



Ultra Wide Band Low Noise Amplifier 0.1GHz~20GHz



- Output power +23dBm Type.
- Low Noise Figure: 2.3dB typical.
- High P1dB >20dBm full band.
- No External Matching Required
- Applicable for base station ,repeaters of cellular network
- Aerospace and military application
- LMDS multi-carrier operation
- High peak to average handle capability
- All specifications can be modified upon request

Electrical Specifications, TA = +25 ° C, With Vdd = +12V

Parameter	Min	Type	Max	Min	Type	Max	Units
Frequency Range	0.1~15		15~20				GHz
Gain	29	30		26	28		dB
Gain Variation Over Temperature		0.5	0.8		0.5	0.8	dB
Noise Figure		2.3	2.8		2.5	3.5	dB
Input VSWR		1.5	1.8		1.7	2.2	
Output VSWR		1.5	1.8		1.5	1.8	
Output Power For 1dB Compression (P-1dB)	22	23		20	22		dBm
Saturated Output Power (Psat)	23	24		21	23		dBm
Output Third Order Intercept (IP3)		34			34		dBm
Supply Current (Idd) (Vdd=+12V)		250	260		250	260	mA
Isolation S12	65	70		60	65		dB
Input Max		-5			-5		dBm
Weight	100						g
Impedance	50						Ohms
Input /Output Connector	SMA-Female						
Finishing	Gold plating						
Material	Aluminum/copper						

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RF-LAMBDA

The power beyond expectations

RLNA05M20GB

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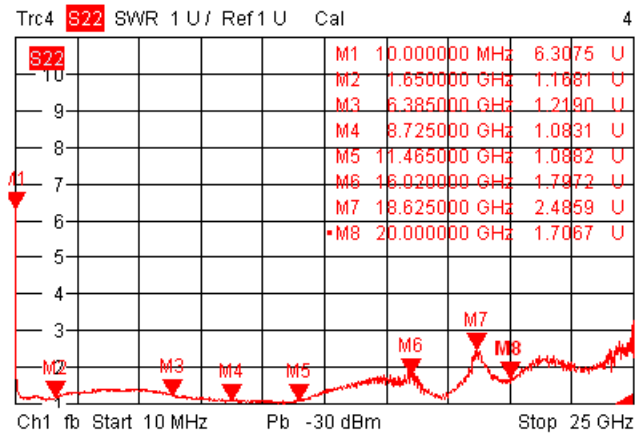
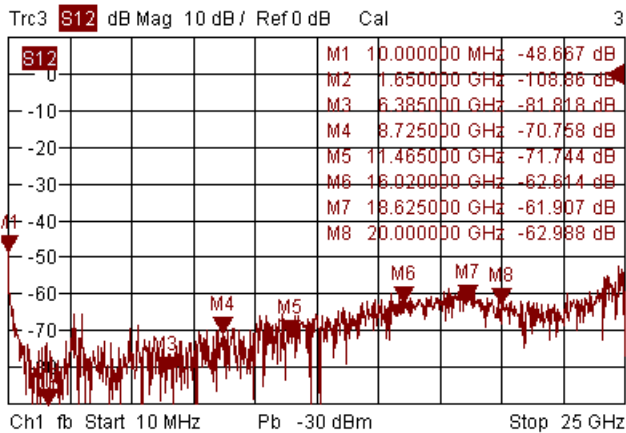
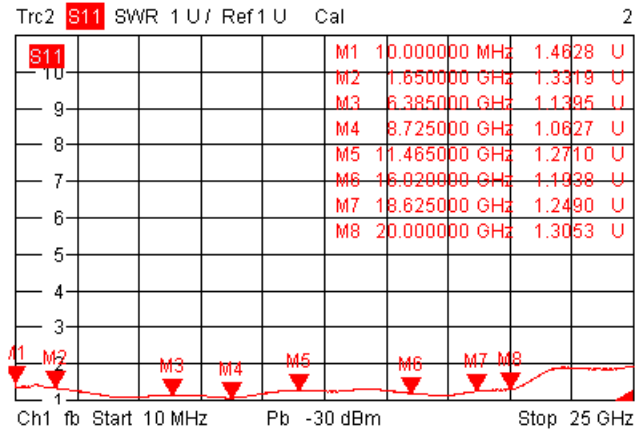
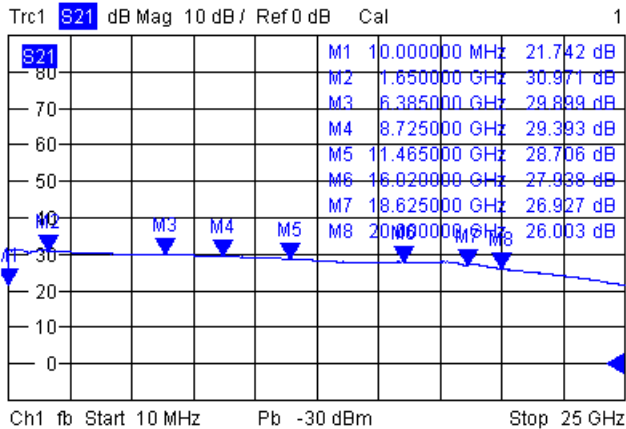
Absolute Maximum Ratings	
Biassing	+12V
Input RF power	-5dBm
Storage Temperature (C°)	-50 ~ +125

Biassing Up Procedure	
Step 1	Connect input and output
Step 2	Connect Ground Pin
Step 3	Connect +12V biassing

Ordering Information		
Part No	ECCN	Description
RLNA05M20GB	EAR99	1-20GHz LNA Amplifier

Power OFF Procedure	
Step 1	Turn off +12V biassing
Step 2	Remove RF connection
Step 3	Remove Ground.

