## KU PA 230250-20 A, GaAs-FET Power Amplifier

**2300 ... 2500 MHz • 20 W**


### Features

- GaAs FET 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 (DC voltage)
- Adjustable ALC (automatic level control)
- ON / OFF control with DC voltage (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

### 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 | 2300..2500 MHz |
| Input power for P1dB | typ. -9 dBm |
| Maximum input power | -5 dBm |
| Output power P1dB | typ. 43.8 dBm, min. 43 dBm (CW) |
| | typ. 24 W, min. 20 W (CW) |
| Output power P3dB | min. 44 dBm (CW) |
| | min. 25 W (CW) |
| Output power COFDM (1) | min. 38.4 dBm (1) |
| | min. 7 W |
| Gain (small signal) | typ. 54 dB, min. 53 dB |
| Gain flatness (small signal) | typ. +/- 1 dB |
| Harmonic rejection | typ. 60 dB, min. 55 dB @ 43 dBm |
| IM3 (2) | min. 40 dBc @ 40 dBm PEP (2) |
| Efficiency | min. 20 % @ 43 dBm (CW) |
| Input return loss (S11) | min. 15 dB |
| ON voltage | +5 ... 14 V DC |
| Supply voltage | +11 ... 14 V DC |
| Current consumption @ P1dB | typ. 8 A |
| Forward detection | yes (diode detector) |
| Reflected power detection | yes (diode detector) |


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# Low Noise Amplifiers

| | |
|---|---|
| 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) | 212 x 64 x 22 |
| Weight | 500 g (typ.) |
| (1) | Measured with QAM 64, single carrier, EVM: 2% |
| (2) | Measured 2-tone, frequency spacing: 1 MHz |


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