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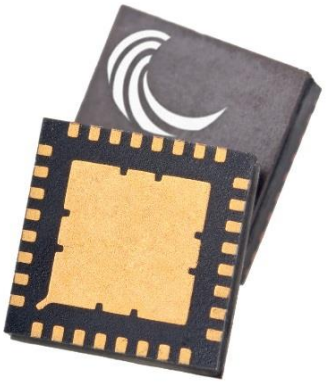
Linwave QFN 2-18 GHz LNA

LW48-793135



Features:

- Frequency from 2-18GHz
- Nominal gain : 24dB
- Low Noise Figure <2.5dB, typically 2.1dB
- TOIP typically +25dBm
- Quiescent bias Vd=4V, Id=120mA
- QFN
- Integrated DC blocks

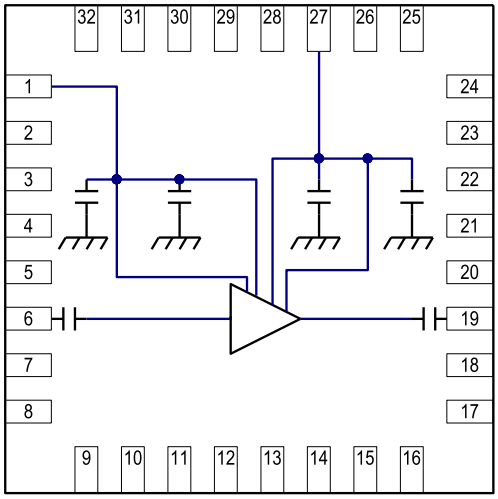
Applications:

- Communications systems
- Low noise receivers

General Description:

The LW48-793135 provides an easy to use LNA with a low noise figure across a wide bandwidth. Its high performance makes it versatile and suitable for both commercial and military use.

Functional Diagram:



Pin Designations	
Pin No.	Function
Pin 6	RF IN
Pin 19	RF OUT
Pin 2-5, 7-8	GROUND
Pin 17-18, 20-24	GROUND
Pin 27	Vd1
Pin 1	Vg1

Data sheet Iss 01, dated 25/02/15 DS00-793135-01, No. 2144

For price, delivery and to place orders please contact
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Electrical Specifications Vdd=3.0V Vg=1.5V T=25 ºC

Parameter	Min	Typ	Max	Units
Frequency Range	2		18	GHz
Gain		24		dB
Noise Figure		2		dB
Input Return Loss 2-16GHz 16-18GHz		 8 4		dB
Output Return Loss		12		dB
Output P1dB		15		dBm
Supply Current		120		mA

Recommended Operating Conditions

Parameter	Min	Typ	Max	Units
Vdd		4		V
Id1,2		120		mA
Vg1,2		-0.45		V

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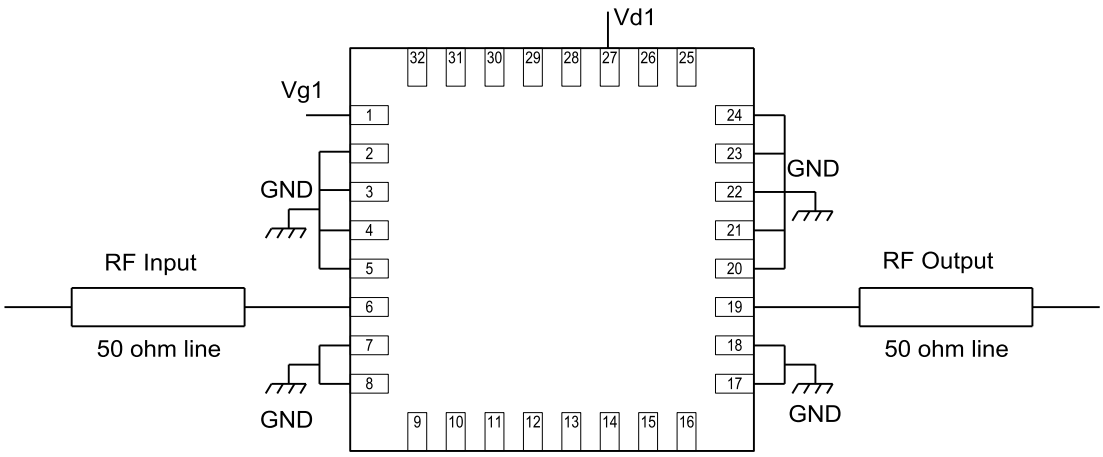
Application Circuit

Note: Effective heatsinking through the ground paddle on the underside of the package is essential for high power operation (RF Input >1W)



Bias Up: Ensure gate voltage is set to -1.8V, apply drain voltage, decrease Vg until the drain current is 120mA.

Bias Down: Ensure gate voltage is set to -1.8V, remove drain bias, remove gate bias

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