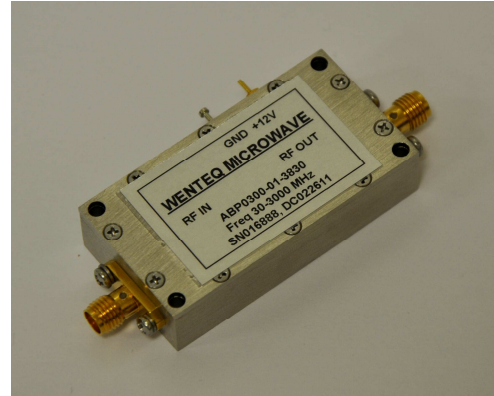


Features:

- 1 Watt typical P-1dB output Power from 30MHz to 3 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

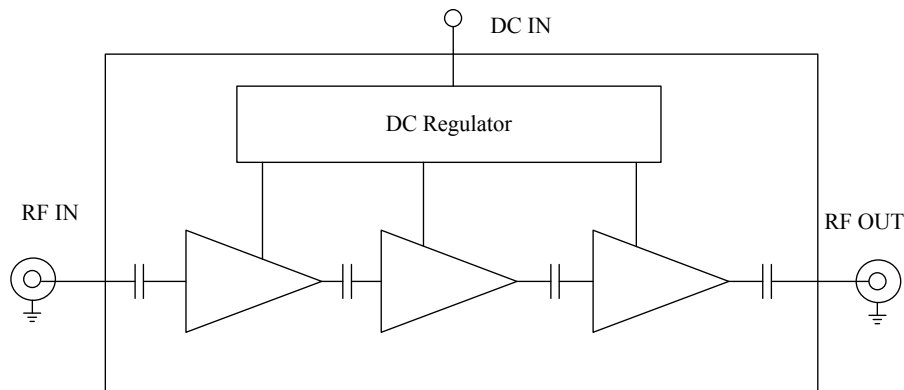
ABP0300-01-3830 is a three stage pHEMT broadband power amplifier module operating in the frequency of 30MHz to 3GHz. The amplifier provides 27dB of small signal gain, +30dBm of typical output power at 1dB gain compression, excellent gain flatness and good VSWR at both input and output. The amplifier requires only a positive DC power supply, its built-in DC voltage regulator and internal sequencing circuitry makes the application more robust.

Typical Applications

ABP0300-01-3830 is ideal for:

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

Functional Diagram





HBROADBAND RF POWER AMPLIFIER ABP0300-01-3830

Electrical Specifications

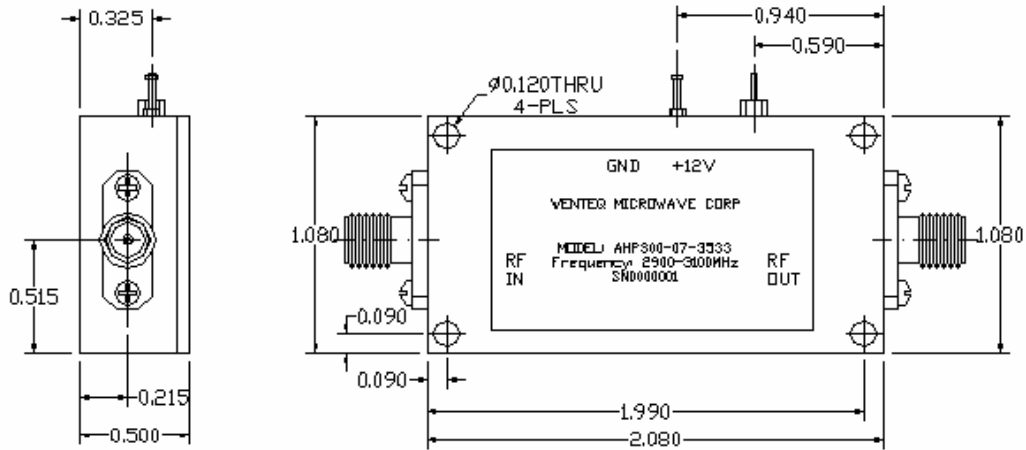
Parameters	Specifications		
	Minimum	Typical	Maximum
Frequency Range	30 MHz		3000MHz
P-1dB Compression Point	+29 dBm	+30dBm	
Output IP3	+37 dBm	+39 dBm	
Nominal SS Gain @25°C	35 dB	38dB	40 dB
Gain flatness		+/-1.0 dB	+/-1.25 dB
Gain Variation		+/-1.0 dB	
Input VSWR		1.6:1	1.8:1
Output VSWR		1.6:1	1.8:1
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		270 mA	430 mA
In/Out connectors	SMA female		
Outline Dimensions (not including SMA and feed pin)	Option 1 without heat sink: 2.08"x1.08"x0.50" Option 2 with heat sink 2.28"x2.4"x1.45"		

Absolute Maximum Ratings

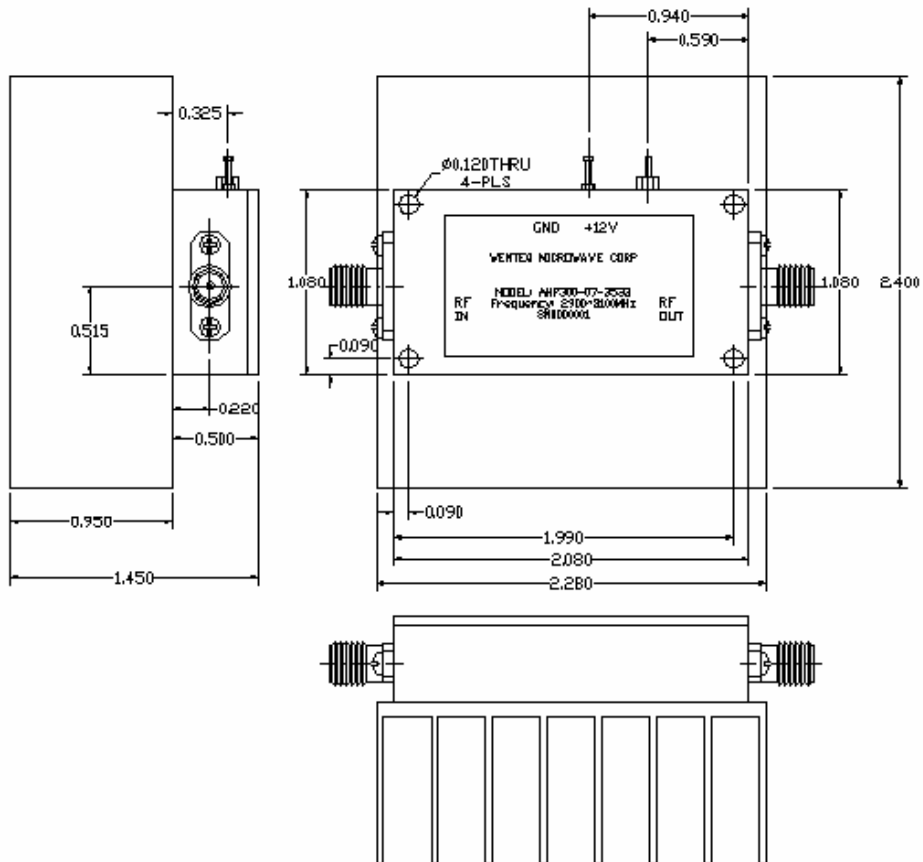
DC Voltage	+13V
RF Input Power	+10dBm
Maximum Load VSWR	3:1
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C

Mechanical Structure:

Option 1: outline drawing without heat sink



Option 2, outline drawing with heat sink



Note: All units in inches.