

KU PA 014018-50 HY, RF Power Amplifier

140 ... 180 MHz • 50 W



Features

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

Applications

- Analog transmission systems

Important notes

Please notice the following:

- All technical data specified at a supply voltage of 14
- 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. V DC at room temperature

Technical specifications:

Frequency range	140..180 MHz
Input power for P3dB	min. +12 dBm
Maximum input power	+17 dBm
Output power P3dB	typ. 47 dBm, min. 46.5 dBm typ. 50 W, min. 45 W
Gain (small signal)	typ. 36 dB, min. 34 dB
Gain flatness (small signal)	typ. +/- 3 dB
Harmonic rejection	typ. 50 dB @ 47 dBm
IM3 (1)	min. 20 dBc @ 43 dBm PEP
Efficiency	min. 30 % @ 47 dBm (CW)
Input return loss (S11)	typ. 10 dB
ON voltage	+12 V DC
Supply voltage	+12 ... 14 V DC
Quiescent current	typ. 4 A
Current consumption @ P3dB	max. 12 A
Forward detection	yes (diode detector)
Reflected power 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	N-female / 50 Ohms
Case	milled aluminium
Dimensions (mm)	130 x 60 x 20
Weight	270 g (typ.)
(1)	Measured 2-tone, frequency spacing: 1 MHz