

Features:

- Broadband operation with flat gain from 0.05~10.0GHz
- Medium power output, low noise figure, good VSWR, unconditional stable
- SMA female connector I/O
- Single DC power supply required, built-in voltage regulator
- Operating temperature -40~+75°C, storage temperature -55~+125°C

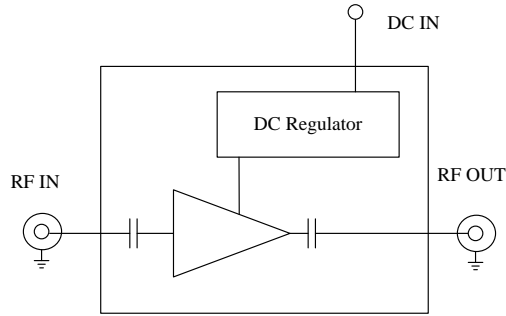
General Description

ABP1000-01-1830 is a one stage MMIC broadband power amplifier module operating in the frequency of 50MHz to 10.0GHz. The amplifier provides 18dB of flat small signal gain, +30dBm of typical output power at 1dB gain compression. The amplifier requires only a single positive DC power supply, its built-in DC voltage regulator and internal sequencing circuitry makes the application more robust.

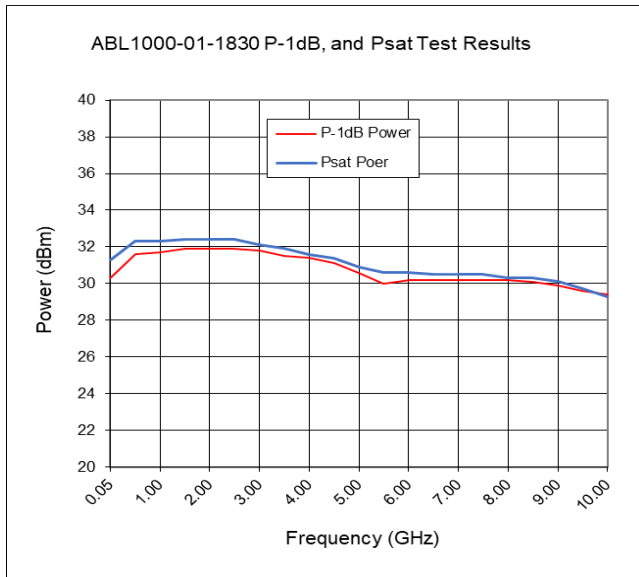
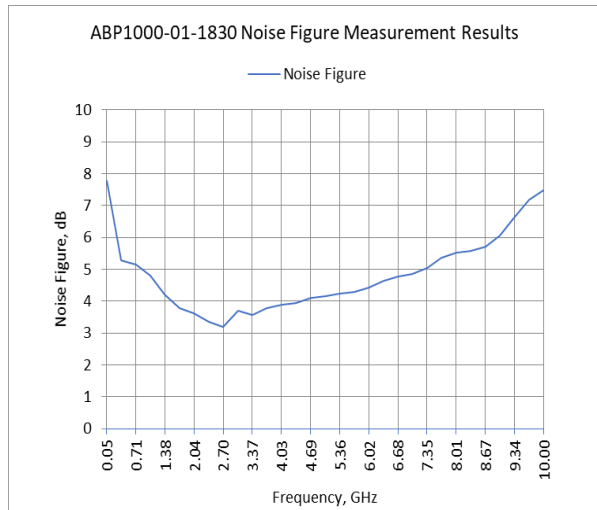
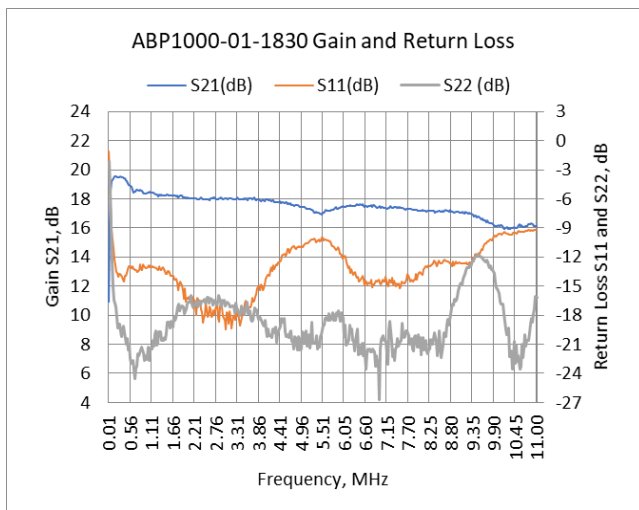
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	0.05		10.0
P-1dB Compression Point for above 10MHz	dBm	+28.0	+30.0	
Psat at Output	dBm	+29.0	+30.5	
Output IP3	dBm	+28.0	+35.0	
Nominal SS Gain @25°C	dB	15.0	18.0	21.0
Gain flatness	dB		+/-1.0	+/-1.5
Gain Variation	dB		+/-1.0	
Noise Figure at +25°C	dB		4.0	6.5
Input VSWR	-		1.6:1	2.0:1
Output VSWR	-		1.8:1	2.0:1
Reverse Isolation	dB	30.0		
Spurious	dBc			-60
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-55.0		+125.0
DC Voltage	V	+13.0	+15.0	+17.0
DC Supply Current	mA	350.0	450.0	600.0
In/Out connectors		SMA female		
Size		1.5"x1.0"x0.4"		

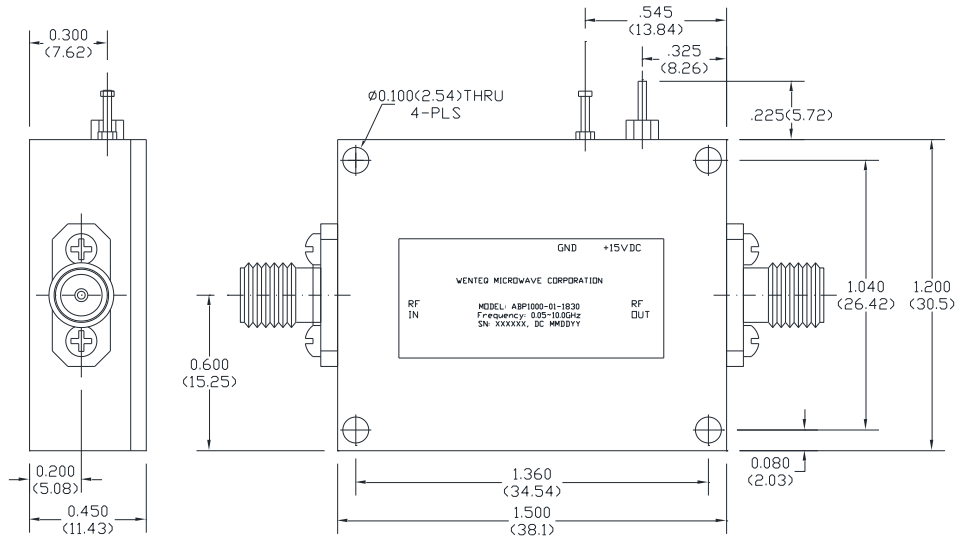
Functional Diagram



Test Results:



Mechanical Structure:



Note: All units in inches (mm).

Housing Material and Surface Finish:

- Body and cover material: aluminum
- Surface finish: Nickel plated
- Connector material: Stainless steel
- Connector surface finish: Passivated

Absolute Maximum Ratings

DC Voltage	+17.5V
RF Input Power	+23 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C



Electrostatic sensitive device, please observe precautions for handling this amplifier.