



RF-LAMBDA

The power beyond expectations

RFLUPA30G40GA

Ka Band 2W Power Amplifier 28~42GHz

- High output power up to 36dBm Psat
- Aerospace and military application
- High Peak to average handle capability
- High Linearity and low noise figure
- All specifications can be modified upon request



Parameter	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range	28~30			30 ~ 40			40 ~ 42			GHz
Gain	23	28	33	30	34	40	28	31	34	dB
Noise Figure		8			8			8		dB
Input Return Loss		18			12			10		dB
Output Return Loss		7			7			7		dB
Output Power For 1dB Compression (P-1dB)	28	31	33	29	32	34	28	31	33	dBm
Saturated Output Power (Psat)		35			36			35		dBm
Supply Current (Idd) (Vdd=+28V)		440	1500		440	1500		440	1500	mA
Power Supply		24			24			24		V
Isolation S12	60	70		60	70		60	70		dB
Input Max		15			15			15		dBm
Weight	365			365			365			g
Impedance	50			50			50			Ohms
Input /Output Connector	2.92 mm - Female									
Finishing	Gold plating									
Material	Aluminum/copper									

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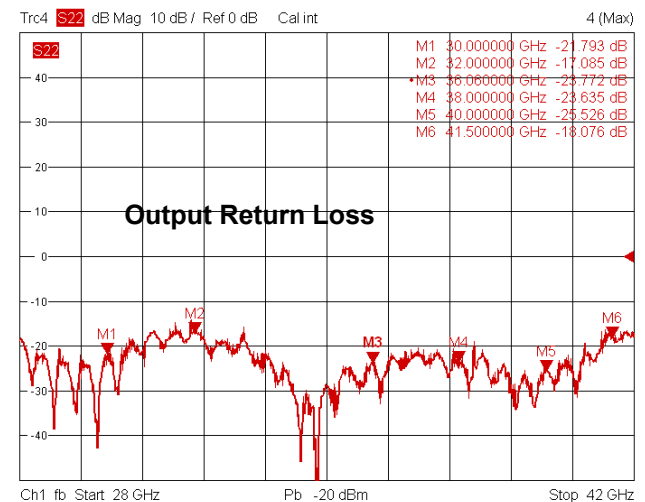
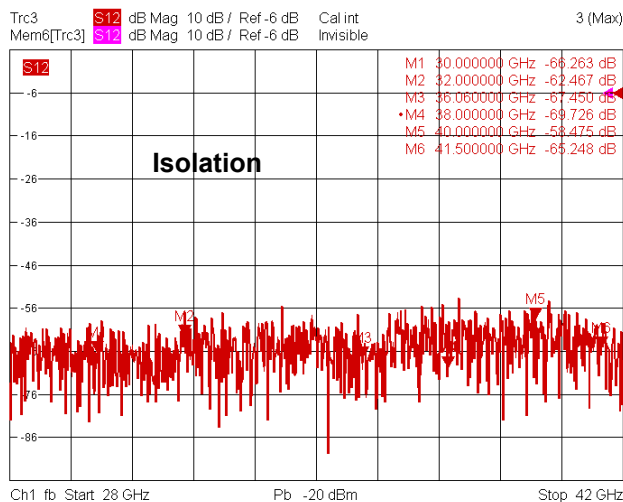
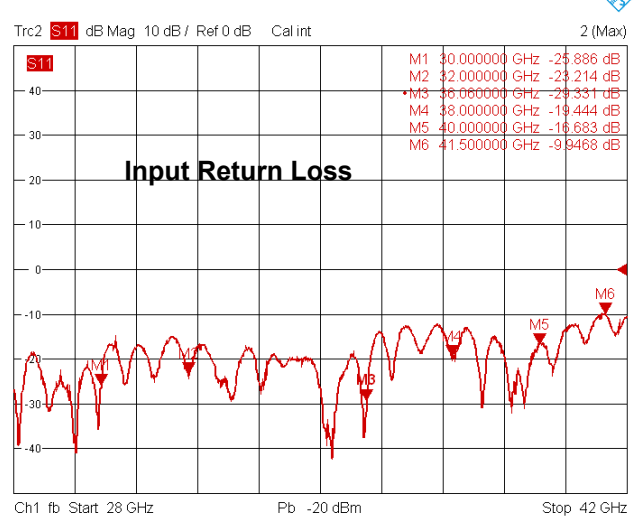
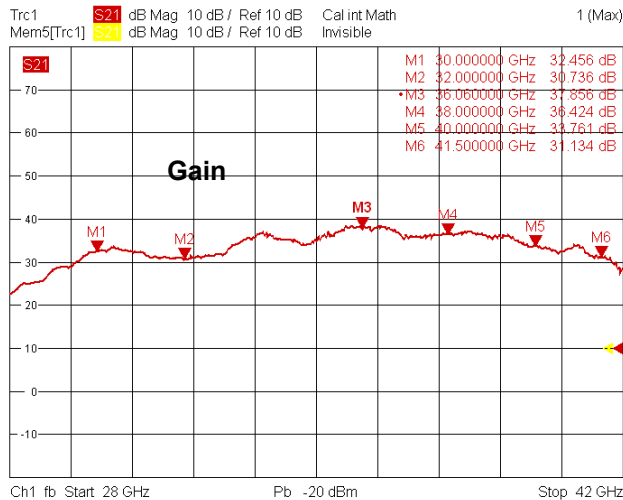
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Absolute Maximum Ratings		
Biasing	+26	
Input RF power	15dBm	
Storage Temperature (C°)	-50 ~ +125	
Ordering Information		
Part No	ECCN	Description
RFLUPA30G40GA	3A001	30GHz~40GHz Power Amplifier

