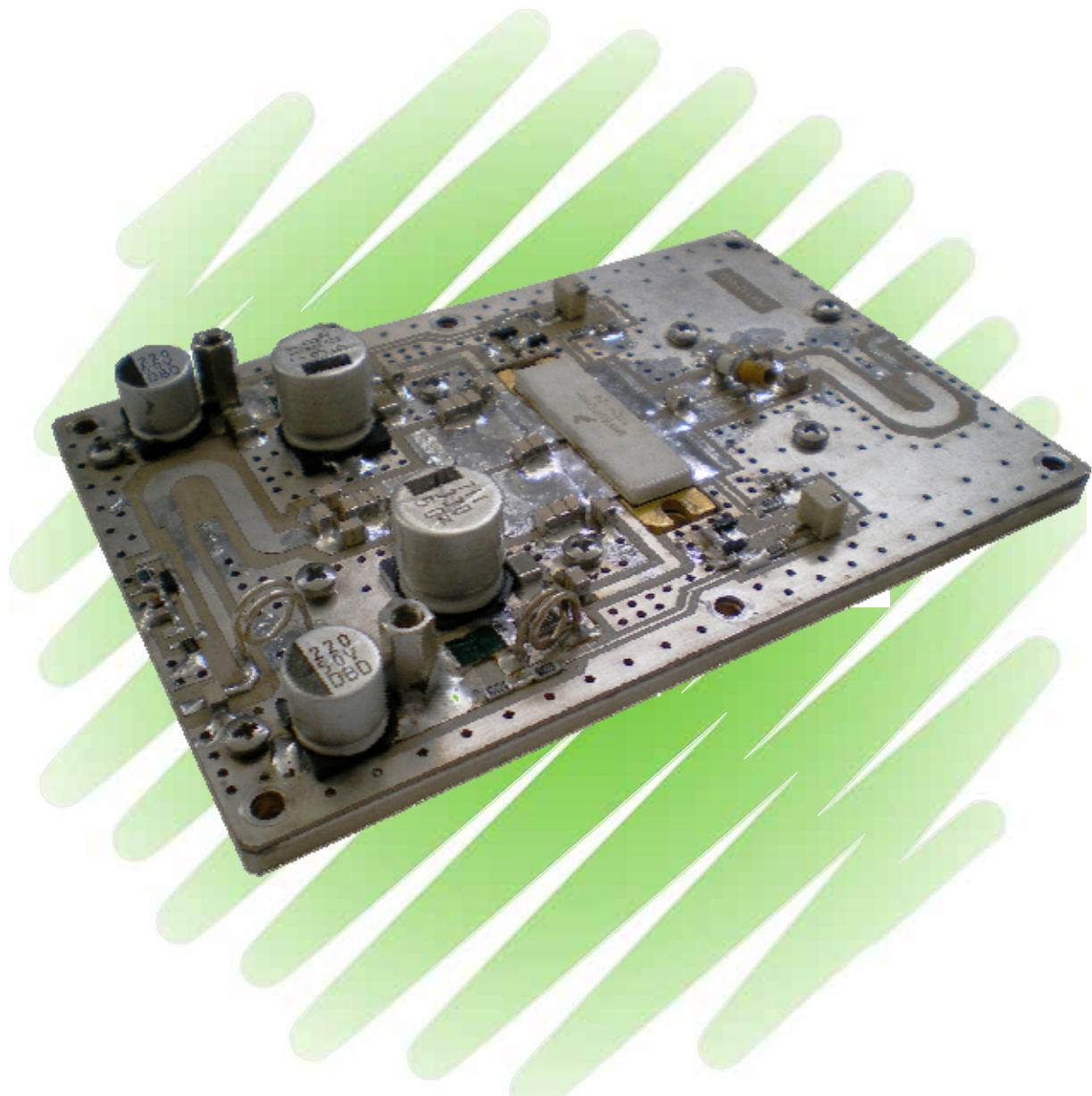


PLT06-102P



*1kW L-Band
Amplifier*

L-BAND AMPLIFIER

GENERAL INFORMATION

The amplifier is designed for the L band operating at frequencies within 1030 to 1090 MHz as pulsed power amplification process. This unit employs solid state LDMOS transistor technology in order to obtain reliability and high efficiency. Typical Pulsed Performance provides 1kW peak with a repetition period of 100 μ sec and Duty Cycle of 2% max.

TECHNICAL SPECIFICATIONS ($th = 25^{\circ}\text{C}$; $50\ \Omega$ loaded; $Vd = +48\text{V}$)

Typical pulsed RF performance at 100 μ s Pulse Width – Duty Cycle 2%

- Frequency range 1030 to 1090 MHz
- Class operation B saturation
- Input - output impedance $50\ \Omega$
- Input return loss $\geq 10\ \text{dB}$
- Input power 20W max.
- Power Gain 17dB Min.
- Output power 1kW peak
- Pulse mode 100 μ sec period; 2% duty cycle
- Pulse drop $\leq 0.5\text{dB}$
- Efficiency (100 μ s Pulse, Duty Cycle 2%) > 45%
- Power supply requirement 48VDC $\pm 2\%$; 1.8 A
- RF input / output connector solder post (SMA option)
- Mismatch tolerance 2:1 any phase
- Harmonics emission $\leq 40\ \text{dBc}$
- Size 80 x 120 x20mm
- Weight 400g approx

RF MODULE LAYOUT

