

KU UP 107 B, Up Converter

10000 ... 10700 MHz

This device converts the IF frequency range 960 ... 1660 MHz up to the frequency range 10000 ... 10700 MHz. Typical applications are MMDS transmitter as well as DVB-T or DVB-S systems. The up converter includes band pass filters for high spurious rejection and a high quality VCO with low phase noise and therefore it is suitable for all modulation types. Together with a power amplifier an output power of 50 watts CW can be achieved.



Features

- Low phase noise oscillator
- High frequency stability of the oscillator
- Additional input for 10 MHz reference frequency
- Automatic activation of PLL if external 10 MHz signal is supplied
- High linearity
- Reverse polarity protection

Applications

- Digital broadcast systems (DVB-T, DVB-S)
- Analog and digital transmission systems

Important notes

- Please notice the following:
- Additional cooling required

Technical specifications:

Frequency range (IF)	960 ... 1660 MHz
Frequency range (RF)	10000 ... 10700 MHz
LO frequency	9040 MHz
LO accuracy @ 18 °C	+/- 2 ppm
LO frequency stability	+/- 3 ppm
Phase noise @ 1kHz	typ. -79 dBc/Hz
Phase noise @ 10 kHz	typ. -83 dBc/Hz
Phase noise @ 100 kHz	typ. -109 dBc/Hz
Image rejection	typ. 80 dB
Gain	typ. 25 dB
Maximum input power	max. 5 mW (+7 dBm)
Output power (P1dB)	typ. 250 mW (+24 dBm)
Output power (COFDM)	30 ... 60 mW
Maximum case temperature	+55 °C
Supply voltage	+12 ... +14 V DC
Current consumption	typ. 850 mA
Reference frequency input	10 MHz / 2 ... 10 mW
Input connector / impedance	SMA-female, 50 ohms
Output connector / impedance	SMA-female, 50 ohms
Case	milled aluminium
Dimensions (mm)	126 x 64 x 22
Weight	310 g