BROADBAND LOW NOISE AMPLIFIER
ABP1800-33-2526

Features:

- Broad band operation from 6.0 GHz to 18.0 GHz
- Low VSWR, unconditional stable
- SMA female connector I/O.
- Single +12V DC power supply
- Operating temperature -40~+75°C, storage temperature -55~+125°C

General Description

ABP1800-33-2526 is a two stage MMIC broadband power amplifier module operating in the frequency of 6.0 to 18.0GHz. The amplifier provides 25dB 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		180.0
Small Signal Gain @25°C	dB	22.0	25.0	28.0
Noise Figure @25°C	dB		3.0	5.0
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	
DC Supply Current	mA	300 mA	350 mA	450 mA
In/Out connectors		SMA Female		
Outline dimension for ABP1800-33-2526 without heatsink	inches	1.50×1.00×0.40		
Outline dimension for ABP1800-33-2526-X with heatsink	inches	1.50×4.75×1.25		

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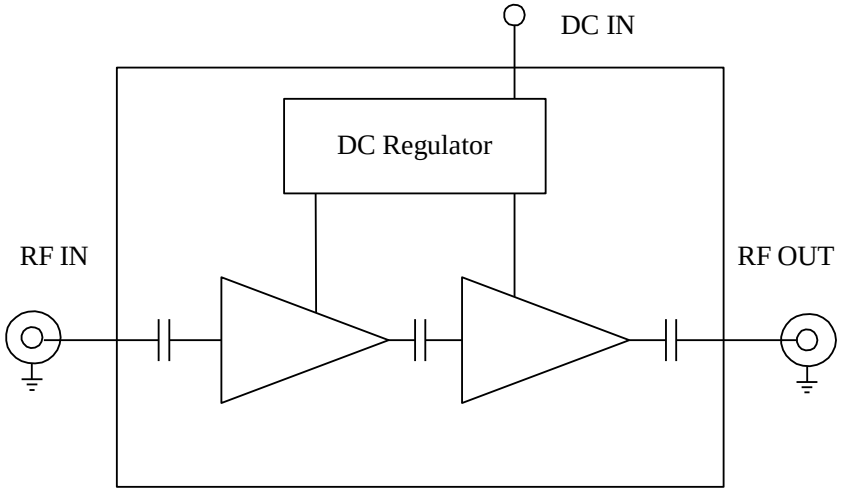
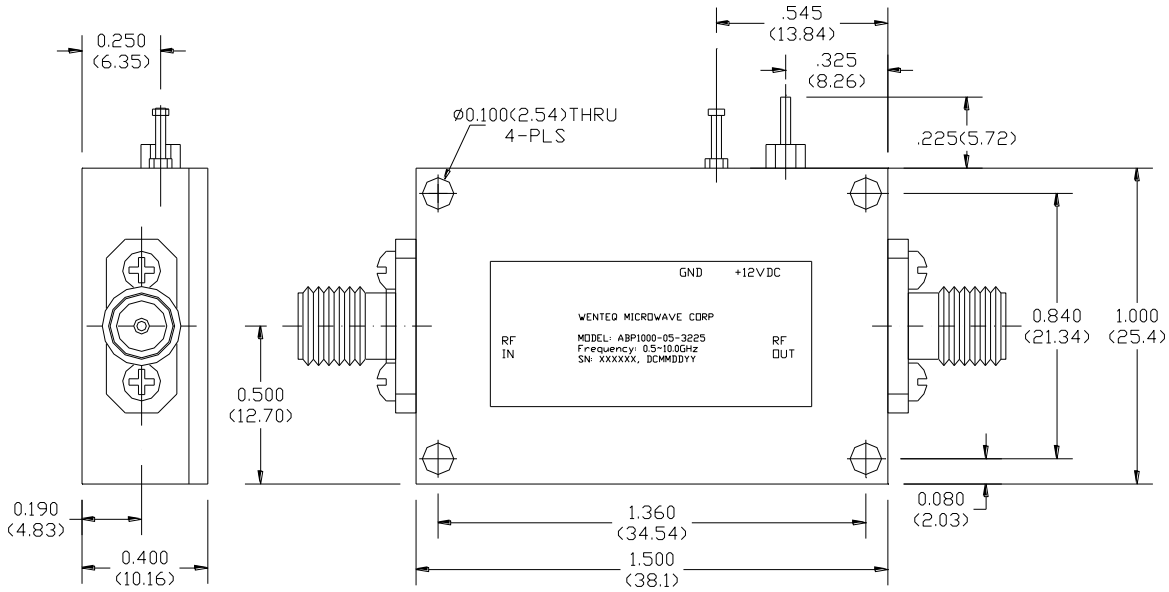
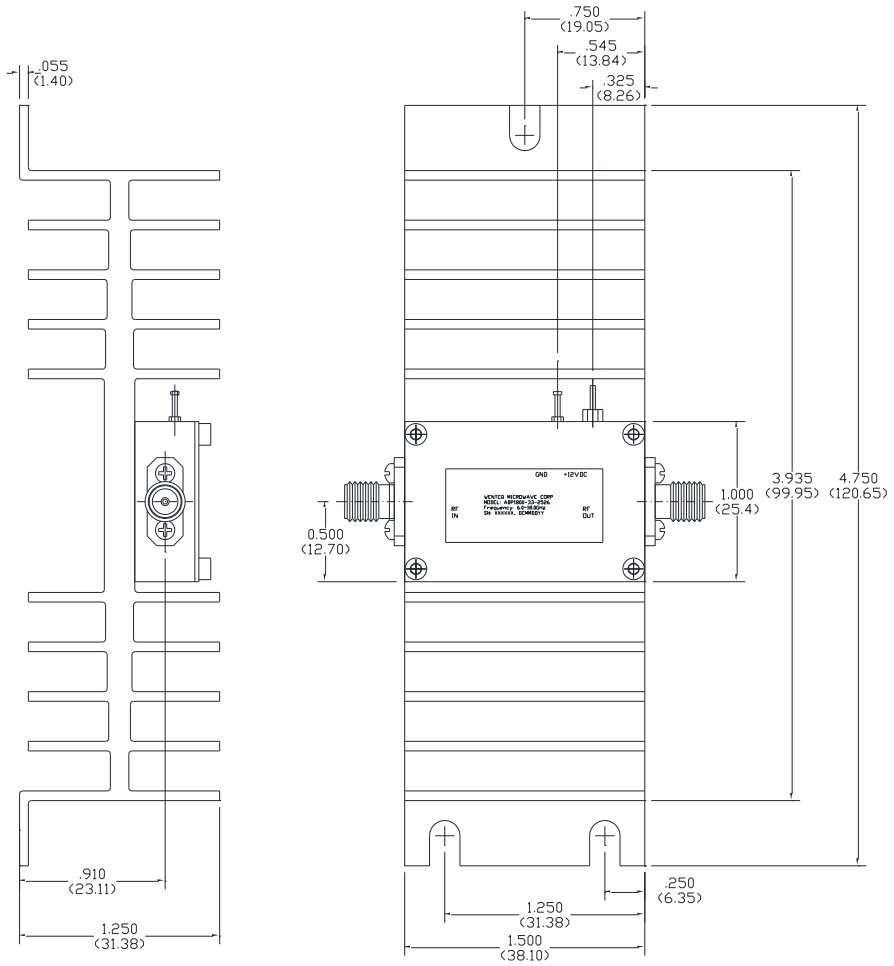
Functional Diagram



Mechanical Structure:



(a) ABP1800-33-2526 amplifier without heatsink



(b) ABL1800-33-2526-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