

KU PA 9501100-2 A, GaAs-FET Power Amplifier
9500 ... 11000 MHz • 2 W



Features

- GaAs FET technology
- High linearity
- Good harmonic rejection
- High bandwidth
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)
- Small mechanical dimensions

Applications

- Digital broadcast systems (DVB-T, DVB-S)
- COFDM systems using modulation types 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	9500..11000 MHz
Input power for P1dB	typ. 10 dBm
Maximum input power	+15 dBm
Output power P1dB	typ. 32.3dBm, min. 31.1dBm (CW) (9500...10500MHz) min. 30.8 dBm (CW) (10500...11000MHz)
Output power P1dB	typ. 1.7 W, min. 1.3 W (CW) (9500...10500MHz) min. 1.2 W (CW) (10500...11000MHz)
Output power P3dB	typ. 33 dBm, min. 32.5 dBm (CW) typ. 2 W, min. 1.8 W (CW)
Output power COFDM (1)	typ. 27.8 dBm, min. 26 dBm typ. 0.6 W, min. 0.4 W
Gain (small signal)	typ. 25 dB
Gain flatness (small signal)	typ. +/- 2 dB
Harmonic rejection	min. 50 dB @ 31.7 dBm
IM3 (2)	min. 40 dBc @ 27.8 dBm PEP
Efficiency	typ. 8 %, min. 7 % @ 33 dBm
Supply voltage	+12 ... 14 V DC
Current consumption @ P1dB	typ. 2 A
Forward detection	yes (diode detector)
Operating case temp. range	-20 ... +55 °C
VSWR of load	max. 1.8 : 1
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	150 g (typ.)
(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz