



2W Q Band Power Amplifier 41GHz~46GHz

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



2W Power Amplifier 41GHz-46GHz

| Parameter | Min | Type | Max | Units |
|--|-----------------|-------|-----|-------|
| Frequency Range | 41 ~ 46 | | | GHz |
| Gain | 30 | 32 | 36 | dB |
| Input Return Loss | -18 | -25 | -50 | dB |
| Output Return Loss | -12 | -20 | -30 | dB |
| Output Power For 1dB Compression (P-1dB) | | 32 | | dBm |
| Saturated Power, Psat | | 33 | | dBc |
| Supply Current (Idd) (Vdd=+28V) | | 2 | | A |
| Power Supply | | 24 | | V |
| Isolation S12 | 60 | 65 | | dB |
| RF Input power | | 18dBm | | dBm |
| Weight | 365 | | | g |
| Impedance | 50 | | | Ohms |
| Input /Output Connector | 2.92-Female | | | |
| Finishing | Gold plating | | | |
| Material | Aluminum/copper | | | |



RF-LAMBDA

The power beyond expectations

RFLUPA41G46GA

2W Power Amplifier 41GHz-46GHz

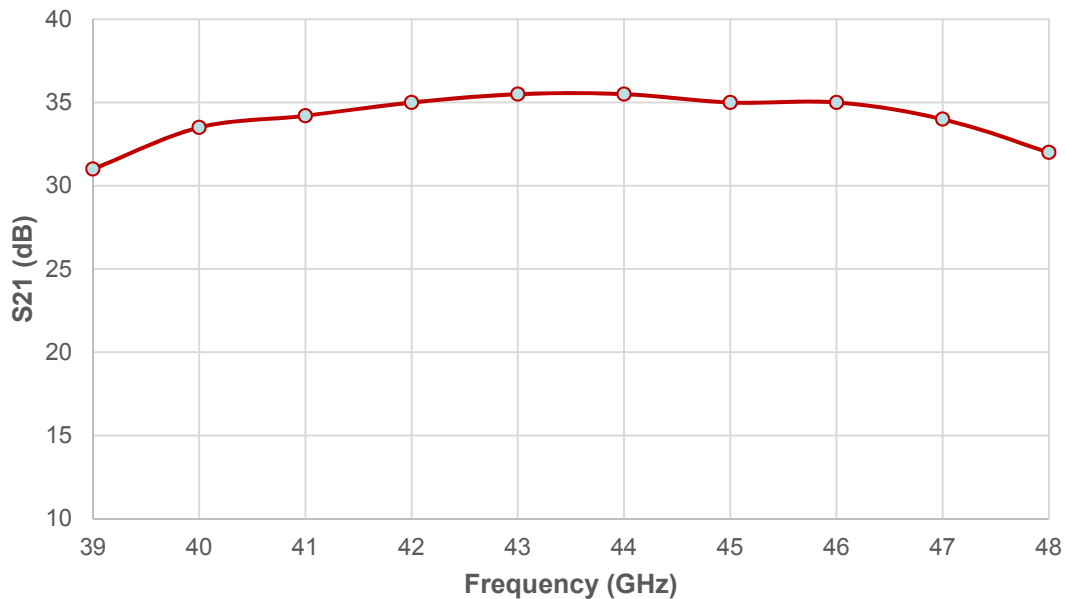
| Absolute Maximum Ratings | |
|-----------------------------|------------|
| Biasing | +24V |
| Input Continuous Wave Power | 18dBm |
| Storage Temperature (C°) | -65 ~ +150 |

| Ordering Information | | |
|----------------------|------|-----------------------------|
| Part No | ECCN | Description |
| RFLUPA41G46GA | ITAR | 41GHz~46GHz 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. |

