



Wide Band Low Noise Amplifier 84GHz~100GHz



- Frequency Range: 84GHz~100GHz
- Low Noise Figure: 5dB typical.
- Small Signal Gain $\geq$ 14dB
- 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

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Specification	Ultra Wide Band Lose Noise Amplifier		
	PN: RLNAW10A		
	Min.	Typ.	Max.
Frequency Range(GHz)	84		100
Gain (dB)	14	15	
Gain Flatness (dB)		± 3	± 4
Noise Figure (dB)		5	6
P1dB Power (dBm)	0	1	
Input Port VSWR		1.5	2.0
Output Port VSWR		1.5	2.0
Current (Id) (mA)		50	60
Power Supply	2V		
Output Connector	WR10 COVER Flange		
Finishing	Gold Plating		
Material	Brass		
Seal	Hermetically Sealed (optional)		



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The power beyond expectations

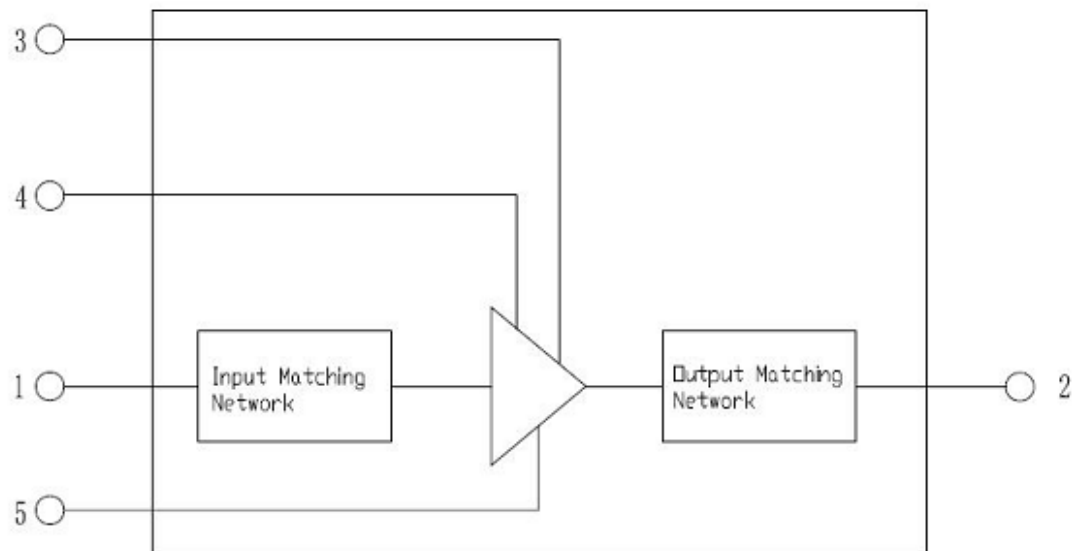
RLNAW10A

Absolute Maximum Ratings			
		Min.	Max.
RF Input Power		-	-10dBm
Bias Voltage	Vd	1.7V	+2.5V
	Vg	-0.8V	+0.4V
Supply Current		45mA	60mA
Operating Temperature		-20 °C	+70°C
Storage Temperature		-55 °C	+85°C

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	WR10 Standard Rectangular Waveguide, UG-387/U (Modified) Circular Flange.
2	RF Output	WR10 Standard Rectangular Waveguide, UG-387/U (Modified) Circular Flange.
3	Vd	Power Supply Voltage for the Amplifier, Voltage Range: +1.8V~+2.2V. 0.8mm Diameter Feedthru Capacitor.
4	Vg	Gate control for amplifier. Adjust to achieve Id=50 mA. Voltage Range:-0.8V~+0.4V, 0.8mm Diameter Feedthru Capacitor.
5	GND	GND.

Functional Diagram:

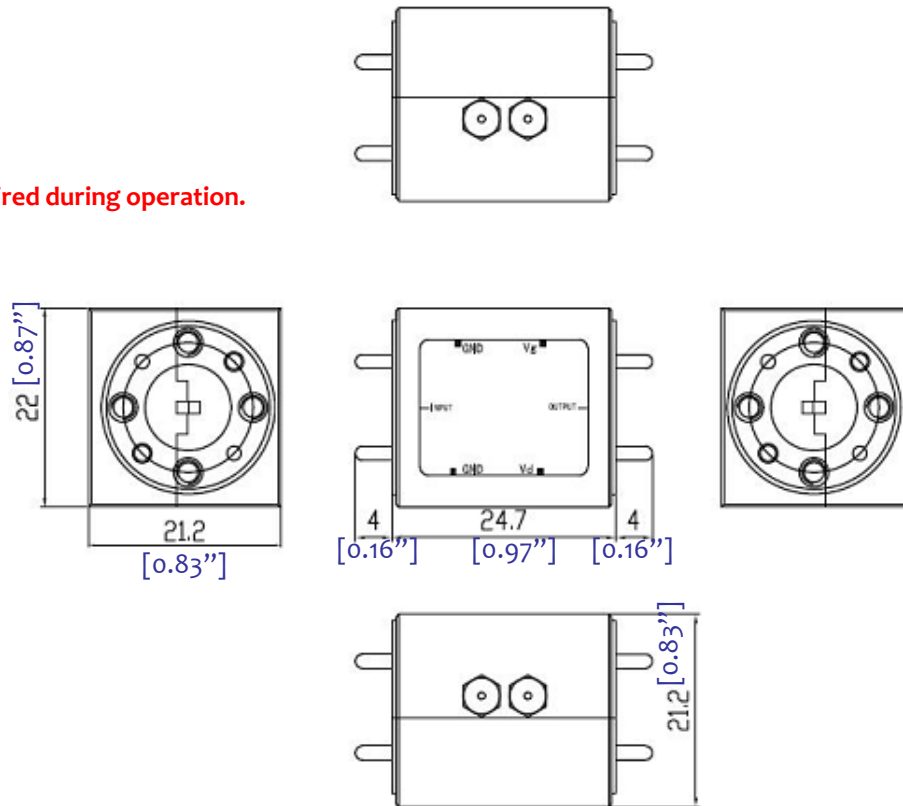


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Outline Drawings:

Heat Sink required during operation.



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