



Low Noise Amplifier WBLNA – 1.0

Wavelet Technologies Pvt Ltd.

Features:

- 60 - 80 MHz
- 19.5 dB Gain in the frequency range of 60 - 80 MHz
- +28.31 dBm Output IP3
- 1.45 dB Noise Figure @ 70 MHz
- Unconditionally stable
- High input power capability
- +5 V Single Supply, 40 mA Current
- Single ended operation
- Reverse Voltage Protection
- Enclosure Dimensions: (66 x 40 x 20) mm
- Enclosed Unit Weight: 80 gm.

Absolute Maximum Ratings:

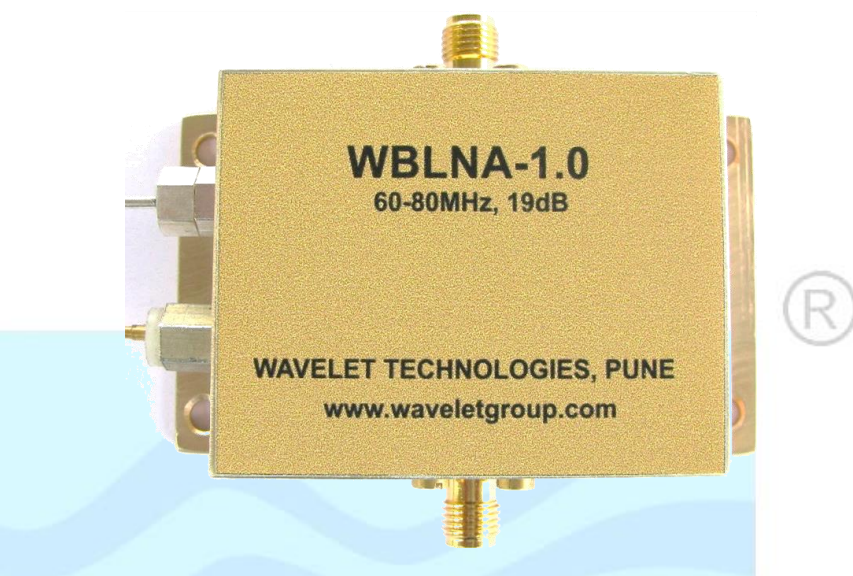
- RF Input Power C.W, 50Ω, T=25° C: +23 dBm
- Operating Temp : -40° C to +85° C

Application:

WBLNA module can be used in infrastructure equipment of the mobile wireless (CDMA, GSM, PCS, GPS, PHS, WLAN, WCDMA, DMB, WiBro, WiMAX), CATV, satellite communication terminal, and other applications requiring high linearity and/or low noise figure and low bias current.

Product Description:

WBLNA-1.0 is a Low Noise Amplifier PCB placed inside a passivated enclosure providing a gain of 19.5 dB within the frequency range of 60-80 MHz. It has an exceptional performance of low noise figure, high gain, high OIP3, and low bias current.



Specifications:

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	60	70	80
Gain	dB	18.8	19.5	20.5
Noise Figure	dB		1.45	1.67
Output P1dB	dBm	16	17	
Output IP3	dBm	25	27	
Supply Voltage	V		5	
Supply Current	mA		30	50
Impedance	Ω		50	
Maximum RF Input Power	dBm		C.W 23~25	
Input Return Loss	dB		28	
Output Return Loss	dB		16	

Test conditions unless otherwise noted: +25° C, +5V supply 50 Ω systems.

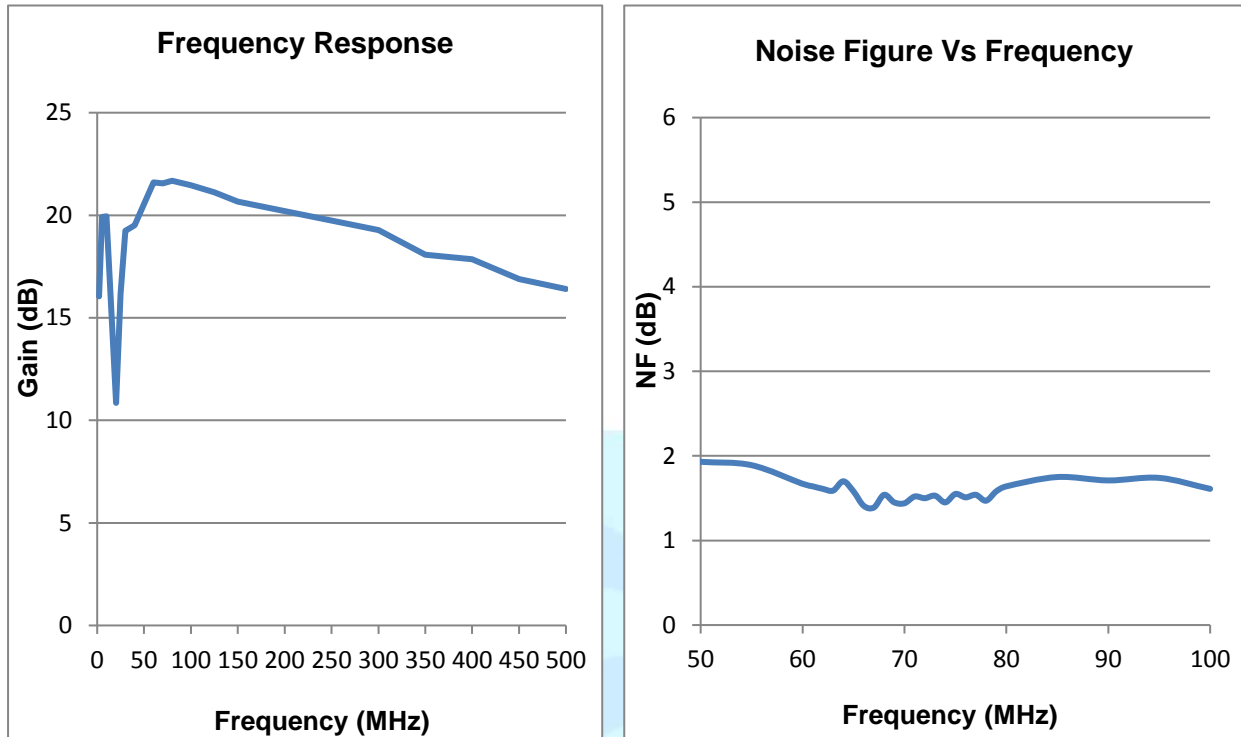
WAVELET TECHNOLOGIES PRIVATE LIMITED

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Performance Plots:



Handling Precautions:

1. First terminate the output with 50E then apply the supply voltage and then connect RF input.

Mechanical Outline:



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