

Features:

- Broadband operation from 1 to 18 GHz
- High gain, medium power output
- Low VSWR, unconditional stable
- SMA female connector I/O
- Single DC power supply, built in voltage regulator and reverse voltage protection
- Operating temperature -40~+75°C, storage temperature -55~+85°C

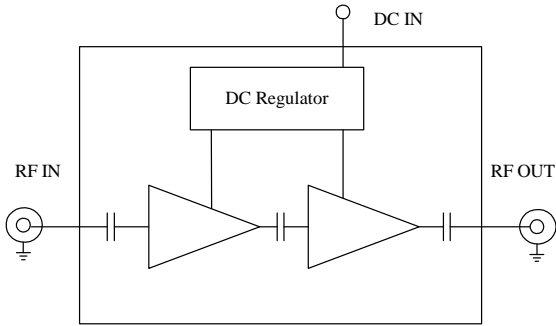
**General Description**

ABP1800-06-3126 is a two stage MMIC based broadband power amplifier module operating in the frequency of 1 to 18GHz. The amplifier provides 31dB of small signal gain, +26dBm of output power at 1dB gain compression. It has excellent gain flatness and good VSWR at both input and output. The amplifier requires only a single positive DC power supply, its built-in DC voltage regulator and internal sequencing circuitry, as well as inverse voltage protection circuitry makes the application more robust.

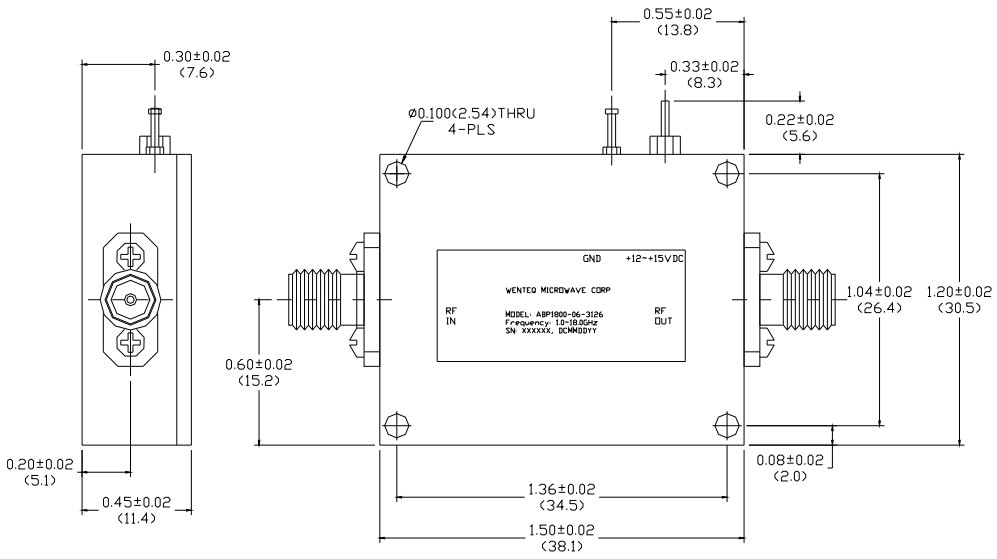
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	1.0		18.0
P-1dB Compression Point	dBm	+25.0	+26.0	
Output IP3	dBm	+30.0	+32.0	
Output IP2	dBm	+40.0	+43.0	
Nominal Gain @25°C	dB	28.0	31.0	34
Gain flatness over frequency	dB		+/-1.5	+/-2.0
Gain Variation over Temperature	dB		+/-2.0	+/-2.5
Noise Figure at 25 degree C 1.0~2.0GHz 2.0~18.0GHz	dB		5.0 3.5	6.0 4.5
Input VSWR			1.8:1	2.5:1
Output VSWR			1.5:1	2.5:1
Spurious	dBc			-60.0
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-45.0		+125.0
DC Power Supply Voltage	V		+12.0	
DC Power Supply Current	mA	400	600	750
In/Out connectors		SMA female		
Size	inches	1.5x1.2x0.45		

Functional Diagram



Mechanical Structure:



Note: All units in inches (mm).

Absolute Maximum Ratings

DC Voltage	+15V
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.