

Features:

- Broad band, low noise, and high gain, specification for 9 kHz-3GHz.
- Low VSWR, unconditional stable
- Small size, low cost
- SMA female connector I/O
- Single DC power supply, option 1 for +12V DC and option 2 for +15V DC
- Operating temperature -40~+85°C, storage temperature -55~+125°C

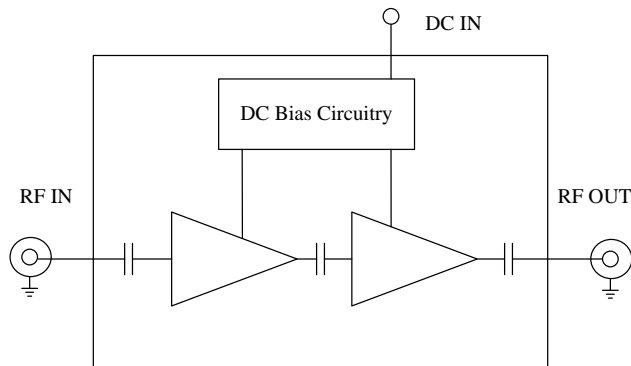
**General Description**

ABL0300-00-3030 is a two stage enhancement SiGe HBT based broadband low noise amplifier module operating in the frequency from 9 kHz to 3.0 GHz. The amplifier provides 30dB of small signal gain with 3.0dB maximum noise figure, excellent gain flatness, as well as good VSWR at both input and output. The amplifier requires only a single +12V DC power supply.

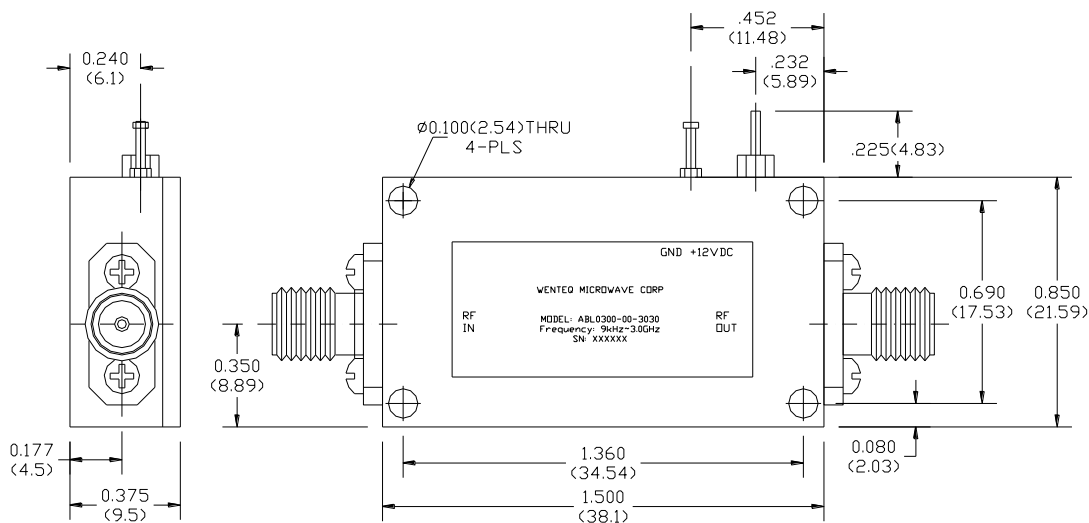
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	MHz	0.009		3000.0
Noise Figure at room temp.	dB		2.5	3.0
P-1dB Compression Point	dBm	+15.0	+16.0	
Output IP3	dBm	+22.0	+25.0	
Nominal SS Gain @25°C	dB	27.0	30.0	33.0
Gain flatness	dB		+/-1.5	
Gain Variation	dB		+/-1.0	
Input VSWR	-		1.6:1	2.0:1
Output VSWR	-		1.7:1	2.5:1
Reverse Isolation	dB	40.0	50.0	
Spurious	dBc			-70.0
Operating Temperature	°C	-40		+85
Survival Temperature	°C	-55		+125
DC Voltage	°C		+12.0	
DC Supply Current	mA	90.0	110.0	130 mA
In/Out connectors	-	SMA female		
Size	inches	1.5×0.85×0.375		

Functional Diagram



Mechanical Structure:



Note: All units in inches.

Absolute Maximum Ratings

DC Voltage	+13.0V
RF Input Power	+5.0dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+85°C