

KU PA 270330-10 A, Power amplifier



Description

Based on GaN HEMT technology, the amplifier module achieves typical energy efficiencies of 48% over the entire 2700-3300MHz bandwidth at 10W output power.

The amplifier features high gain (37dB) and a gain ripple of typically +/- 2dB across the full bandwidth.

The module provides a monitoring output for monitoring of forward power. The power supply input features protection against reverse polarity and overvoltage.

Features

- GaN technology
- High efficiency
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)
- Logic ON / OFF control (ON at +5 ... 14 V DC)

Applications

- Measurement, Laboratory equipment

Important notes

- 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	2700..3300 MHz
Maximum input power	+10 dBm
Output power P3dB	min. 40 dBm (CW)
	min. 10 W (CW)
Gain (small signal)	typ. 40 dB, min. 37 dB
Gain flatness (small signal)	typ. +/- 2 dB
Harmonic rejection	typ. 22 dB @ 40 dBm
Efficiency	typ. 48 % @ 40 dBm (CW)
ON voltage	+5 ... 14 V DC
Supply voltage	+27 ... 29 V DC
Quiescent current	typ. 300 mA
Forward 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)	78 x 41 x 22 mm
Weight	120 g (typ.)