

Features:

- Broad band, low noise, high gain
- Low VSWR, unconditional stable
- SMA female connector RF I/O
- Single DC power supply required
- Operating temperature -40~+85°C, storage temperature -55~+85°C

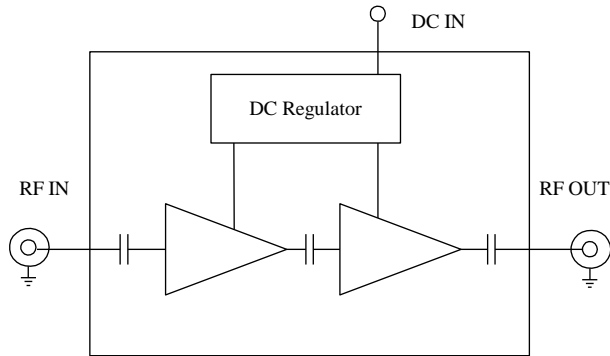
General Description

ABP1800-06-2424 is a two GaAs pHEMT MMIC based broadband amplifier module operating in the frequency from 1.0 to 18.0GHz. The amplifier provides 24dB of small signal gain and +24dBm P-1dB power. It requires only a single positive DC power supply. Its built-in DC voltage regulator allows the amplifier to functional at different DC supply voltages without affecting the RF performances.

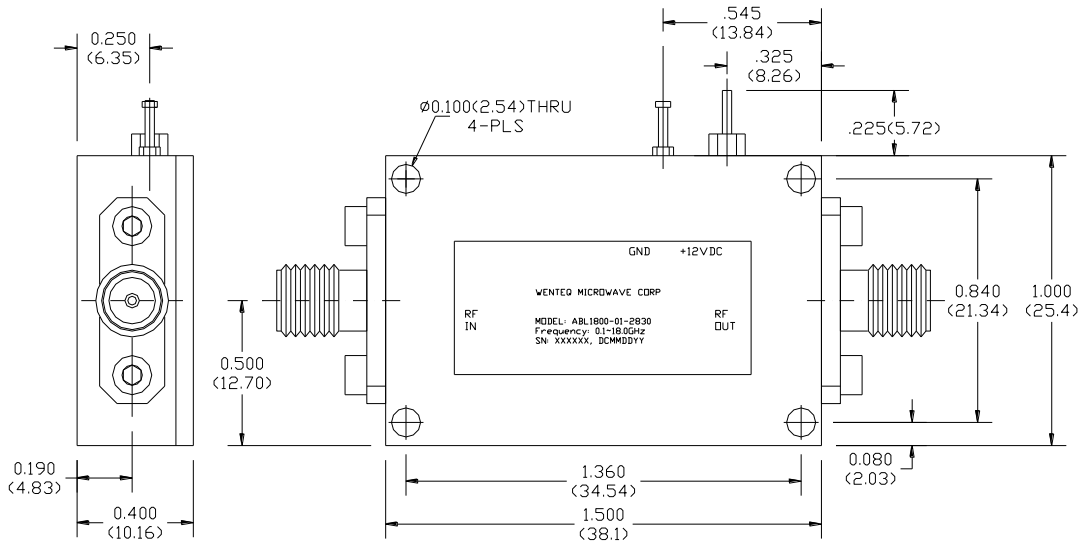
Electrical Specifications

Parameters		Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	1.0		18.0
Nominal Gain @25°C base plate temperature	dB	21.0	24.0	27.0
Noise Figure				
1.0~2.5GHz	dB		4.0	5.0
2.5~16.5GHz			3.0	4.0
16.0~18.0GHz			3.5	4.5
P-1dB Compression Point	dBm	23.0	24.0	
Psat at Output	dBm	23.5	25.0	
Output IP3	dB m	29.0	33.0	
Gain flatness	dB		+/-1.0	+/-1.5
Gain Variation over Temp.	dB		+/-1.5	
Reverse Isolation	dB	40.0	50.0	
Input VSWR	-		1.5:1	2.0:1
Output VSWR	-		1.7:1	2.0:1
Spurious	dBc			-60.0
Operating Temperature	°C	-40.0		+85.0
Survival Temperature	°C	-45.0		+125.0
DC Power Supply Voltage	V	+11.0	+12.0	+15.0
DC Power Supply Current	mA	300.0	350.0	400.0
RF In/Out connectors		50 ohm SMA female		
DC Input Connector		Feedthru Pin		
Size	inches	1.50×1.0×0.4		

Functional Diagram



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	+18V
RF Input Power	+15 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+85°C