



140W 6-18GHz Solid State Broadband - EMC Benchtop Power Amplifier



Features

- High Saturated Power 50~52dBm.
- Microwave Radio and VSAT.
- Aerospace and Military Applications.
- Telecom Infrastructure Applications.
- High peak to average handling capability.
- High linearity and low noise figure.
- Convenient AC Power Input.
- Integrated Heat Sink and Fan.
- All specifications can be modified upon request.

Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

Parameter	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range	6-13		13-18				GHz
Gain	43	48	55	40	41.5	43	dB
Gain Flatness		±6			±2		dB
Gain Adjustment Step (20dB Range)		0.1			0.1		dB
Noise Figure		6.5			7		dB
Input Return Loss		15			15		dB
Output Return Loss		25			25		dB
Output Power for 1 dB Compression (P1dB)	42.5	43	44	42.5	43	44	dBm
Output Power for 3 dB Compression (P3dB)	45	47		45	46		dBm
Saturated Output Power (Psat)	51	51.5			50		dBm
Output Third Order Intercept (IP3)		42			40		dBm
Harmonic Compression		10			10		dBc
Maximum Input Power (no damage)			-3			-3	dBm
Weight	7.25						kg
Impedance	50						Ohms
Input / Output Connectors	N-Female						
Finishing	White Painted Finish						
Material	Aluminum / Copper						

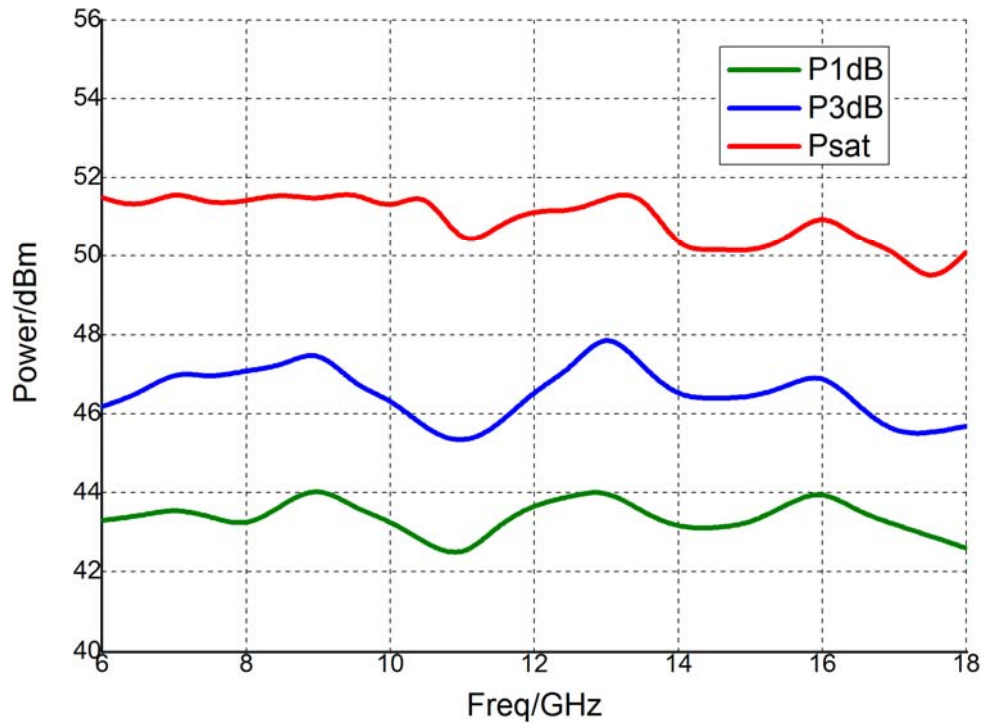
140W 6-18GHz Solid State Broadband EMC Benchtop Power Amplifier



RF-LAMBDA

The power beyond expectations

RAMP06G18GF



Frequency (GHz)	Gain (dB)	P1dB (dBm)	P3dB (dBm)	Psat (dBm)	Harmonics P1dB (dBc)	Harmonics P3dB (dBc)	Harmonics Psat (dBc)
6	55.2	43.3	46.2	51.5	17.7	9.4	4.1
6.5	53.7	43.4	46.5	51.2			
7	52.8	43.6	47.1	51.7	21.3	15.6	13.9
7.5	53.1	43.4	46.9	51.3			
8	53.4	43.1	47.1	51.4	22.7	16.2	11.2
8.5	52.4	43.7	47.2	51.6			
9	51.2	44.2	47.7	51.4	21.5	15.8	10.5
9.5	48.2	43.6	46.7	51.7			
10	46.2	43.3	46.4	51.1	37.4	30.4	29.8
10.5	44.3	42.7	45.6	51.8			
11	43.6	42.3	45.2	50.1	39.1	39.7	40.1
11.5	43.8	43.2	45.7	50.8			
12	43.8	43.7	46.6	51.2	40.1	40.2	40.3
12.5	43.6	43.9	47.1	51.1			
13	43.2	44.1	48.2	51.5	40.2	40.3	40.2
13.5	43.6	43.5	47.2	51.7			
14	43.8	43.1	46.4	50.1	40.1	40.2	40.1
14.5	42.3	43.1	46.4	50.2			
15	41	43.2	46.4	50.1	40.3	40.1	40.3
15.5	40.9	43.7	46.7	50.4			
16	40.6	44.1	47.1	51.2	40.1	40.3	40.2
16.5	40.5	43.5	46.2	50.4			
17	40.4	43.2	45.5	50.2	40.2	40.2	40.1
17.5	41.2	42.9	45.5	49.2			
18	40.8	42.6	45.7	50.1	40.2	40.3	40.2

140W 6-18GHz Solid State Broadband EMC Benchtop Power Amplifier



Amplifier Use

Ensure that the amplifier input and output ports are safely terminated into a proper 50 ohm load before turning on the power. Never operate the amplifier without a load. A proper 50 ohm load is defined as a load with impedance less than 1.9:1 or return loss larger than 10dB relative to 50 Ohm within the specified operating band width.

Power Supply Requirements

Power supply must be able to provide adequate current for the amplifier. Power supply should be able to provide 1.5 times the typical current or 1.2 times the maximum current (whichever is greater).

In most cases, RF - Lambda amplifiers will withstand severe mismatches without damage. However, operation with poor loads is discouraged. If prolonged operation with poor or unknown loads is expected, an external device such as an isolator or circulator should be used to protect the amplifier.

Ensure that the power is off when connecting or disconnecting the input or output of the amp.

Prevent overdriving the amplifier. Do not exceed the recommended input power level.

Adequate heat-sinking required for RF amplifier modules. Please inquire.

Amplifiers do not contain Thermal protection, Reverse DC polarity or Over voltage protection with the exception of a few models. Please inquire.

Proper electrostatic discharge (ESD) precautions are recommended to avoid performance degradation or loss of functionality.

What is not covered with warranty?

Each RF - Lambda amplifier will go through power and temperature stress testing.

Since the die, ICs or MMICs are fragile, these are not covered by warranty. Any damage to these will NOT be free to repair.