HBROADBAND RF POWER AMPLIFIER
ABP0400-01-2623

Features:

- 1 Watt typical P-1dB output Power from 50MHz to 4.0 GHz
- high gain with good gain flatness
- Low VSWR, unconditional stable
- SMA female connector I/O
- Single DC power supply, Integrated internal voltage regulator
- Operating temperature -40~+75°C, storage temperature -55~+125°C

General Description

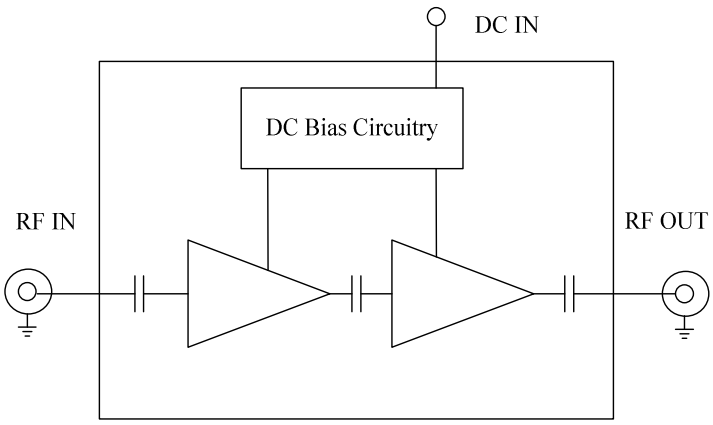
ABP0400-01-2623 is a two stage pHEMT broadband power amplifier module operating in the frequency of 50MHz to 4GHz. The amplifier provides 26dB of small signal gain, +23dBm of typical output power at 1dB gain compression, excellent gain flatness and good VSWR at both input and output. The amplifier requires only a positive DC power supply, its built-in DC voltage regulator and internal sequencing circuitry makes the application more robust.

Typical Applications

ABP0400-01-2623 is ideal for:

- General laboratory test application
- Academic research
- Defense industry
- Communication systems

Functional Diagram



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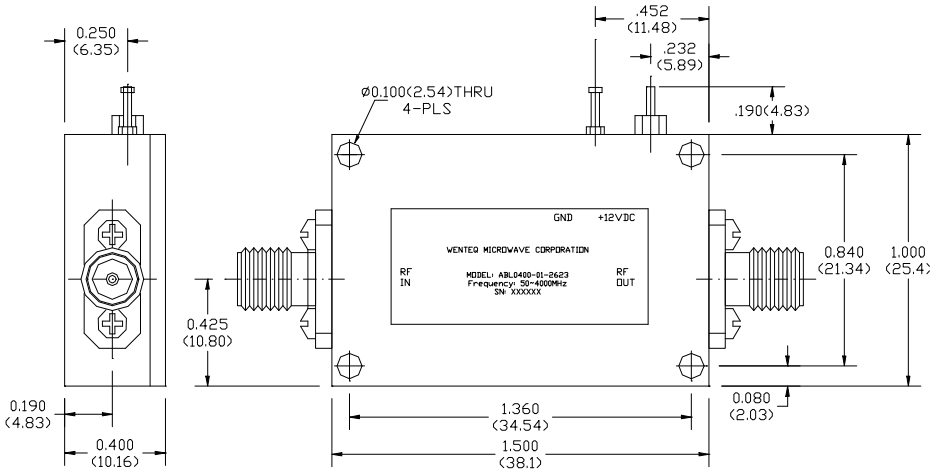
Electrical Specifications

Parameters	Specifications		
	Minimum	Typical	Maximum
Frequency Range	50 MHz		4000MHz
P-1dB Compression Point	+22 dBm	+23dBm	
Output IP3	+32 dBm	+35 dBm	
Nominal SS Gain @25°C	24 dB	26dB	28 dB
Gain flatness		+/-1.0 dB	+/-1.25 dB
Gain Variation		+/-1.0 dB	
Noise Figure		5.0dB	6.0dB
Input VSWR		1.6:1	1.8:1
Output VSWR		1.6:1	1.8:1
Reverse Isolation	45 dB	55dB	
Non-harmonic Spurious			-60 dBc
Operating Temperature	-40°C		+75°C
Survival Temperature	-55°C		+125°C
DC Voltage	+11.5V	+12 V	+13.0 V
DC Supply Current		120 mA	220 mA
In/Out connectors	SMA female		
Outline Dimensions (not including SMA and feed pin)	2.08”x1.08”x0.50”		

Absolute Maximum Ratings

DC Voltage	+13V
RF Input Power	+10dBm
Maximum Load VSWR	3:1
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C

Mechanical Structure:



Note: All units in inches.