

KU LNA BB 8001240 A – Broadband Low Noise and Driver Amplifier

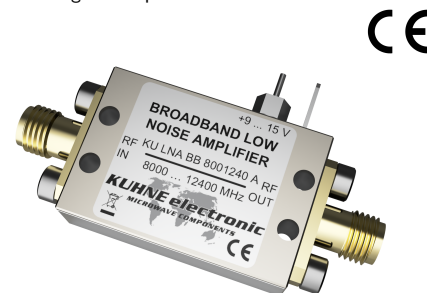
Technical Specifications

Electrical Specifications				
Parameter	Min.	Typ.	Max.	Unit
Frequency	8		12.4	GHz
Gain		32	26	dB
Gain Flatness		±3		dB
Noise Figure		3	4	dB
Input Reflection Coefficient (S11)			-10	dB
Output Reflection Coefficient (S22)			-10	dB
Output Power at 1 dB Compression (P1dB)		25	23	dBm
Output Third Order Intercept (IP3)		31		dBm
DC Supply Voltage	9		15	V
Supply Current		230		mA

Maximum Ratings	
Parameter	Ratings
Operating Temperature	-40..65 °C
DC Voltage	16 V
Input RF Power	10 dBm

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

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



Mechanical Specifications	
Input Connector	SMA female
Output Connector	SMA female
Case	milled aluminium
Dimensions (L x W x H)	28.7 mm x 19.3 mm x 8.4 mm
Weight	typ. 15 g

Applications:

Analog & digital transmission systems
Measurement and laboratory equipment
Monitoring systems

Fulfilled Standards:

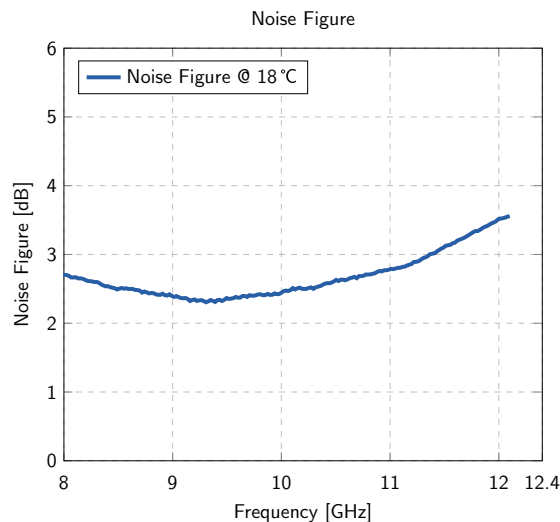
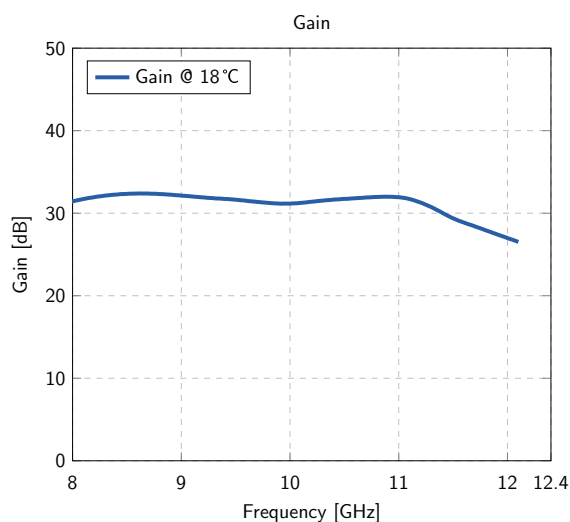
EMC directive 2014/30/EU
RoHS directive 2011/65/EU

Features:

High bandwidth
High P1dB and IP3
Small package dimensions

Typical Performance Data and Curves

(DC Voltage = 12 V, DC Current = 230 mA)



Notice

- Additional protection against moisture is essential in case of outdoor installation, e.g., a waterproof case.
- Due to the small dimensions, adequate cooling is highly recommended, e.g., with a passive heat sink.
- Supply current can vary by around ±30 mA due to fabrication tolerances of the IC devices used.

Test Certificate

Sig.: _____

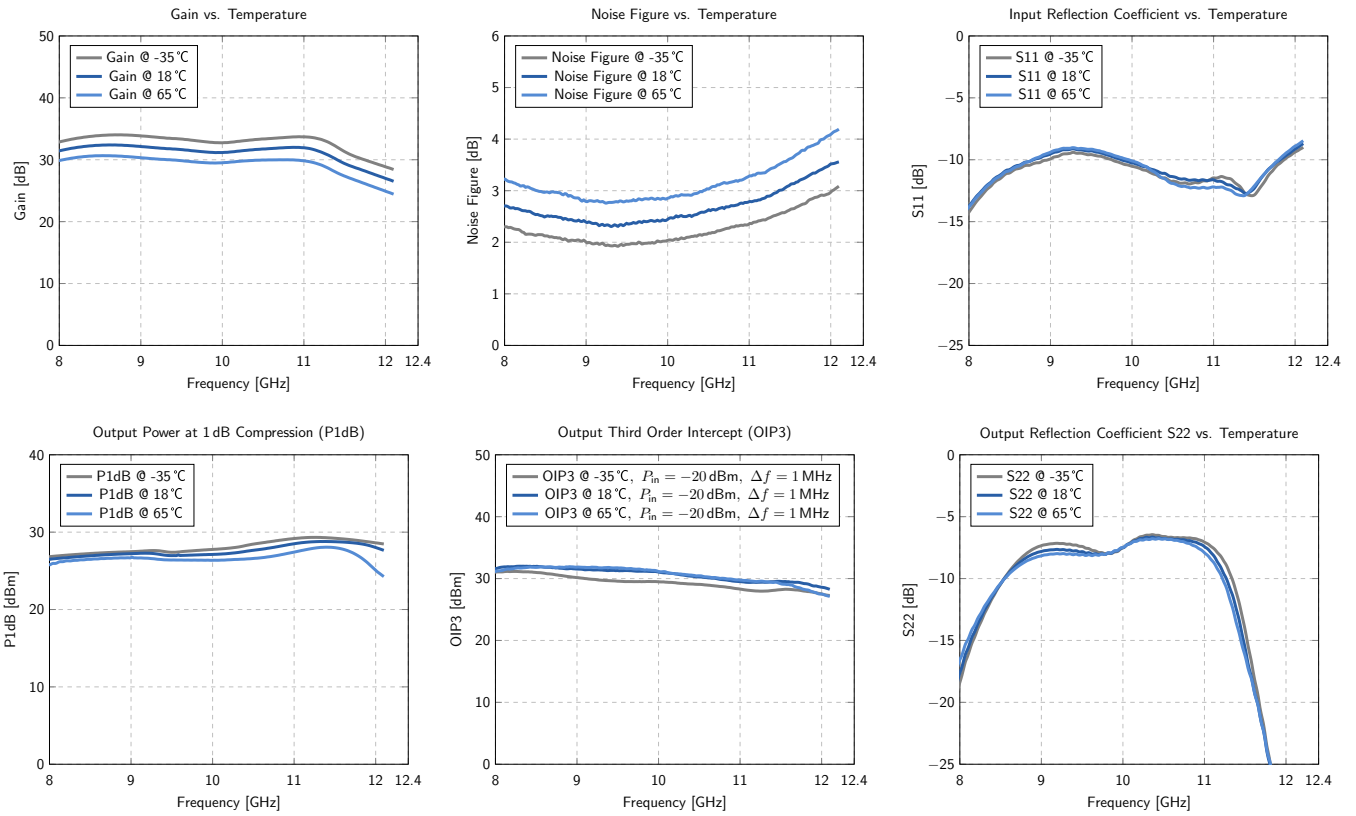
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Typical Curves

(DC Voltage = 12V, DC Current = 230 mA)



Typical Data

(DC Voltage = 12V, DC Current = 230 mA)

Frequency [MHz]	Gain [dB]	Noise Figure [dB]	S11 [dB]	S22 [dB]	P1dB [dBm]	IP3 [dBm]
8000	31.5	2.70	-13.7	-17.5	26.5	31.6
9000	32.1	2.40	-9.6	-7.8	27.2	31.5
10000	31.2	2.44	-10.3	-7.5	27.1	31.1
11000	31.9	2.80	-11.7	-7.7	28.5	29.5
12000	27.0	3.51	-9.2	-39.0	28.0	28.6

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Outline Drawings (similar for all connector variants)

(Unit: mm)

