

KU PA 12701540-2 A, RF Power Amplifier

12700 ... 15400 MHz • 2 W



Features

- GaAs FET technology
- High linearity
- High bandwidth
- Reverse polarity protection
- Monitor output for forward power detection
- Small mechanical dimensions

Applications

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

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	12700..15400 MHz
Input power for P1dB	typ. 4 ... 12 dBm
Maximum input power	+20 dBm
Output power P1dB	min. 33 dBm min. 2 W
Output power P3dB	typ. 34 dBm typ. 2.5 W
Output power COFDM (1)	typ. 26 dBm, min. 24.7 dBm typ. 400 mW, min. 300 mW
Gain (small signal)	min. 22 dB
Gain flatness (small signal)	typ. +/-4 dB
Harmonic rejection	min. 40 dB @ 33 dBm
IM3 (2)	typ. 27 dBc @ 30 dBm PEP
Efficiency	min. 10 % @ 33 dBm
Input return loss (S11)	typ. 10 dB, min. 7 dB
Supply voltage	+12 ... 14 V DC
Current consumption @ P1dB	typ. 1,5 A
Forward detection	yes (diode detector)
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)	50 x 30 x 18
Weight	45 g (typ.)
(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz