

Features:

- Broad band operation from 0.5 GHz to 10.0 GHz
- Low VSWR, unconditional stable
- SMA female connector I/O.
- Single DC power supply, internal voltage regulator, operating voltage from +10~+12V
- Operating temperature -40~+75°C, storage temperature -55~+125°C

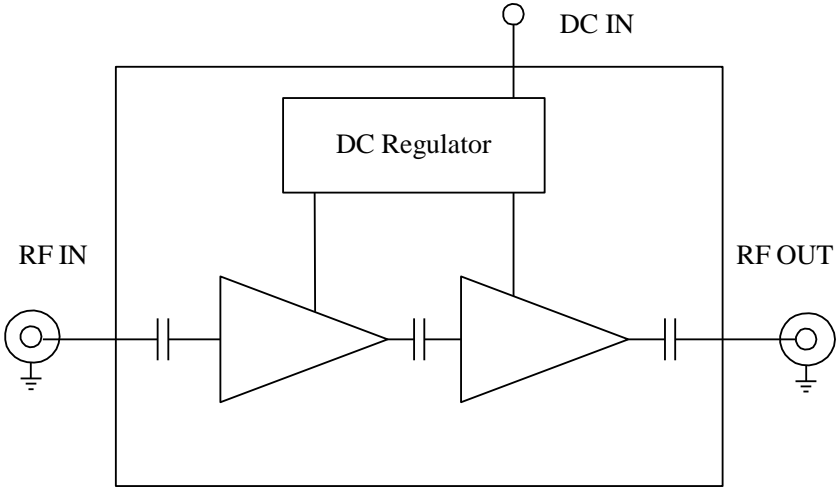
**General Description**

ABP1000-05-3225 is a two stage MMIC broadband power amplifier module operating in the frequency of 500MHz to 10GHz. The amplifier provides 32dB of small signal gain, +25dBm 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 makes the application more robust.

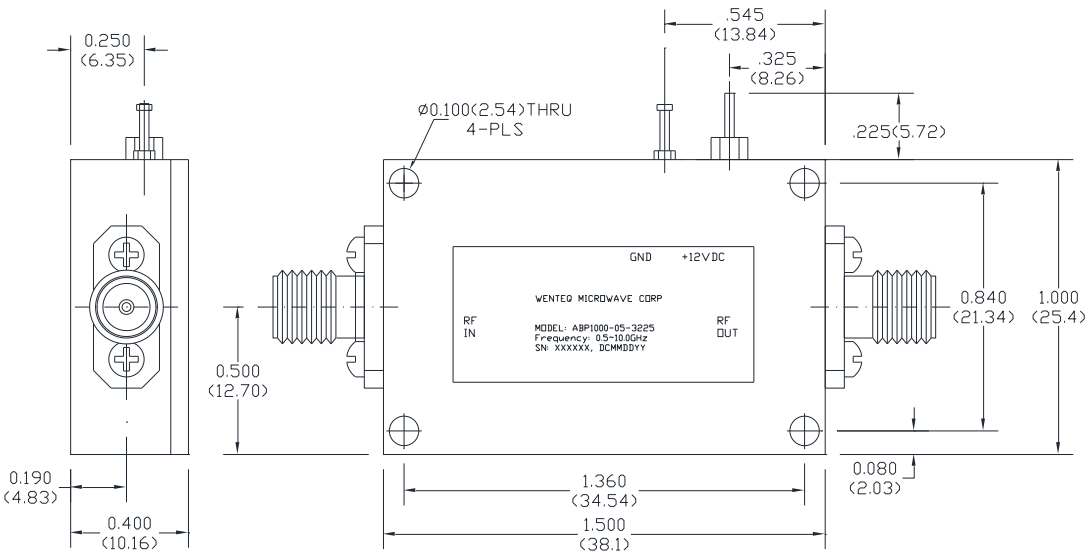
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	0.5		10.0
Small Signal Gain @25°C	dB	29.0	32.0	35.0
Noise Figure @25°C	dB		3.0	5.0
P-1dB Compression Point	dBm	+24.0	+25.0	
Output IP3	dBm	+30.0	+33.0	
Gain flatness	dB		+/-1.0	+/-1.5
Gain Variation	dB		+/-2.5	
Input VSWR			1.8:1	2.0:1
Output VSWR			1.8:1	2.0:1
Reverse Isolation	dB	45.0	51.0	
Non-Harmonic Spurious	dBc			-60.0
Operating Temperature	°C	-45		+75
Survival Temperature	°C	-55		+125
DC Voltage	V	+10.0		+12.0
DC Supply Current	mA	350 mA	375 mA	400 mA
In/Out connectors		SMA Female		
Outline dimension for ABP1000-05-3225 without heatsink	inches	1.50×1.00×0.40		
Outline dimension for ABP1000-05-3225-X with heatsink	inches	1.50×4.75×1.25		

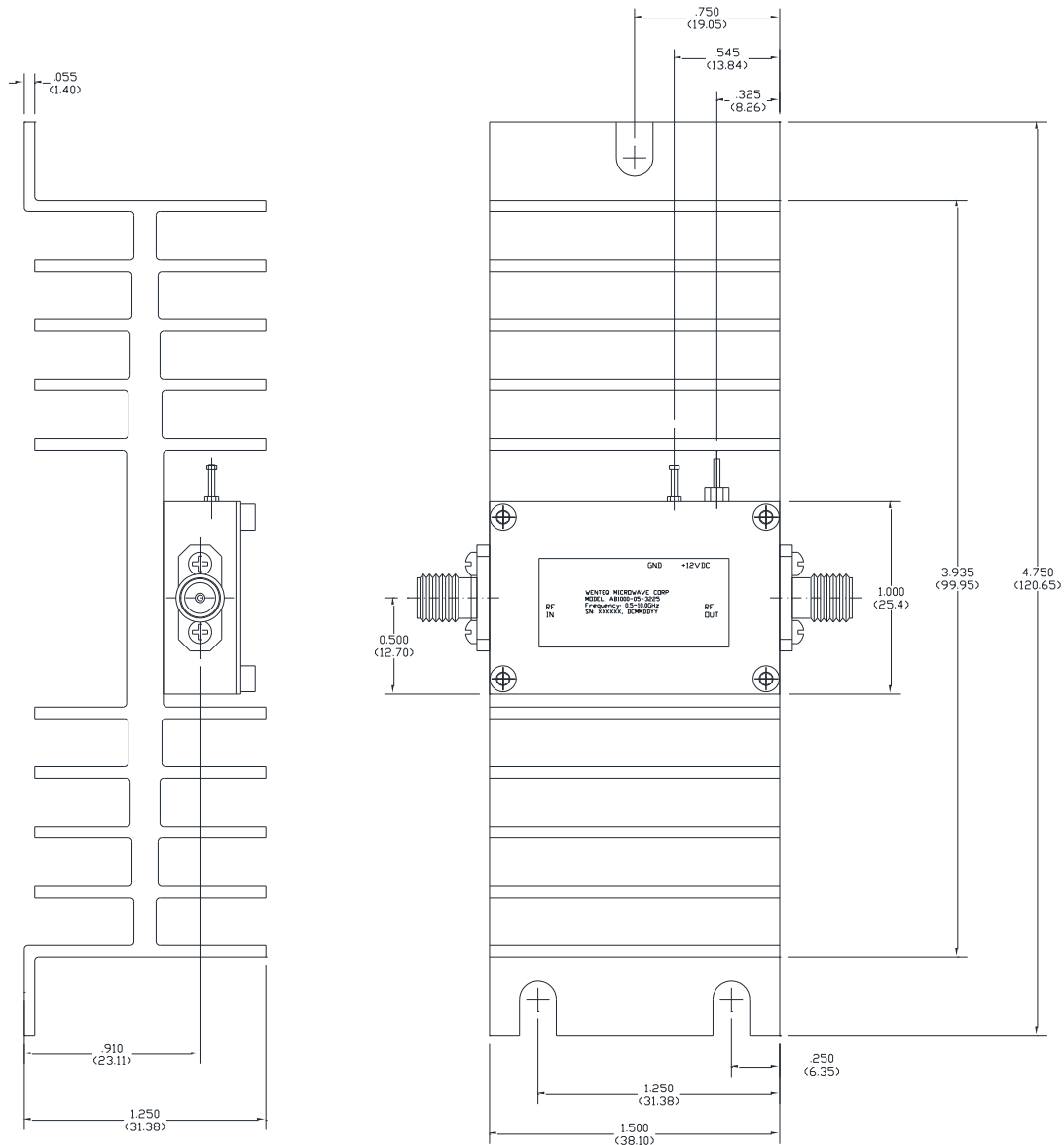
Functional Diagram



Mechanical Structure:



(a) ABP1000-05-3225 amplifier without heatsink



(a) ABL1000-05-3225-X amplifier with heatsink

Note: All units are in inches(mm), and all tolerances are +/-0.005 inch unless otherwise specified

Housing Material and Surface Finish:

- Body and cover material: aluminum
- Surface finish: nickel plated
- Connector material: Stainless Steel
- Connector surface finish: Passivated
- Heatsink material: Aluminum, surface finish: Black anodized

Absolute Maximum Ratings:

DC Voltage	+13V
RF Input Power	10 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C

Revision History:

Revision	Date	Description	Comments
A00	4/23/2014	Initial Release	



WARNING: This device is electrostatic sensitive, please observe precautions for safe handling this amplifier.

WARNING: This product can expose you to chemicals including Nickel (Metallic) and Gallium Arsenide which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.