High Level PHEMT Preamplifier
+40 dBm IP_3
0.8 dB noise Figure
700 to 800 MHz

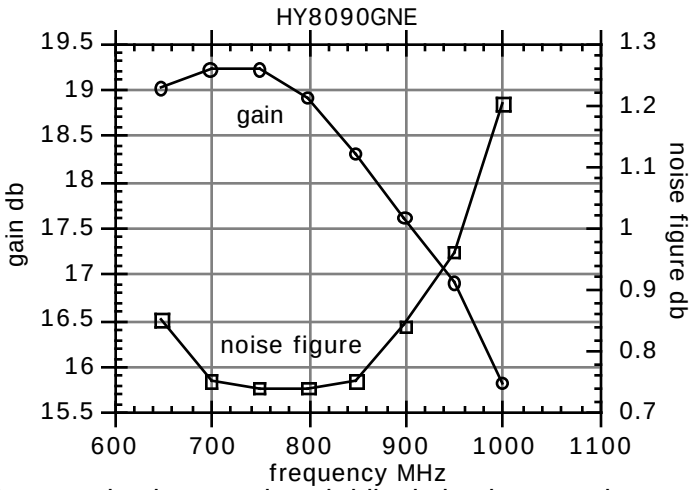
Angle Linear
PO Box 35, Lomita, CA ,90717
310-539-5395

Angle Linear, in it's desire to continue producing the best of present day technology in receiver front end design, has now introduced its highest level, lowest noise figure, hybrid combined redundant pair PHEMT preamplifier. This amplifier offers the high output intercept of silicon bipolar amplifiers but with the low noise figure of PHEMTs.

Hybrid combiners and common port inductance yield excellent input and output return losses while maintaining the low noise figure characteristics of PHEMT devices and enhancing stability.

Output compression levels are typically +25 dBm and 3rd order intercepts are typically +39 to +40 dBm. Input intercept level is typically greater than +23 dBm. This amplifier will deliver 0.4 Watts of linear output power. Gain is about 20 dB at 700 MHz and 18 dB at 900 MHz. Noise figure is typically 0.8 dB ±0.2 dB over this range. Input and output return losses are typically around 20 dB. As always, Angle Linear guarantees unconditional stability of every preamplifier.

Each amplifier has it's own independent voltage and current regulator. External and internal high voltage transient suppressors provide 40kV, 1 micro sec. pulse protection. An Internal voltage pre-regulator permits operation from +11.8 to +16VDC. An external dropping resistor recommended for operation from higher voltages <+35 VDC. DC current requirement is typically 230 mA. Filtering on the DC terminal provides >80 dB attenuation from 5 MHz to >10 GigaHertz.



Construction is rugged: an irridited aluminum enclosure with stainless steel hardware throughout. Twenty four screws attach the covers and give maximum shielding for the most hostile RF environments. Connectors are silver plated and have ptfe (Teflon) dielectric with gold pins and are available in type N, SMA, TNC. Dimensions: 3" x 3" x 0.7". Connectors: N = N, T = TNC, S = SMA. Connector configuration: (T) Top, (E) End mounting, example, with N conn: HY7080GNE, shown in picture