

KU PA 013017-100 HY, RF Power Amplifier

130 ... 170 MHz • 100 W



Features

- Built-in low pass filter for good harmonic rejection
- Reverse polarity protection
- Monitor output for forward power detection

Applications

- Analog transmission systems

Important notes

Please notice the following:

- All technical data specified at a supply voltage of +14 V DC at 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	130..170 MHz
Input power for P3dB	typ. +15 dBm
Maximum input power	+20 dBm
Output power P1dB	typ. 47 dBm, min. 44.8 dBm (CW) typ. 50 W, min. 30 W (CW)
Output power P3dB	typ. 50 dBm (CW) typ. 100 W (CW)
Gain (small signal)	typ. 40 dB, min. 35 dB
Gain flatness (small signal)	typ. +/- 3 dB
Harmonic rejection	typ. 60 dB @ 50 dBm
IM3 (1)	typ. 27 dBc @ 46 dBm PEP
Efficiency	typ. 44 % @ 50 dBm (CW)
Input return loss (S11)	min. 20 dB
ON voltage	+12 V DC
Supply voltage	+12 ... 14 V DC
Quiescent current @ Vcc (max)	typ. 8 A
Current consumption @ P3dB	max. 20 A
Forward detection	yes (diode detector)
VSWR of load	max. 1.8 : 1
Operating case temp. range	-20 ... +55 °C
Input connector / impedance	SMA-female / 50 ohms
Output connector / impedance	N-female / 50 Ohms
Case	milled aluminium
Dimensions (mm)	124 x 80 x 22

Weight	400 g (typ.)
(1)	Measured 2-tone, frequency spacing: 1 MHz