

Features:

- Broadband, high gain and high power output
- Low VSWR, unconditional stable
- SMA female connector I/O
- Operating temperature -40~+75°C, storage temperature -55~+85°C

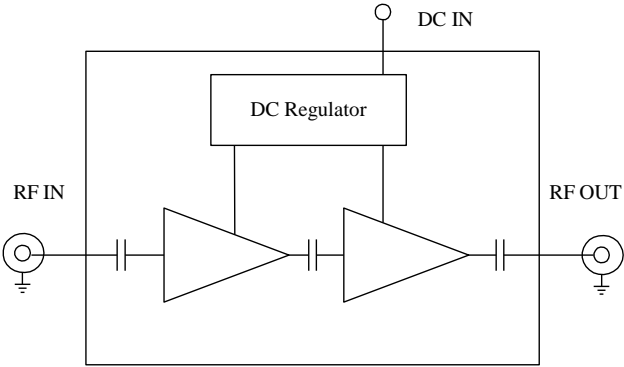
General Description

ABP1800-01-3026 is a two stage MMIC broadband power amplifier module operating in the frequency of 10MHz to 18GHz. The amplifier provides 30dB of small signal gain, +26dBm of typical 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 makes the application more robust.

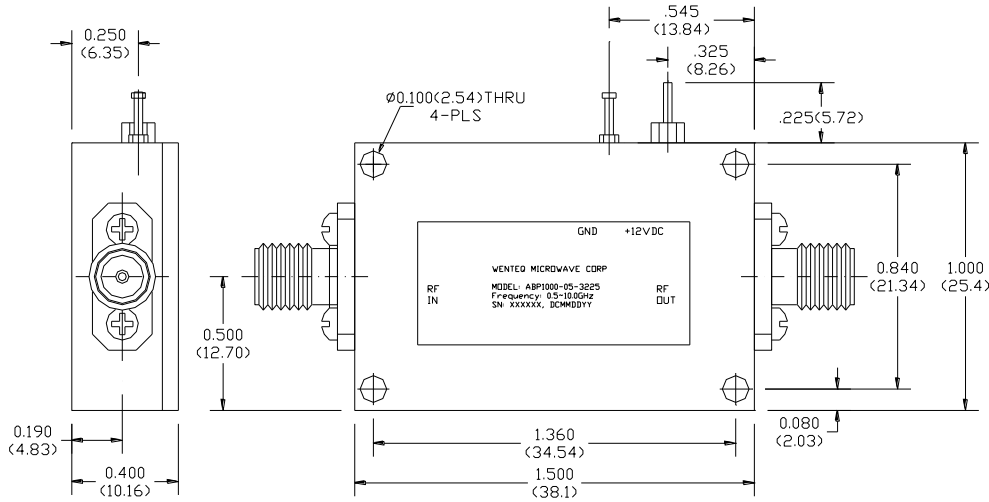
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	0.01		18.0
P-1dB Compression Point	dBm	+24.5	+26.0	
Output IP3	dBm	+30.0	+37.0	
Output IP2	dBm	+38.0	+45.0	
Nominal Gain @25°C	dB	27.0	30.0	33.0
Gain flatness over frequency	dB		+/-1.5	+/-2.0
Gain Variation over Temperature	dB		+/-2.0	+/-2.5
Noise Figure at 25 degree C	dB			
0.01~1.0GHz			4.5	6.0
2.0~4.0GHz			3.5	4.5
4.0~18.0GHz			2.5	4.0
Input VSWR			1.5:1	2.5:1
Output VSWR			1.5:1	2.0:1
Spurious	dBc			-70.0
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-45.0		+85.0
DC Power Supply Voltage	V	11.5	+12.0	+15.0
DC Power Supply Current	mA	270	320	500
In/Out connectors		SMA female		
Size	inches	1.5x1.0x0.4		

Functional Diagram



Mechanical Structure:



Note: All units in inches (mm).

Absolute Maximum Ratings

DC Voltage	+18V
RF Input Power	15 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C



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