

KU PA 330360-16 A, MOSFET-Power Amplifier

3300 ... 3600 MHz • 16 W

The power amplifier is developed both for digital and analog transmission systems. The wide frequency range covers as well the WIMAX-band as the amateur radio band equally. The power amplifier is developed with latest 28 V - LDMOS - technology.



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

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	3300..3600 MHz
Input power for P1dB	typ. 20 dBm
Maximum input power	27 dBm
Output power P1dB	min. 42 dBm min. 16 W
Output power P3dB	min. 44.1 dBm (CW) min. 26 W
Output power COFDM (1)	typ. 39 dBm, min. 37.7 dBm typ. 8 W, min. 6 W
Gain (small signal)	typ. 27 dB, min. 24 dB
Gain flatness (small signal)	typ. +/- 1 dB
Harmonic rejection	typ. 32 dB, min. 28 dB @ 41.7 dBm
IM3 (2)	typ. 30 dBc @ 40 dBm PEP
Efficiency	typ. 30 % @ 43 dBm (CW)
Input return loss (S11)	typ. 11 dB, min. 8 dB
ON voltage	+9 ... 14 V DC
Supply voltage	+28 V DC
Quiescent current	typ. 380 mA
Current consumption @ P1dB	typ. 2.5 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