Biasing Up Procedure	
Step 1	Connect input and output
Step 2	Connect Ground Pin
Step 3	Connect +24V biasing
Power OFF Procedure	
Step 1	Turn off +24V biasing
Step 2	Remove RF connection
Step 3	Remove Ground.

Operational Temperature (C°)	-45 to +85
Storage Temperature (C°)	-50 to +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msc half sin wave, 3 axis both directions



Note: Input/output return loss measurements include attenuators to protect VNA

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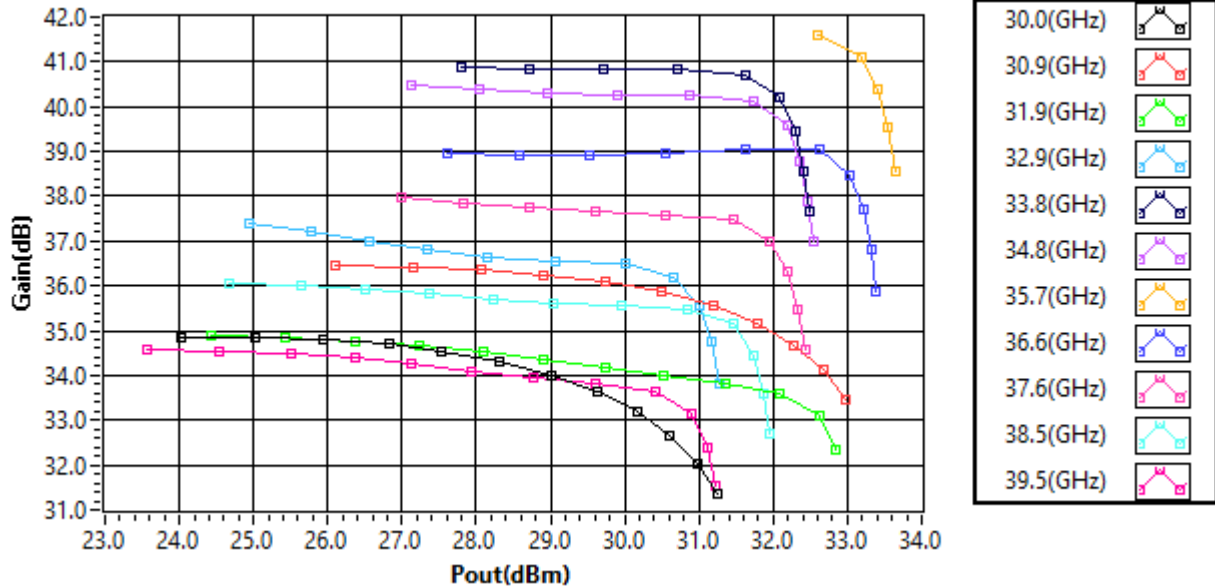
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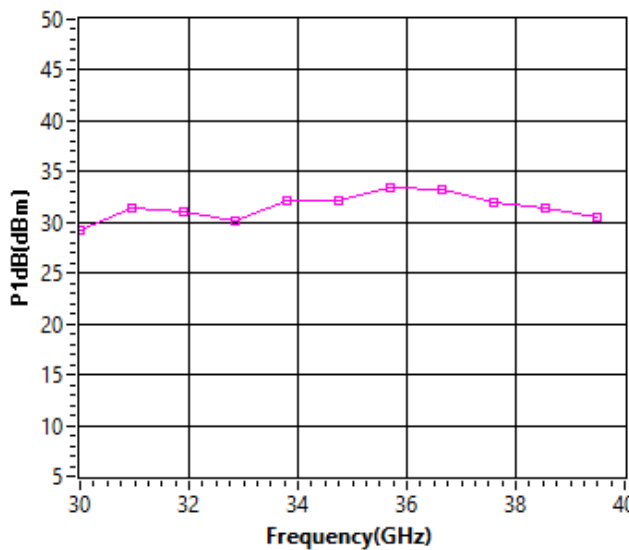
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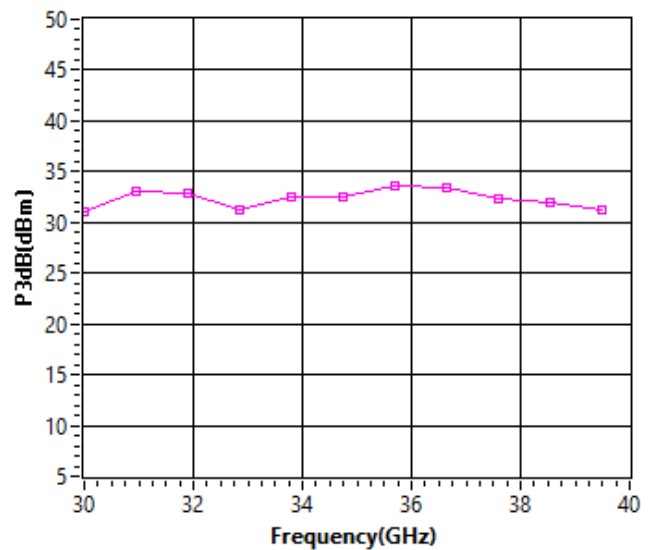
Gain vs. Pout



