BROADBAND LOW NOISE AMPLIFIER ABL0400-50-4307

Features:

- ➤ Broad band operation from 2.0 to 4.0 GHz
- ➤ Low noise, high dynamic range
- > SMA female connector I/O
- ➤ Single DC power supply, internal voltage regulator allowing operating voltage from +8V to +15V range
- ➤ Operating temperature -40~+75°C, storage temperature -55~+125°C

General Description

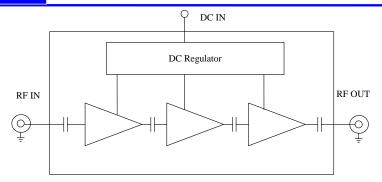
ABL0400-50-4307 is a three stage pHEMT transistor based broadband low noise amplifier module operating in the frequency of 2.0 to 4.0GHz. The amplifier provides 43dB of small signal gain with 0.7dB noise figure and excellent gain flatness, as well as good VSWR at both input and output. The amplifier requires only a positive DC power supply, its built-in DC voltage regulator allows for different DC voltage supply application.

Electrical Specifications

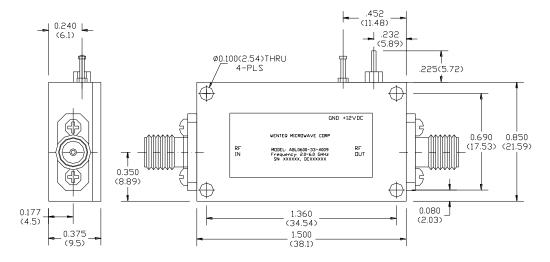
Parameters		Specifications		
		Minimum	Typical	Maximum
Frequency Range	MHz	2000		4000
Noise Figure (from 50MHz)	dB		0.7	0.9
Nominal SS Gain @25°C	dB	40.0	43.0	46.0
P-1dB Compression Point	dBm	+19.5	+20.5	
Gain flatness	dB		+/-1.0	+/-1.25
Gain Variation over temperature	dB		+/-1.5	
Input VSWR	-		1.5:1	2.0:1
Output VSWR	-		1.6:1	2.0:1
Reverse Isolation	dB	55.0		
Spurious	dBc			-70.0
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-55.0		+125.0
DC Voltage	V	+9.0	+12.0	+15.0
DC Supply Current	mA	100.0	130.0	160.0
RF In/Out connectors	-	SMA female		
DC Input Connector	-	Feed-thru PIN		
Size	inches	1.5×0.85×0.375		

Functional Diagram

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Mechanical Structure:



Note: All units in inches.

Absolute Maximum Ratings

DC Voltage	+18V
RF Input Power	+10dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C



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