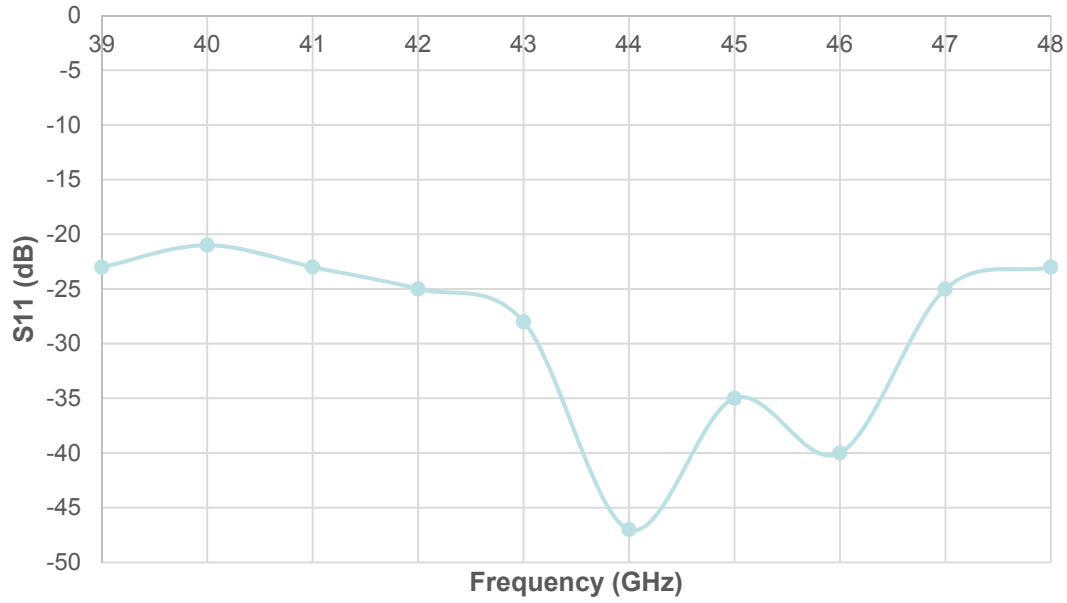
| Environment specifications | |
|------------------------------|---|
| Operational Temperature (C°) | -45 ~ +85 |
| Storage Temperature (C°) | -50 ~ +125 |
| Altitude | 30,000 ft (Controlled environment) |
| Vibration | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |
| Humidity | 100% RH at 35c,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

