

902 & 1296 MHz Preamps

*DESIGNS and LAYOUTS USED IN
K5TRA 33cm and 23cm TRANSVERTERS*

1296 and 902 MHz LOW NOISE PREAMPS



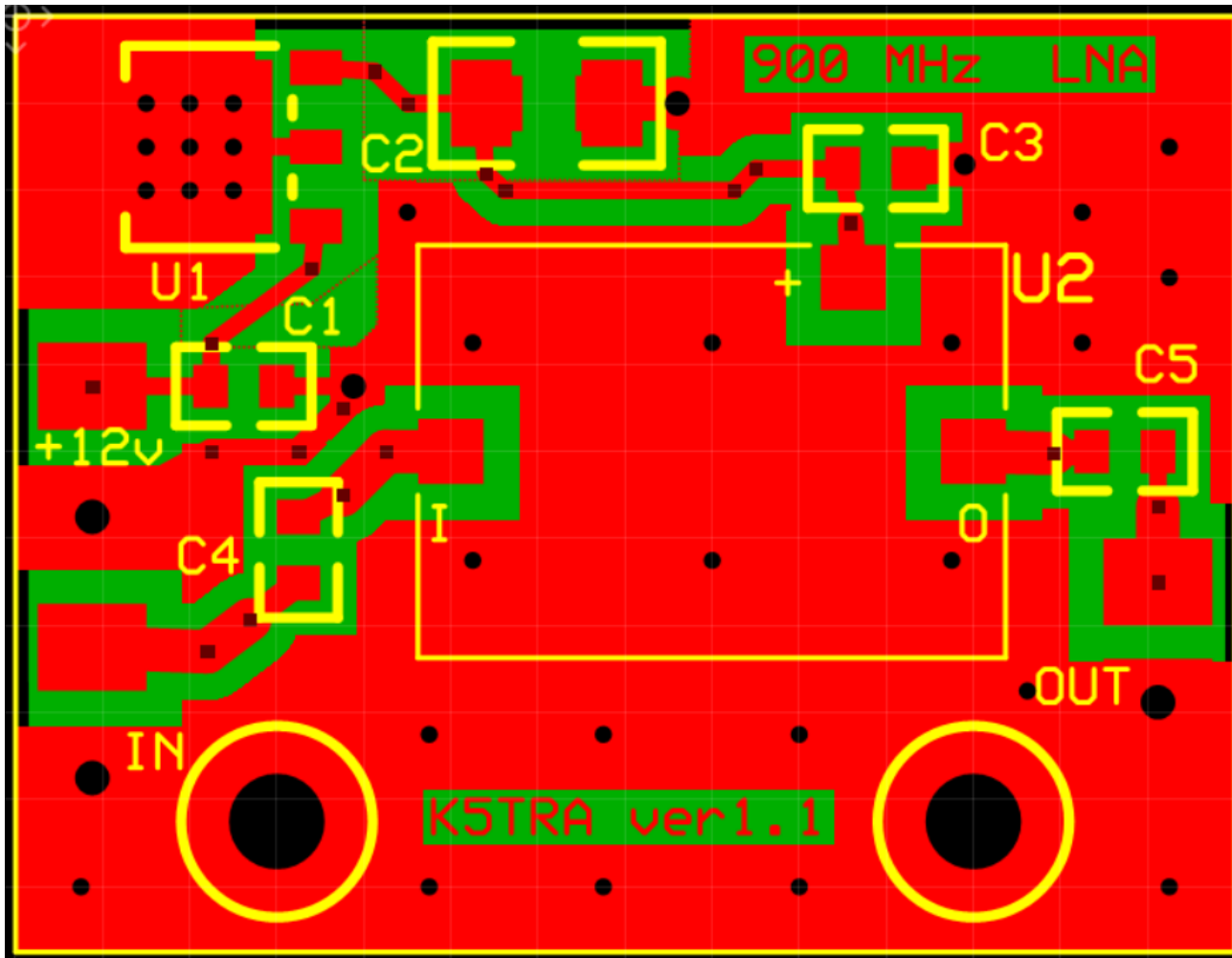
PREAMP OVERVIEW

- +12v DC operation
- Typical 0.5 dB NF
- Typical +17 dB gain
- Typical OIP3 30 dBm
- Two designs:
 - 902 to 928 MHz operation
 - 902 to 1296 MHz operation
- SMA or Type-N connector options
- Designs lifted from K5TRA 902 and 1296 transverters
- Surface mount assembly PC boards

