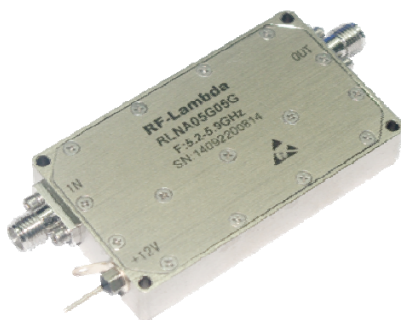




Ultra Wide Band Low Noise Amplifier 5.2GHz~5.9GHz



- Output power +24dBm typical
- Low Noise Figure: 1.2 typical.
- High P1dB >22dBm 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 VCC=+12V

Parameter	Min	Type	Max	Min	Type	Max	Units
Frequency Range	5.2~5.9						GHz
Gain	30	31					dB
Gain Variation Over Temperature		0.5	0.8				dB
Noise Figure		1.2	2.0				dB
Input VSWR		1.7	2				
Output VSWR		1.8	2				
Output Power For 1dB Compression (P-1dB)	22	24					dBm
Saturated Output Power (Psat)	-	25					dBm
Output Third Order Intercept (IP3)		32					dBm
Supply Current (Idd) (Vdd=+12V)		300	350				mA
Isolation S12		60					dB
Input Max		0					dBm
Weight	200						g
Impedance	50						Ohms
Input /Output Connector	SMA-Female						
Finishing	Nickel plating						
Material	Aluminum						
Package Sealing	Epoxy Sealing (Standard) Hermetically Seal (Option with extra charge)						



RF-LAMBDA

The power beyond expectations

RLNA05G05G

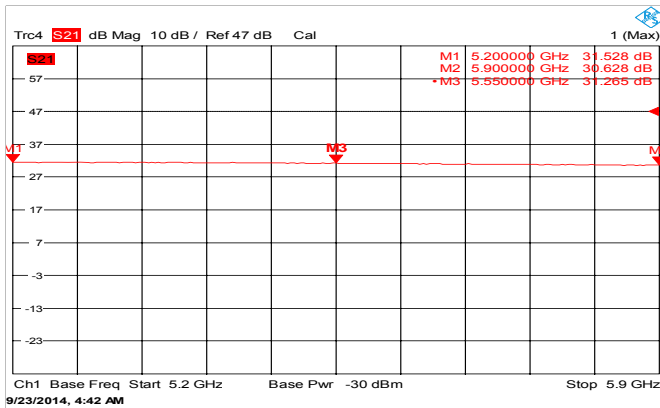
Absolute Maximum Ratings	
Biassing	12V
Input RF power	0dBm
Storage Temperature (C°)	-50 ~ +125

Ordering Information		
Part No	ECCN	Description
PN:RLNA05G05G	EAR99	5.2-5.9GHz LNA Amplifier

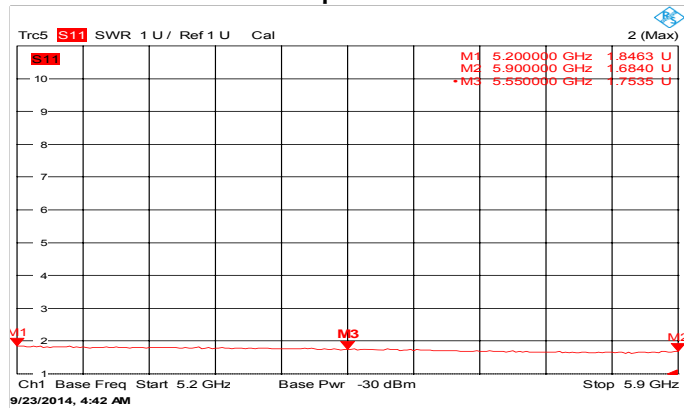
Biassing Up Procedure	
Step 1	Connect input and output
Step 2	Connect Ground Pin
Step 3	Connect 12V
Power OFF Procedure	
Step 1	Turn off 12V
Step 2	Remove RF connection
Step 3	Remove Ground.

