

## 1000-18000MHz

Model Number: OC-LNA1-18K30DB

The model OC-LNA1-18K30DB is a broadband, low noise, low P<sub>-1dB</sub> low noise amplifier operating between 1000 MHz and 18000 MHz and providing an ultra low noise figure with 3.6 dB. The employment of Hetero-Junction FET devices with good noise figure in manufacturing ensures this module exceptional noise figure performance. It is the key component of the electronic system.

### FEATURES:

- Broadband;
- Low Noise Figure;
- Low Output P<sub>-1dB</sub>;
- Small Size & Light Weight;
- Good Consistency;

### ELECTRICAL SPECIFICATIONS @ +15.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	1000		18000	MHz
Small Signal Gain	Gain	27	30		dB
Small Signal Gain Flatness	Δ Gss		±2.0	±2.5	dB
Output P <sub>-1dB</sub>	OP <sub>-1dB</sub>	+13	+15.5		dBm
Noise Figure	NF		3.6	4.5	dB
VSWR @ Input Port	IN VSWR		1.8:1	2.3:1	
VSWR @ Output Port	OUT VSWR		1.8:1	2.3:1	
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VCC		+12	+15	Volt
DC Current	IDD		80	120	mA

### MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	30x15x10 [1.18x0.59x0.39]	mm [inch]	Maximum
Weight	20 [0.04]	g [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	INSULATOR		

### ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	0		50	°C	
Non-operating Temperature	-20		65	°C	Storage
Relative Humidity (non-condensing)			95	%	

### Absolute Maximum Rating

Input RF drive level without damage	+13 dBm
DC Voltage	+15 V

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OUTLINE DRAWING (All dimensions in mm [inch])

