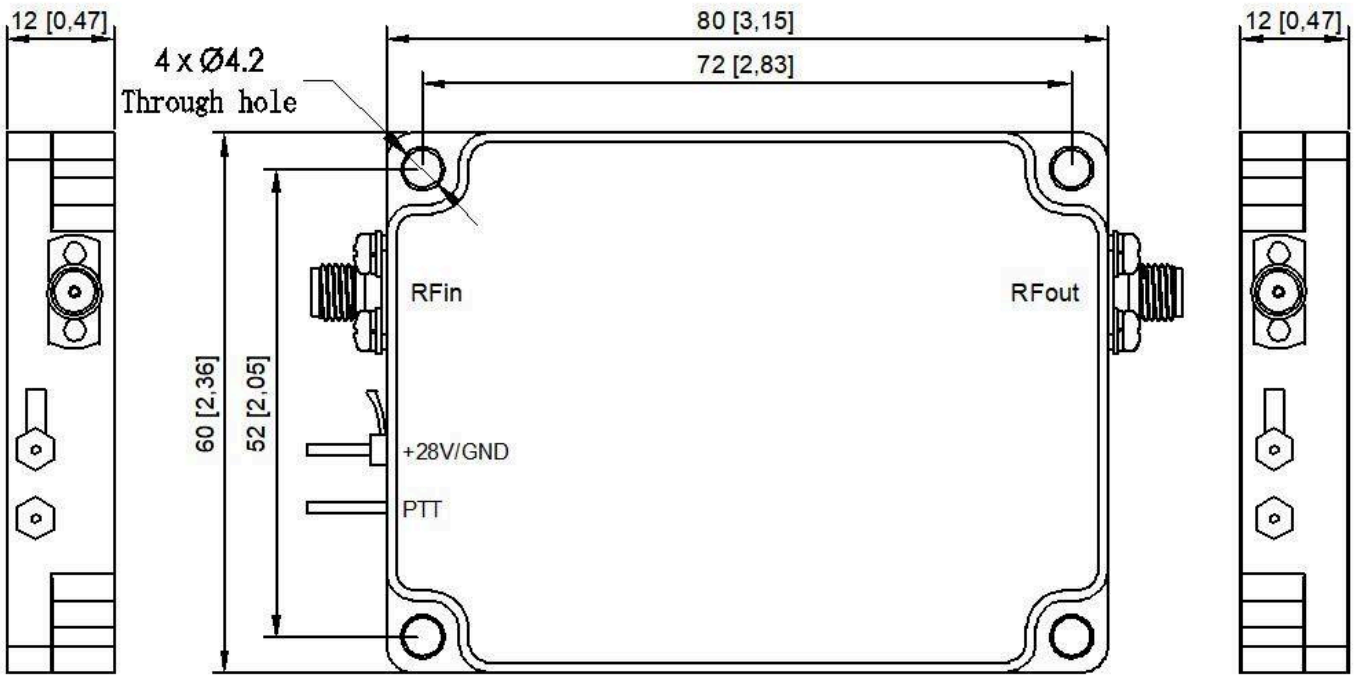
DC interface pinout

Pin #	Description	Specification
1	VDD/GND	28 V DC / Ground
2	PTT	Vd pulse-control bit; level and polarity not specified.

Mechanical specifications

Parameter	Value	Unit
Body dimensions	80 × 60 × 12 (Housing dimensions from the outline drawing, excluding connector projections. The source mechanical table marks the dimensions as Max.)	mm
Weight	0.5 (Typ)	kg
Mounting-hole centre spacing	72 × 52	mm
Mounting holes	4 × Ø4.2	mm

Mechanical Outline



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.