Environment specifications	
Operational Temperature (C°)	-45 ~ +85
Storage Temperature (C°)	-50 ~ +125
Altitude	30,000 ft (Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-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

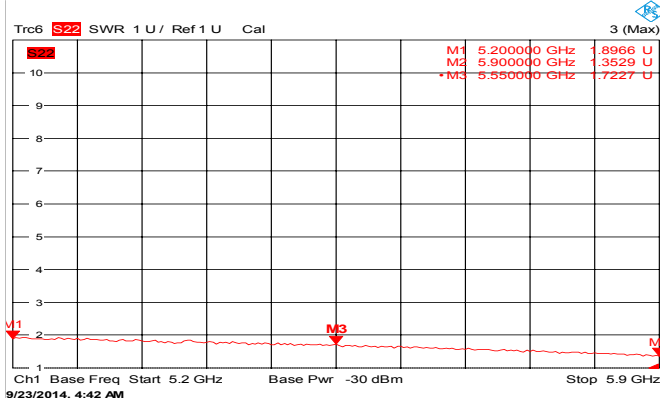
Gain



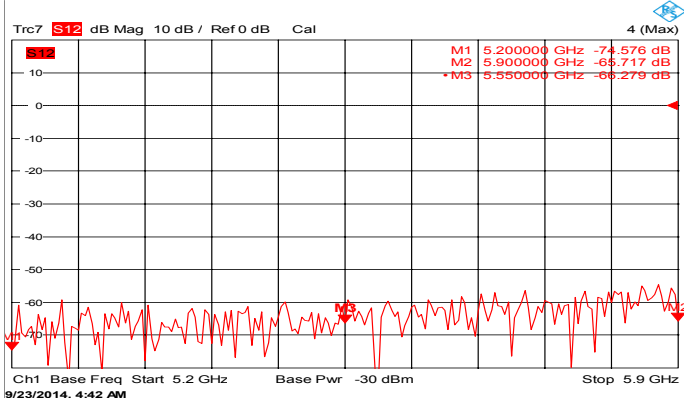
Input VSWR



Output VSWR



S12 Isolation



Ultra Wide Band Low Noise Amplifier 5.2GHz~5.9GHz



