

Features:

- Broad band operation from 6.0 GHz to 18.0 GHz
- Medium power output, low noise figure, good VSWR, unconditional stable
- 50 ohm SMA female connector I/O.
- Single +12V DC power supply, built-in voltage regulator
- Operating temperature -40~+75°C, storage temperature -55~+125°C

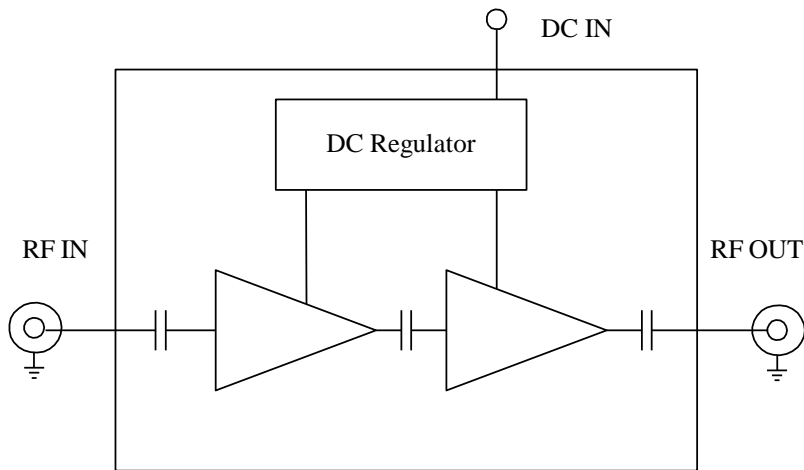
**General Description**

ABP1800-33-3326 is a two stage MMIC broadband power amplifier module operating in the frequency of 6.0 to 18.0GHz. The amplifier provides 33dB of flat 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 makes the application more robust.

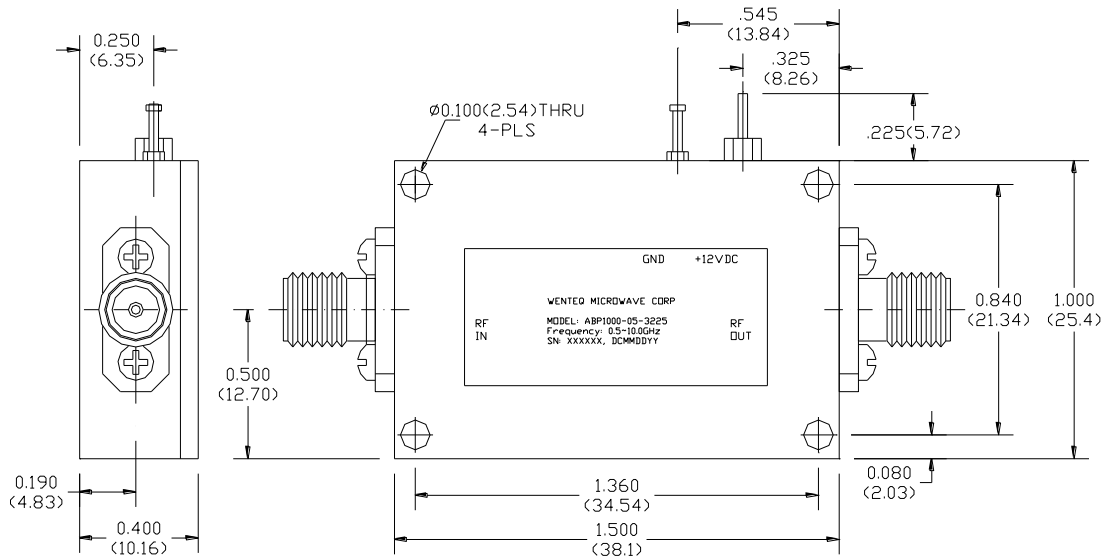
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	6.0		18.0
Small Signal Gain @25°C	dB	30.0	33.0	36.0
Noise Figure @25°C	dB		2.5	3.5
P-1dB Compression Point	dBm	+24.5	+26.0	
Output IP3	dBm	+32.0	+36.0	
Gain flatness	dB		+/-1.0	+/-1.25
Gain Variation	dB		+/-2.0	
Input VSWR			1.8:1	2.2:1
Output VSWR			1.8:1	2.2:1
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		+12.0	+15.0
DC Supply Current	mA		360	460
In/Out connectors		SMA Female		
Outline dimension for ABP1800-33-3326 without heatsink	inches	1.50×1.00×0.40		
Outline dimension for ABP1800-33-3326-X with heatsink	inches	1.50×4.75×1.25		

