

PA10-300W power amplifier 10W in, 300W out 1.8-54 MHz with LPF diplexer.

This device is made for use with low power SDR radios, like ANAN-10, FLEX-1500 or QRP HF transceivers.

With 6 to 8 W input power from SDR it runs solid 300W to your antenna. The amplifier's output is filtered by LPF with diplexer, so the second and higher harmonics of transmitted signal are suppressed for more than -47 dBc. To switch the filters you my use open-collector circuit of SDR or external switch. This amplifier may be used with QRP transceivers like FT-817 or IC-703 (with automatic band decoder) also.

Active elements are matched pair of VRF2933 MOSFET transistors (see schematic) in AB-class. 2-tone measured IMD3 is -40 dBc.

Measured by KC901H network analyser suppression of second and third harmonics (amplifier with diplexer) is:

10 meters 2nd -52 dB 3rd -55 dB 20 meters 2nd -54 dB 3rd -47 dB 80 meters 2nd -53 dB 3rd -51 dB.

Power supply required is 48V 12A.

Board size 190 x 165 mm.