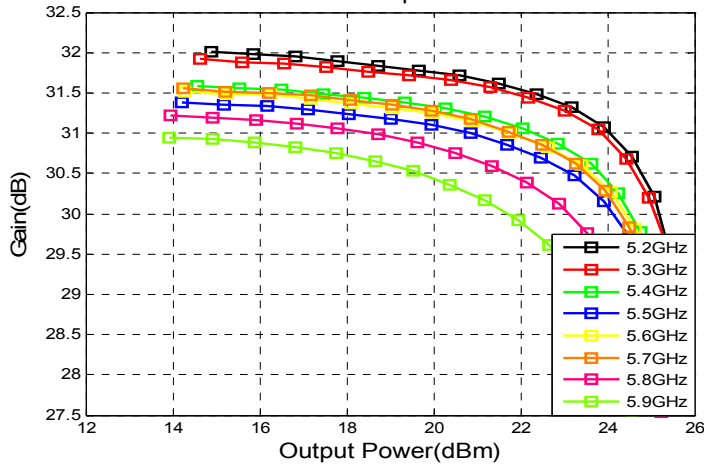
RF-LAMBDA

The power beyond expectations

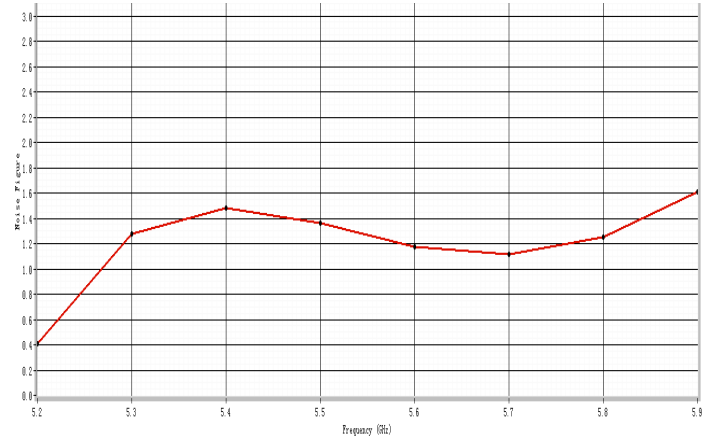
RLNA05G05G

Ultra Wide Band Low Noise Amplifier 5.2GHz~5.9GHz

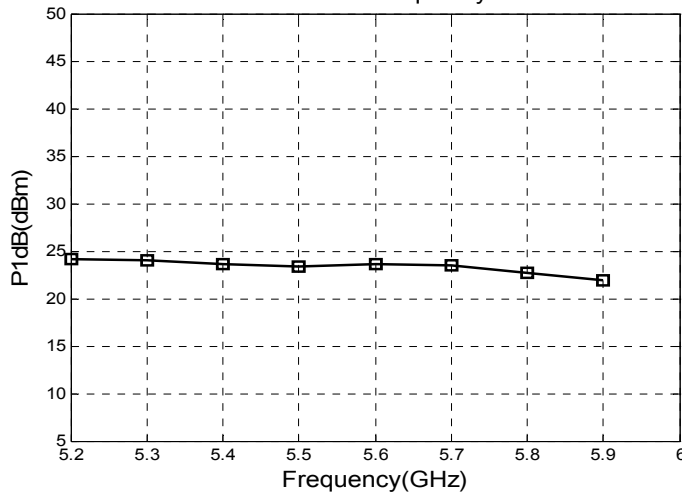
Gain vs. Output Power



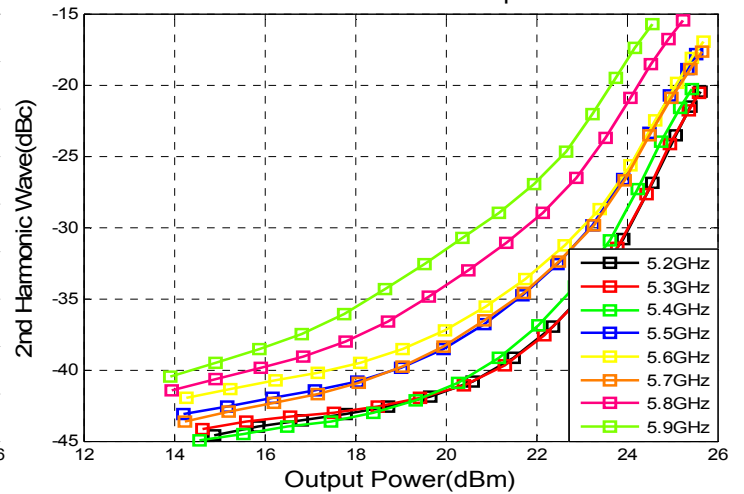
Noise Figure Vs Gain



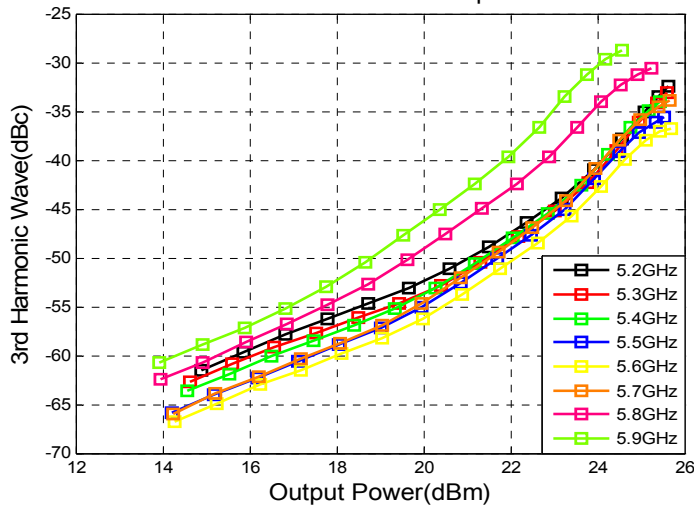
P1dB vs. Frequency



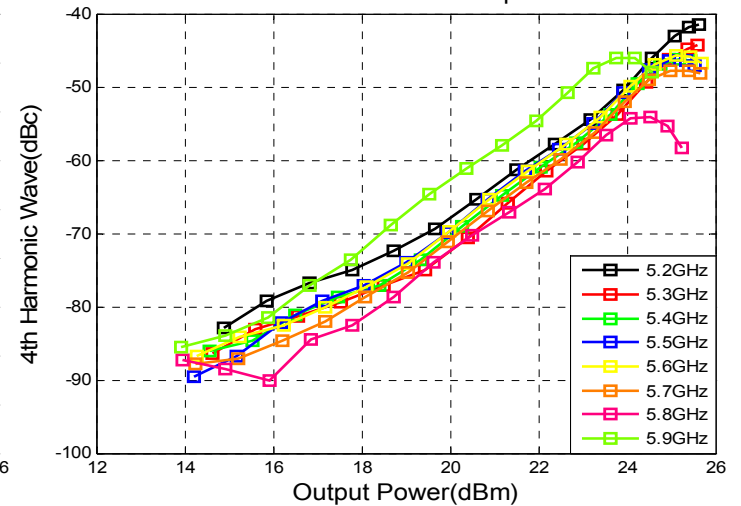
