

KU PA 440500-8 A, Linear Power Amplifier



Features

- GaAs FET technology
- High linearity
- Low EVM
- Isolator for protection against high VSWR
- Adjustable ALC (automatic level control)
- Reverse polarity protection
- Over temperature protection
- Monitor outputs for forward and reverse power detection (DC voltage)
- Logic ON / OFF control (ON at +5 ... 14 V DC)

Applications

- Digital transmission and broadcast systems (DVB, WiMAX)
- COFDM systems using QPSK, QAM
- Analog transmission systems

Technical specifications:

Frequency range	4400..5000 MHz
Input power for P1dB	typ. 8 dBm
Maximum input power	+13 dBm
Output power P1dB	typ. 40 dBm, min. 39 dBm (CW) typ. 10 W, min. 8 W (CW)
Output power COFDM (1)	typ. 34.7 dBm, min. 34 dBm typ. 3 W, min. 2 W
Automatic level control (ALC)	yes (adjustable ALC)
Gain (small signal)	min. 35 dB
Gain flatness (small signal)	typ. +/- 1.5 dB
Harmonic rejection	typ. 50 dB, min. 40 dB @ 40 dBm
VSWR protection	Isolator
Over temperature protection	yes
IM3 (2)	typ. 34 dBc @ 37 dBm PEP typ. 26 dBc @ 40 dBm PEP
Efficiency	typ. 25 % @ 40 dBm (CW)
ON voltage	+5 ... 14 V DC
Supply voltage	+12 ... 14 V DC
Quiescent current	typ. 3.2 A
Current consumption	max. 4 A
Forward detection	yes (diode detector)
Reflected power detection	yes (diode detector)
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)	158 x 60 x 20
Weight	320 g (typ.)

(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz