

KU PA 170220-30 A, RF Power Amplifier

1700 ... 2200 MHz • 30 W

The power amplifier is developed both for digital and analog transmission systems. By the use of LD-MOSFET technology high efficiency and low current consumption are reached at the same time.



Features

- LD-MOSFET-technology
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)
- Milled aluminium case

Applications

- WIMAX radio systems
- COFDM – systems with modulation QPSK, QAM
- Analog transmission systems
- Measurement and laboratory equipment

Important notes

Please notice the following:

- The technical specifications refer to room temperature.
- The power amplifier doesn't contain any coaxial relays.
- The recommended combination of heat sink and fan(s) is only specified for an ambient temperature of 25 °C.
- Further information about dimensioning of heat sinks is available on our FAQ site.

Technical specifications:

Frequency range	1700..2200 MHz
Input power for P1dB	typ. 17 dBm, min. 14 dBm
Maximum input power	+23 dBm
Output power P1dB	min. 44.7 dBm (CW) min. 30 W (CW)
Output power P3dB	min. 46 dBm min. 40 W
Output power COFDM (1)	min. 40 dBm min. 10 W
Gain (small signal)	typ. 30 dB, min. 28 dB
Gain flatness (small signal)	typ. +/- 1.5 dB
Harmonic rejection	typ. 30 dB, min. 25 dB @ 44.7 dBm
IM3 (2)	typ. 40 dBc @ 41.7 dBm PEP typ. 25 dBc @ 44.7 dBm PEP
Efficiency	typ. 35 %, min. 30 % @ 46 dBm
Supply voltage	+28 V DC
Quiescent current	typ. 0.5 A
Current consumption @ P3dB	typ. 4.5 A
Forward detection	yes (diode detector)
VSWR of load	max. 1.8 : 1
Operating case temp. range	-20 ... +55 °C

Input connector / impedance	SMA-female / 50 ohms
Output connector / impedance	SMA-female / 50 ohms
Case	milled aluminium
Dimensions (mm)	80 x 60 x 20
Weight	140 g (typ.)
(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz