

# KU LNA BB 3000 A - Low Noise Broadband Preamplicifier

## Technical Specifications

| Electrical Specifications               |      |      |      |       |
|---|------|------|------|-------|
| Parameter                               | Min. | Typ. | Max. | Units |
| Frequency                               | 10   |      | 3000 | MHz   |
| Gain                                    | 25   |      | 30   | dB    |
| Gain Flatness                           |      | ±1.5 |      | dB    |
| Noise Figure<br>(25...2800 MHz)         |      | 1.5  | 2.1  | dB    |
| (2800...3000 MHz)                       |      | 2    | 2.5  | dB    |
| Input Return Loss (S11)                 |      | 10   |      | dB    |
| Output Power at 1 dB Compression (P1dB) |      | 15   |      | dBm   |
| Output Third Order Intercept (IP3)      | 26   | 30   |      | dBm   |
| DC Supply Voltage                       | 12   |      | 15   | V     |
| Supply Current                          |      | 150  |      | mA    |

| Maximum Ratings       |            |
|-----------------------|------------|
| Parameter             | Ratings    |
| Operating Temperature | -40...85°C |
| DC Voltage            | 16 V       |
| Input RF Power        | 3 dBm      |

Permanent damage may occur if any of these limits are exceeded.

Noise figure specified at 18°C, will increase with higher temperature.

[Link](#) to the product page online.



| Mechanical Specifications |                     |
|---------------------------|---------------------|
| Input Connector           | SMA-female, 50 ohms |
| Output Connector          | SMA-female, 50 ohms |
| Case                      | milled aluminium    |
| Dimensions (L x W x H)    | 50 x 30 x 17 mm     |
| Weight                    | 45 g                |

### Applications:

Communication systems  
Measurement and laboratory equipment

### Fulfilled Standards:

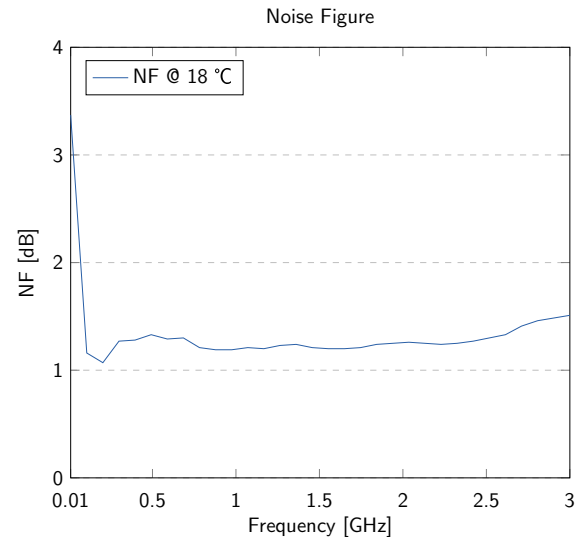
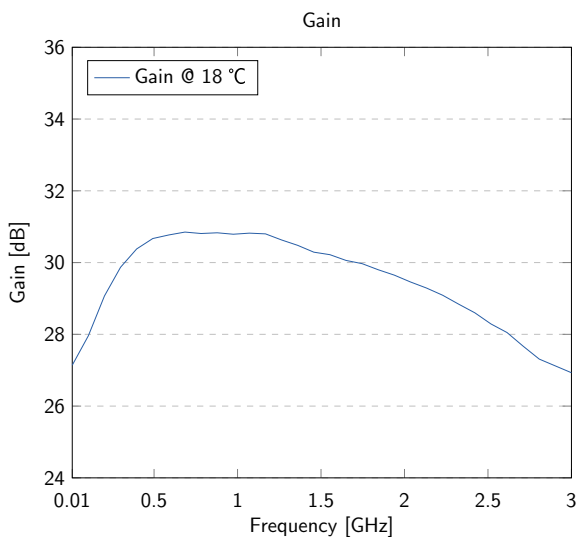
EMC directive 2014/30/EU  
Low voltage directive 2014/35/EU  
RoHS directive 2011/65/EU

### Features:

Large bandwidth  
Solder pin for direct power supply  
Reverse polarity protection

## Typical Performance Data and Curves

(DC Voltage = 12V, DC Current = 150mA)



## Notice

Additional protection against moisture is essential in case of outdoor installation.  
Installation in a waterproof case is recommended.

## Test Certificate

Sig.: \_\_\_\_\_

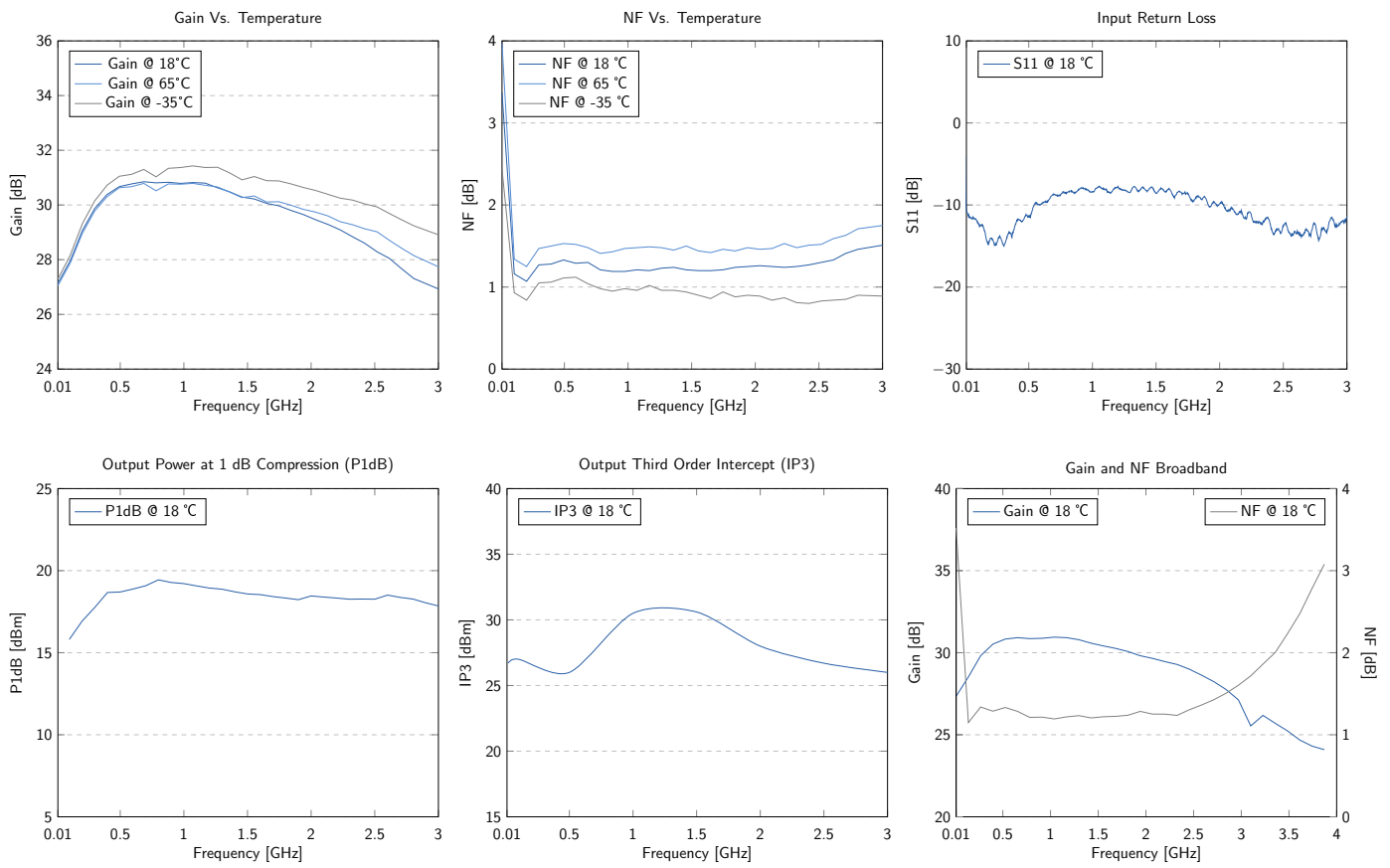
QS: \_\_\_\_\_

SN: \_\_\_\_\_

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## Typical Curves

(DC Voltage = 12V, DC Current = 150mA)



## Typical Data

(DC Voltage = 12V, DC Current = 150mA)

| Frequency (MHz) | VSWR | P1dB (dBm) | IP3 (dBm) | Gain (dB) | Noise Figure (dB) |
|-----------------|------|------------|-----------|-----------|-------------------|
| 20              | 1.76 | 13.7       | 26.7      | 27.3      | 2.46              |
| 100             | 1.66 | 15.8       | 27.0      | 28.5      | 1.19              |
| 500             | 1.74 | 18.7       | 26.0      | 30.6      | 1.33              |
| 1000            | 2.24 | 19.2       | 33.5      | 30.7      | 1.20              |
| 1500            | 2.19 | 18.6       | 30.6      | 30.2      | 1.22              |
| 2000            | 1.95 | 18.5       | 28.0      | 29.6      | 1.25              |
| 2500            | 1.62 | 18.3       | 26.7      | 28.6      | 1.36              |
| 3000            | 1.72 | 17.9       | 26.1      | 27.1      | 1.60              |

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## Outline Drawings

(Unit: mm)

