

## DEM L33LNA / L23LNA Low Noise Amplifier 902-928 or 1280-1300 MHz.

### Description:

The DEM L33LNA and L23LNA are new designs developed by Down East Microwave Inc. utilizing the combination of PHEMT and SAW filter technology. The utilized active device is the QORVO TQP3M9037 MMIC amplifier that will provide Noise figure, Gain, and RF input power levels required by today's amateur radio enthusiasts. The difference between the two models is the selection of the Band Pass filters that prevent out of band signals from reaching your receiver. But because of this filtering, the LNA's maximum input power needs to be limited. The LNA's are offered with a robust machined enclosure that measures 1.8" L x 1.0" W x 0.9" H with various types of RF connectors and connector combinations. They are provided with a standard +DC feed through connector or +DC power may be provided through the coax if ordered as an option. This LNA design utilizes a machine assembled circuit board enabling us to offer it as a simple board kit or complete kit for anyone with basic soldering skills.



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### Specifications:

| Model:             | L33LNA                    | L23LNA                   |
|--------------------|---------------------------|--------------------------|
| Gain:              | 17dB nominal              | 16dB nominal             |
| Frequency Range    | 895 – 930 MHz             | 1280 – 1320 MHz          |
| Noise Figure:      | 0.5dB Nominal             | 0.5dB Nominal            |
| P1dB:              | +13dBm output             | +13dBm output            |
| Input VSWR:        | >6dB 500 - 3500 MHz       | >6dB 500 - 3500 MHz      |
| Output VSWR:       | >10dB @. design frequency | >10dB @ design frequency |
| Voltage:           | +7 - +22 VDC              | +7 - +22 VDC             |
| Current Drain      | 70 mA nominal             | 70 mA nominal            |
| Max Input RF power | -5 dBm                    | -5 dBm                   |