

## 100-6000MHz

The model OC-LNA0.1-6K27DB is a broadband, low noise, low P<sub>-1dB</sub> low noise amplifier operating between 100 MHz and 6000 MHz and providing an ultra low noise figure with 2.5 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.

**Model Number: OC-LNA0.1-6K27DB**

**FEATURES:**

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

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	100		6000	MHz
Small Signal Gain	Gain	25	28		dB
Small Signal Gain Flatness	Δ Gss		±1.5	±2.0	dB
Output P <sub>-1dB</sub>	OP <sub>-1dB</sub>	+15	+16		dBm
Noise Figure	NF		2	2.5	dB
Non Harmonic Spurious	NHS			-60	dBc
VSWR @ Input Port	IN VSWR		1.8:1		
VSWR @ Output Port	OUT VSWR		1.8:1		
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VCC	+10	+12		Volt
DC Current	IDD			100	mA

**MECHANICAL SPECIFICATIONS**

Parameter	Value	Units	Notes
Dimensions	40x60x20 [1.57x2.36x0.79]	mm [inch]	Maximum
Weight	100 [0.22]	g [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	FEEDTHRU CAPACITOR		

**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])