2nd Harmonic Wave vs. Output Power



3rd Harmonic Wave vs. Output Power



4th Harmonic Wave vs. Output Power





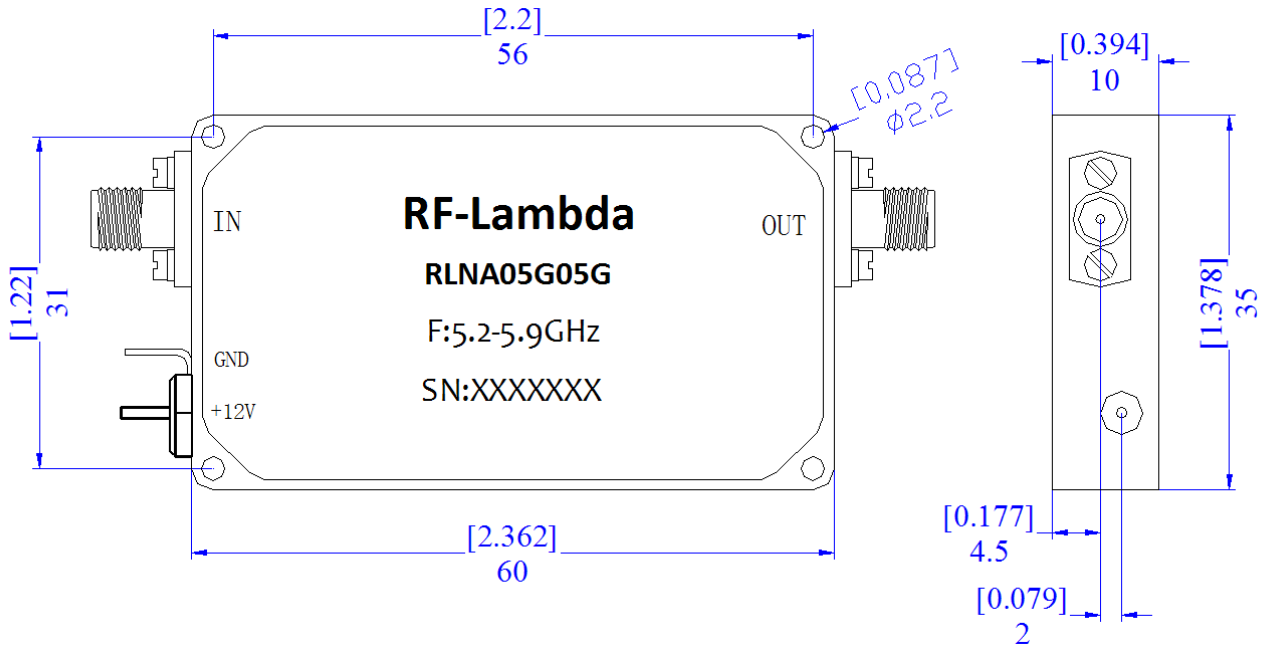
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The power beyond expectations

RLNA05G05G

Outline Drawing:

All Dimensions in mm (inches)



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Ultra Wide Band Low Noise Amplifier 5.2GHz~5.9GHz