



Power Amplifier

Model: PA-1G-12G-0.4-H

1-12GHz 0.4W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 1-12GHz
- High output power at saturation, 0.4W Typ.
- High gain, 24 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-1G-12G-0.4-H is a power amplifier with a typical small signal gain of 24 dB and a nominal P_{sat} of 0.4W across the frequency range of 1 to 12GHz. The DC power requirement for the amplifier is +12 V DC/420 mA. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	1		12	GHz
Small Signal Gain	22	24		dB
Noise Figure		3	4	dB
Output P1dB	25	25.5		dBm
Output Psat		26		dBm
Input VSWR		2	2.4	:1
Output VSWR		2	2.4	:1
DC Voltage	+11	+12	+13	V DC
DC Supply Current		420		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	44*36*12	mm

*Note: For a wider temperature range, please consult the manufacturer.

Absolute Maximum Ratings:

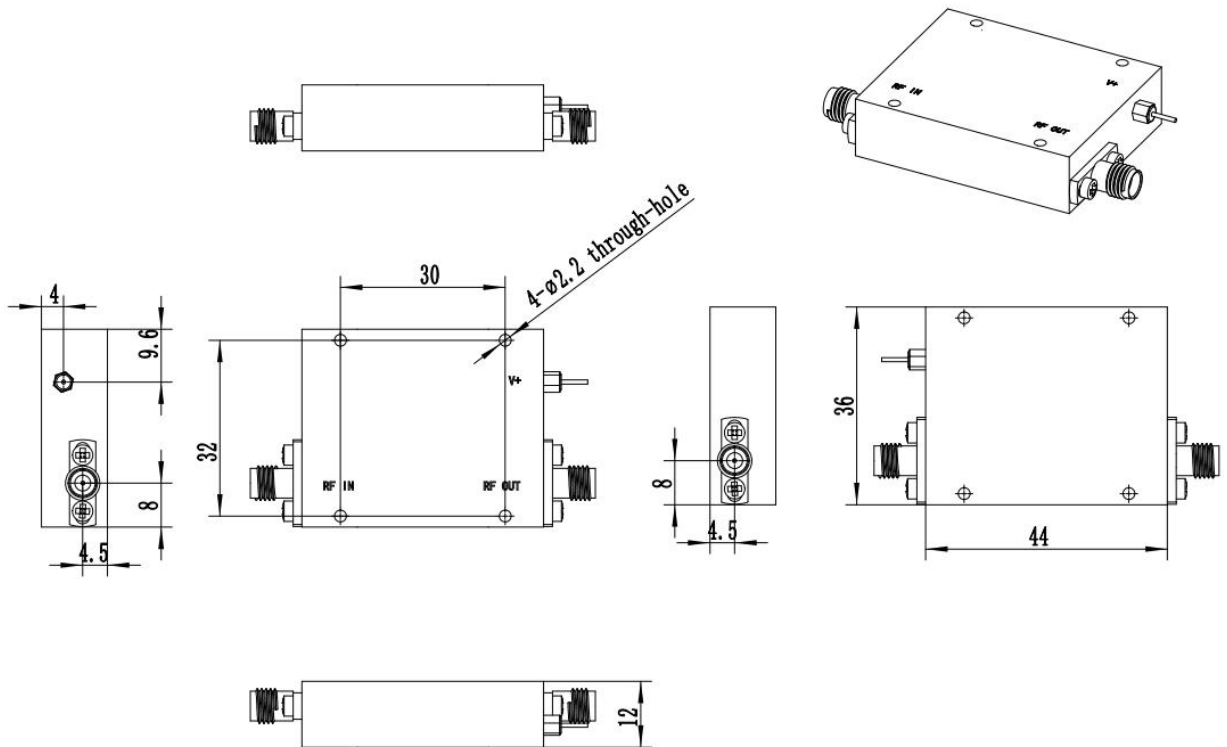
Parameter	Value
Supply Bias Voltage	+13 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-1G-12G-0.4-H



Ordering Information:

Base Number	Description	Optional
PA-1G-12G-0.4-H	Power Amplifier, 1-12GHz, Gain:24dB,Psat:0.4W,+12V DC	Without Heatsink
PA-1G-12G-0.4-H-HS	Power Amplifier, 1-12GHz, Gain:24dB,Psat:0.4W,+12V DC	With Heatsink