Wide Band Low Noise Amplifier 26GHz~40GHz

- Frequency Range： 26GHz~40GHz
- Low Noise Figure: 7dB typical.
- Small Signal Gain ≥ 17dB
- Applicable for base station ,repeaters of Satellite station network
- Aerospace and military application
- LMDS multi-carrier operation
- High peak to average handle capability
- All specifications can be modified upon request

RoHS Compliant

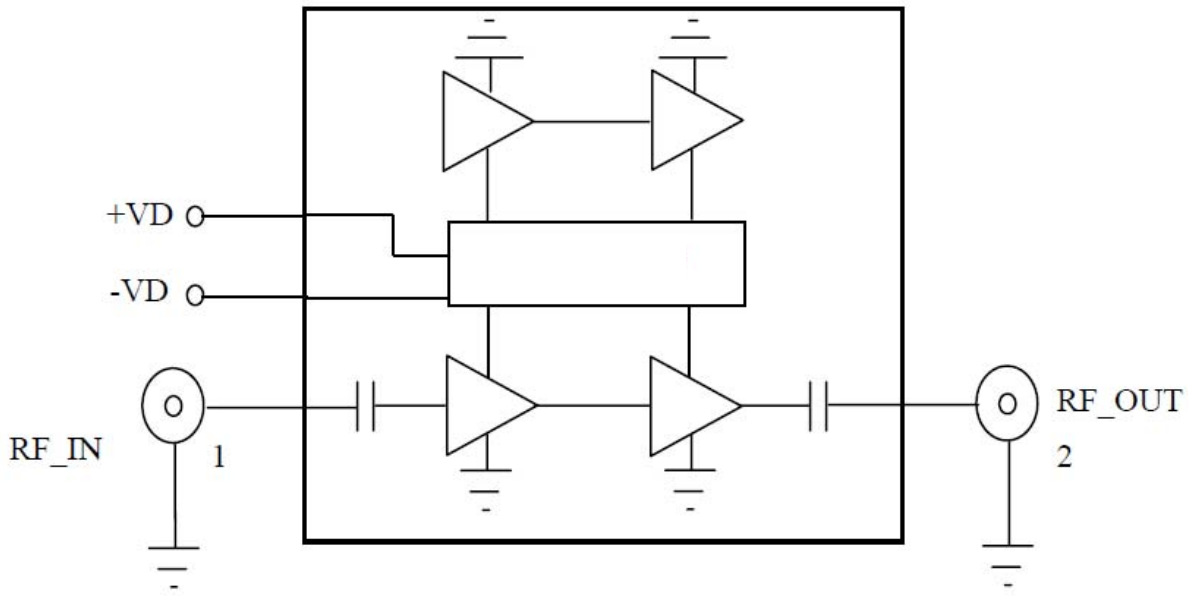
Specification	Ultra Wide Band Lose Noise Amplifier		
	PN: RLNAW28A		
	Min.	Typ.	Max.
Frequency Range(GHz)	26		40
Gain (dB)	17	19	
Gain Flatness (dB)		±4	±5
Noise Figure (dB)		7	8
P1dB Power (dBm)	27.9	29	
Input Port VSWR		1.8	2.0
Output Port VSWR		1.8	2.0
Current (Id) (mA)		2200	
Power Supply	7V		
Output Connector	WR28		
Finishing	Gold Plating		
Material	Brass		
Seal	Hermetically Sealed (optional)		

Absolute Maximum Ratings			
		Min.	Max.
RF Input Power		-	23dBm
Bias Voltage	Vd	-	+7V
	Vd	-3V	-
Operating Temperature		-20 ℃	+70℃
Storage Temperature		-40 ℃	+85℃

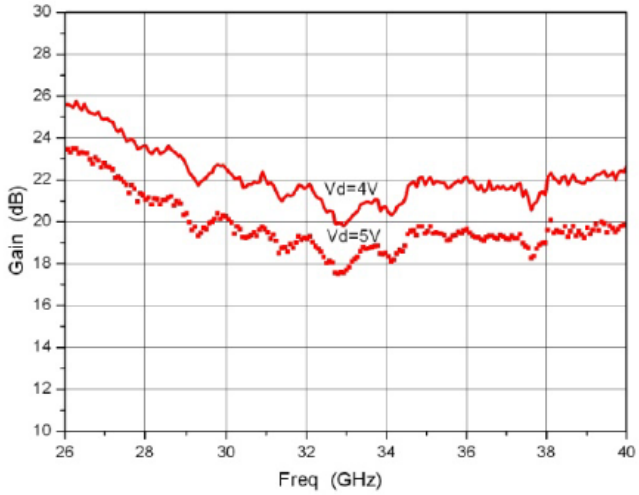
Biasing Up Procedure	
Step 1	Connect input and output
Step 2	Connect Ground Pin
Step 3	Connect +12V biasing
Power OFF Procedure	
Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground.

Port Instructions:		
1	RF Input	WR28 Connector
2	RF Output	WR28 Connector
3	Vd	Power Supply Voltage for the Amplifier, Voltage Range: +4V~+5V. 0.8mm Diameter Feedthru Capacitor.
4	Vg	Gate control for amplifier. Adjust to achieve Id=50 mA. Voltage Range:-0.4V~+0.8V. 0.8mm Diameter Feedthru Capacitor.
5	GND	GND.

