

# Ku-Band Linear Power Amplifier KU PA 12701540 – 2 A

## Product Information

### Specifications (Ta = 25 °C):

<b>Type</b>	<b>KU PA 12701540 – 2 A</b>
Frequency range	12700 ... 15400 MHz
<b>Input power</b>	
For P1dB	typ. 2 ... 12 dBm
Maximum	20 dBm
<b>Output power</b>	
P1dB	min. 33 dBm (CW)
P1dB	min. 2 W (CW)
P3dB	typ. 34 dBm (CW)
P3dB	typ. 2.5 W (CW)
COFDM 1)	typ. 26 dBm, min. 24.7 dBm
COFDM 1)	typ. 400 mW, min. 300 mW
<b>Gain</b>	
Small signal	min. 22 dB
Flatness (small signal)	typ. +/-4 dB
<b>Harmonics</b>	
Harmonic rejection @ 33 dBm	min. 40 dB
<b>Intermodulation distortions</b>	
IM3 @ 30 dBm PEP 2)	typ. 27 dBc
Efficiency @ 33 dBm (CW)	min. 10 %
Input return loss (S11)	typ. 10 dB, min. 8 dB
Supply voltage	+12 ... 14 V DC
Current consumption @ P1dB	typ. 1.5 A
<b>Monitor output</b>	
Forward detection	yes (Diode-Detector)
<b>Limits</b>	
VSWR of load	max. 1.8:1
Operating case temperature range	-20 ... +55 °C

### Features:

- GaAs 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

### Amplifier should be mounted on heat sink!

- 1) Single carrier; 64 QAM; 8MSPS; EVM=2%  
2) Two tone test;  $\Delta f=1\text{MHz}$

### Mechanics

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	typ. 45 g

### CE Conformity:

- EMC directive 2014/30/EU
- Low voltage directive 2014/35/EU
- RoHS directive 2011/65/EU



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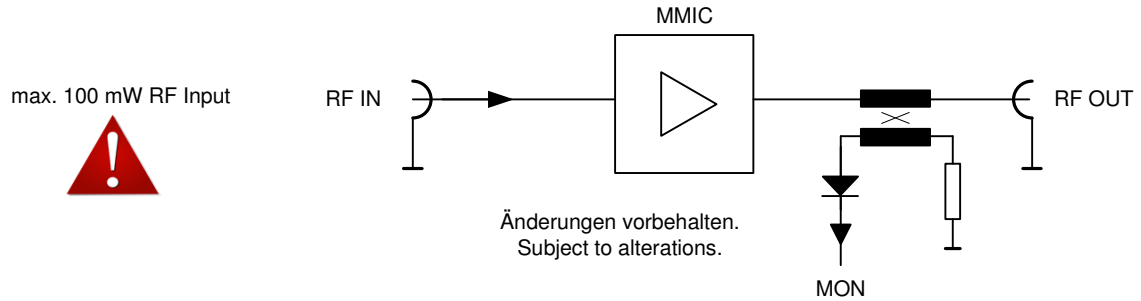


Products are only to be sold to processing companies.  
For operating high frequency modules legal instructions must be followed.

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### Block diagram



ON.....supply DC voltage to „ON“ to switch power amplifier „ON“ (active)  
MON OUT.....Output which monitors forward power (DC voltage), not calibrated



Sig.: \_\_\_\_\_ QS: \_\_\_\_\_



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