

# Ultra Low Noise pHEMTs

## Ultra Low Noise pHEMTs

- Low Noise Figure
- High Associated Gain
- Operation up to 30 GHz
- 0.15  $\mu\text{m}$  GaAs pHEMT Process
- Commercial Applications
- Military Applications
- Hi-Rel Space Applications
- Chip and MicroX Packages

## 50 Mhz - 18 Ghz Low Noise MIMC Amplifiers

- Low Noise Amplifier
- Buffer Amplifier
- Microwave Radios
- Satellite and Telemetry
- Test Instrumentation
- EW Systems
- Military / Avionics
- Chip and QFN Packages

### Typical RF Performance

	Gate ( $\mu\text{m}$ ) (W/L)	NF (dB) (@ 120MHz)	NF (dB) (@ 40GHz)	Ga (dB) (@ 120MHz)	Ga (dB) (@ 40GHz)	P-1dB (dBm) (@ 120MHz)
MwT-LN180	180/1.5	0.50	0.20	10 / --	14.5	16.0
MwT-LN240	240/1.5	0.50	0.20	10 / --	13.0	16.0
MwT-LN300	300/1.5	0.60	0.20	10 / --	13.0	16.0
MwT-LN600	600/1.5	0.50	0.20	9 / 8	12.0	20.0

# SUPER LOW NOISE MIMCs

### New Low Noise Wideband Amplifiers

	Surface Mount	Freq (GHz)	Lin. Gain (dB)	Ga (V <sub>o</sub> dB)	NF (dB)	P-1dB (dBm)	Vdd (V)	DC Current (mA)
MLA-0522A	QFN	0.2-1 1-2.0	17.5 / -- 16 / --	0.5 / -- 1.25 / --	1.0 1.5	15.6 / -- 15 / --	3 3	70 70
MLA-01122B	QFN	1-8 8-12	17 / -- 19	.6 / -- 1.5 / --	1.5 1.5	16 / -- 16 / --	5 5	55 55
MLA-06183A	QFN	5-18	19 / --	2 / --	3.0	20 / --	4.5	135

# Wideband Commercial Components