

KU PA 10001045-8 A, GaAs-Fet Power Amplifier

10000 ... 10450 MHz • 8 W



Features

- GaAs FET technology
- High linearity (class A operation)
- Detector output (DC voltage) for monitoring forward output power
- Reverse polarity protection
- Small mechanical dimensions

Applications

- Analog and digital 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	10000..10450 MHz
Input power for P1dB	typ. 21 dBm
Maximum input power	+24.7 dBm
Output power P1dB	min. 39 dBm (CW) min. 8 W (CW)
Output power P3dB	min. 40 dBm (CW) min. 10 W (CW)
Output power COFDM (1)	min. 33 dBm min. 2 W
Gain (small signal)	typ. 19 dB
Gain flatness (small signal)	typ. +/- 2 dB
Harmonic rejection	min. 60 dB @ 39 dBm
IM3 (2)	typ. 38 dBc, min. 33 dBc @ 37 dBm PEP
Efficiency	typ. 14 % @ 39 dBm (CW)
Input return loss (S11)	typ. 10 dB, min. 6 dB
Supply voltage	+12 ... 14 V DC
Current consumption @ P1dB	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)	130 x 60 x 20
Weight	250 g (typ.)

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