

500-2000MHz

Model Number: OC-LNA0.5-2K20DB

The model OC-LNA0.5-2K20DB is a broadband, low noise, low P_{-1dB} low noise amplifier operating between 500 MHz and 2000 MHz and providing an ultra low noise figure with 1.7 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_{-1dB};
- Small Size & Light Weight;
- Good Consistency;

ELECTRICAL SPECIFICATIONS @ +12.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	500		2000	MHz
Small Signal Gain	Gain	20			dB
Small Signal Gain Flatness	Δ Gss			±1.0	dB
Output P _{-1dB}	OP _{-1dB}	+13	+15		dBm
Noise Figure	NF		1.7	2	dB
VSWR @ Input Port	IN VSWR		1.8:1	2.0:1	
VSWR @ Output Port	OUT VSWR		1.8:1	2.0:1	
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VCC		+12		Volt
DC Current	IDD@+12		80	120	mA

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	24x15x10 [0.94x0.59x0.39]	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	+12 dBm
DC Voltage	+15 V

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OUTLINE DRAWING (All dimensions in mm [inch])