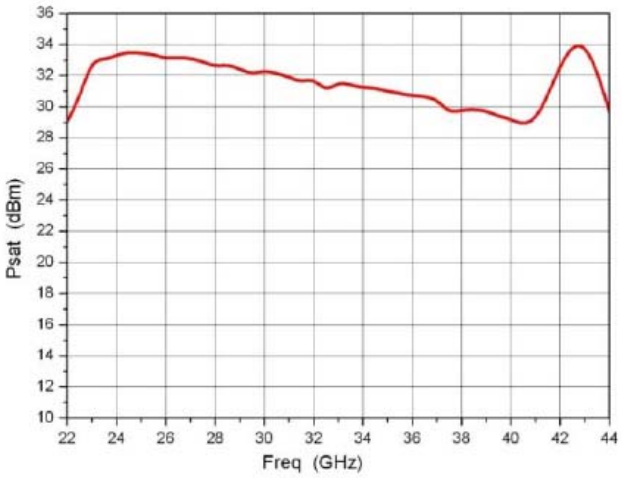
Functional Diagram:



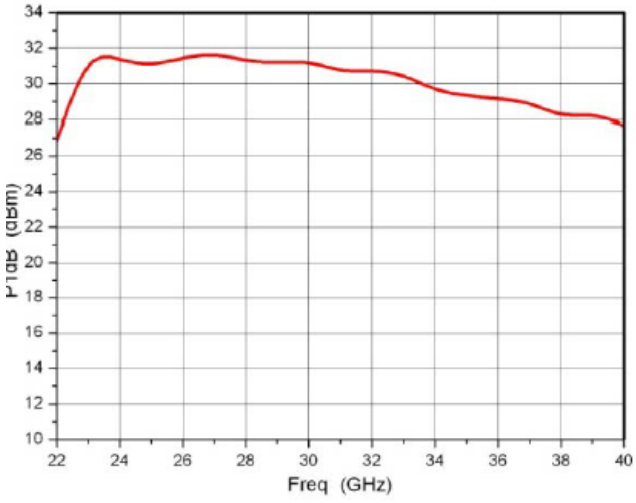
Typical Performance:



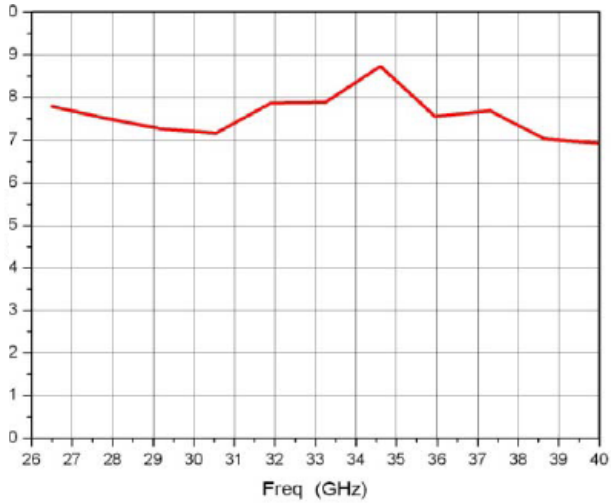
Small Signal Gain VS. RF Frequency



Output Power VS. RF Frequency



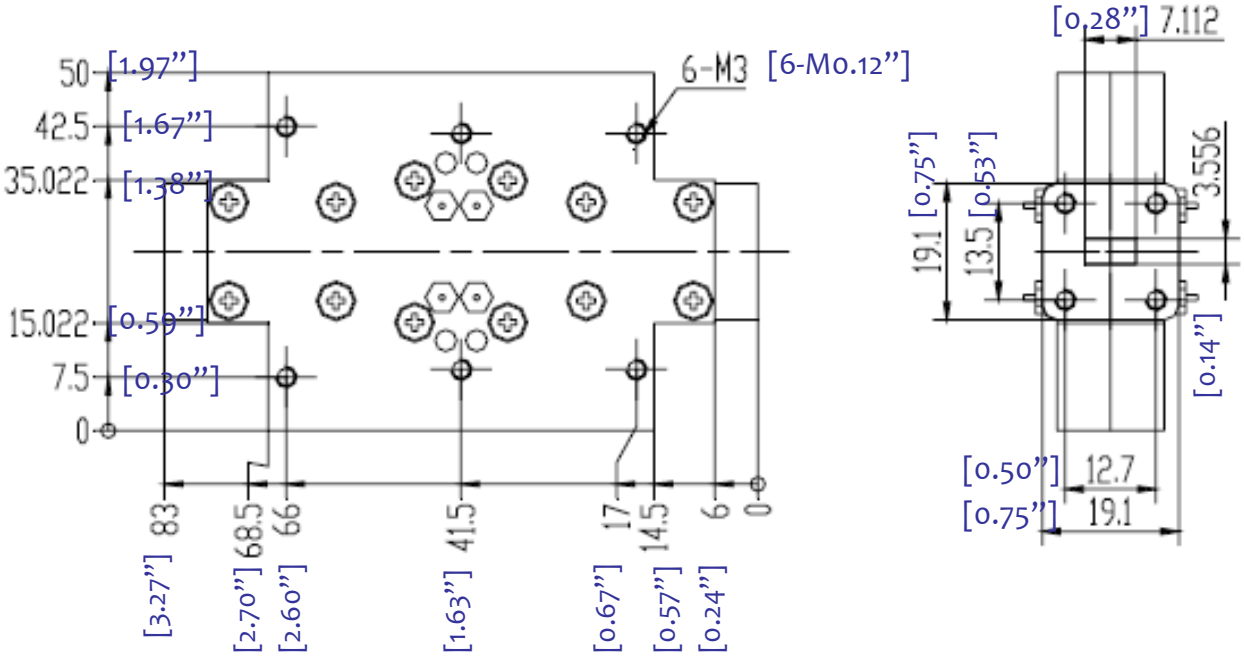
P1dB Power VS. RF Frequency



Noise Figure VS. RF Frequency

Outline Drawings:

Heat Sink required during operation.



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