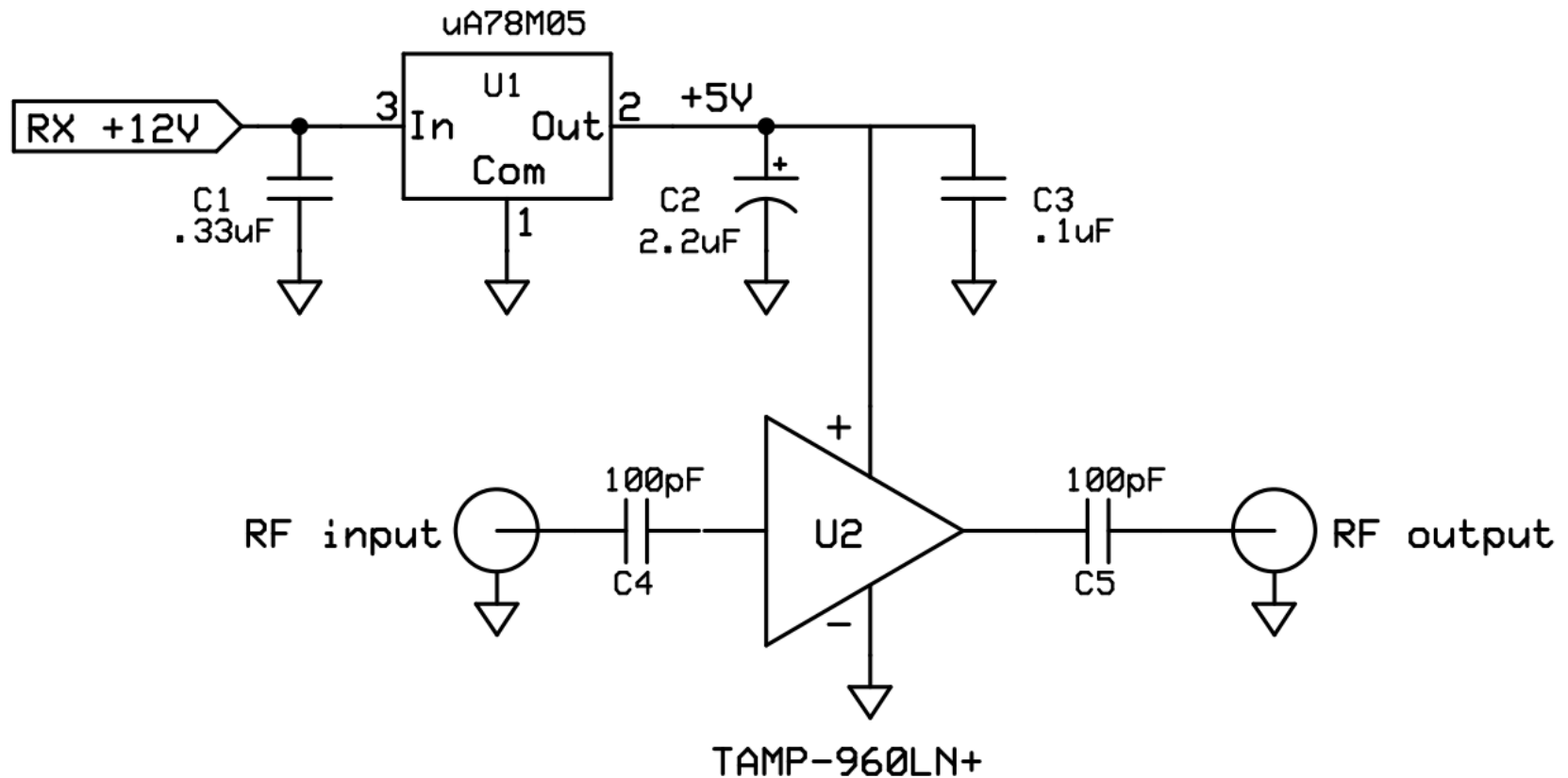
CIRCUIT SUMMARY

- Minicircuits LNA IC
 - 902-928 MHz: TAMP-960LN+
 - 902-1296 MHz: CMA-162LN+
 - TAMP-960LN is easier assembly than CMA-162LN
 - Both are unconditionally stable
- Internal +5v regulator: μ A78M05
- 1.400" x 1.075" circuit board
- Hammond 1590HBK 2.07"x1.5"x1.06"

