

KU PA BB 005090-6 A - RF Power Amplifier

50 ... 900 MHz • 6 W



Features

- LD MOSFET technology
- Reverse polarity protection
- Milled aluminium case
- Small mechanical dimensions

Applications

- Analog transmission systems
- Measurement and laboratory equipment
- Driver amplifier

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	50..900 MHz
Input power for P1dB	typ. +3 dBm
Maximum input power	+10 dBm
Output power P1dB	typ. 37.8 dBm, min. 37 dBm (CW) (50 ... 500 MHz) typ. 36 dBm, min. 34.7 dBm (CW) (500 ... 900 MHz)
Output power P1dB	typ. 6 W, min. 5 W (CW) (50 ... 500 MHz) typ. 4 W, min. 3 W (CW) (500 ... 900 MHz)
Output power P3dB	typ. 39 dBm, min. 38.4 dBm (CW) (50 ... 500 MHz) typ. 37.8 dBm, min. 37 dBm (CW) (500 ... 900 MHz)
Output power P3dB	typ. 8 W, min. 7 W (CW) (50 ... 500 MHz) typ. 6 W, min. 5 W (CW) (500 ... 900 MHz)
Output power COFDM (1)	min. 30 dBm min. 1 W
Gain (small signal)	min. 31.5 dB
Gain flatness (small signal)	typ. +/- 2.5 dB
Harmonic rejection	typ. 20 dB, min. 18 dB @ 37 dBm
IM3 (2)	typ. 30 dBc, min. 23 dBc @ 37 dBm PEP
Efficiency	min. 20 % @ 37 dBm (CW)
Input return loss (S11)	min. 13 dB
ON voltage	+9 ... 14 V DC
Supply voltage	+28 V DC
Quiescent current	typ. 0.5 A
Current consumption	max. 1.1 A
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	135 g (typ.)
(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz