

Features:

- Broad band operation from 4.0 to 8.0GHz with good noise figure
- Low VSWR, unconditional stable
- SMA female connector RF I/O
- Single DC power supply required, built-in voltage regulator and reverse polarity protection circuitry
- Operating temperature -40~+85°C, storage temperature -55~+85°C

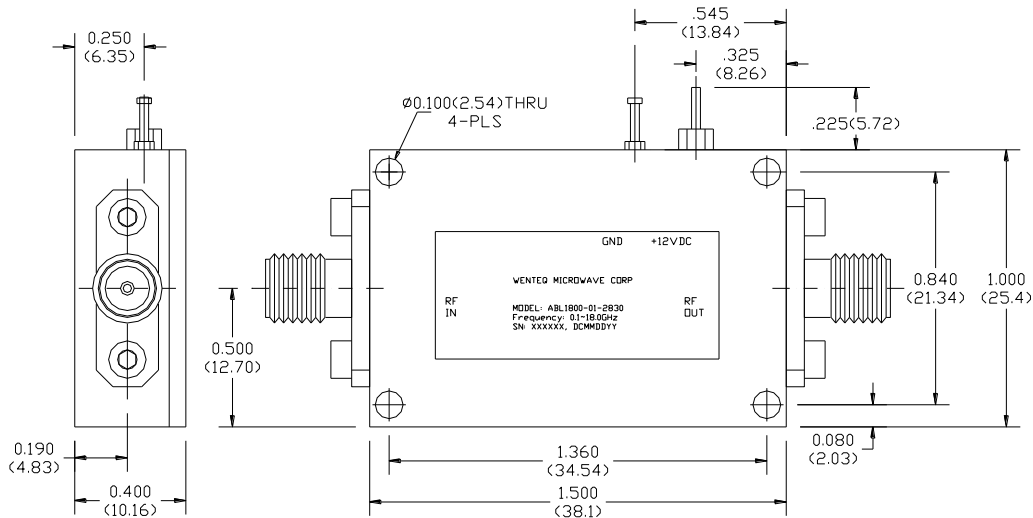
**General Description**

ABL0800-50-4008 is a two stage GaAs pHEMT MMIC based broadband low noise amplifier module operating in the frequency from 4.0 to 8.0GHz. The amplifier provides 40dB of small signal gain with 0.8dB typical noise figure. It requires only a single positive DC power supply. Its built-in voltage regulator allows the amplifier to functional at different DC supply voltages without affecting the RF performances.

Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	GHz	4.0		8.0
Nominal Gain @25°C	dB	37.0	40.0	43.0
Noise Figure @25°C	dB		0.8	0.95
P-1dB Compression Point	dBm	12.0	15.0	
Psat at Output	dBm	13.0	16.0	
Output IP3	dB m	25.0	27.0	
Gain flatness	dB		+/-1.20	+/-1.5
Gain Variation over Temperature Range	dB		+/-1.5	
Reverse Isolation	dB	55.0		
Input VSWR	-		1.6:1	2.0:1
Output VSWR	-		1.6:1	2.0:1
Spurious	dBc			-70.0
Operating Temperature	°C	-40.0		+85.0
Survival Temperature	°C	-45.0		+125.0
DC Power Supply Voltage	V	+10.0	+12.0	+15.0
DC Power Supply Current	mA	80.0	100.0	150.0
RF In/Out connectors		50 ohm SMA female		
DC Input Connector		Feedthru Pin		
Size	inches	1.50×1.00×0.40		

Mechanical Structure:



Note: All units in inches (mm).

Housing Material and Surface Finish:

- Body and cover material: aluminum
- Surface finish: nickel plated
- Connector material: Stainless Steel
- Connector surface finish: Passivated

Absolute Maximum Ratings

DC Voltage	+16V
RF Input Power	+5 dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+85°C



Caution! Electrostatic sensitive device, please observe precautions for handling ESD sensitive devices.