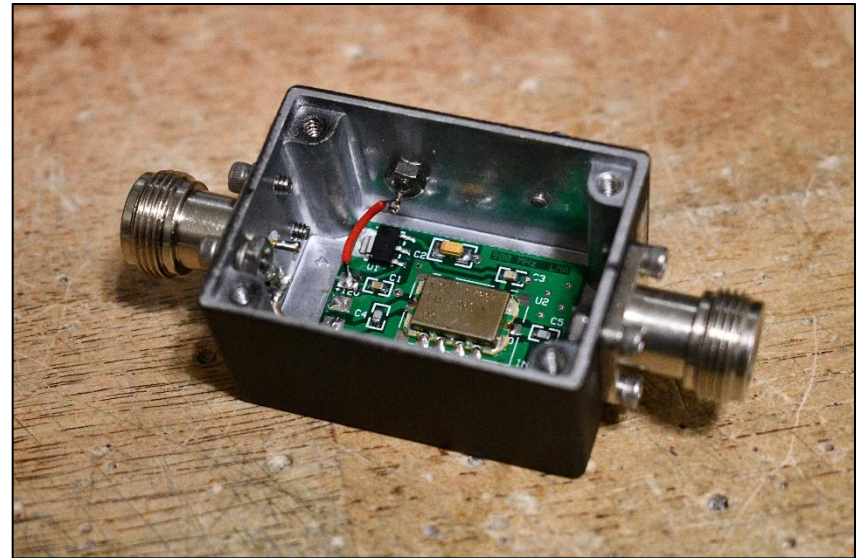
33 CM LNA BOARD



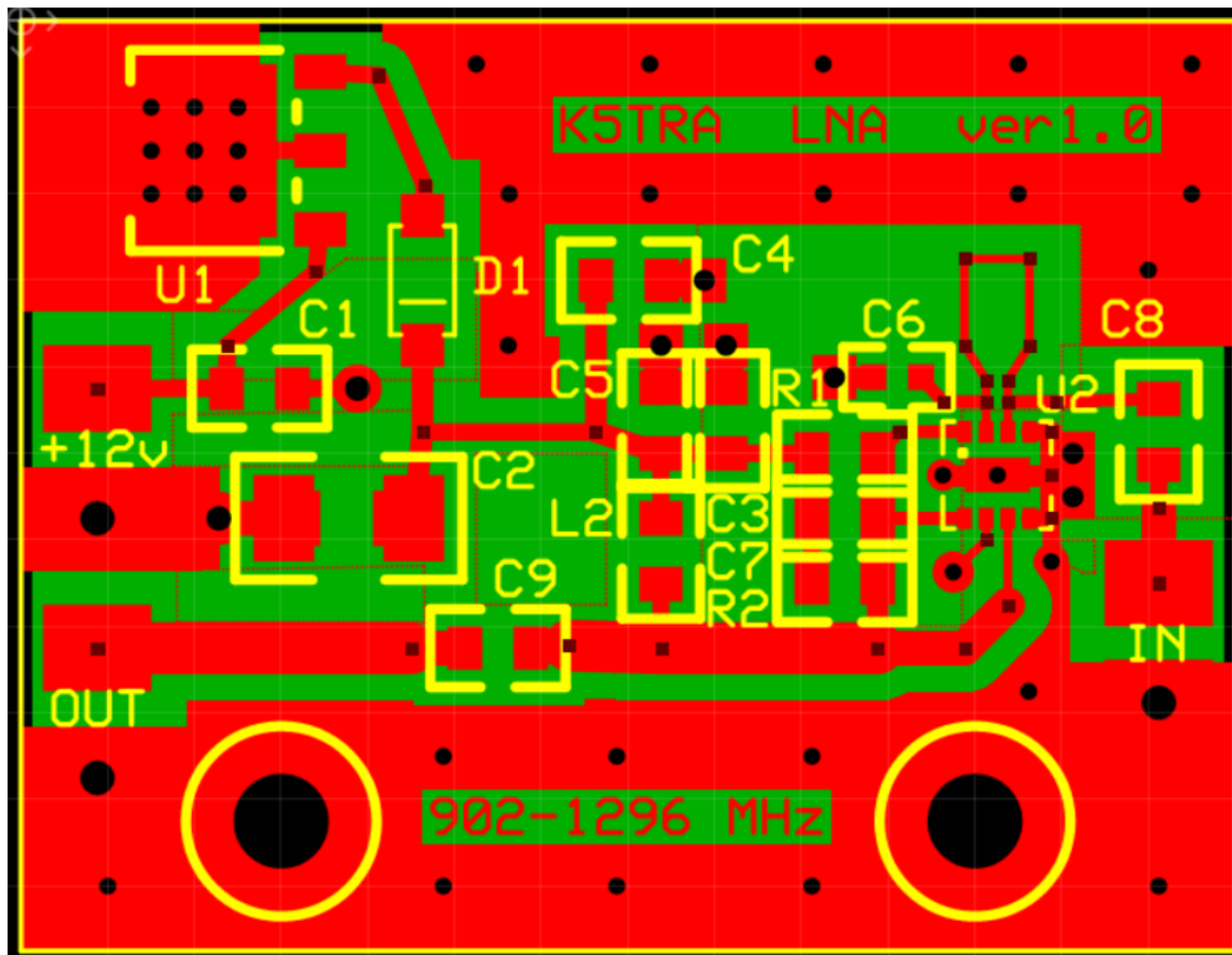
33 CM LNA SCHEMATIC



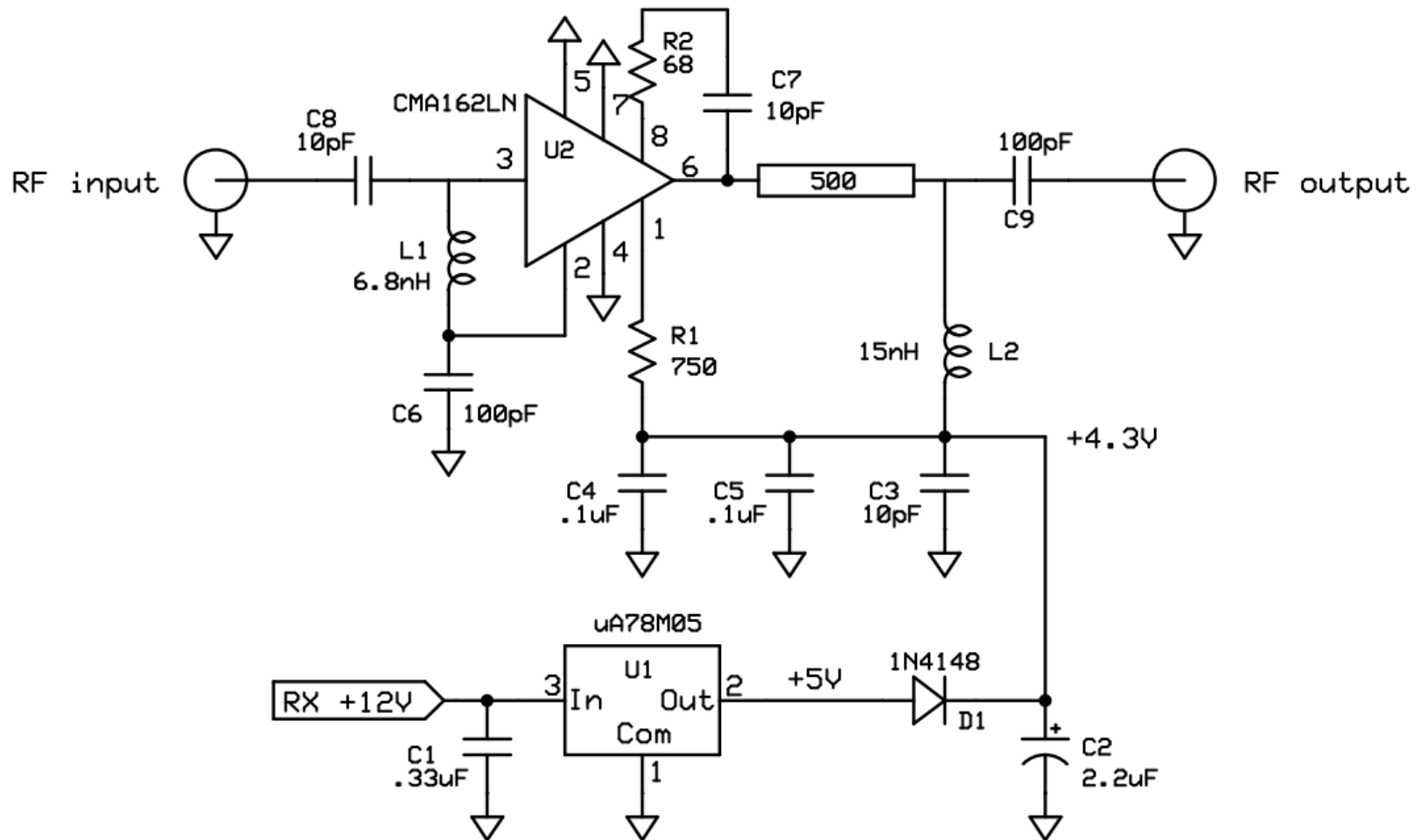
