

KU PA 230250-20 B, 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)
- 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. 14 dBm typ. +12 dBm
Maximum input power	+17.5 dBm
Output power P1dB	typ. 44 dBm, min. 43 dBm (CW) typ. 25 W, min. 20 W (CW)
Output power COFDM (1)	typ. 39 dBm, min. 37.7 dBm typ. 8 W, min. 6 W
Gain (small signal)	typ. 31 dB, min. 30 dB
Gain flatness (small signal)	+/-0.5 dB (typ.)
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. 13 dB
ON voltage	+5 ... 14 V DC
Supply voltage	+11 ... 14 V DC
Quiescent current	typ. 7.3 A
Current consumption	typ. 7.5 A
Forward detection	yes (diode detector)
Reflected power detection	yes (diode detector)
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)	178 x 60 x 20
Weight	350 g (typ.)
(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz