KU LNA 750850 A WG – Super Low Noise Preamplifier

Technical Specifications

Electrical Specifications					
Parameter		Min.	Typ.	Max.	Unit
Frequency		7500		8500	MHz
Gain			65		dB
Gain Flatness			±1		dB
Noise Figure	(7.5 GHz ... 8.5 GHz)		0.8	0.95	dB
	(8.5 GHz ... 9.5 GHz)		0.7	0.85	dB
Input Reflection Coefficient (S11)			-8	-6	dB
Output Reflection Coefficient (S22)			-15	-10	dB
Output Power at 1 dB Compression (P1dB)			13		dBm
Output Third Order Intercept (IP3)			23		dBm
DC Supply Voltage		9		15	V
Supply Current (@ 12 V supply voltage)			220		mA

Mechanical Specifications	
Input Connector	WR-112
Output Connector	N female
DC Connector	MS3112E10-6P
Case	milled aluminium
Dimensions (L x W x H)	99.2 mm × 76 mm × 63.5 mm
Weight	typ. 440 g

Maximum Ratings	
Parameter	Ratings
Operating Temperature	-40..65 °C
DC Voltage	16 V
Input RF Power	0 dBm

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

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

CE

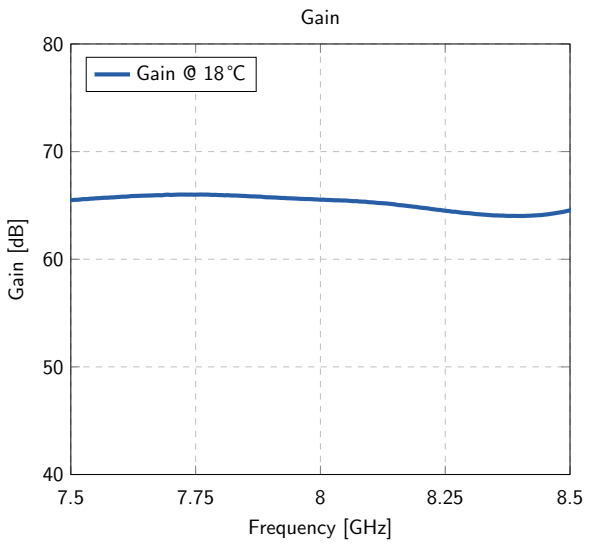
Applications:
Deep Space communications
Satellite ground station

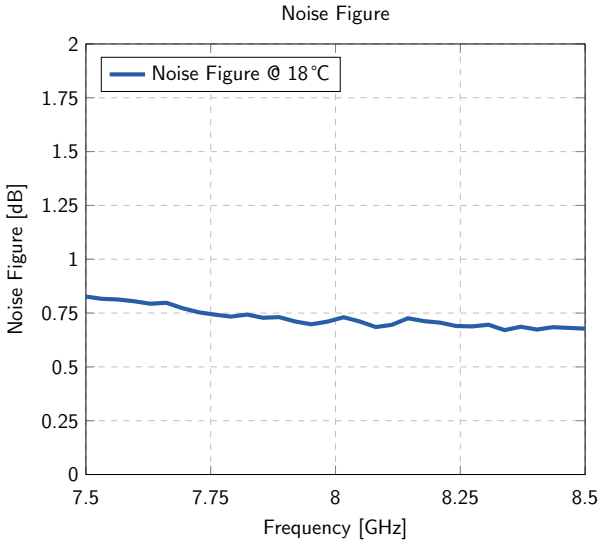
Fulfilled Standards:
EMC directive 2014/30/EU
RoHS directive 2011/65/EU

Features:
Extremely low noise figure
Reverse polarity protection
Remote power supply via output connector
Low-power enable input pin

Typical Performance Data and Curves

(DC Voltage = 12 V, DC Current = 220 mA)





Notice

Airtight and splash-proof case, designed for 30 mbar air pressure.

