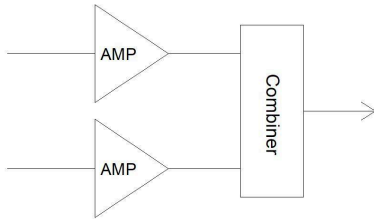


300 MHz–3 GHz Two-Input LNA and Combiner

Two-input receive amplifier and combiner with 30 dB typical gain, 2 dB typical noise figure and 170 mA typical current.



Electrical specifications

Parameter	Value	Unit	Notes
Operating frequency	300–3000	MHz	-
Gain	30	dB	Typical: 30 dB.
Noise figure	2	dB	Typical: 2 dB.
Saturated output power (Psat)	7	dBm	Saturated output (Psat), not P1dB or guaranteed linear output. Typical: 7 dBm.
Input S11 (signed source value)	–10	dB	Negative S11 convention retained from source; not recast as positive return loss. Typical: -10 dB.
Supply voltage	5	VDC	Typical: 5 VDC.
Dynamic current	170	mA	Typical: 170 mA.

Absolute maximum ratings

Parameter	Value	Unit
Absolute maximum supply voltage	≤6 (Absolute maximum rating; continuous operation or performance at this limit is not established. Maximum: 6 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

Parameter	Value	Unit
Number of RF inputs	2	-
Number of combined RF outputs	1	-

Interfaces and contacts

Parameter	Value	Unit
Amplification and combining paths	Two amplified inputs combine into one output (The source does not define per-path versus simultaneous-input test conditions, input isolation or amplitude/phase balance; no guaranteed combining improvement is derived.)	-
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	50 × 40 × 13	mm
Mounting-hole center spacing	45.6 × 35.6	mm
Mounting holes	4 × Φ2.7 (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.