

# S-Band GaAs FET Linear Power Amplifier KU PA 250270 – 20 A

## Product Information

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

### Specifications (Ta = 25 °C):

Type	KU PA 250270 – 20 A
Frequency range	2500 ... 2700 MHz
<b>Input power</b> For P1dB Maximum	typ. -8 dBm -6 dBm
<b>Output power</b> P1dB P1dB P3dB P3dB COFDM 1) COFDM 1) Automatic level control (ALC)	typ. 44 dBm, min. 43 dBm (CW) typ. 25 W, min. 20 W (CW) min. 44 dBm min. 25 W min. 38.4 dBm min. 7 W yes (adjustable ALC)
<b>Gain</b> Small signal Flatness (small signal)	typ. 53 dB, min. 50 dB typ. +/-1.5 dB
<b>Harmonics</b> Harmonic rejection @ 43 dBm	typ. 60 dB, min. 55 dB
<b>Protection</b> Output protection	isolator
<b>Intermodulation distortions</b> IM3 @ 40 dBm PEP 2)	min. 40 dBc
Efficiency @ 43 dBm (CW) Input return loss (S11)	min. 20 % min. 10 dB
ON voltage Supply voltage	+5 ... 14 V DC +11 ... 14 V DC
Quiescent current	typ. 7.5 A
Current consumption	typ. 8 A
<b>Monitor output</b> Forward detection Reverse detection	yes (Diode-Detector) yes (Diode Detector)
<b>Limits</b> Operating case temperature range	-20 ... +55 °C
<b>Mechanics</b> Input connector / impedance Output connector / impedance Case Dimensions (mm) Weight	SMA-female, 50 ohms SMA-female, 50 ohms milled aluminium 212 x 63 x 22 typ. 500 g

### Features:

- GaAs technology
- High linearity (class A operation)
- Good harmonic rejection
- Isolator for protection against high VSWR
- Reverse polarity protection
- Monitor outputs for forward and reverse power detection (DCvoltage)
- Adjustable ALC (automatic level control)
- Logic ON / OFF control (ON at 5 ... 14 V)

### Applications:

- Multichannel Multipoint Distribution Service (MMDS)
- Digital broadcast systems (DVB-T, DVB-S)
- 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;  $\Delta f=1\text{MHz}$

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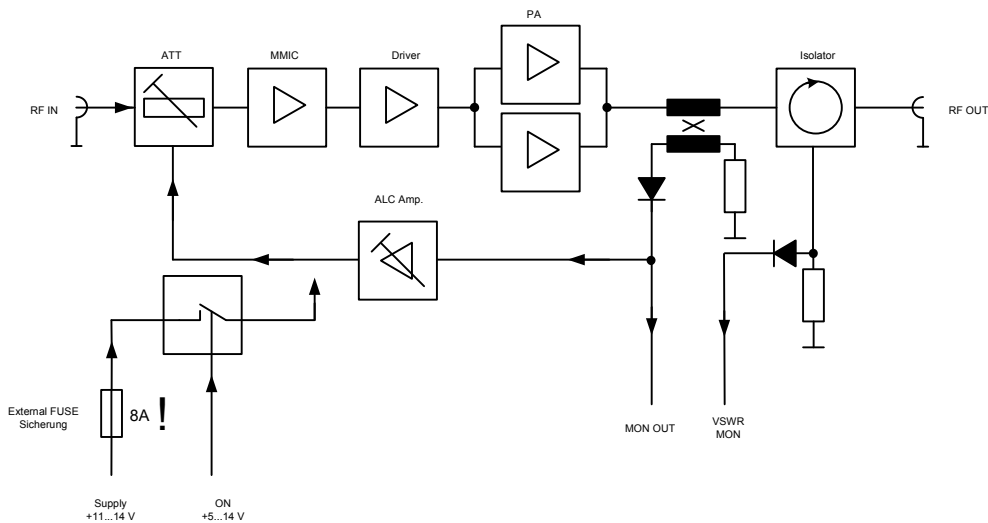


Products are only to be sold to processing companies.  
For operating high frequency modules legal instructions must be followed.

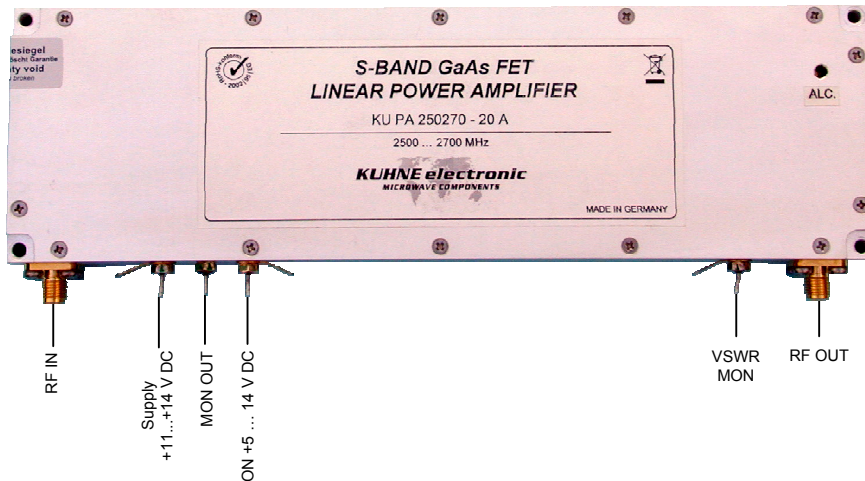
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### Block diagram



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



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



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