

Features:

- Octave bandwidth, specification from 30~500MHz
- Low noise figure, high gain with good gain flatness
- Low VSWR, unconditional stable
- SMA female connector I/O
- Single DC power supply
- Operating temperature -40~+75°C, storage temperature -55~+125°C

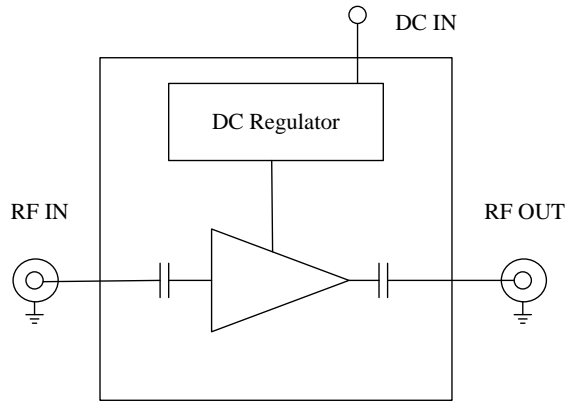
**General Description**

ABL0050-06-1729 is a single stage pHEMT based broadband power amplifier module operating in the frequency of 30 to 500MHz and provide +29dBm minimum output P-1dB power with 17dB of small signal gain. The amplifier requires only a single positive DC power supply, its built-in DC voltage regulator allows for different DC voltage supply application. This amplifier is ideal for telecommunication infrastructures, microwave radio, test instrumentation and military applications.

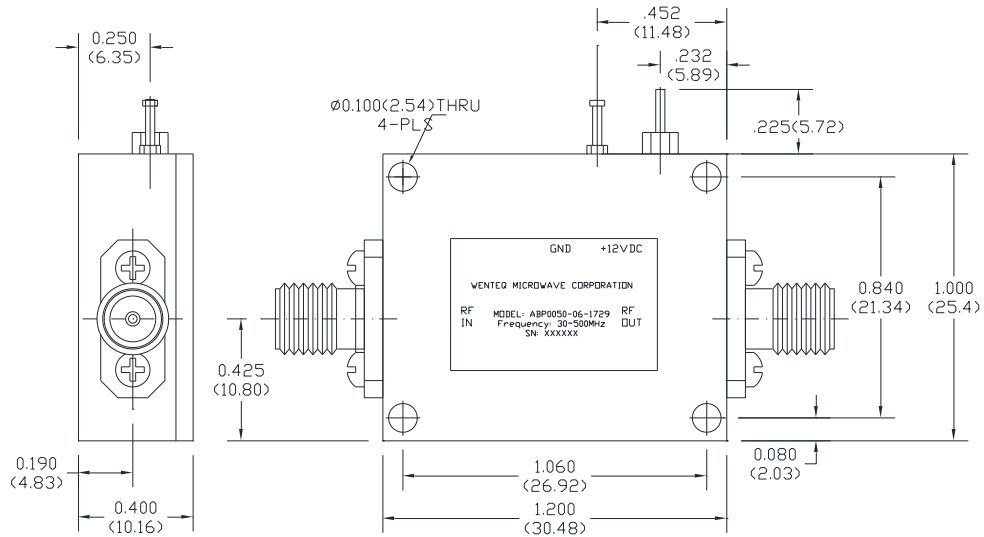
Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	MHz	30.0		500.0
P-1dB Compression Point	dBm	+29.0	+30.0	
Output IP3	dBm	+40.0	+45.0	
Nominal SS Gain @25°C	dB	15.5	17.0	18.5
Gain flatness	dB		+/-0.5	+/-0.75
Gain Variation	dB		+/-1.0	
Noise Figure	dB		3.0	4.0
Input VSWR	-		1.6:1	2.0:1
Output VSWR	-		1.8:1	2.0:1
Reverse Isolation	dB	20.0		
Spurious	dBc			-60,0
Operating Temperature	°C	-40.0		+75.0
Survival Temperature	°C	-55.0		+125.0
DC Voltage	V	+11.5	+12.0	+13.0
DC Supply Current	mA	290.0	350 mA	400.0
In/Out connectors		50 ohm SMA female		
Size	inches	1.2x1.0x0.4		

Functional Diagram



Mechanical Structure:



Note: All units in inches (mm).

Housing Material and Surface Finish:

- Body and cover material: aluminum
- Surface finish: nickel plated
- Connector material: Copper
- Connector surface finish: gold plated

Absolute Maximum Ratings

DC Voltage	+13V
RF Input Power	+16dBm
Storage Temperature	-55~+125°C
Operating Temperature	-40~+75°C