KUHNE electronic

Other Components

MKU PA 23CM-50W B, Power Amplifier

1240 ... 1300 MHz • 50 W

High Power Amplifier for the Amateur Radio Band 23 cm

Our high-performance amplifier for the 23 cm amateur radio band achieves great performance, high efficiency and best linearity. An LDMOS transistor with a supply voltage of only +28 V is used here. High-voltage transformers, preheating and annoying post-voices are a thing of the past! The amplifier can be mounted close to the antenna to avoid power losses due to long coaxial cables.

Compact size (80x60x20) High power in given size Light weight



Description

The compact power amplifier for the 23 cm band combines small size and light weight with high power and efficiency thanks to LDMOS technology. Thus mounting close to the antenna is eased and plenty of applications become possible. E.g. analog and digital transmissions using COFDM-Systems with QPSK, QAM modulation and DAB, DVB.

Features

- LD-MOSFET technology
- Good linearity
- High efficiency
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)

Applications

- Digital broadcast systems (DAB, DVB)
- COFDM systems using modulation types QAM, QPSK
- Analog transmission systems

Important notes

Please notice the following:

- Further information about dimensioning of heat sinks is available on our FAQ site.
- Attention: The recommended fans need a supply voltage of 24 \dots 28 V DC.
- The technical specifications refer to room temperature.

Industrial use

Our power amplifiers of the MKU-series are exclusively intended for amateur radio applications and will only be sold to radio amateurs with a licence. These products are specified for amateur radio requirements and are not designed for industrial applications. Please notice our list of industrial products or ask for a special version.

Technical specifications:		
Frequency range	12401300 MHz	
Input power	typ. 3 W	
Output power P3dB	typ. 50 W (CW)	
Gain (small signal)	typ. 16 dB	
ON voltage	+9 14 V DC	
Supply voltage	+28 V DC	



Other Components

Quiescent current	typ. 0.5 A
Current consumption	max. 6 A
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)	80 x 60 x 20
Weight	240 g (typ.)