Test Certificate

Sig.: _____ QS: _____ SN: _____

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KUHNE electronic
MICROWAVE COMPONENTS

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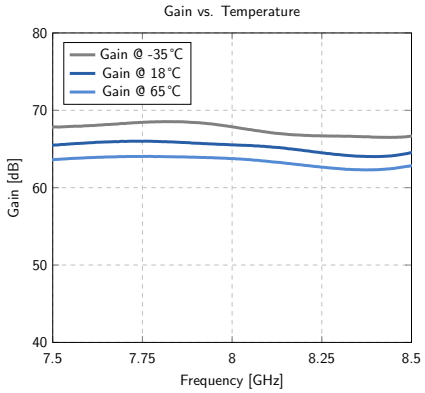
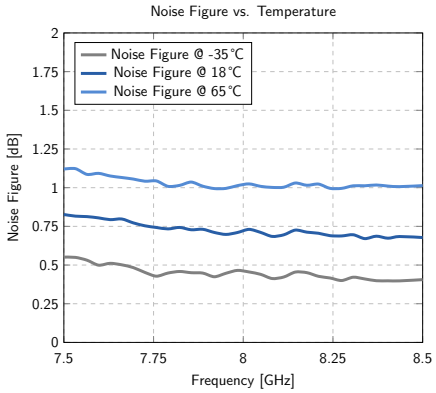
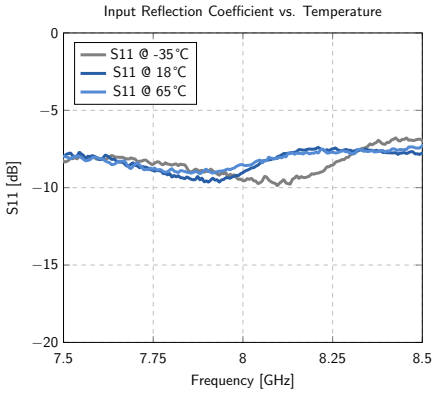
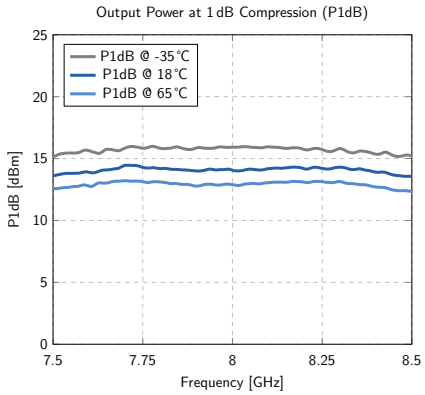
Typical Curves

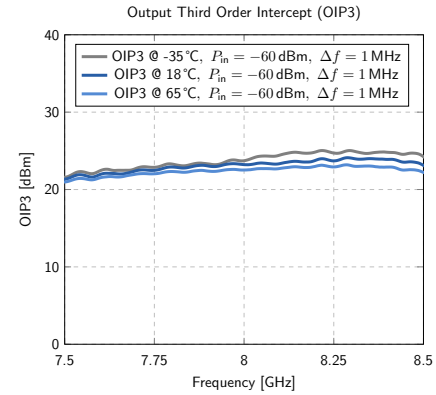
(DC Voltage = 12 V, DC Current = 220 mA)

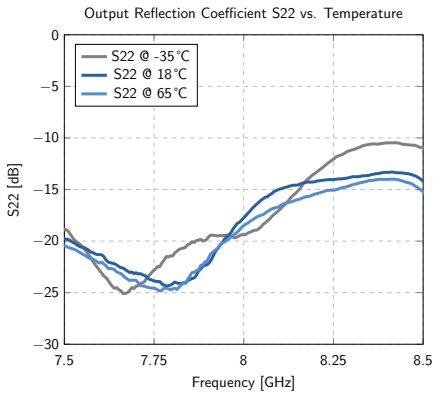












Typical Data

(DC Voltage = 12V, DC Current = 220 mA)

Frequency [MHz]	Gain [dB]	Noise Figure [dB]	S11 [dB]	S22 [dB]	P1dB [dBm]	IP3 [dBm]
7500	65.5	0.83	-8.0	-19.8	13.6	21.3
7750	65.0	0.74	-8.9	-23.8	14.3	22.5
8000	65.5	0.71	-9.0	-17.7	14.0	23.2
8250	64.5	0.69	-7.5	-14.0	14.2	23.7
8500	64.5	0.68	-7.8	-14.1	13.6	23.2

Outline Drawings

(Unit: mm)