

Radiofrequency Modules Line

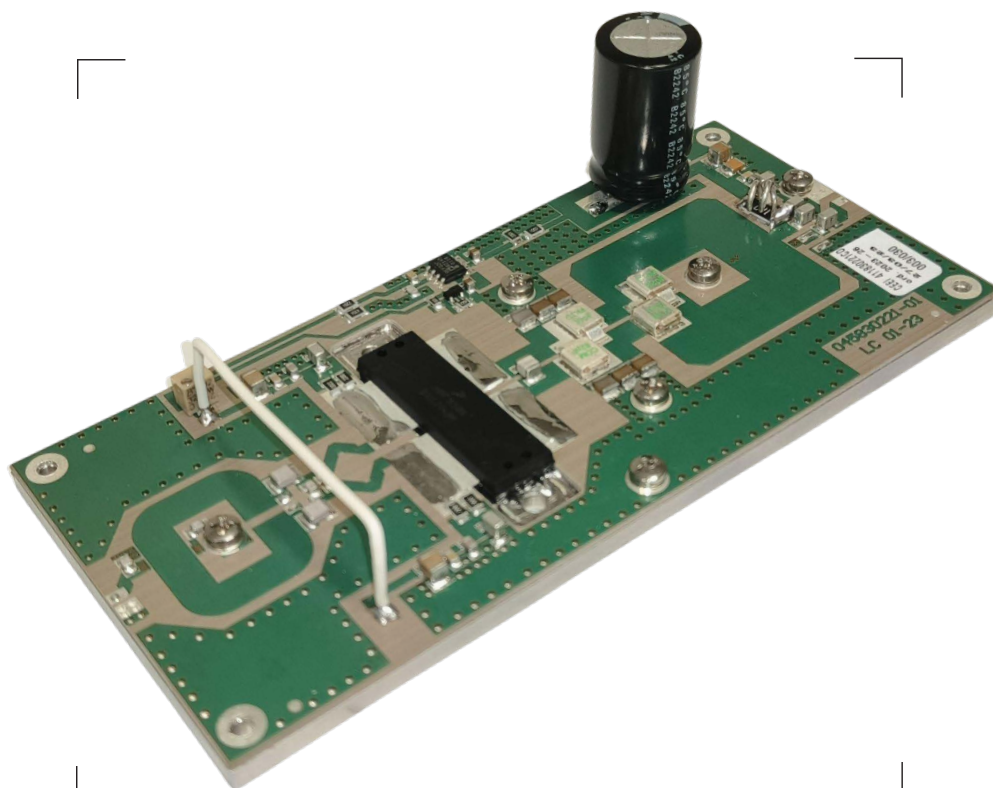
VHF POWER AMPLIFIER (216.8 MHz)



VHF AMPLIFIER

RF CHARACTERISTICS

- Device: NXP MRF1K50N (plastic package)
- Frequency range: 180-220 MHz
- DC Power supply: 20-54 V
- Input/Output impedance: 50 Ω
- Class: class AB (0.1-1 A, according to linearity requirements)
- Test Signal: Pulsed CW (100 ms, 10% duty cycle)
- Output Power ≥ 1500 W @216.8 MHz, 50V drain bias
- Efficiency $\geq 73\%$ @ 1dB gain compression
- Power Gain ≥ 21 dB @1dB compression
- Load mismatch ruggedness: 65:1 Load VSWR, all phase angles Base



ADDITIONAL FEATURES

- ☐ Built-in directional coupler for forward/reflected power measurement
- ☐ Programmable overcurrent protection
- ☐ RMS load/current voltage and VSWR measurement for reactive loads
- ☐ Base plate dim: 130x60 mm
- ☐ Typical application: particle accelerators @216.8 MHz