33 CM LNA PHOTO



23 CM LNA BOARD

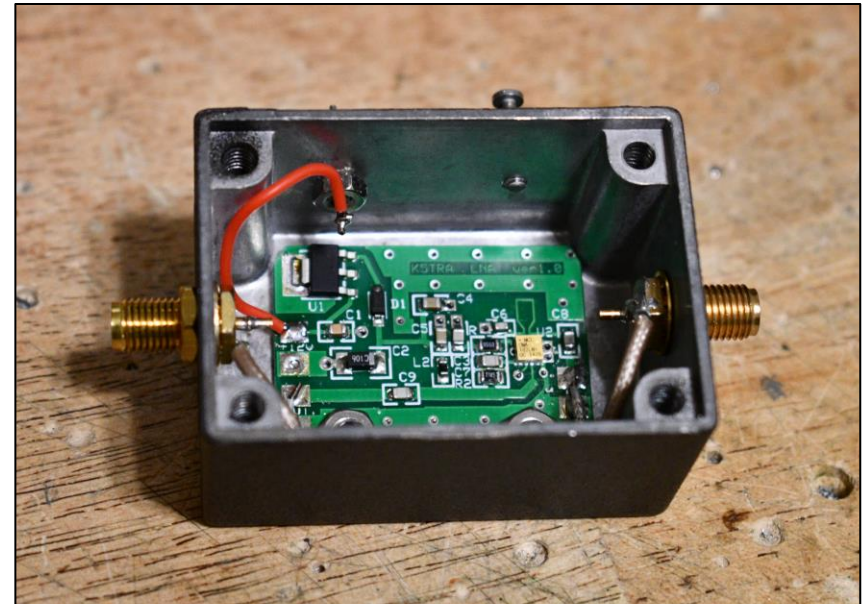


23 CM LNA SCHEMATIC



T.Apel

23 CM LNA PHOTO



GERBER FILES

<https://groups.io/g/902-1296-weaksig/attachment/7/3/LNA%20902-927%20v1r1.zip>

<https://groups.io/g/902-1296-weaksig/attachment/8/0/LNA%20902-1296%20v1r0.zip>