P1dB vs. Frequency



P3dB vs. Frequency



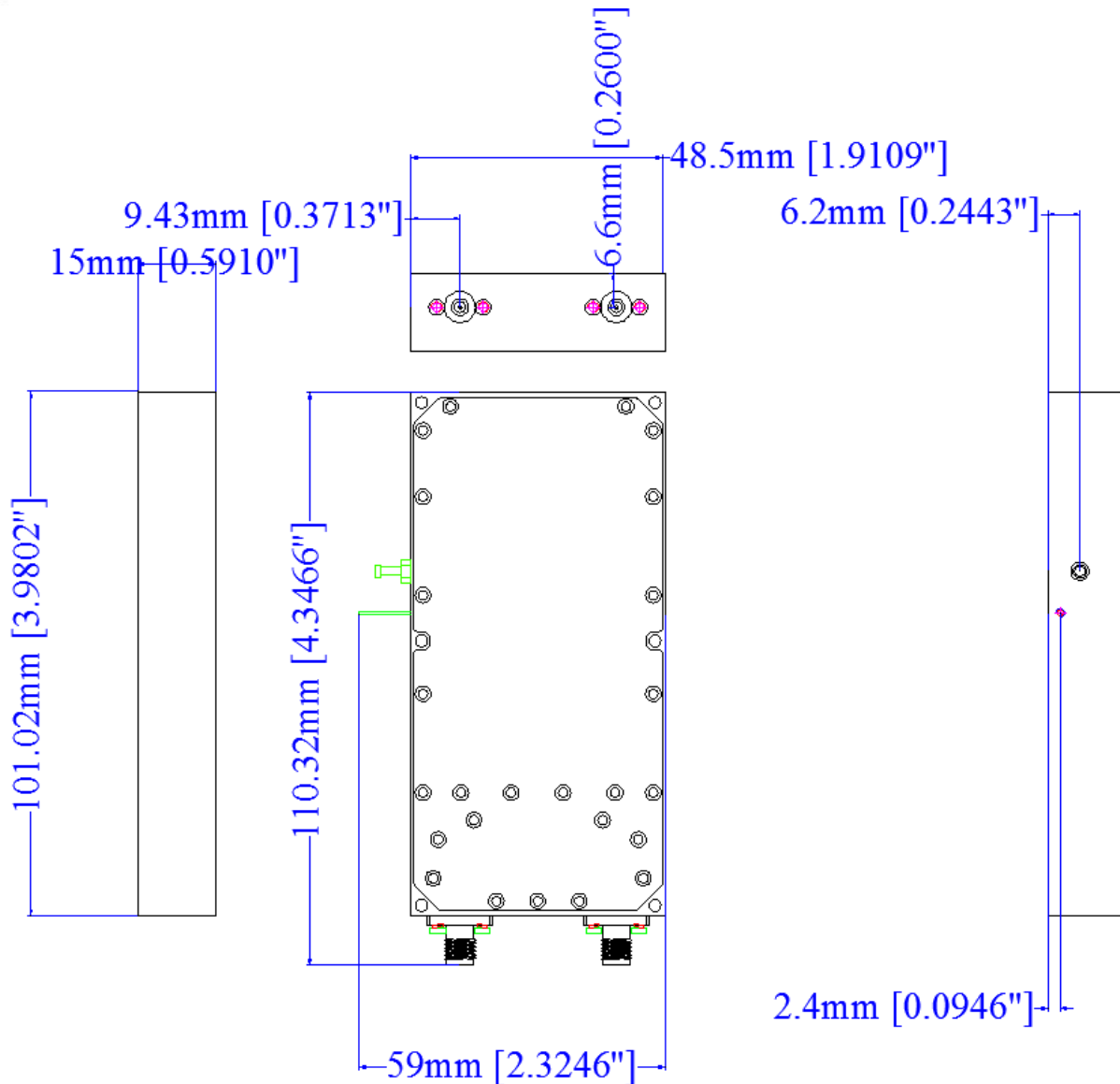


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Heat Sink required during operation.



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