Gain vs Frequency

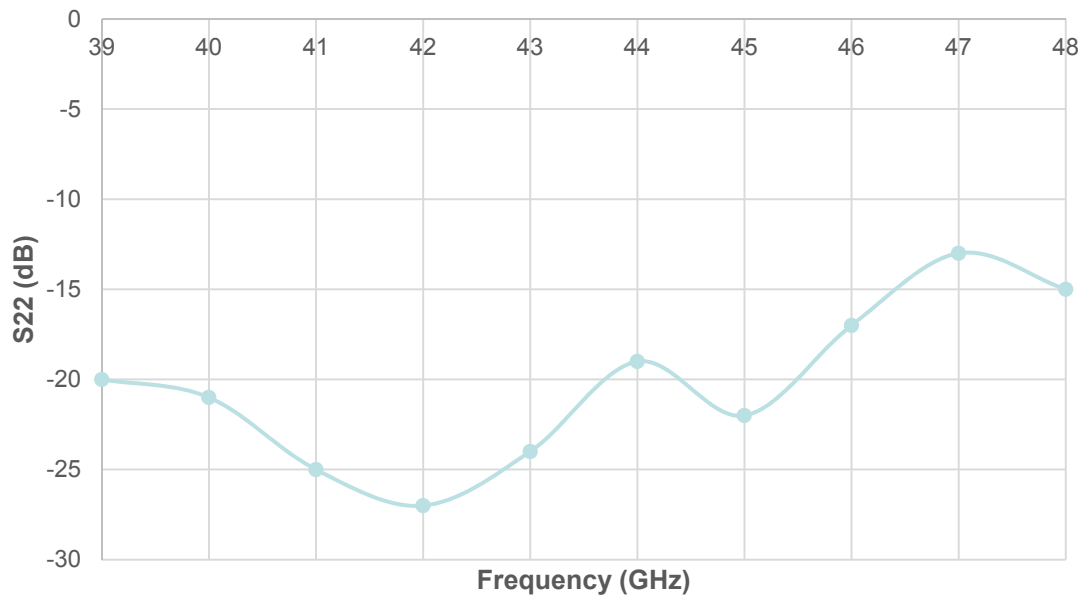


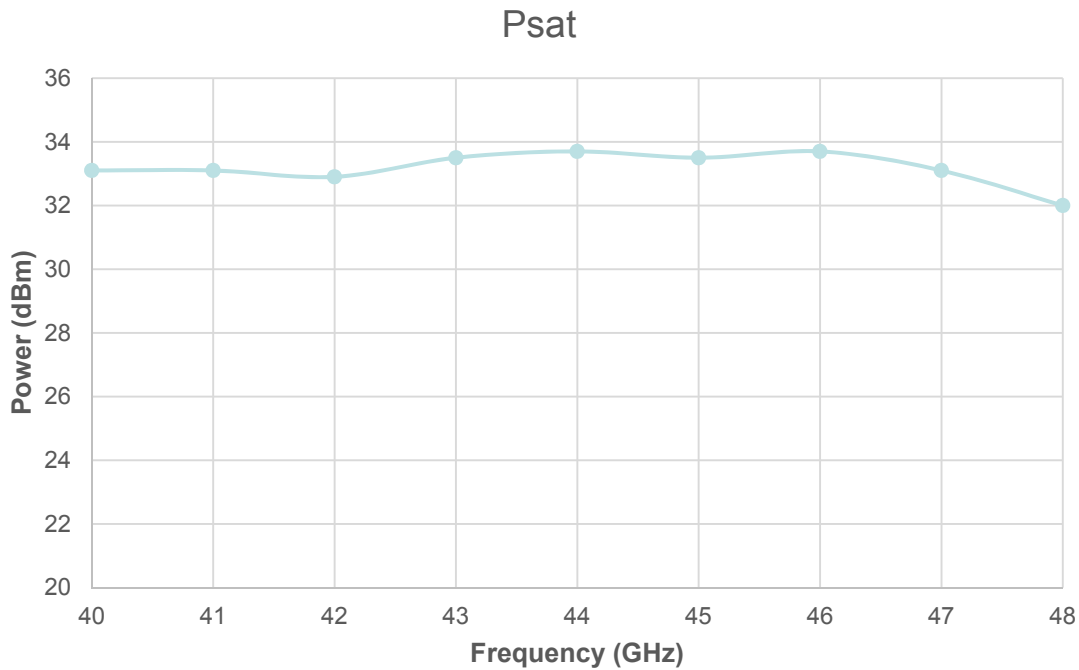
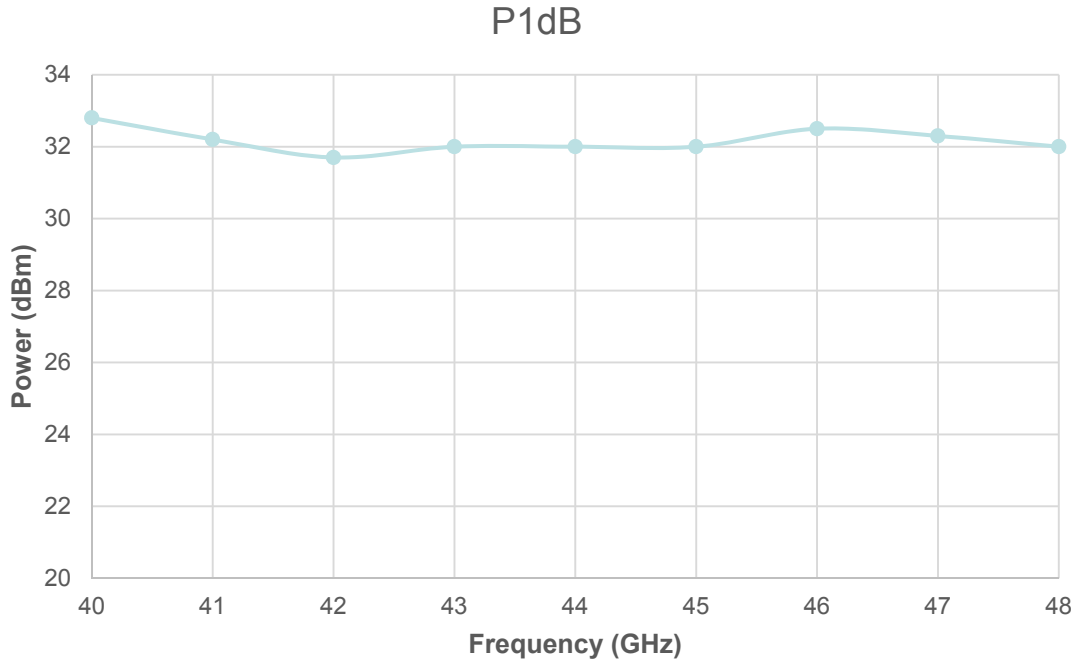