Environment specifications	
Operational Temperature (C°)	-45 ~ +85
Storage Temperature (C°)	-50 ~ +125
Altitude	30,000 ft. (Controlled environment)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc half sin wave, 3 axis both directions



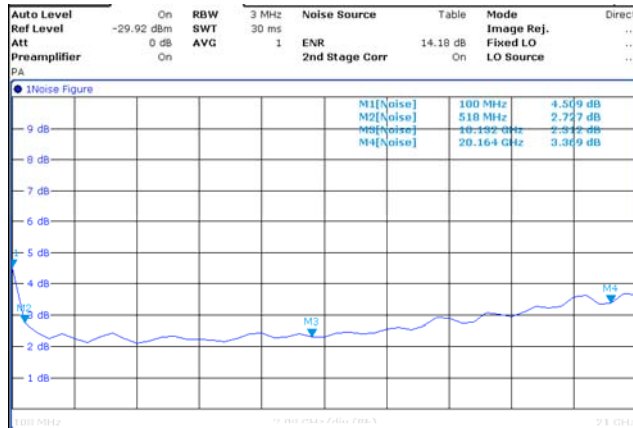
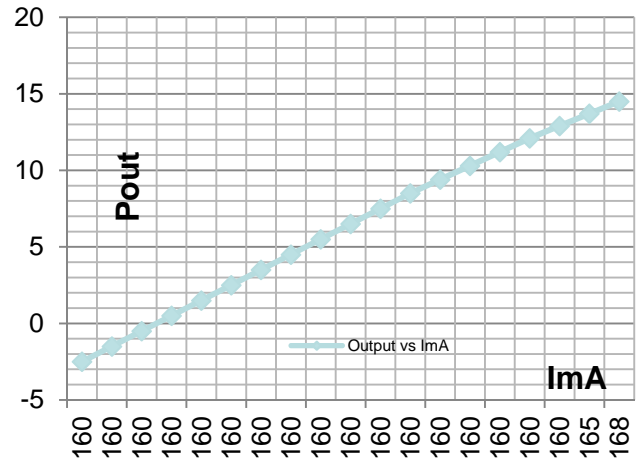
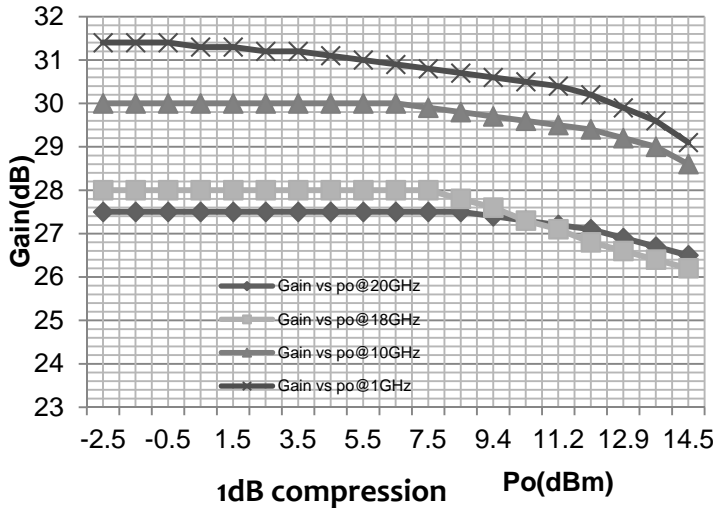
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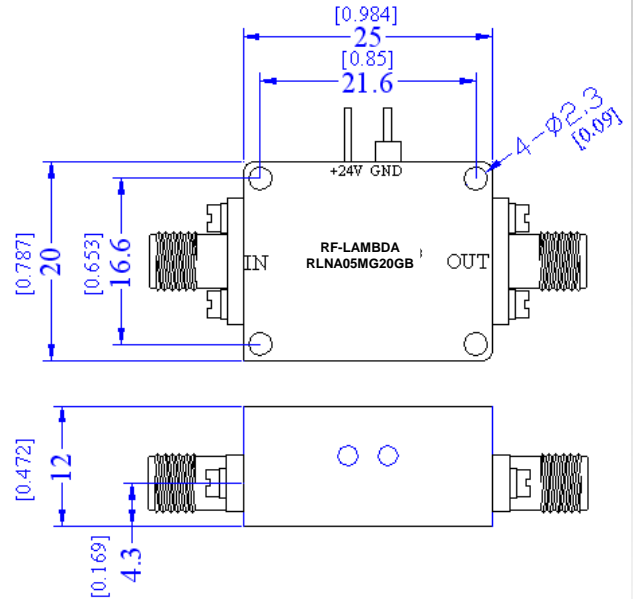
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The power beyond expectations

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Noise Figure (Over Frequency)



Heat Sink required during operation.



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