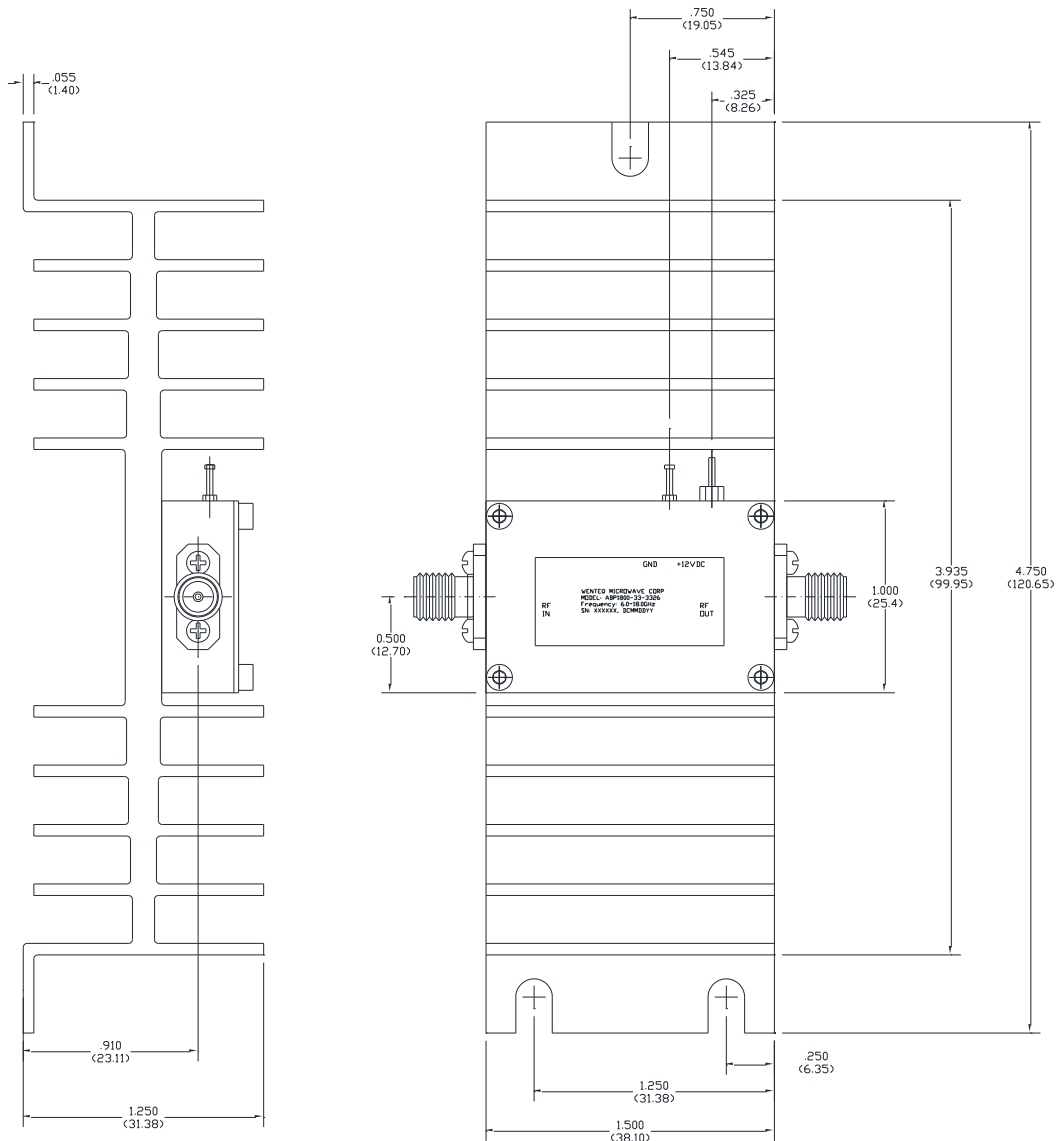
Functional Diagram



Mechanical Structure:



(a) ABP1800-33-3326 amplifier without heatsink



(b) ABL1800-33-3326-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	+15V
RF Input Power	15 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C

Revision History:

Revision	Date	Description	Comments
A00	12/20/2019	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.