

Features:

- Broad band operation from 1kHz to 1000 MHz
- Low VSWR, unconditional stable
- SMA female connector I/O
- Single DC power supply, built-in DC voltage regulator
- Operating temperature -40~+75°C, storage temperature -55~+125°C

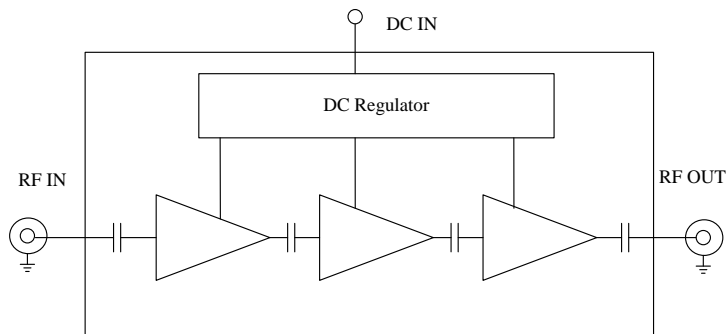
General Description

ABL0100-00-5010 is a three stage broadband low noise amplifier module using Silicon Germanium Bipolar RF transistor as the input low noise stage. The amplifier operates in the frequency from 1kHz to 1GHz and provides 50dB of small signal gain and about 1.0dB noise figure. The amplifier requires only a positive DC power supply, its built-in DC voltage regulator allows for different DC voltage supply application.

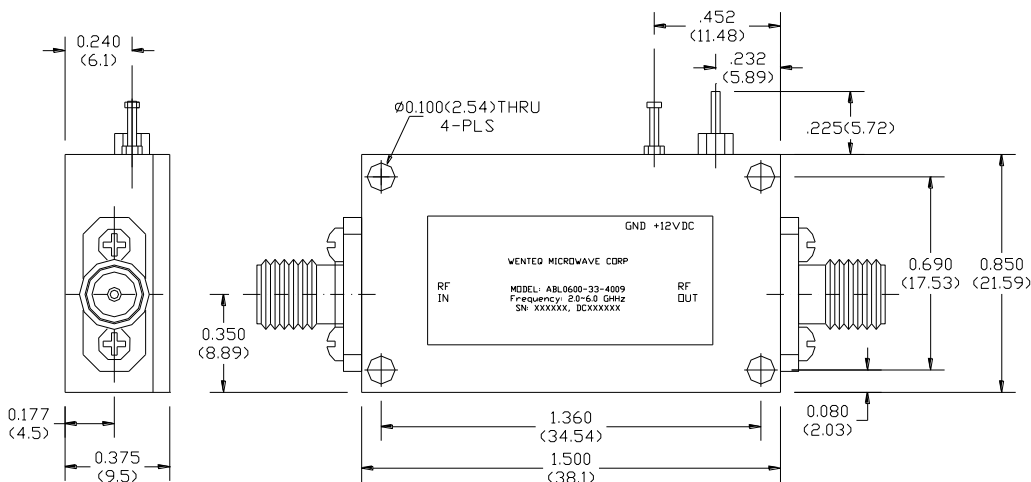
Electrical Specifications

Parameters		Specifications		
		Minimum	Typical	Maximum
Frequency Range	MHz	0.001		1000
Noise Figure (from 10MHz)	dB		1.0	1.5
Nominal SS Gain @25°C	dB	47.0	50.0	53.0
P-1dB Compression Point	dBm	+12.0	+15.0	
Output IP3	dBm	+25.0	+30.0	
Gain flatness	dB		+/-1.25	+/-1.50
Gain Variation over temperature	dB		+/-2.0	
Input VSWR	-		1.5:1	2.0:1
Output VSWR	-		1.6:1	2.0:1
Reverse Isolation	dB	60.0	70.0	
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-55.0		+125.0
DC Voltage	V		+12.0	+15.0
DC Supply Current	mA	90.0	110.0	150.0
RF In/Out connectors	-	SMA female		
DC Input Connector	-	Feed-thru PIN		
Size	inches	1.5×0.85×0.375		

Functional Diagram



Mechanical Structure:



Note: All units in inches.

Absolute Maximum Ratings

DC Voltage	+15V
RF Input Power	+10dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C



Electrostatic sensitive device, please observe precautions for handling this amplifier.