

# L – Band LDMOSFET Linear Power Amplifier KU PA 140150 – 150 A

## Product Information

Product ID: \_\_\_\_\_

### Specifications (Ta = 25 °C):

| Type   | KU PA BB 140150 – 150 A   |
|--|---|
| Frequency range  | 1400 ... 1500 MHz   |
| <b>Input power</b><br>For P1dB<br>Maximum  | typ. 36 dBm<br>41 dBm   |
| <b>Output power</b><br>P1dB<br>P1dB<br>P3dB<br>P3dB<br>COFDM 1)<br>COFDM 1)  | typ. 51.7 dBm, min. 51.46 dBm (CW)<br>typ. 150 W, min. 140 W (CW)<br>min. 52 dBm (CW)<br>min. 160 W (CW)<br>typ. 45.4 dBm, min. 44.77 dBm<br>typ. 35 W, min. 30 W |
| <b>Gain</b><br>Small signal<br>Flatness (small signal)   | min. 14 dB<br>typ. +/-0.7 dB  |
| <b>Harmonics</b><br>Harmonic rejection @ 50 dBm  | typ. 35 dB, min. 33 dB  |
| <b>Intermodulation distortions</b><br>IM3 @ 48.4 dBm PEP 2)  | typ. 37 dBc, min. 35 dBc  |
| Efficiency @ P1dB<br>Input return loss (S11)   | typ. 48 %<br>typ. 10 dB, min. 6 dB  |
| ON voltage<br>Supply voltage   | +9 ... 14 V DC<br>+28 V DC  |
| Quiescent current  | typ. 1.5 A  |
| Current consumption @ P1dB   | typ. 10 A   |
| <b>Monitor output</b><br>Forward detection   | yes (Diode-Detector)  |
| <b>Limits</b><br>VSWR of load<br>Operating case temperature range  | max. 1.8:1<br>-20 ... +55 °C  |
| <b>Mechanics</b><br>Input connector / impedance<br>Output connector / impedance<br>Case<br>Dimensions (mm)<br>Weight | SMA-female, 50 ohms<br>N-female, 50 ohms<br>milled aluminium<br>130 x 60 x 20<br>typ. 260 g   |

### Features:

- LDMOS technology
- High linearity
- High efficiency
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)
- ON / OFF control with DC voltage

### Applications:

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

### Accessories:

- Recommended power supply: SP 320 W 27
- Recommended heat sink: SK 200 - 80
- Recommended fan: 1 piece FAN 80x80 HP 24 V

### Amplifier should be mounted on heat sink!

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

2017-09-05

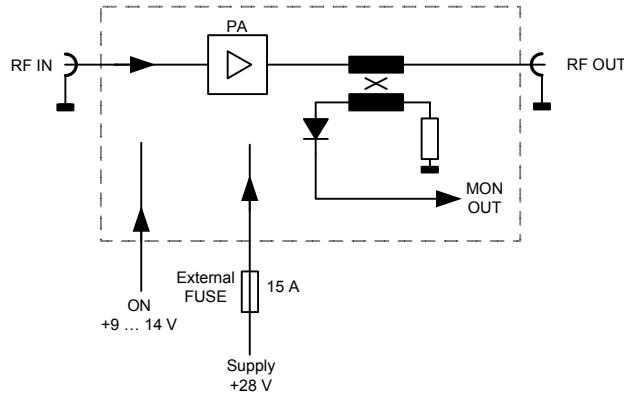


Products are only to be sold to processing companies.  
For operating high frequency modules legal instructions must be followed.

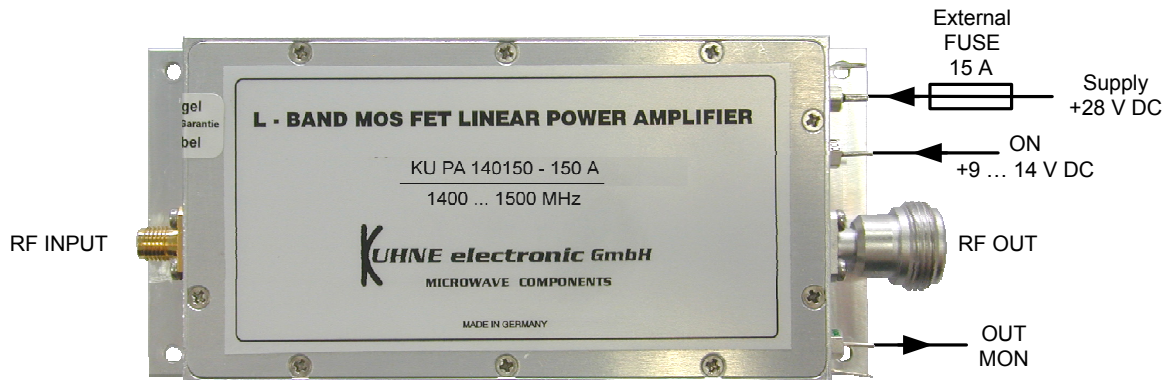
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## Product Information

### 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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