DEM L50LNA - *50-54 MHz. Low Noise Amplifier*
DEM L137LNA- *137 MHz. Low Noise Amplifier*
DEM L144LNA- *144-148 MHz. Low Noise Amplifier*
DEM L222LNA - *222-225 MHz. Low Noise Amplifier*
DEM L432LNA - *420-450 MHz. Low Noise Amplifier*

Specifications:

Gain:	17dB nominal
Noise Figure:	<0.5dB
P1dB:	+19dBm output
Input VSWR:	>6dB @ design frequency
Output VSWR:	>10dB DC - 3 GHz.
Voltage:	+7 - +22 VDC
Current Drain	100mA nominal

Description:

Our new DEM "L" series of low noise amplifiers shares a common design that is utilized by all LNA's between 30 and 1500 MHz. Each LNA is custom tuned and optimized for gain and noise parameters in its own specific frequency band of operation. This new design utilizes the latest PHEMT technology to produce a LNA that is more selective, more robust to ESD, and more immune to out of band interference.

The basic design employs a tuned band-pass input circuit with a DC shunt to bleed off static or other external discharges. The output circuit features a diplexer that is "band dependant". The diplexer allows any type of output filtering to be utilized without causing reflections back into the FET degrading its IMD performance or causing instabilities.

The FET, a FPD-750SOT89 is biased for high P1dB output which is uncharacteristic of low noise amplifiers. With proper matching and gain management, its low noise characteristics are maintained at low frequency operation.

The LXXXLNA design does not offer any RF bypass switching for transceiver operation and therefore may only be utilized in receive only applications. It is offered with various types of RF connectors and connector combinations. This L series LNA is ready to be "dropped in" to any pre-existing receive system or to be a component in a newly developed receive system.

Schematic Diagram of Standard VHF-UHF LNA Design: