

KU LNA 200250 A-SMA, Super Low Noise Pre-Amplifier

2000 ... 2500 MHz

Analog & digital transmission systems Satellite ground station Communication systems

- Extremely low noise figure
- Remote power supply via output connector possible
- Low-gain mode via solder pin
- Reverse polarity protection

The super low-noise pre-amplifier KU LNA 200250 A was particularly developed by Kuhne for S-band receive applications, e.g., satellite ground station equipment. The combination of an extremely low noise figure, high P1dB and IP3, and switchable low-gain mode ensures a very high dynamic range.



Description

The KU LNA 200250 A has a bandwidth of 2 GHz to 2.5 GHz and is thus suitable for a variety of applications in the S-band microwave range, in particular for the amplification of weak satellite signals in low-noise receivers. Furthermore, the KU LNA 200250 A is characterized by a very low noise figure of typ. 0.35 dB and a gain of typically 53 dB. By connecting the second solder pin to ground, the gain can be decreased to typ. 35 dB without affecting the noise performance. The reverse polarity protection furthermore increases user-friendliness.

Features

- Extremely low noise figure
- Remote power supply via output connector
- Low-gain mode via solder pin
- Reverse polarity protection

Technical specifications:

Frequency range	2000..2500 MHz
Noise figure @ 18 °C	typ. 0.35 dB max. 0.5 dB
Gain	typ. 53 dB in high-gain mode typ. 35 dB in low-gain mode
Gain flatness	typ. +/- 3 dB in high-gain mode typ. +/- 2.5 dB in low-gain mode
Maximum input power	10 mW
Output power (P1dB)	typ. +21 dBm
Output IP3	typ. +35 dBm
Input return loss (S11)	typ. 12 dB min. 8 dB
Output return loss (S22)	typ. 15 dB min. 12 dB
Supply voltage	+9 ... 15 V DC
Current consumption	typ. 110 mA
Operating case temp. range	-40 ... +65 °C
Input connector / impedance	SMA-female, 50 ohms
Output connector / impedance	SMA-female, 50 ohms
Case	milled aluminium

Dimensions (mm)	73 x 30 x 22
Weight	110 g (typ.)