

KU PA 135155-25 A, Power Amplifier

1350 ... 1550 MHz • 25 W

RF Power Amplifier for 1.3 GHz
suitable for Video transmission

analog & digital transmission systems



Features

- LD-MOSFET technology
- Good linearity
- High efficiency
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)

Applications

- Digital broadcast systems (DAB, DVB)
- COFDM systems using modulation types QAM, QPSK
- 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.
- Attention: The recommended fans need a supply voltage of 24 ... 28 V DC.

Technical specifications:

Frequency range	1350..1550 MHz
Input power for P1dB	typ. 23 dBm
Maximum input power	29 dBm
Output power P1dB	min. 44 dBm (CW) min. 25 W (CW)
Saturation power	min. 45,4 dBm min. 35 W
Output power COFDM (1)	typ. 37.7 dBm min. 5 W
Gain (small signal)	min. 21 dB
Gain flatness (small signal)	typ. +/- 1.5 dB
Harmonic rejection	typ. 20 dB @ 25 W
IM3 (2)	min. 35 dBc @ 40 dBm PEP
Efficiency	min. 46 % @ 30 W (CW)
Supply voltage	+28 V DC
Quiescent current	typ. 300 mA
Current consumption	max. 3.5 A

Forward detection	yes (diode detector)
Operating case temp. range	-20 ... +55 °C
VSWR of load	max. 1.8 : 1
Input connector / impedance	SMA-female / 50 ohms
Output connector / impedance	SMA-female / 50 ohms
Case	milled aluminium
Dimensions (mm)	80 x 60 x 20
(1)	Measured with QAM 64, single carrier, EVM: 2%
(2)	Measured 2-tone, frequency spacing: 1 MHz