



Power Amplifier

Model: PA-0G1-18G-0.8

0.1-18GHz 0.8W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 0.1-18GHz
- High output power at saturation, 0.8W Typ.
- High gain, 30 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-0G1-18G-0.8 is a power amplifier with a minimum gain of 30 dB and a nominal Psat of 0.8W across the frequency range of 0.1 to 18GHz. The DC power requirement for the amplifier is +12 VDC/800 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	0.1		18	GHz
Gain	30	35		dB
Gain Flatness		±1.5		dB
Gain Variation Over Temperature		±1		dB
Output P1dB	27			dBm
Output Psat		29		dBm
Nosie Figure		5		dB
Spurious		-60		dBc
Input VSWR			2.2	:1
Output VSWR			2.2	:1
DC Voltage		+12		V DC
DC Supply Current		800	900	mA
Impedance		50		Ohms

*Note: This parameters reaches 32~40dBm within the frequency range of 100Mhz to 1GHz.

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-45°C to +85°C	
Non-operating Temperature*	-55°C to +125°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Altitude	50,000	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	50*30*12	mm
Weight	50	g

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



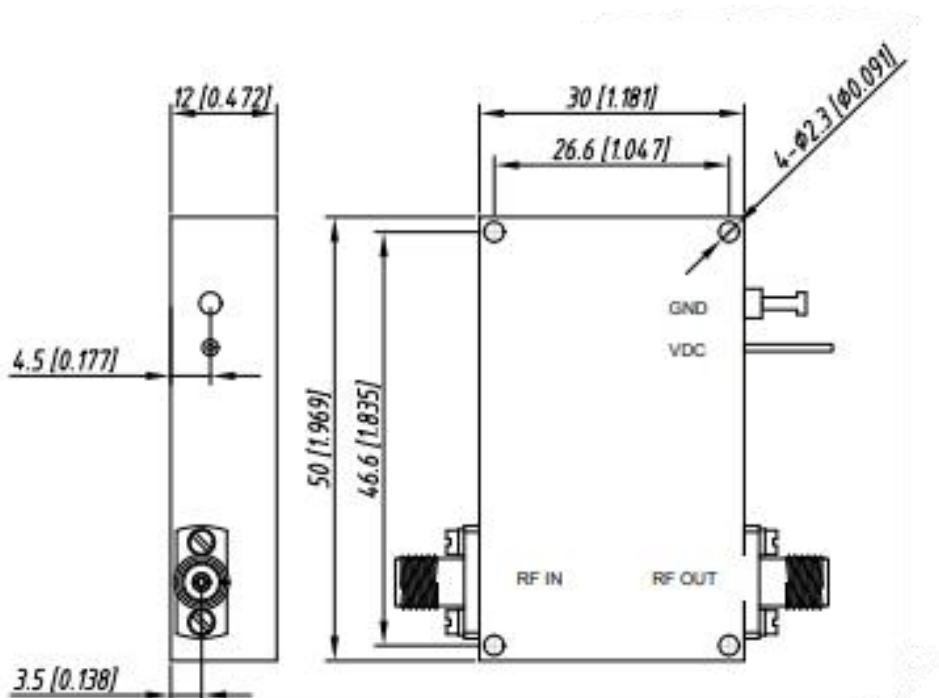
Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-0G1-18G-0.8



Ordering Information:

Base Number	Description	Optional
PA-0G1-18G-0.8	Power Amplifier, 0.1-18GHz, Gain:30dB,Psat:0.8W,+12V DC	Without Heatsink
PA-0G1-18G-0.8-HS	Power Amplifier, 0.1-18GHz, Gain:30dB,Psat:0.8W,+12V DC	With Heatsink