S11 Vs Frequency



S22 Vs Frequency



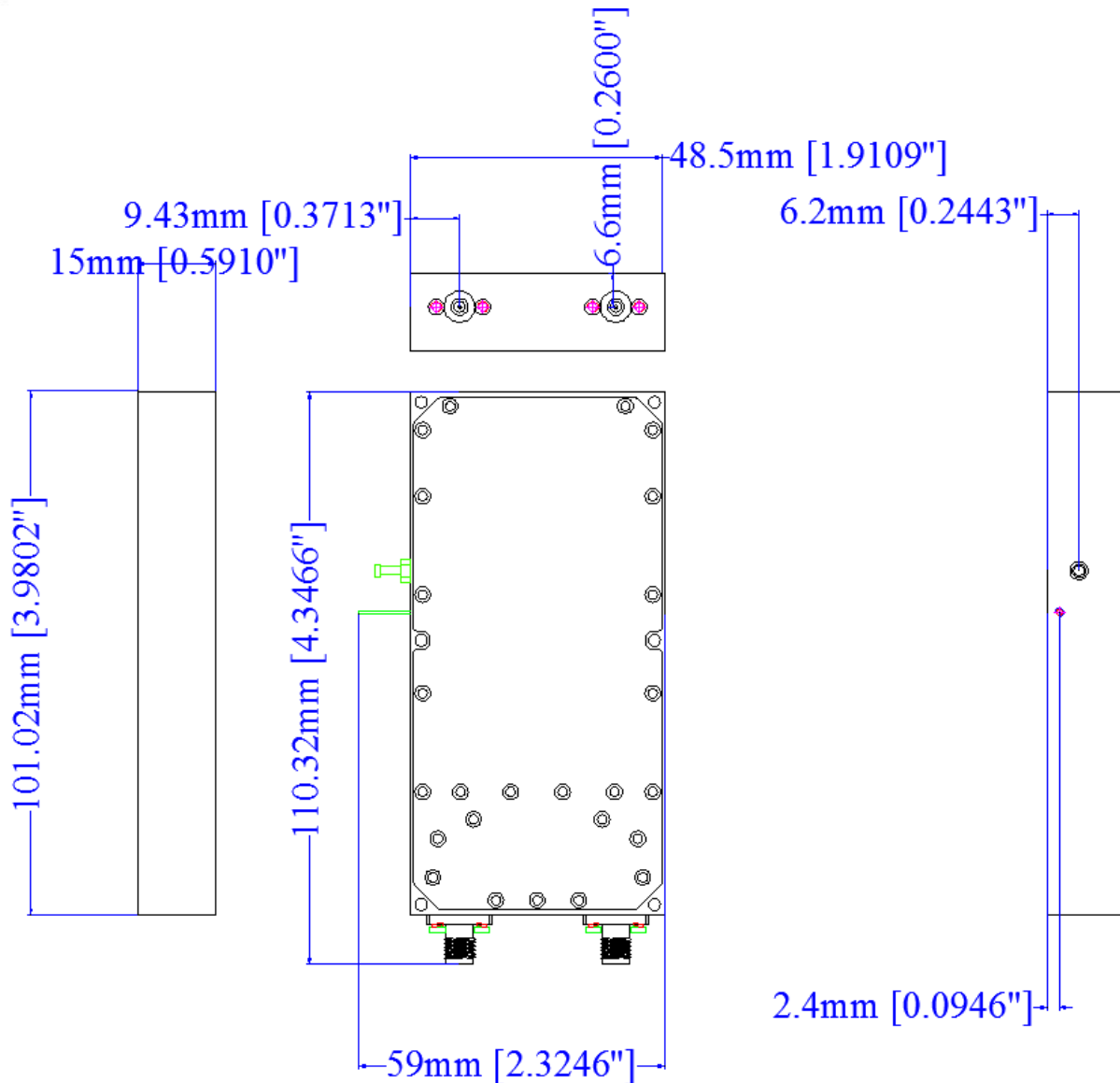




RF-LAMBDA

The power beyond expectations

RFLUPA41G46GA



Heat Sink required during operation.



Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.